

2012–2016 Construction Skills Network North East

LABOUR MARKET INTELLIGENCE



Contents

1. Summary and key findings	04
2. The outlook for construction in the North East	06
3. Construction employment forecasts for the North East	12
4. Comparisons across the UK	14
5. CSN explained	16
5.1 CSN methodology	17
5.2 Glossary of terms	18
5.3 Notes and footprints	19
5.4 Definitions: types and examples of construction work	20
5.5 Occupational groups	22
5.6 CSN website and contact details	25

Tables and Charts

1. Annual average construction output growth 2012–2016	04
2. Regional comparison 2012–2016	05
3. Construction output 1994–2010	06
4. Construction industry structure 2010	06
5. Economic structure	07
6. Economic indicators	07
7. New construction orders growth 1994–2010	08
8. New work construction orders	08
9. Annual average construction output growth 2012–2013	09
10. Construction output 2012–2013	10
11. Annual average construction output growth 2012–2016	11
12. Construction output 2012–2016	11
13. Total employment by occupation	12
14. Annual recruitment requirement by occupation	13
15. Annual average output growth by region	15
16. Annual recruitment requirement by region	15

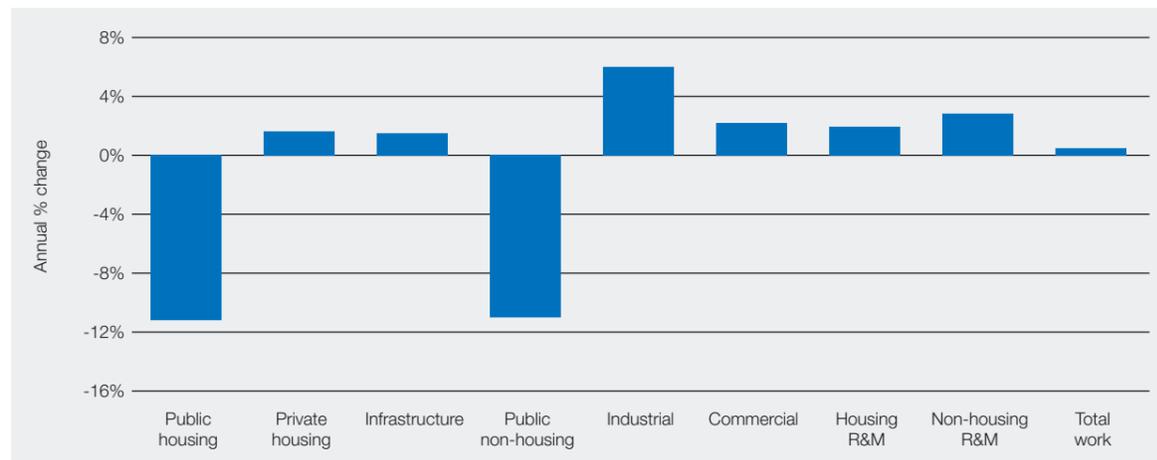
ConstructionSkills is the Sector Skills Council for construction, tasked by Government to ensure the UK's largest industry has the skilled workforce it requires. Working with Government, training providers and employers, it is responsible for ensuring that the industry has enough qualified new entrants and that the existing workforce is fully skilled and qualified, as well as for improving the performance of the industry and the companies within it.

These materials together with all of the intellectual property rights contained within them belong to the Construction Industry Training Board (ConstructionSkills). Copyright 2005 ("ConstructionSkills") and should not be copied, reproduced nor passed to a third party without ConstructionSkills prior written agreement. These materials are created using data and information provided to ConstructionSkills and/or EXPERIAN Limited ("Experian") by third parties of which EXPERIAN or ConstructionSkills are not able to control or verify the accuracy. Accordingly neither EXPERIAN nor ConstructionSkills give any warranty about the accuracy or fitness for any particular purpose of these materials. Furthermore, these materials do not constitute advice and should not be used as the sole basis for any business decision and as such neither EXPERIAN nor ConstructionSkills shall be liable for any decisions taken on the basis of the same. You acknowledge that materials which use empirical data and/or statistical data and/or data modelling and/or forecasting techniques to provide indicative and/or predictive data cannot be taken as a guarantee of any particular result or outcome.

1. Summary – North East

The North East is expected to see very modest growth over the forecast period with the average annual output rate at 0.5%. The greatest decline in output is expected in 2012 before a recovery begins in 2013 with activity increasing by 3%. Construction employment is forecast to reach 102,470 by 2016, 8% higher than in 2012. The North East accounts for 5% of total UK annual recruitment requirements (ARR) and it is 2.3% of total projected base 2012 employment, slightly higher than in the UK as a whole (1.9%).

Annual average construction output growth 2012-2016 - North East



Source: CSN, Experian ref. CSN Explained, Section 5.3, Note 2

Stockton Casino
Kier



North East is expected to see very modest growth over the forecast period, annual average output rate of 0.5%

Key findings

The industrial sector will see the largest annual average growth rate of 6% in the five years to 2016. However, it will be coming back from a low base and even by 2016 output in the sector is predicted to be half of its 2006 peak in real terms.

The public housing and public non-housing sectors are expected to see the biggest declines in output, both averaging around 11% over the five year period to 2016. Under the National Affordable Housing Programme (NAHP) 2008-2011 the North East benefited from around £217m of investment in homes for rent and low cost ownership. The current Affordable Housing Programme 2011-2015 will see much less funding available. The new Homes and Communities Agency (HCA) operating areas have amalgamated the North East and Yorkshire & Humber, and the combined area is due to receive just £181m.

The North East benefited strongly from initial stages of the Building Schools for the Future (BSF) programme. However, as 'legacy' projects wind down, education construction in the region will fall sharply. In addition, the majority of hospital construction work in the region was done during the ProCure 21 programme, therefore both these factors contribute towards falling output in the public non-housing sector.

The commercial sector is predicted to see an annual average growth rate of 2.2%. The market will be supported by major projects such the regeneration of Gateshead town centre and the Nissan plant in Sunderland worth £150m and £189m respectively.

The private housing (1.6%) and infrastructure (1.5%) sectors are projected to experience only moderate growth to 2016, with demographic factors weak for the former and little in the way of large transport or energy projects in the pipeline for the region at present.

Construction employment is forecast to reach 102,470 in 2016 which is 8% higher than in 2012. Of the construction-specific trades and professions, civil engineers are expected to see a 19% rise in employment levels to 2016. Construction managers (18%), labourers nec (11%), architects (10%) and other construction professionals and technical staff (8%) are also likely to experience reasonable growth.

The North East accounts for 5% of total UK annual recruitment requirements (ARR) and it is 2.3% of total projected base 2012 employment, slightly higher than in the UK as a whole (1.9%). The largest absolute requirement is for specialist building operatives nec (430), but as a share of 2012 base employment steel erectors/structural trades will be the most sought after (20%).

Regional comparison 2012-2016

	Annual average % change in output	Growth in total employment	Total ARR
North East	0.5%	4,840	2,170
Yorkshire and Humber	0.0%	-6,370	2,630
East Midlands	1.0%	-1,800	3,460
East of England	2.9%	10,660	5,710
Greater London	2.5%	16,560	1,790
South East	2.2%	28,020	4,520
South West	2.2%	9,560	7,220
Wales	1.3%	11,590	4,280
West Midlands	-1.1%	-7,360	3,730
Northern Ireland	2.1%	3,880	1,170
North West	-0.9%	-6,990	5,080
Scotland	1.3%	13,520	4,480
UK	1.4%	76,110	46,240

Source: CSN, Experian ref. CSN Explained, Section 5.3, Note 2

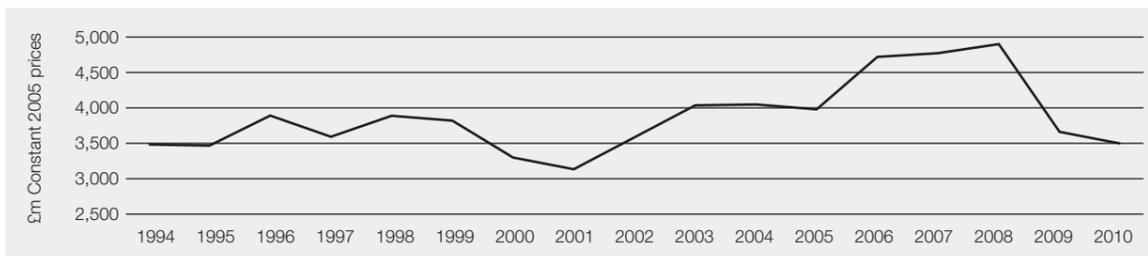
2. The outlook for construction in the North East

2.1 Construction output in the North East – overview

The North East saw total construction output fall by 5% in 2010 to £3.5bn (2005 prices). Whilst the new work sector increased by 14%, repair and maintenance decreased by 33%.

The only new work sector to experience a decline in output was commercial, down by 13%. Public housing output doubled to £147m, but the sector remains tiny, accounting for only 4% of North East construction output in 2010. The majority of this boost in output was due to work funding by the 2008-11 NAHP and Kickstart Delivery Programme. The Industrial sector saw the smallest increase in output of 24% to £207m.

Construction output 1994-2010 - North East



Source: ONS
ref. CSN Explained, Section 5.3, Note: 1

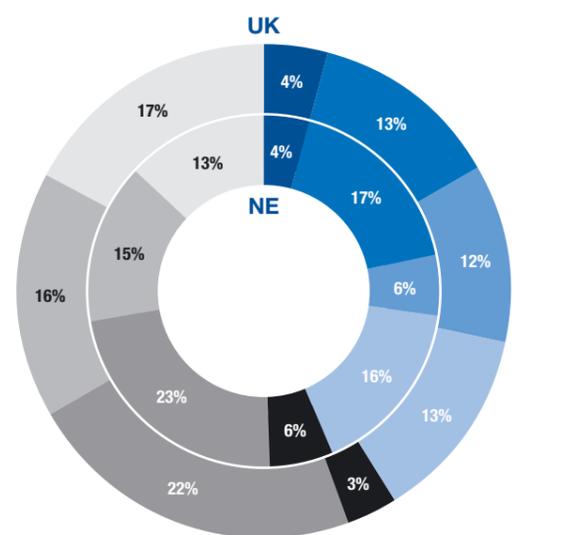
2.2 Industry structure

The diagram, Construction Industry structure 2010 – UK vs. North East, illustrates the sector breakdown of construction in the North East compared to that in the UK. Effectively, the percentages illustrate what proportion of total output each sector accounts for.

The new work sector in the North East is slightly larger than in the UK as a whole, taking a 72% share of total output in the region compared with a national figure of 67%.

The private housing sector is close to 50% bigger proportionally, accounting for 17% of construction output in the North East in 2010, compared with only 13% in the UK as a whole. Conversely, the infrastructure sector is smaller, taking only a 6% share of activity in the North East compared with 12% across the UK as a whole.

Construction industry structure 2010 - UK vs. North East



Source: ONS, Experian



Economic structure - North East (£ billion, 2006 prices)

Selected sectors	Actual	Forecast					
	2010	2011	2012	2013	2014	2015	2016
Public services	11	1.1	-0.4	-0.7	-0.6	-0.1	0.1
Financial and business services	6.1	0.9	1.8	1.9	2.3	2.8	3.0
Transport and communications	2.7	0.4	1.6	1.8	2.0	2.3	2.4
Manufacturing	6.3	2.0	2.8	2.8	2.1	1.6	1.1
Distribution, hotels and catering	4.8	0.8	0.1	1.2	2.0	2.4	2.7
Total Gross Value Added (GVA)	39.0	0.8	0.7	1.0	1.3	1.7	1.7

Source: Experian
ref. CSN Explained, Section 5.3, Note 3

2.3 Economic overview

The expected performance of a regional or national economy over the forecast period (2012–2016) provides an indication of the construction sectors in which demand is likely to be strongest.

2.4 Economic structure

In 2010 the North East's Gross Value Added (GVA) increased by 2% to £39bn (2006 prices), and accounted for just 3% of UK GVA.

The manufacturing sector in the region saw the greatest level of growth in 2010 at 4%. Distribution, hotels and catering followed closely behind as output increased by 2.5%. Financial and business services saw a further decline, of 3%. The transport and communications and public services sector also saw negative levels of growth albeit marginal at 0.7% and 0.2% respectively.

2.5 Forward looking economic indicators

GVA for the North East is expected to rise at a modest rate during the forecast period. The highest rate of growth is expected to be seen in 2015 and 2016 at 1.7% in each year. The manufacturing sector is predicted to see healthy increases in output during the first part of the forecast period, but growth will slow in the latter half. Transport and

communications and financial and business services will both see rising growth levels in each subsequent year of the forecast period and by 2016 they are projected to reach 2.4% and 3.0% respectively. Public services sector is estimated to have grown by 1.1% in 2011, but thereafter the sector is predicted to decline to 2015 as expenditure cuts continue to bite.

The fall in real household disposable incomes (RHD) in the North East in 2011 is one of the sharpest at 4.7% and well over the UK average of 2.2%. Incomes are expected to grow modestly in 2012 with the rate of growth increasing to over 1% in 2013. However, the rate of increase in RHD is likely to remain below 2% over the whole of the forecast period. Household spending tends to follow this same pattern, with consumers cutting back on spending in 2011 and 2012 before increasing expenditure again from 2013 onwards.

Unemployment levels in the region are expected to have risen in 2011 to 0.13m. This level of unemployment will stay constant up until 2013 before modest falls kick in from 2014 onwards. By 2016 unemployment in the North East is predicted to stand at 0.11m.

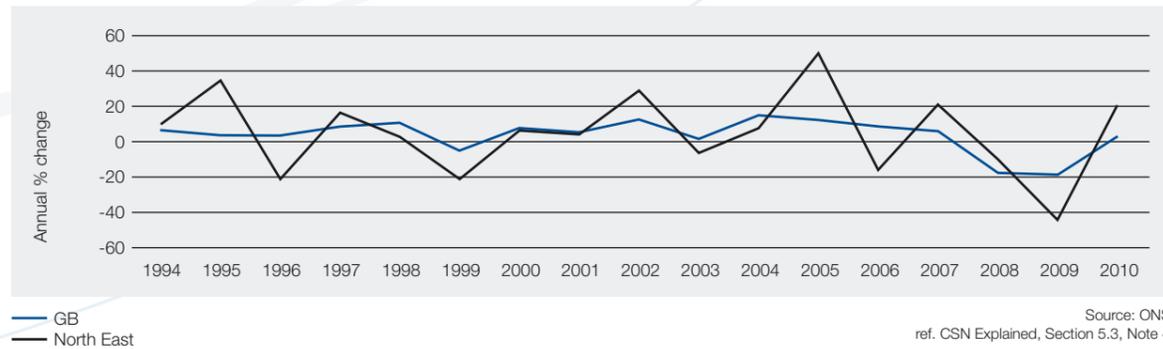
After declining house prices in 2011 (3%) and 2012 (0.2%), the housing market should pick up and modest rises are projected for each of the subsequent years.

Economic indicators - North East (£ billion, 2006 prices - unless otherwise stated)

	Actual	Forecast					
	2010	2011	2012	2013	2014	2015	2016
Real household disposable income	34	-4.7	0.8	1.1	1.1	1.8	1.9
Household spending	31	-2.3	-0.2	1.7	2.0	2.2	2.3
Working age population (000s and as % of all)	1577.2	60.6	60.7	61.3	61.9	62.3	62.7
House prices (£)	137,495	-3.0	-0.2	1.6	1.9	1.9	2.0
LFS unemployment (millions)	0.12	0.13	0.13	0.13	0.12	0.11	0.11

Source: ONS, DCLG, Experian

New construction orders growth 1994-2010 - North East vs. GB



2.6 New construction orders – overview

Following a 44% fall in new construction orders in 2009, 2010 saw orders increase by 21%. Private housing in the North East saw record low levels in 2009 as orders stood at £203m. However there was a healthy bounce back in 2010 as orders increased by 179% to £566m. Similarly, public housing also saw a recovery in 2010 as orders increased by 150% to £151m. Again a large part of this increase can be accounted for by the back-end of funding from the NAHP and Kickstart delivery programme.

Like the housing sectors, infrastructure also saw a large recovery in 2010 as orders increased by 114% to £183m. One project that contributed to this increase was the order for the first phase of expansion of the Northern Gateway at Teesport. The commercial sector saw relatively small levels of growth at 7%. The public non-housing and industrial sectors saw orders decline by 39% and 9% respectively.

New work construction orders - North East (£ million, current prices)

	Actual 2010	Annual % change				
		2006	2007	2008	2009	2010
Public housing	151	-17.8	77.4	-27.5	-25.3	150.4
Private housing	566	11.8	36.2	-53.1	-49.9	178.9
Infrastructure	183	13.2	-11.4	-47.1	0.6	114.1
Public non-housing	398	-38.8	20.3	101.9	-15.0	-39.2
Industrial	105	53.5	-18.2	-20.0	-62.8	-9.4
Commercial	421	-38.6	35.3	-4.0	-63.0	7.0
Total new work	1,825	-16.0	21.0	-9.9	-44.3	20.6

Source: ONS ref. CSN Explained, Section 5.3, Note 4

2.7 New construction orders – current situation

In the first half of 2011, total construction orders declined by 42% to £620m when compared to the first half of 2010, with all sectors recording falls.

The biggest drop was seen in the public housing sector as orders fell by 88% to £12m in the six months to June 2011 when compared to the corresponding period of the preceding year. Private housing saw big declines as orders decreased by 69% to £102m year on year. Commercial orders fell by 27% whilst public non-housing orders followed closely behind as orders declined by 24%. The industrial and infrastructure sectors held up best with only modest drops of 3% and 2% respectively.

2.8 Construction output – short-term forecasts (2012–2013)

Regional Office for National Statistics (ONS) output statistics are published in current prices and are thus inclusive of any inflationary effect. At the time of writing, ONS construction output statistics were only available for the first two quarters of 2011.

Output in the first half of 2011 totalled just under £2bn in current prices in the North East, 5% below the previous half-year, but 6% up on the corresponding period of 2010. The infrastructure sector was most buoyant, with output in the first half of 2011 already 75% of the 2010 total. In contrast, the public non-housing, industrial and commercial sectors experienced fairly heavy falls in activity.

Construction output in the North East is expected to decline by an annual average rate of 1.3% over the next two years. Output is predicted to decline by 6% in 2012 before returning to growth in 2013 with a 3% increase.

The commercial sector accounts for the largest share of new work and the market is expected to see an annual average growth rate of 2% during the 2012-2013 period.

The regeneration of Gateshead town centre started in 2011, with Spenhill, the development arm of Tesco, investing £150m into a new town square, offices, 45 retail units, a Tesco store and town centre parking. In addition to this, there is also a possibility of a 120 bed hotel. Work on the project is anticipated to be completed by the end of 2013.

The private housing sector accounts for the second largest share of new work and the market and is predicted to see annual average growth rates of 1.6% over the short term. In contrast the public housing sector accounts for the smallest share of the new work market and is predicted to see the

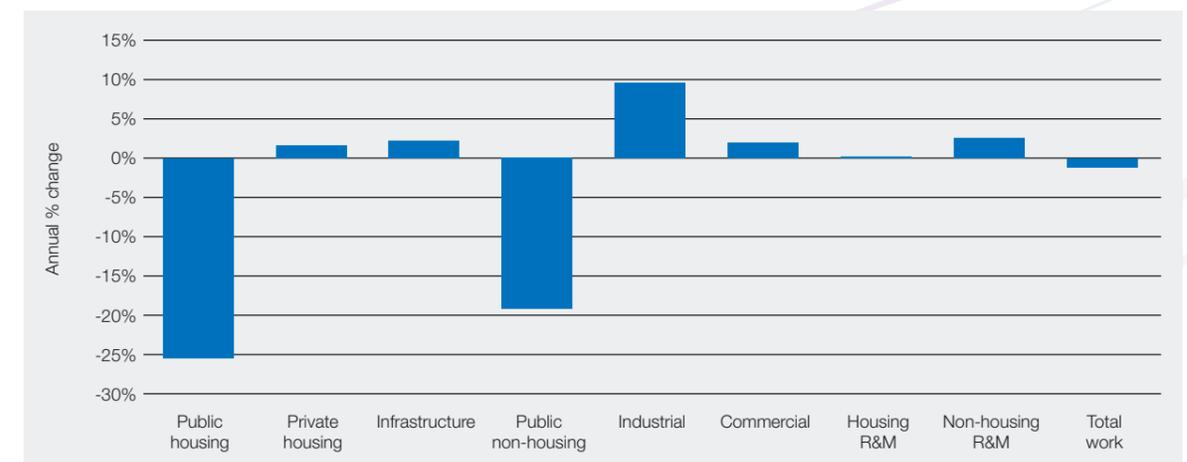
biggest declines in activity in the short term (-25.5% annual average drop). The new HCA operating areas have amalgamated the North East and Yorkshire & Humber, and the area is due to receive £181m funding from the much smaller 2011-2015 NAHP. The North East saw a total of £217m allocated under the previous NAHP, compared with the £181m funding available for the combined area over the period to 2015.

The public non-housing sector accounts for the third largest share of new work and the market is expected to see a average annual rate of decline of 19% over the next two years. The region has benefited quite strongly from the Building Schools for the Future (BSF) programme. Waves 1 to 4 saw five separate programmes of work in the North East totalling around 40 schools. The more a region benefitted from the BSF pre-cancellation, the further activity has to fall once 'legacy' projects are completed. The majority of hospital construction work carried out by the public sector was done during the ProCure 21 programme. Currently the ProCure 21+ programme does not have any further work to be undertaken in the North East.

The infrastructure and industrial sectors are of a similar size and average annual growth is forecast to be 2.2% and 9.5% respectively. The former should benefit from the Northern Gateway project at Teesport, which started construction at the beginning of 2011, while by far the biggest project in the latter sector is the expansion of the Nissan plant in Sunderland, with £189m of funding from the European Investment Bank.

Both housing and non-housing R&M sectors are predicted to see positive annual average growth rates. Overall R&M will grow by 1.3% over the next two years.

Annual average construction output growth 2012-2013 - North East



Source: Experian ref. CSN Explained, Section 5.3, Notes 1 and 2

Construction output - North East (£ million, 2005 prices)

	Actual	Forecast annual % change			Annual average
	2010	2011	2012	2013	2012-13
Public housing	147	-17%	-34%	-15%	-25.5%
Private housing	612	1%	-2%	5%	1.6%
Infrastructure	199	31%	-1%	5%	2.2%
Public non-housing	571	-21%	-27%	-11%	-19.2%
Industrial	207	-12%	10%	9%	9.5%
Commercial	788	-8%	-6%	10%	2.0%
New work	2,523	-6%	-8%	4%	-2.4%
Housing R&M	520	3%	-1%	1%	0.1%
Non-housing R&M	448	8%	2%	3%	2.5%
Total R&M	969	5%	0%	2%	1.3%
Total work	3,492	-3%	-6%	3%	-1.3%

Source: Experian
ref. CSN Explained, Section 5.3, Notes 1 and 2

2.9 Construction output – long-term forecasts (2012–2016)

The region's construction industry will see modest growth over the forecast period at an annual average rate of 0.5%.

Public housing will see the greatest decline in the five years to 2016 as the average yearly growth rate is expected to decline by 11.2%, but it will be closely followed by the public non housing sector (-11.0%).

However, not all is doom and gloom in the public sectors. The Scape National Minor Works Framework incorporates new build work and refurbishment on public sector buildings of every type from community buildings right through to schools and hospitals. The framework will run over four years starting from the end of 2011 and is estimated to be worth £750m-£1bn.

As part of the Scape framework Redcar will see £33m invested towards a leisure and business centre as well as a community facility. The community facilities include a relocated registrar's office and a debating chamber, whilst the leisure facility includes a six lane 25 metre swimming pool, additional training and a leisure pool as well as a performance space and a dance hall. The business centre is proposed to be a flexible space for start-up firms and entrepreneurs. In addition to this car parking facilities will also be improved. Construction is due to commence at the beginning of 2012 with completion of work by autumn 2013.

The industrial sector will see the largest increase with an annual average growth rate of 6% over the 2012 to 2016 period. However, it will be coming back from a low base and even in 2016 output in the sector is predicted to be half of its 2006 peak in real terms.

Air Products is set to carry out a project where waste is converted into hydrogen gas generating enough electricity to power 50,000 homes. Planning permission has been granted at a business park in Billingham. The facility is due to open for commercial use in late 2013/early 2014. We have been reliably informed by the Office for National Statistics that such waste to energy projects should be recorded as part of industrial output in the official statistics.

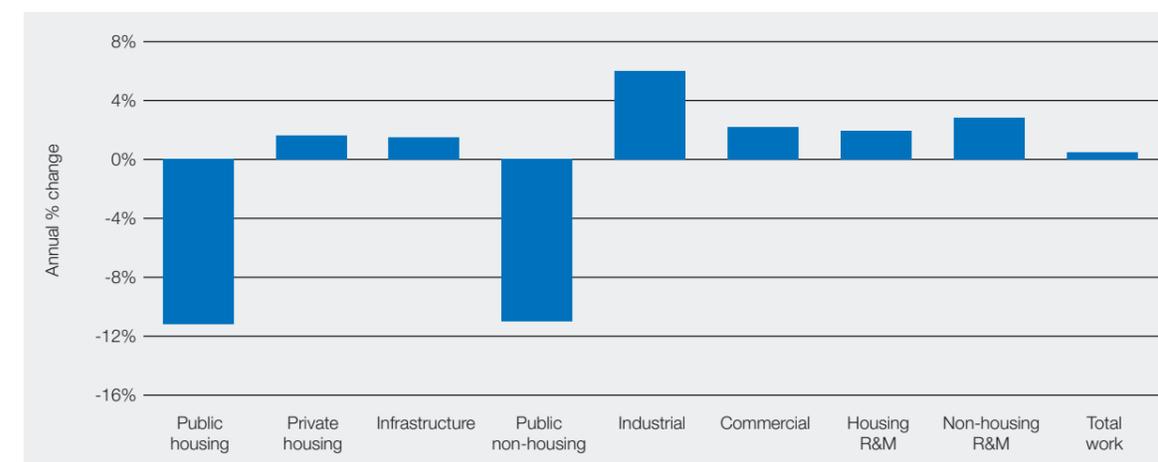
Growth in infrastructure activity is projected to be only modest, at 1.5% a year over the forecast period. However, Tees Valley's largest investment in decades could be back on course. GE Oil and Gas has announced that it is carrying out planning work with Tenergy on building an oil refinery in the North East. The £2bn project is believed to have more or less the same plan as the one used for a crude oil refinery at the Wilton site, which was put forward in 2007 by Sonhoe Development Company.

The commercial sector is expected to grow at an annual average rate of 2.2% in the next five years. Output growth is predicted to peak in 2013 at 10% before quickly decelerating to 3% in 2014. The two following years will then see growth levels of 2%. Sainsbury's are planning a £48m new superstore in Sunderland, due to begin in mid-2012 and anticipated to open in spring 2013.

The R&M sector is predicted to see annual average growth rates of 2.3% from 2012 to 2016 with output peaking in 2014 and 2015.

Changes in legislation have led to a transfer of ownership of lateral drains and private sewers from private individuals to water and sewerage firms. Northumbrian Water has taken responsibility for an additional 13,500km of private sewer pipes. According to the Glenigan project database £150m worth of work will be carried out on these drains and sewers including repair, maintenance and cleaning. Hence the better performance of the non-housing R&M sector during the forecast period.

Annual average construction output growth 2012-2016 - North East



Source: CSN, Experian
ref. CSN Explained, Section 5.3, Note 2

Construction output - North East (£ million, 2005 prices)

	Estimate	Forecast annual % change					Annual average
	2011	2012	2013	2014	2015	2016	2012-16
Public housing	122	-34%	-15%	-2%	3%	-1%	-11.2%
Private housing	618	-2%	5%	3%	2%	0%	1.6%
Infrastructure	261	-1%	5%	1%	2%	0%	1.5%
Public non-housing	450	-27%	-11%	-12%	-2%	-1%	-11.0%
Industrial	183	10%	9%	4%	5%	2%	6.0%
Commercial	727	-6%	10%	3%	2%	2%	2.2%
New work	2,359	-8%	4%	1%	2%	1%	-0.3%
Housing R&M	536	-1%	1%	3%	4%	2%	1.9%
Non-housing R&M	484	2%	3%	3%	3%	3%	2.8%
R&M	1,020	0%	2%	3%	3%	2%	2.3%
Total work	3,379	-6%	3%	2%	2%	1%	0.5%

Source: CSN, Experian
ref. CSN Explained, Section 5.3, Notes 2

2.10 Beyond 2016

After a two and half year process, Evolution Gateshead has won a joint venture partnership with Gateshead Council to build 2,400 homes across 19 sites under a £347m scheme. Work is due to start in 2012 but will continue for 15 to 20 years. The sites include Chopwell, Saltwell, Bensham, and Birtley Northside.

Plans have been revealed for a £100m project at Lingfield Point, with 270 homes to be constructed in the first phase of development. In total 1,200 homes, a school and sport

facilities alongside green space for the local community will be created. The project is due to start this year and is anticipated to end in 2020.

However by far the biggest project currently proposed for the North East is the new nuclear power station at Hartlepool. Recent research by ConstructionSkills, Experian and EDF Energy has put forward a potential start date for the project of early 2017, with completion in mid-2022. The construction element of the project should be worth around £2bn in today's prices.

3. Construction employment forecasts for the North East

3.1 Total construction employment forecasts by occupation

The table presents actual construction employment (SICs 41-43, 71.1, and 74.9) in the North East for 2010, the forecast total employment in 26 occupations and in the industry as a whole between 2012 and 2016. A full breakdown of occupational groups is provided in Section 5 of CSN Explained.

Construction employment in the North East is forecast to reach 102,470 in 2016 which is 8% higher than in 2012. Employment is expected to fall by 3% in 2011 and 2012 before stagnating in 2013. Thereafter employment is predicted to see moderate growth levels. The rise in output during 2013 and in each subsequent year is the main driver of employment during the forecast period.

Total employment by occupation - North East

	Actual	Forecast	
	2010	2012	2016
Senior, executive, and business process managers	3,850	3,820	4,040
Construction managers	9,940	9,810	11,590
Non-construction professional, technical, IT, and other office-based staff	9,300	8,410	8,370
Wood trades and interior fit-out	7,830	7,260	7,670
Bricklayers	2,630	2,440	2,430
Building envelope specialists	2,420	2,280	2,550
Painters and decorators	4,130	3,770	3,820
Plasterers and dry liners	3,050	3,010	3,470
Roofers	3,720	3,550	3,900
Floorers	1,940	1,820	1,940
Glaziers	1,080	980	900
Specialist building operatives nec*	2,680	2,540	2,800
Scaffolders	1,400	1,400	1,600
Plant operatives	2,370	2,200	2,270
Plant mechanics/fitters	2,350	1,920	1,560
Steel erectors/structural	1,610	1,500	1,600
Labourers nec*	4,220	4,050	4,480
Electrical trades and installation	7,580	7,170	8,040
Plumbing and HVAC trades	9,070	8,480	9,370
Logistics	1,660	1,580	1,590
Civil engineering operatives nec*	2,960	2,900	2,990
Non-construction operatives	1,660	1,570	1,490
Civil engineers	2,320	2,380	2,830
Other construction professionals and technical staff	8,470	7,960	8,610
Architects	700	720	790
Surveyors	1,770	1,630	1,770
Total (SIC 41-43)	87,450	82,460	88,470
Total (SIC 41-43, 71.1, 74.9)	100,710	95,150	102,470

Source: ONS, CSN, Experian ref. CSN Explained, Section 5.3, Notes 5 and 6
NEC* - Not elsewhere classified

Of the construction-specific occupations, civil engineers are expected to see a 19% rise in employment levels to 2016. The skills possessed by these workers tend to be applied right across the construction sector and so as overall output increases so too does employment. Construction managers follow closely behind as employment levels increase by 18%. In absolute terms this occupation sees the largest increase as employment levels increase by 1,780 to 11,590.

Other construction-specific occupations such as labourers nec (11%), architects (10%) and other construction professionals and technical staff (8%) will also see reasonable rises in employment.

3.2 Annual recruitment requirements (ARR) by occupation

The ARR is a gross requirement that takes into account workforce flows into and out of construction, due to factors such as movements between industries, migration, sickness, and retirement. However, these flows do not include movements into the industry from training, although robust data on training provision is being developed by ConstructionSkills. Thus, the annual recruitment requirement provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output.

The ARR for the 26 occupations within the North East's construction industry is illustrated in the table. The figure of 2,170 is indicative of the average requirements per year for the industry, as based on the output forecasts for the region. This takes into account 'churn' i.e. the flows into and out of the industry, excluding training flows.

The North East accounts for 5% of total UK annual recruitment requirements (ARR) and it is 2.3% of total projected base 2012 employment, slightly higher than in the UK as a whole (1.9%).

The largest absolute requirement is for specialist building operatives nec (430), but as a share of 2012 base employment steel erectors/structural trades will be the most sought after (20%).

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.

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

Annual recruitment requirement by occupation - North East

	2012-2016
Senior, executive, and business process managers	-
Construction managers	-
Non-construction professional, technical, IT, and other office-based staff	-
Wood trades and interior fit-out	-
Bricklayers	280
Building envelope specialists	-
Painters and decorators	180
Plasterers and dry liners	60
Roofers	290
Floorers	130
Glaziers	-
Specialist building operatives nec*	430
Scaffolders	150
Plant operatives	-
Plant mechanics/fitters	-
Steel erectors/structural	300
Labourers nec*	200
Electrical trades and installation	-
Plumbing and HVAC trades	-
Logistics	-
Civil engineering operatives nec*	130
Non-construction operatives	-
Civil engineers	-
Other construction professionals and technical staff	-
Architects	<50
Surveyors	-
Total (SIC 41-43)	2,150
Total (SIC 41-43, 71.1, 74.9)	2,170

Source: CSN, Experian ref. CSN Explained, Section 5.3, Notes 5 and 6
NEC* - Not elsewhere classified

4. Comparisons across the UK

The North East is projected to see a very modest annual average growth rate of 0.5% over the next five years. However the North West (-0.9%) along with the West Midlands (-1.1%) are the only regions projected to see a decline. For the UK the yearly growth rate is 1.4%. The best performing region is expected to be the East of England with a rate of 2.9%.

Over the forecast period, we seem to be seeing the emergence of a north/south divide, with the greater south east (the South East, Greater London and the East of England) faring best, and the northern English regions faring worst. In between are the devolved nations, who, although they have their overall expenditure limits set by Westminster, through their devolved administrations have more control on what it will be spent than the English regions. Already the devolved administrations in Scotland and Northern Ireland have redirected a proportion of resource funding to the capital expenditure account, which should benefit the construction industry in these areas.

There are a number of reasons for the emergence of this north/south divide. The first is the more constrained outlook for public expenditure going forward. While declines in public housing activity are expected to be fairly similar across the board, with one or two exceptions, the profile for the public non-housing sector is very different. Output in this sector hit a new historic high in 2010 and since 2007 had grown by over 72% in real terms, primarily driven by work under the BSF programme. The North East was a major beneficiary under the early waves of BSF as well as the ProCure 21 programme. Unfortunately as both programmes have ended and with no new work in the pipeline, the sector has further to fall.

Second, major infrastructure projects are tending to be greater South East centric at present. Infrastructure activity in the UK is at a historic high, exceeding its previous peak in 1993 during the building of the Channel Tunnel. This level of activity is being driven largely projects in the South East corner of England – Crossrail, Thameslink, M25 widening, London Gateway port, to name a few. That is not to say that there are not projects elsewhere, there are, but they are tending to be of a lesser size. The North East has the Northern Gateway project at Teesport, which started construction early 2011 thus contributing towards the large growth at the beginning of the forecast period. However, the first phase of this project is nowhere near enough to replace the £185m Tyne Tunnel once completed.

Third, growth in the commercial sector is likely to be stronger in the greater South East than elsewhere in England. The offices market has already been strengthening in London and along the M4 corridor/Thames Valley, while excess capacity issues remain a problem across many regional centres. The northern English regions also have many currently mothballed retail and leisure developments for which it is difficult to see an economic imperative to restart, at least in the short term. The North East has a number of long-term regeneration projects ongoing in the region, such as North Shore in Stockton, but in the current economic climate little is being taken forward on these schemes at present.

Wales is predicted to have the strongest growth in employment, despite only moderate growth in output. That is because most of its growth is focussed in the more labour intensive repair and maintenance sectors. This is also the case for the North East, which despite its modest output growth is projected to see employment increases of 1% a year over the forecast period, higher than the UK average of 0.6%. Not surprisingly, employment growth is also stronger than the UK average in the South East, Greater London and the South West.

The North East's ARR as a percentage of 2012 employment, at 2.3% is in line with the UK average, indicating a stronger level of net employment outflows in the region than the UK as a whole.

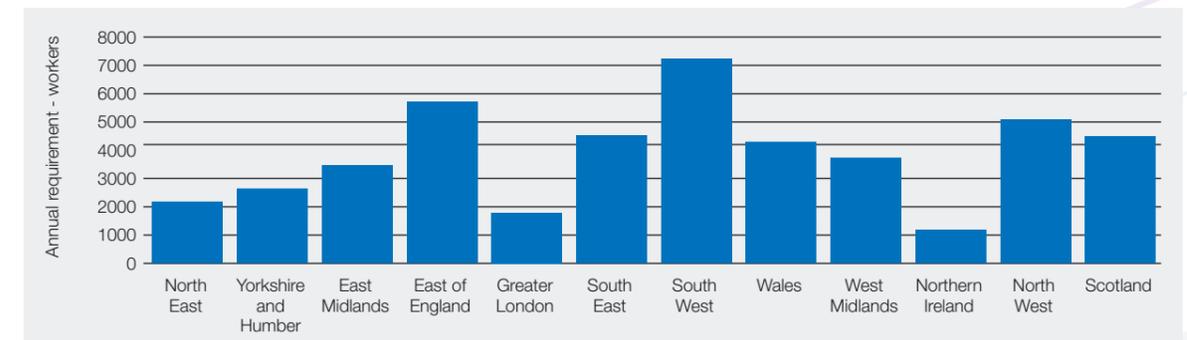
North East's industrial sector will see the largest growth rate in the region, annual average of 6% from 2012-2016

Annual average output growth by region 2012-2016



Source: CSN, Experian ref CSN Explained, Section 5.3, Note 2

Annual recruitment requirement (ARR) by region 2012-2016



Source: CSN, Experian

Grace Darling Campus
Kier



Construction employment is forecast to reach 102,470 by 2016, 8% higher than in 2012

5. CSN explained

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

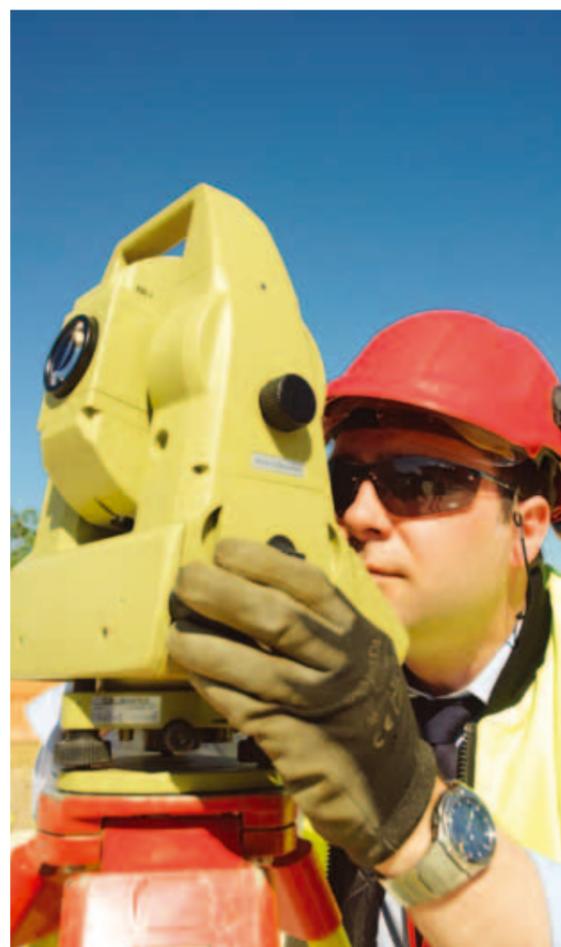
Section 5.1 gives an overview of the underpinning methods that are used by the CSN, working in partnership with Experian, to produce the suite of reports at both a UK, national and regional level.

Section 5.2 provides a glossary to clarify some of the terms that are used in the reports, while section 5.3 has some further notes that relate to the data sources that are used for the various charts and tables. Section 5.3 also outlines what is meant by the term footprint, when talking about the areas of responsibility that lie with a Sector Skills Council.

Section 5.4 explains the sector definitions used within the report and provides examples of what is covered in each.

Section 5.5 gives a detailed breakdown of the 26 occupational groups into the individual standard occupational classification (SOC) codes that are aggregated to provide the employment and recruitment requirement.

Section 5.6 then concludes by giving details about the range of LMI reports, the advantages of being a CSN member and the contact details should people be interested in joining.



Queen Street refurbishment
Gentoo Group

5.1 CSN 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, CIC and CITB Northern Ireland are working as ConstructionSkills, the Sector Skills Council for Construction to produce robust Labour Market Intelligence to provide a foundation on which to plan for future skills needs and to target investment.

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

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

At the heart of the CSN are a number of forecasting models which generate forecasts of employment requirements within the industry for a range of occupational groups. The models are designed and managed by Experian under the independent guidance and validation of the Technical Reference Group, comprised of statisticians and modelling experts.

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

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

The **annual recruitment requirement (ARR)** is a gross requirement that takes into account workforce flows into and out of construction, due to such factors as movements between industries, migration, sickness, and retirement. However, these flows do not include movements into the industry from training, although robust data on training provision is being developed by ConstructionSkills in partnership with public funding agencies, Further Education, Higher Education and employer representatives. Thus, the annual recruitment requirement provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output.

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

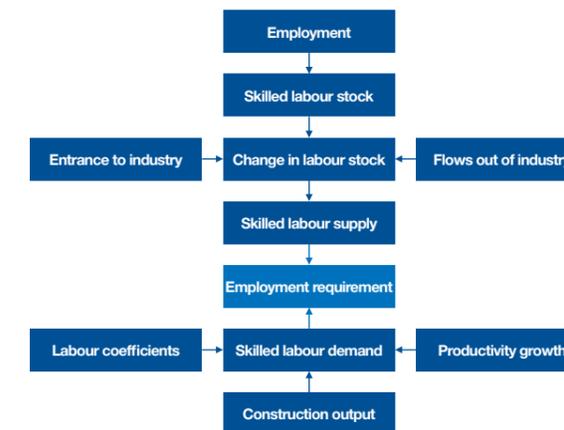
- transfers to other industries
- international/domestic OUT migration
- permanent retirements (including permanently sick)
- outflow to temporarily sick and home duties.

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.

The most significant inflow is likely to be from other industries. A summary of the model is shown in the flow chart.



5.2 Glossary of terms

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



5.3 Notes and footprints

Notes

- 1 Except for Northern Ireland, output data for the English regions, Scotland and Wales are supplied by the Office for National Statistics (ONS) on a current price basis. Thus national deflators produced by the ONS have been used to deflate to a 2005 constant price basis, i.e. the effects of inflation have been stripped out.
- 2 The annual average growth rate of output is a compound average growth rate, i.e. the rate at which output would grow each year if it increased steadily year-on-year over the forecast period.
- 3 Only selected components of gross value added (GVA) are shown in this table and so do not sum to the total.
- 4 For new construction orders comparison is made with Great Britain rather than the UK, owing to the fact that there are no orders data series for Northern Ireland.
- 5 Employment numbers are rounded to the nearest 10.
- 6 The tables include data relating to plumbers and electricians. As part of SIC 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

ConstructionSkills is responsible for SIC 45 Construction and part of SIC 74.2 Architectural and Engineering activities and related technical consultancy.

The table summarises the SIC codes (2003) 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.

ConstructionSkills shares an interest with SummitSkills in SIC 45.31 Installation of wiring and fittings and SIC 45.33 Plumbing. ConstructionSkills recognises the responsibility of Summit Skills across Standard Industrial Classifications (SIC) 45.31 and 45.33, thus data relating to the building services engineering sector is included here primarily for completeness.

AssetSkills

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

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

AssetSkills has a peripheral interest in SIC 74.2.

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.

5.4 Definitions: types and examples of construction work

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

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

Private sector housing

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

Infrastructure - public and private

Water

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

Sewerage

Sewage disposal works, laying of sewers and surface drains.

Electricity

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

Gas, communications, air transport

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

Railways

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

Harbours

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

Roads

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

Public non-residential construction¹

Factories and warehouses

Publicly owned factories, warehouses, skill centres.

Oil, steel, coal

Now restricted to remedial works for public sector residual bodies.

Schools, colleges, universities

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

Health

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

Offices

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

Entertainment

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

Garages

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

Shops

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

Agriculture

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

Miscellaneous

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

Private industrial work

Factories, warehouses, wholesale depots, all other works and buildings for the purpose of industrial production or processing, oil refineries, pipelines & 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 work²

Schools and universities

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

Health

Private hospitals, nursing homes, clinics.

Offices

Office buildings, banks.

Entertainment

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

Garages

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

Shops

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

Agriculture

All buildings and work on farms, horticultural establishments.

Miscellaneous

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

New work

New housing

Construction of new houses, flats, bungalows only.

All other types of work

All new construction work and all work that can be referred to as improvement, renovation or refurbishment and which adds to the value of the property.³

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.⁴

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

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

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

5.5 Occupational groups

Occupational group

Description, SOC reference.

Senior, executive and business process managers

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

Construction managers

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

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

IT operations technicians, 3131
 IT user support technicians, 3132
 Estimators, valuers and assessors, 3531
 Finance and investment analysts/advisers, 3534
 Taxation experts, 3535
 Financial and accounting technicians, 3537
 Vocational and Industrial trainers and instructors, 3563
 Business and related associate professionals nec*, 3539
 Legal associate professionals, 3520
 Inspectors of factories, utilities and trading standards, 3565
 Software professionals, 2132
 IT strategy and planning professionals, 2131
 Estate agents, auctioneers, 3544
 Solicitors and lawyers, judges and coroners, 2411
 Legal professionals nec*, 2419
 Chartered and certified accountants, 2421
 Management accountants, 2422

Management consultants, actuaries, economists and statisticians, 2423
 Receptionists, 4216
 Typists, 4217
 Sales representatives, 3542
 Civil Service administrative officers and assistants, 4112
 Local government clerical officers and assistants, 4113
 Accounts and wages clerks, book-keepers, other financial clerks, 4122
 Filing and other records assistants/clerks, 4131
 Stock control clerks, 4133
 Database assistants/clerks, 4136
 Telephonists, 4141
 Communication operators, 4142
 General office assistants/clerks, 4150
 Personal assistants and other secretaries, 4215
 Sales and retail assistants, 7111
 Telephone salespersons, 7113
 Buyers and purchasing officers (50%), 3541
 Marketing associate professionals, 3543
 Personnel and industrial relations officers, 3562
 Credit controllers, 4121
 Market research interviewers, 4137
 Company secretaries (excluding qualified chartered secretaries), 4214
 Sales related occupations nec*, 7129
 Call centre agents/operators, 7211
 Customer care occupations, 7212
 Elementary office occupations nec*, 9219

Wood trades and interior fit-out

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



Eco Village
Gentoo Group

Bricklayers

Bricklayers, masons, 5312

Building envelope specialists

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

Painters and decorators

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

Plasterers and dry liners

Plasterers, 5321

Roofers

Roofers, roof tilers and slaters, 5313

Floorers

Floorers and wall tilers, 5322

Glaziers

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

Specialist building operatives nec*

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

Scaffolders

Scaffolders, staggers, riggers, 8141

Plant operatives

Crane drivers, 8221
 Plant and machine operatives nec*, 8129
 Transport operatives nec*, 8219
 Fork-lift truck drivers, 8222
 Mobile machine drivers and operatives nec*, 8229
 Agricultural machinery drivers, 8223

Plant mechanics/fitters

Metal working production and maintenance fitters, 5223
 Motor mechanics, auto engineers, 5231
 Labourers in process and plant operations nec*, 9139
 Tool makers, tool fitters and markers-out, 5222
 Vehicle body builders and repairers, 5232
 Auto electricians, 5233
 Vehicle spray painters, 5234
 Tyre, exhaust and windscreen fitters, 8135



Steel erectors/structural

Steel erectors, 5311
 Welding trades, 5215
 Sheet metal workers, 5213
 Metal plate workers, shipwrights and riveters, 5214
 Construction trades nec* (5%), 5319
 Smiths and forge workers, 5211
 Moulders, core makers, die casters, 5212
 Metal machining setters and setter-operators, 5221

Labourers nec*

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

Electrical trades and installation

Electricians, electrical fitters, 5241
 Electrical/electronic engineers nec*, 5249
 Telecommunications engineers, 5242
 Lines repairers and cable jointers, 5243
 TV, video and audio engineers, 5244
 Computer engineers, installation and maintenance, 5245

Plumbing and heating, ventilation, and air conditioning trades

Plumbers and HVAC trades, 5314
 Pipe fitters, 5216
 Labourers in building and woodworking trades (6%), 9121
 Construction trades nec* (5%), 5319

Logistics

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

Civil engineering operatives nec*

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

Non-construction operatives

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

Civil engineers

Civil engineers, 2121

Other construction professionals and technical staff

Mechanical engineers, 2122
Electrical engineers, 2123
Chemical engineers, 2125
Design and development engineers, 2126
Production and process engineers, 2127
Planning and quality control engineers, 2128
Engineering professional nec*, 2129
Electrical/electronic technicians, 3112
Engineering technicians, 3113
Building and civil engineering technicians, 3114
Science and engineering technicians nec*, 3119
Architectural technologists and town planning technicians, 3121
Draughtspersons, 3122
Quality assurance technicians, 3115
Town planners, 2432
Electronics engineers, 2124
Building inspectors, 3123
Scientific researchers, 2321

Architects

Architects, 2431

Surveyors

Quantity surveyors, 2433
Chartered surveyors (not Quantity surveyors), 2434

5.6 CSN website and contact details

The CSN website – <http://www.cskills.org/csn>

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

The main UK report, along with the twelve LMI reports (one for Northern Ireland, Scotland, Wales and each of the nine English regions) can be downloaded from the site, while research reports such as the '2020Vision' and 'Closer look at Greater London' are also freely available.

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

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

The website also contains further information about:

- how the CSN functions
- the CSN Model approach
- how the Model can be used to explore scenarios
- CSN team contact information
- access to related ConstructionSkills research
- details for those interested in becoming members of the network.

The CSN website can be found at:

<http://www.cskills.org/csn>

CSN members area

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

As a CSN member you will be linked to one of the Observatory groups, which play a vital role in being able to feed back observations, knowledge and insight on what is really happening on the ground in every UK region and nation. This feedback is used to fine tune the assumptions and data that 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
- access sub-regional LMI reports
- download additional research material
- comment/feedback to the CSN Team.

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

Contact details

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

csn@cskills.org



For more information about the
Construction Skills Network, contact

Lee Bryer

Research and Development

Operations Manager

0344 994 4400

Lee.bryer@cskills.org

<http://www.cskills.org/contact-us/offices.aspx>

Cskills website

<http://www.cskills.org/>

CSN webpage

<http://www.cskills.org/supportbusiness/businessinformation/csn/index.aspx>

