Construction Skills Network
Northern Ireland 2014-2018

Labour Market Intelligence

ConstructionSkills is 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.

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1 Summary – Northern Ireland

Construction output in Northern Ireland is estimated to grow at an annual average rate of 2.3% over the five years to 2018, roughly in line with the UK as a whole (2.2%). New work is expected to fare better than the repair and maintenance (R&M) sector over the forecast period (2.5% vs. 1.8%). However, Northern Ireland has suffered one of the severest falls in output in recent years, estimated at around 40% in real terms over the 2008 to 2013 period, so activity will be rising from a low base. Employment is predicted to grow at an annual average rate of 1.1%, once again similar to the UK rate (1.2%). The annual average recruitment requirement (ARR) for the 2014 to 2018 period is estimated at 1,280, representing 2.2% of base 2014 employment.

Annual average construction output growth 2014-2018 – Northern Ireland
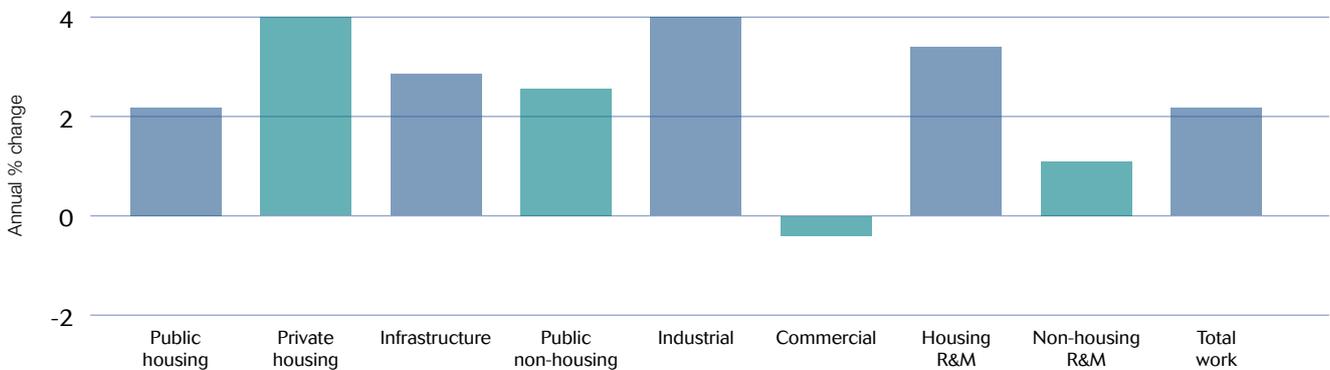
Source: CSN, Experian
ref. CSN Explained, Section 3, Note 2

1.1 Key findings

Construction output in Northern Ireland is estimated to have declined by 4% in 2013, a disappointing performance that has put recovery in the sector back by a year. However, growth is expected to return in 2014 and the industry is projected to expand at an annual average rate of 2.3% over the five years to 2018.

The best performing sectors are forecast to be the private housing and industrial ones, with 3.9% annual average growth in the former and 4% in the latter. Private housing activity in Northern Ireland has dropped down to around the UK average in terms of its share of total construction output, and this, combined with stabilising house prices and improving confidence, should lead to expansion in the sector over the medium term.

The industrial construction sector has shrunk from around £100m in 2002 at 2005 prices, to just £36m in 2012. The 4% annual average growth rate only equates to a £12m rise in the sector's size by 2018.

Infrastructure output is predicted to rise by 2.7% a year on average over the forecast period, driven in particular by roads projects, such as upgrades to the A2, A5, and A6. The indication from the 2011–2021 Northern Ireland Investment Strategy is that expenditure on the roads system could increase in the second half of the forecast period.

The prognosis for construction employment in Northern Ireland has turned positive for the first time in a while, with an annual average growth rate of 1.1% forecast, which is close to the UK average of 1.2%. Employment should start expanding in 2014 and continue to do so over the whole of the forecast period.

Twenty out of the 28 occupational groups should see growth, with annual average growth strongest for project managers (5.4%), trade supervisors (4.6%), and plant mechanics/fitters (4.2%).

The ARR for the 2014–2018 period is estimated at 1,280, considerably higher than the 660 estimated last year for the 2013–2017 period. This represents 2.2% of the projected 2014 workforce in Northern Ireland, a higher ratio than for the UK as a whole (1.5%). Part of the reason for this relatively higher ARR is believed to be because the devolved nation has suffered significant net outflows of its construction workforce to other areas of the UK in recent years. In 2012, this net outflow is estimated at 19,000.

Construction output in Northern Ireland is projected to grow at an annual average rate of 2.3% over the five years to 2018

Regional comparison 2014–2018

	Annual average % change in output	Change in total employment	Total ARR
North East	2.4%	2,660	2,680
Yorkshire and Humber	2.2%	8,590	3,170
East Midlands	1.1%	5,910	1,980
East of England	3.0%	24,220	5,150
Greater London	2.0%	27,490	1,290
South East	2.9%	28,900	1,600
South West	3.5%	16,700	6,370
Wales	3.4%	9,490	3,570
West Midlands	0.8%	-2,090	380
Northern Ireland	2.3%	3,400	1,280
North West	1.3%	10,300	2,970
Scotland	2.0%	12,240	5,960
UK	2.2%	147,810	36,400

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

2 The outlook for construction in Northern Ireland

2.1 Construction output in Northern Ireland – overview

Construction output in Northern Ireland continued to fall in 2012, to £1.95bn at 2005 prices. This was the fifth consecutive year of decline and it took activity in the devolved nation down to nearly 38% below its 2007 peak. However, the rate of contraction slowed to 3% in 2012, which was a better performance than the UK as a whole in that year (-8%).

The decline was largely in the new work sector, which experienced an output fall of 4%, compared with 1% for R&M.

The pattern of activity across the sectors was very mixed. Public housing output rose by 21% to a new historic high of £221m at 2005 prices, but private housing activity continued to decline sharply, by 27% to £278m. This means that the private sector accounted for only 56% of total housing activity in Northern Ireland in 2012, compared with 78% across the UK as a whole. Industrial and commercial construction activity was also heavily down but, in contrast, infrastructure output was up by 20% and public non-housing saw a modest rise of 1%. Therefore, the public sectors did better than the private sectors in Northern Ireland in 2012, which was the opposite of the pattern in the UK as a whole.

Construction output – Northern Ireland 1996-2012
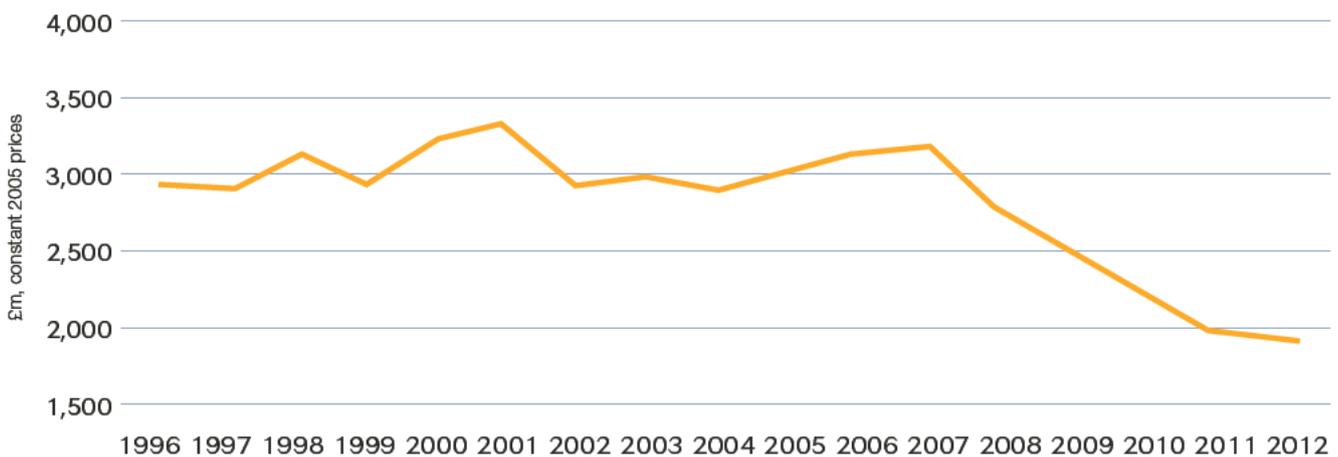
Source: ONS
ref. CSN Explained, Section 3, Note 1

2.2 Industry structure

The diagram, Construction Industry structure 2012 – UK vs. Northern Ireland, illustrates the sector breakdown of construction in Northern Ireland compared to that in the UK. Effectively, the percentages for each sector illustrate the proportion of total output accounted for by each sector.

The structure of the Northern Ireland construction industry remains different to the UK as a whole, but it continues to converge. The share of housing output fell another 3% in Northern Ireland between 2011 and 2012 and, at 25%, is now only 7% larger than in the UK as a whole (from 11% in 2011). The private housing sector now accounts for the same proportion of construction activity across the two geographies and this strongly suggests that the 30% (and greater) shares that the sector took in Northern Ireland for most of the first decade of the 2000s were exceptional figures that are unlikely to be repeated.

Both the infrastructure (20% vs. 12%) and public non-housing (16% vs. 10%) sectors take substantially larger shares of construction output in Northern Ireland compared with the UK average but, conversely, the commercial sector is proportionally much smaller (9% vs. 21%).

Construction Industry structure 2012 – UK vs. Northern Ireland
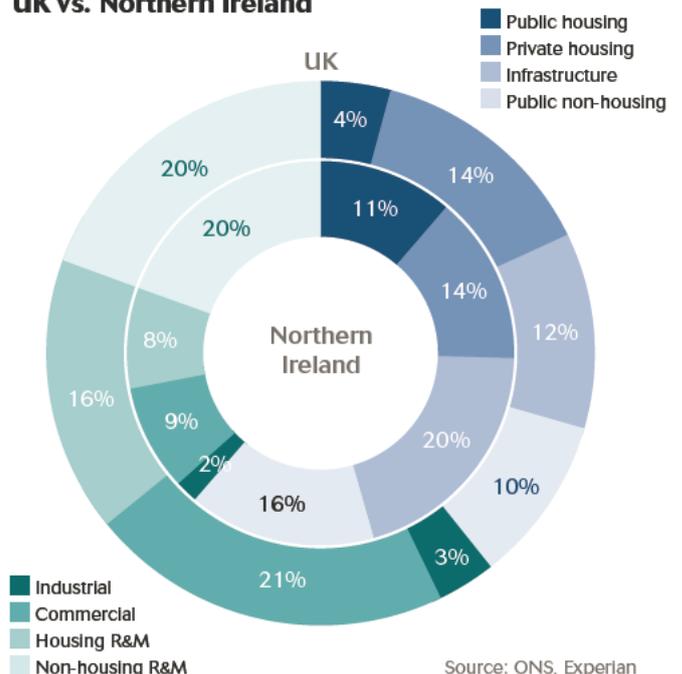
Source: ONS, Experian

The R&M sector, and in particular housing R&M, remains proportionally smaller than in the UK as a whole (28% vs. 36%), although its share of Northern Ireland construction output has doubled from 14% between 2000 and 2012.

2.3 Economic overview

The expected performance of a regional or national economy over the forecast period (2014–2018) provides an indication of the construction sectors in which demand is likely to be strongest.

2.4 Economic structure

Northern Ireland's gross value added (GVA) totalled £29.2bn at 2010 prices in 2012, a decline of 1.7% on the previous year and a significantly worse performance than the UK as a whole (0.3%). This left GVA in Northern Ireland more than 5% below its 2007 peak in 2012.

The Northern Ireland economy continues to be heavily reliant on the public services sector, which accounted for 27.7% of GVA in 2012. Its share has generally been on a slightly upward trend since, despite the financial constraints that public organisations are currently working under. Professional and other public services accounted for 19.2% of GVA in Northern Ireland in 2012, compared with a 24.3% share across the UK as a whole. Construction accounted for 6.2% of Northern Ireland GVA in 2012, slightly higher than the UK average of 5.8%. Manufacturing continues to be an important sector for the Northern Ireland economy, accounting for 15.5% of GVA in 2012, significantly higher than the 10.3% share it takes of UK output.

Economic structure – Northern Ireland (£ billion, 2010 prices)

Selected sectors	Actual	Forecast *Annual % change, real terms*					
	2012	2013	2014	2015	2016	2017	2018
Public services	8.1	2.4	0.3	0.5	0.9	1.1	1.4
Professional and other private services	5.6	0.7	2.0	1.7	2.1	1.9	1.9
Manufacturing	4.5	0.8	1.5	0.8	1.0	0.8	0.6
Wholesale and retail	3.7	3.6	2.0	1.8	2.1	1.9	1.9
Finance and insurance	1.2	-5.1	1.1	1.9	2.5	2.4	2.2
Total Gross Value Added (GVA)	29.2	1.0	1.3	1.3	1.6	1.6	1.6

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

2.5 Forward looking economic indicators

Northern Ireland's economy is estimated to have returned to growth in 2013, with expansion of around 1%. Over the five years to 2018, GVA in the devolved nation is projected to rise at an annual average rate of 1.5%, continuing its trend of lagging behind UK expansion by around 0.5% a year.

Public services, the largest sector of the Northern Ireland economy, is expected to see annual average growth of 0.8%, as financial pressures remain a constraint throughout the forecast period. Professional and other private services should do significantly better, with an annual average growth rate of 1.9%, but the prospects for manufacturing remain relatively weak, with just 1% a year growth on average predicted for the 2014– 2018 period.

In contrast, the information and communication sector is expected to do much better, growing at an annual average rate of 2.3% over the forecast period. This is likely to be a feature of the UK economy overall, as technological advances make this sector more important. As yet, the sector is relatively small in Northern Ireland, accounting for 3.6% of GVA in 2012, compared with 6.5% across the UK, but the expectation is that it will grow in importance.

Economic indicators – Northern Ireland (£ billion, 2010 prices – unless otherwise stated)

	Actual	Forecast *Annual % change, real terms*					
	2012	2013	2014	2015	2016	2017	2018
Real household disposable income	24.9	-0.9	0.9	1.2	1.7	2.0	2.1
Household spending	26.1	1.3	1.3	1.7	1.9	1.9	1.9
Working age population (000s and as % of all)	1,121	61.9%	62.2%	62.5%	62.7%	62.9%	62.9%
House prices (£)	131,265	-0.8	1.4	1.4	1.8	1.8	2.1
LFS unemployment (millions)	0.06	9.13	-1.81	-6.66	-4.29	-3.65	-4.71

Source: ONS, DCLG, Experian

Real household disposable income (RHDI) is estimated to have fallen by 0.9% in 2013, the fourth year of decline in the past six, leaving it 5% below its 2007 peak. In contrast, household spending is likely to have grown by 1.3% in the same year, suggesting that consumers have dug into their savings or increased borrowing significantly during the year. RHDI should return to growth in 2014, and the rate of increase should slowly rise over the forecast period, as inflation continues to subside and average earnings increase faster than at their current rate. This should lead to rises in household expenditure, although, at an annual average rate of 1.7% in the five years to 2018, it will remain well below the 5% a year seen in the five years to 2007.

House prices remained weak in Northern Ireland in 2012, with the mix-adjusted average falling by 10% to an average price of £131,265 according to the Office for National Statistics (ONS). In that year, house prices fell to just 57% of their 2007 peak, although they rose by 78% between 2005 and 2007. A marginal decline is estimated for 2013 on the ONS measure, followed by modest growth over the forecast period.

Unemployment totalled around 65,000 in Northern Ireland in 2012 on the Labour Force Survey measure and this is estimated to have risen to about 71,000 in 2013, a rate of 8.2%. The rate is projected to subside thereafter, to around 6.4% by 2018.

2.6 Construction output – short-term forecasts (2014–2015)

Construction output data for Northern Ireland are published by the Department of Finance and Personnel. At the time of writing, data were available only for the first half of 2013 although, unlike the English regions and other devolved nations, an estimate of output in constant prices is made. No new orders data are available for Northern Ireland.

Construction output in the first half of 2013 totalled £929m at 2005 prices, 8% down on the corresponding period of 2012, but a similar outturn to the second half of that year.

The public housing sector fared badly in the first half of 2013, with output falling by over 20% compared with the corresponding period of 2012. However, the level of output in the sector in 2012 was at a historic high, so it was probably inevitable that some decline in the sector would be seen. Also heavily down half-year-on-half-year were the infrastructure (-15%), public non-housing (-25%), and industrial sectors (-15%). Activity in the R&M sectors was flat overall. The two bright spots were private housing, with output up 4% year-on-year, and commercial construction at 10% higher.

The expectation put forward in 2012 that construction output in Northern Ireland would stabilise in 2013 looks like proving a little premature, with the estimated outturn for the year now suggesting a decline of 4%.

Construction output 2014-2015 – Northern Ireland (£ million, 2005 prices)

	Actual	Forecast Annual % change			Annual average
	2012	2013	2014	2015	2014-15
Public housing	221	-18%	-3%	6%	1.4%
Private housing	278	3%	6%	3%	4.6%
Infrastructure	393	-1%	4%	5%	4.7%
Public non-housing	303	-21%	1%	4%	2.5%
Industrial	36	9%	8%	10%	9.1%
Commercial	180	3%	-6%	-4%	-4.6%
New work	1,410	-7%	2%	4%	2.7%
Housing R&M	152	8%	3%	4%	3.6%
Non-housing R&M	393	1%	-1%	3%	1.1%
Total R&M	545	3%	0%	3%	1.8%
Total work	1,955	-4%	1%	4%	2.4%

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

Growth is now projected to return a year later, in 2014, at a modest 1% before strengthening to 4% in the following year. This provides an annual average rate of 2.4% for construction over the short term.

Expansion is predicted to be strongest in the industrial construction sector, at an annual average rate of 9.1%. However, this disguises the fact that output from the sector is at very low levels, just £36m at 2005 prices in 2012, so very small movements in value equate to large movements in growth rates.

Of the more important sectors to the Northern Ireland construction market, the private housing and infrastructure sectors are expected to perform best over the short term, with annual average growth rates of 4.6% and 4.7% respectively. According to the ONS, house prices in Northern Ireland continued to fall sharply during 2012 and ended the year nearly 10% down on 2011. However, the indications are that they are beginning to stabilise, with the annualised rate to the third quarter of 2013 showing a slight rise of 0.4%.

The biggest housing project in the pipeline remains the proposed £100m redevelopment of the Hilden Mill site in Lisburn, which could deliver up to 660 mixed-tenure units, as well as light industrial, commercial and community facilities. Clanmill Housing Association,

which is developing the project, is due to make a final decision on purchase and regeneration of the site by summer 2014. Other smaller developments are planned in the Dunsilly, Castlereagh, and Ballymena areas over the next two years.

In the infrastructure sector, Northern Ireland Water's water distribution capital framework is now running and is due to deliver £485m of work over the four years from September 2013. The £100m– £120m dualling project on the A8 between Belfast and Larne is ongoing and due to complete in mid-2015, as is the A2 widening at Greenisland. Roads projects expected to start within the next two years include the dualling of the A26 between Glarryford and the junction with the A44, worth between £60m and £70m. Two projects, which are part of the huge A5 Western Transport Corridor development, have recently concluded procurement and are scheduled to start construction in mid-2015. These are the sections north of Strabane to New Buildings, worth between £100m and £120m, and south of Armagh to Ballygawly, at an estimated cost of between £160m and £180m. The conclusion is that plenty of activity is ongoing or in the pipeline in the roads sub-sector to help drive the infrastructure sector forward.

Annual average construction output growth 2014-2015 – Northern Ireland

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

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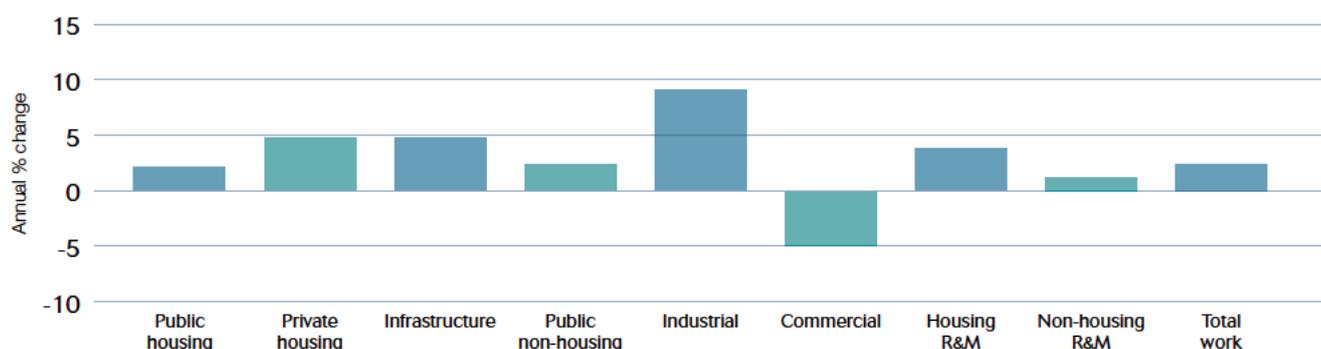
CSN EXPLAINED

On the housing R&M side, the Warm Homes programme is ongoing but is due to complete at the end of March 2015. However, a new £190m framework programme has recently been released for more general repairs and refurbishment of the public housing stock across Northern Ireland, which is due to run for four years to November 2017.

2.7 Construction output – long-term forecasts (2014–2018)

Annual average output growth over the 2014 to 2018 period is projected to reach 2.3% for Northern Ireland, slightly better than the UK average (2.2%), and significantly higher than the 1.7% projected last year for the 2013 to 2017 period. New work is expected to fare better than R&M, with annual average growth of 2.5% for the former compared with 1.8% for the latter.

Growth is forecast to be strongest in the private housing (3.9% annual average) and industrial sectors (4%). However, the industrial sector is currently so small that this rate of growth will only take output up to £48m at 2005 prices in 2018, just 2.3% of Northern Ireland construction output. Manufacturing output is projected to expand at an average of 1% a year over the next five years and, while this growth rate is hardly spectacular, it is better than the 0.8% seen in the five years to 2012.

The private housing sector is expected to see steady rather than robust growth over the whole of the forecast period. The sector's share of total construction output in Northern Ireland has fallen to around the UK average of 14%, which suggests that the much larger share held in the early 2000s was something of a temporary phenomenon. However, improving economic conditions, easing of credit restrictions and a return of consumer confidence should help to boost the sector over the medium term. A number of reasonably sized projects are proposed for the sector that at present do not have start dates but are likely to commence before the end of the forecast period. These include a 500-home development in Bangor, a mixed-use scheme with nearly 400 apartments for Belfast and a 180-unit development for Dungannon.

The public non-housing sector is forecast to return to growth over the forecast period after four consecutive years of decline to 2013. Redevelopment works are currently ongoing at Windsor Park, Ravenhill, and Casement Park, worth between £105m and £135m in total, with some continuing to the third quarter of 2015. According to the NI Investment Strategy, between £116m and £152m of education projects have been initiated and should start on site within the forecast period.

On the health side, a new radiotherapy unit is planned for the Altnagelvin hospital in Derry as part of its long-term development plan. Work on the £130m project is scheduled to start in mid-2014 and last until 2018. Five other health projects have received approval, the largest of which is the new maternity unit at the Royal Victoria hospital in Belfast, worth between £45m and £50m, where work should have recently started.

Commercial construction is the only sector expected to experience negative growth overall for the five years to 2018 (-0.3%) although this disguises a weak first half of the forecast period and a stronger second half. Northern Ireland's retail construction sector is not immune to the changes in shopping habits taking place across the UK, in particular the growth in online retailing reducing the need for a high street presence.

While the main sectors that drive commercial construction – wholesale and retail, accommodation, food services and recreation, finance and insurance, and professional and other private services – are all expected to return to growth over the forecast period, rates of expansion will be much lower than in the last five-year

Annual average construction output growth 2014-2018 – Northern Ireland
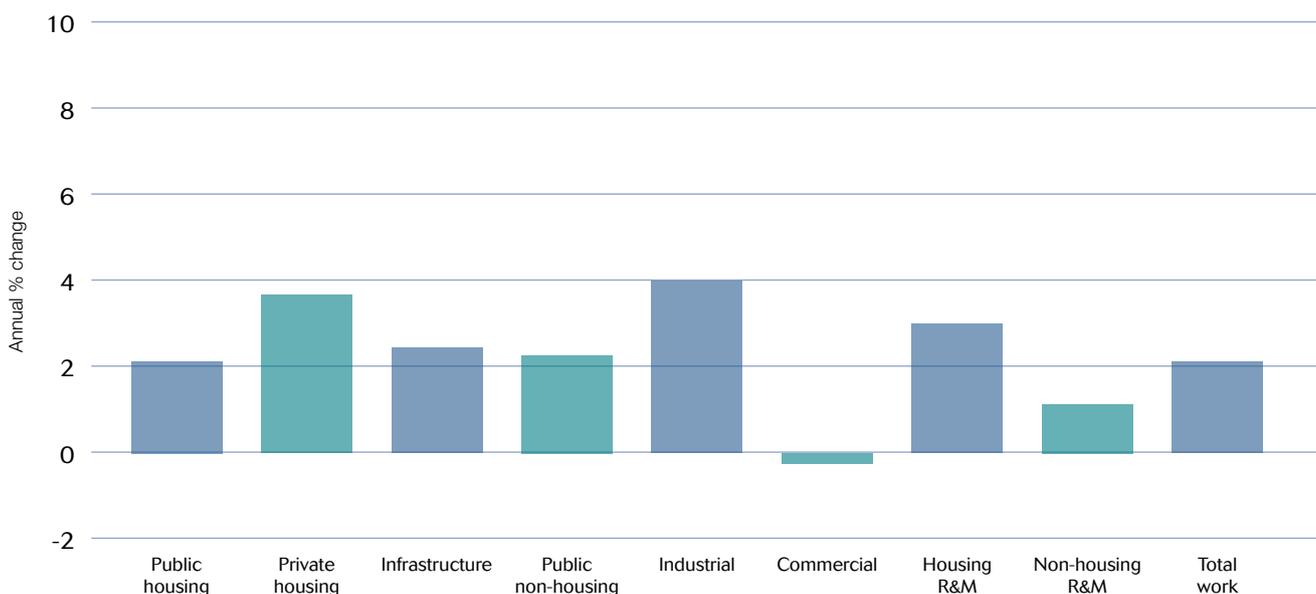
Source: Experian
ref. CSN Explained, Section 3, Note 2

Construction output 2014-2018 – Northern Ireland (£ million, 2005 prices)

	Estimate	Forecast Annual % change					Annual average
	2013	2014	2015	2016	2017	2018	2014-18
Public housing	181	-3%	6%	4%	1%	4%	2.3%
Private housing	287	6%	3%	3%	4%	3%	3.9%
Infrastructure	388	4%	5%	3%	1%	0%	2.7%
Public non-housing	239	1%	4%	5%	0%	2%	2.4%
Industrial	39	8%	10%	0%	2%	1%	4.0%
Commercial	184	-6%	-4%	1%	3%	4%	-0.3%
New work	1,319	2%	4%	3%	2%	2%	2.5%
Housing R&M	164	3%	4%	3%	3%	2%	3.3%
Non-housing R&M	397	-1%	3%	2%	2%	0%	1.2%
R&M	561	0%	3%	2%	2%	1%	1.8%
Total work	1,879	1%	4%	3%	2%	2%	2.3%

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

growth period (2002–2007). For example, professional and other private services are projected to expand by an annual average of 1.9% in the five years to 2018 but growth averaged 8.5% over the five years to 2007.

The biggest commercial project in the pipeline remains the £360m mixed-use Royal Exchange scheme in Belfast, where work was due to start in mid-2013 but has slipped back to mid-2014. Otherwise, few large-scale commercial construction projects are currently in the pipeline in Northern Ireland, hence the rather weak forecast for the sector.

2.8 Beyond 2018

Over the long term, focus is likely to continue to be on improvements to the devolved nation's transport infrastructure, and roads in particular. Developments on the A5 Western Corridor are expected to continue past the current forecast period, and further dualling works on the A6 are proposed for the first half of the 2020s.

The indicative funding provisions in the Northern Ireland Investment Strategy 2011–2021 suggests that capital funding for roads, schools, health and water and sewerage should increase after 2014–2015.

Civil engineers, architects, surveyors should see growth in employment as they tend to be particularly prevalent in the early stages of construction projects

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3 Construction employment forecasts for Northern Ireland

3.1 Total construction employment forecasts by occupation

The table presents actual construction employment (SICs 41–43, 71.1 and 74.9) in Northern Ireland for 2012, the estimated total employment across 28 occupational categories in 2013 and forecasts for the industry for 2014 to 2018. A full breakdown of occupational groups is provided in Section 5 of CSN Explained.

Construction employment in Northern Ireland is projected to total just over 62,000 in 2018, representing an average annual growth rate of 1.1% over the forecast period. It should be noted that employment numbers are not directly comparable to those produced in the previous Labour Market Intelligence report due to changes in the official data consequent on the move from Standard Occupational Classification (SOC) 2000 to SOC 2010. This growth rate is slightly lower than the average UK's, at 1.2%. Employment is projected to start rising in 2014.

While the overall trend will be upwards, not all of the 28 occupational categories are predicted to see growth over the forecast period. However, 20 of the 28 categories are expected to see rising employment, with the biggest increases for project managers (5.4% annual average growth), trade supervisors (4.6%) and plant mechanics/fitters (4.2%). All the professional occupations — civil engineers, architects, surveyors — should see growth in employment as they tend to be particularly prevalent in the early stages of construction projects and so will be the first to benefit from recovery.

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

Total employment by occupation – Northern Ireland

	Actual	Estimate	Forecast	
	2012	2013	2014	2018
Senior, executive and business process managers	3,480	3,800	3,770	3,730
Construction project managers	1,190	1,060	1,130	1,380
Other construction process managers	4,480	4,900	4,980	5,340
Non-construction professional, technical, IT and other office-based staff	7,520	6,720	6,810	7,240
Construction trades supervisors	890	790	850	990
Wood trades and interior fit-out	7,190	6,790	6,950	7,670
Bricklayers	2,130	2,010	2,040	2,170
Building envelope specialists	1,090	980	980	1,000
Painters and decorators	3,500	3,120	3,180	3,420
Plasterers	2,320	2,070	2,120	2,300
Roofers	1,220	1,110	1,150	1,310
Floorers	280	250	260	270
Glaziers	570	510	510	540
Specialist building operatives nec*	750	820	780	670
Scaffolders	230	230	230	230
Plant operatives	1,300	1,180	1,180	1,160
Plant mechanics/fitters	640	700	730	860
Steel erectors/structural fabrication	220	190	180	150
Labourers nec*	4,230	3,780	3,690	3,470
Electrical trades and installation	5,050	5,070	4,990	4,920
Plumbing and HVAC Trades	3,880	3,460	3,460	3,210
Logistics	410	450	450	460
Civil engineering operatives nec*	600	540	540	600
Non-construction operatives	170	180	190	220
Civil engineers	2,650	2,390	2,470	2,790
Other construction professionals and technical staff	3,150	3,120	3,180	3,400
Architects	1,770	1,580	1,600	1,660
Surveyors	860	820	830	890
Total (SIC 41-43)	53,340	50,710	51,150	53,310
Total (SIC 41-43, 71.1, 74.9)	61,770	58,620	59,230	62,050

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

training, although robust data on training provision is being developed by ConstructionSkills. Therefore, the annual recruitment requirement provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output.

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 used, will be able to work in the industry without the need for significant retraining.

The ARR for the 2014– 2018 period for the 28 occupational groups within Northern Ireland's construction industry is illustrated in the table. The ARR of 1,280 is significantly higher than that projected for the 2013–2017 period last year of 660 and reflects the strengthening recovery.

This ARR represents 2.2% of projected base employment in Northern Ireland in 2014, somewhat higher than the UK average of 1.5%, despite the fact the both geographies have similar output growth rates. However, Northern Ireland has seen significant net outflows of its construction workforce in recent years due to its strong decline in output, 38%, between 2007 and 2012. According to CITB's 2012 Workforce

Mobility and Skills report, only 4% of those working in construction in Northern Ireland originated from elsewhere. Utilising figures from the Labour Force Survey, this would equate to around 2,500.

In contrast, according to the same study, 1% of the 2012 Scottish construction workforce originated from Northern Ireland, 3% of that in the North West, 2% of that in the West Midlands, 1% of that in the South East, and 1% of that in Greater London. Again using Labour Force Survey data as the baseline, this would equate to over 21,500 in 2012. Thus, Northern Ireland seems to have had a net outflow of its construction workforce of around 19,000 in that year. The concern is how many will return once recovery sets in.

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 not elsewhere classified (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 – Northern Ireland

	2014-2018
Senior, executive and business process managers	-
Construction project managers	110
Other construction process managers	90
Non-construction professional, technical, IT and other office-based staff	<50
Construction trades supervisors	<50
Wood trades and interior fit-out	80
Bricklayers	170
Building envelope specialists	<50
Painters and decorators	140
Plasterers	160
Roofers	70
Floorers	<50
Glaziers	<50
Specialist building operatives nec*	-
Scaffolders	-
Plant operatives	90
Plant mechanics/fitters	70
Steel erectors/structural fabrication	-
Labourers nec*	-
Electrical trades and installation	-
Plumbing and HVAC Trades	<50
Logistics	-
Civil engineering operatives nec*	<50
Non-construction operatives	-
Civil engineers	<50
Other construction professionals and technical staff	110
Architects	-
Surveyors	-
Total (SIC 41-43)	1,170
Total (SIC 41-43, 71.1, 74.9)	1,280

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

4 Comparisons across the UK

The strongest growth in construction output is expected in the South West and Wales, as both will benefit from new nuclear build projects during the forecast period. Even though main construction works at Wylfa, Wales, are not due to start until mid-2017 at the earliest, this is a very large project in a relatively small market, making its impact on overall construction output similar to Hinkley Point in the South West, despite the latter starting three years earlier.

Once the South West and Wales are stripped away, the south east corner of England is again due to do rather better than the rest of the UK. The South East benefits disproportionally from growth in the private housing sector which takes a larger share of output in the region than the UK average (18% vs. 14%). This combined with a higher than average growth rate (5.7% vs. 4.6%) helps boost overall expansion in the South East's construction sector (with an annual average growth of 2.9% to 2018). The East of England has a slightly stronger average growth rate of 3% a year. The main reasons for the region's higher than average increase in construction output are good growth in private housing, combined with higher than average infrastructure expansion when work starts on the site of the Sizewell C new nuclear project at the beginning of 2018. In addition, strong growth in industrial construction is linked to the development of distribution and logistics facilities around London Gateway Port.

Interestingly however, Greater London's projected annual average output growth rate of 2% is slightly below the UK average (2.2%). Greater London is the only region to have experienced expansion in construction output in real terms over the five years to 2012; therefore activity in some sectors may be close to peaking. For example, infrastructure activity is projected to decline by an annual average of 2.4% in the five years to 2018, as projects such as Crossrail and Thameslink wind down in the second half of the forecast period.

Despite the South West and Wales being the strongest areas in output terms, they do not top the employment rankings. Infrastructure work has a smaller labour requirement than other sectors and so impacts employment much less than output. The East of England has the strongest employment growth rate, of 2% a year on average over the forecast period. This is due to two factors – a strong output growth rate and the region's higher than average share of the much more labour intensive R&M sectors compared with the UK as whole (45% vs. 36%). All regions are expected to see employment growth except the West Midlands, where output growth of just 0.8% a year on average is not enough to drive expansion of employment given anticipated productivity gains.

Concerns about prospective skills shortages have been increasing in some quarters recently, which may initially seem surprising given the industry's position in the recovery cycle. Construction output in 2013 is likely still to be 15% below its 2007 peak, and employment is likely to be 13% down on its 2008 peak. This would suggest that a substantial pool of construction workers is waiting to re-enter the industry. However, many of these workers may have taken jobs in other sectors, or retired. Questions remain about the number of workers who will come back into the industry as growth continues and, of these, how many will have been out of the industry for such a length of time that they will require some level of retraining.

Annual average output growth by region 2014-2018
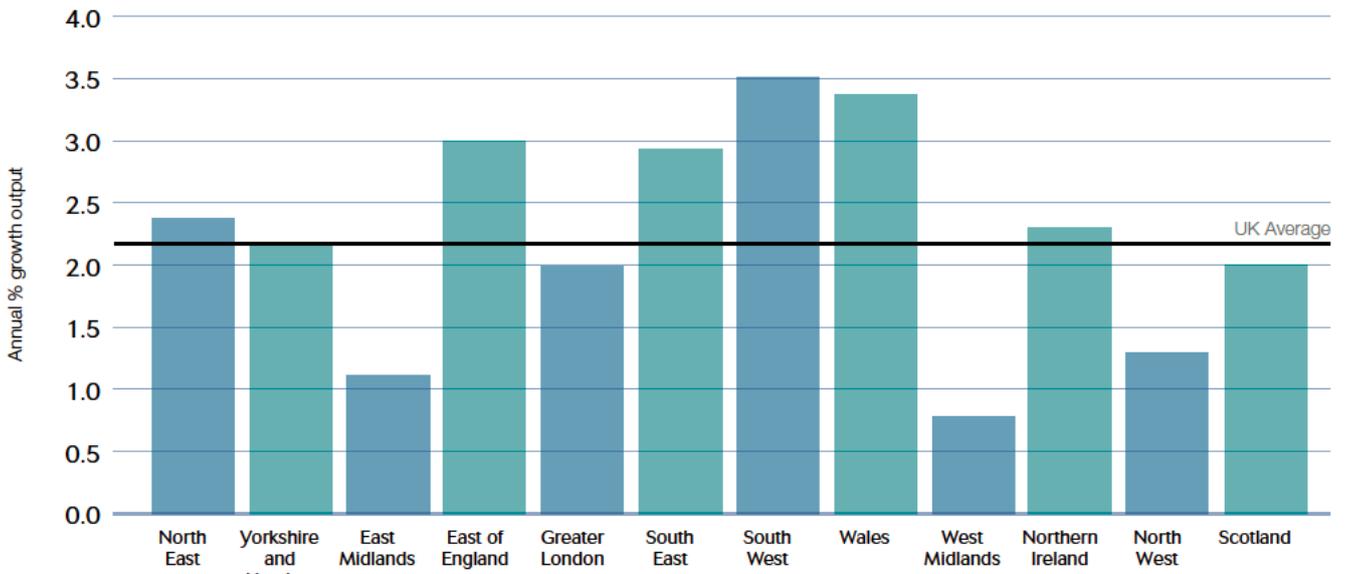
Source: CSN, Experian
ref. CSN Explained, Section 3, Note 2

Annual recruitment requirement (ARR) by region 2014-2018

Source: CSN, Experian

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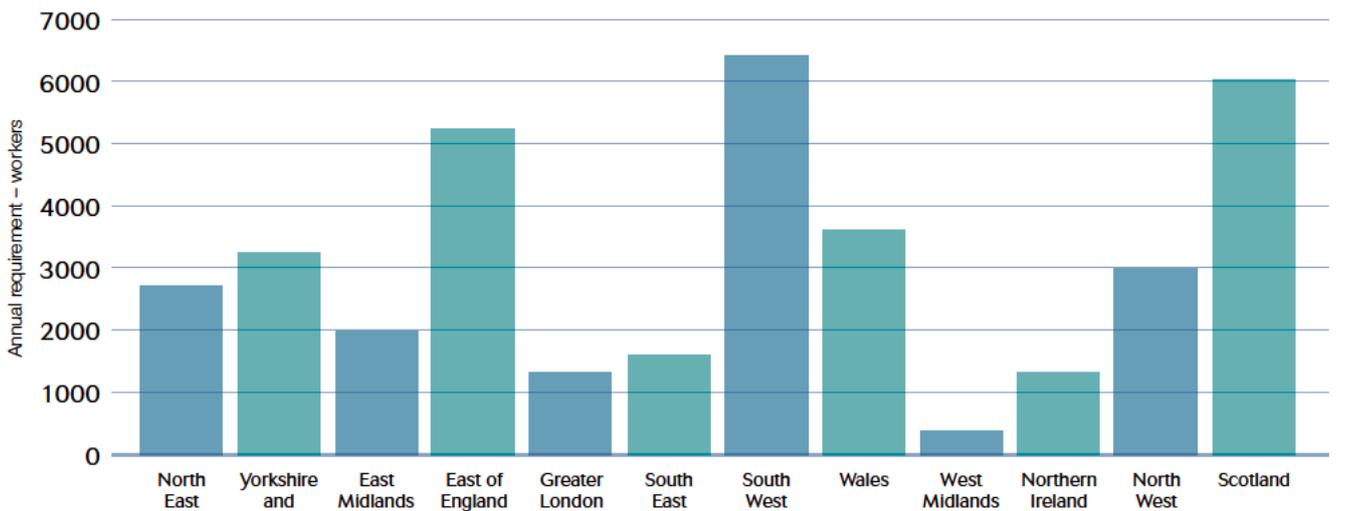
CSN EXPLAINED

CSN Explained

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

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

Section 2 provides a glossary to clarify some of the terms that are used in the reports.

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

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

Section 5 gives a detailed breakdown of the 28 occupational groups into the individual standard occupational classification (SOC) codes that are aggregated to provide the employment and recruitment requirement.

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

1 CSN methodology

Background

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

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

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

At the heart of the CSN are several models 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, which is comprised of statisticians and modelling experts.

The models have evolved over time and will continue to do so, to ensure that they account for new research as it is published as well as new and improved modelling techniques. Future changes to the model will only be made after consultation with the Technical Reference Group.

The model approach

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

The models work by forecasting demand and supply of skilled workers separately. The difference between demand and supply forms the employment requirement. The forecast total employment levels are derived from expectations about construction output and productivity. Essentially, this is based upon the question 'How many people will be needed to produce forecast output, given the assumptions made about productivity?'.

The **annual recruitment requirement** (ARR) is a gross requirement that takes into account workforce flows into and out of construction, due to such factors as movements between industries, migration, sickness and retirement. However, these flows do not include movements into the industry from training, although robust data on training provision is being developed by CITB in partnership with public funding agencies, further education, higher education and employer representatives. Thus, the 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.

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

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

- Transfers to other industries
- International/domestic OUT migration
- Permanent retirements (including permanent sickness)
- Outflow to temporary sickness and home duties.

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

Flows into the labour market include:

- Transfers from other industries
- International/domestic immigration
- Inflow from temporary sickness and home duties.

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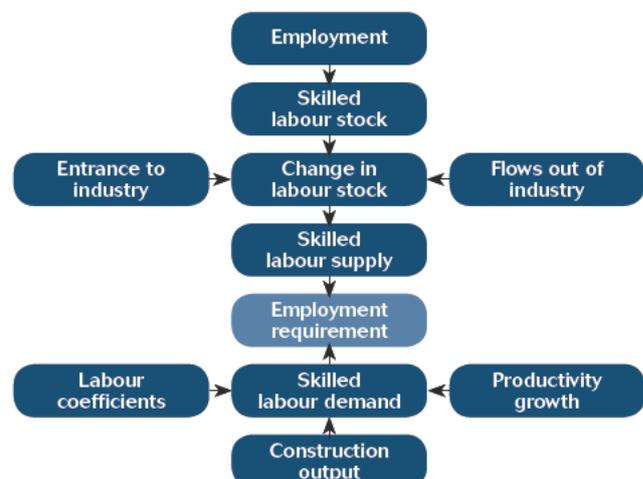
2 Glossary of terms

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

Demand – this is calculated using construction output data from the Office for National Statistics (ONS) and the Department of Finance and Personnel Northern Ireland (DFP), along with vacancy data from the National Employer Skills Survey, produced by the Department for Education and Skills. These data sets are translated into labour requirements by trade using a series of coefficients to produce figures for labour demand that relate to forecast output levels.

GDP (gross domestic product) – total market value of all final goods and services produced. A measure of national income. GDP = GVA plus taxes on products minus subsidies on products.

GVA (gross value added) – total output minus the value of inputs used in the production process. GVA measures the contribution of the economy as a difference between gross output and intermediate outputs.

Coefficients – to generate the labour demand, the model makes use of a set of specific statistics for each major type of work, to determine employment by trade or profession, based upon the previous year's supply. In essence, this is the number of workers of each occupation or trade needed to produce £1m of output across each sub-sector.

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

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

Macroeconomics – the study of an economy at a national level, including total employment, investment, imports, exports, production and consumption.

Nec – not elsewhere classified, used as a reference in LFS data.

ONS (Office for National Statistics) – organisation producing official statistics on the economy, population and society at both a national and local level.

Output – total value of all goods and services produced in an economy.

Productivity – output per employee.

SIC codes (Standard Industrial Classification codes) – from the United Kingdom Standard Industrial Classification of Economic Activities produced by the ONS.

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

Supply – the total stock of employment in a period of time, plus the flows into and out of the labour market. Supply is usually calculated from LFS data.

3 Notes and footprints

Notes

1 Except for Northern Ireland, output data for the English regions, Scotland and Wales is supplied by the Office for National Statistics (ONS) on a current price basis. Thus, national deflators produced by the ONS have been used to deflate prices to a 2005 constant price basis, so that the effects of inflation have been stripped out.

2 The annual average growth rate of output is a compound average growth rate, i.e. the rate at which output would grow each year if it increased steadily over the forecast period.

3 Only selected components of gross value added (GVA) are shown in this table and so do not sum to the total.

4 For new construction orders, comparison is made with Great Britain rather than the UK, owing to the fact that there are no orders data series for Northern Ireland.

5 Employment numbers are rounded to the nearest 10.

6 The tables include data relating to plumbers and electricians. As part of SIC 43, plumbers and electricians working in contracting are an integral part of the construction process. However, it is recognised by ConstructionSkills that SummitSkills has responsibility for these occupations across a range of SIC codes, including SIC 43.2.

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

8 The Employment and ARR tables show separate totals for SIC 41-43 and SIC 41-43, 71.1 and 74.9. The total for SIC 41-43 covers the first 24 occupational groups on the relevant tables and excludes civil engineers, other construction professionals and technical staff, architects and surveyors. The total for SIC 41-43, 71.1 and 74.9 includes all occupations.

Footprints for Built Environment SSCs

ConstructionSkills is responsible for SIC 41 Construction of buildings, SIC 42 Civil engineering, SIC 43 Specialised construction activities and SIC 71.1 Architectural and engineering activities and related technical consultancy.

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

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 43.21 Electrical installation and SIC 43.22 Plumbing, heat and air-conditioning installation. ConstructionSkills recognises the responsibility of SummitSkills across Standard Industrial Classifications (SIC) 43.21 and 43.22; 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, domestics, facilities managers.

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

Energy and Utility Skills

Footprint – electricity, gas (including gas installers), water and waste management.

Coverage – electricity generation and distribution, gas transmission, distribution and appliance installation and maintenance, water collection, purification and distribution, waste water collection and processing, waste management.

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

AssetSkills has a peripheral interest in SIC 71.1

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4 Definitions: types and examples of construction work

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

Housing schemes, care homes for the elderly and the provision within housing sites of roads and services for gas, water, electricity, sewage and drainage.

Private sector housing

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

Infrastructure – public and private

Water

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

Sewerage

Sewage disposal works, laying of sewers and surface drains.

Electricity

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

Gas, communications, air transport

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

Railways

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

Harbours

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

Roads

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

Public non-residential construction[1]

Factories and warehouses

Publicly owned factories, warehouses, skill centres.

Oil, steel, coal

Now restricted to remedial works for public sector residual bodies.

Schools, colleges, universities

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

Health

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

Offices

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

Entertainment

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

Garages

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

Shops

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

Agriculture

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

Miscellaneous

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

Private industrial work

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

Private commercial work[1]

Schools and universities

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

Health

Private hospitals, nursing homes, clinics.

Offices

Office buildings, banks.

Entertainment

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

Garages

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

Shops

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

Agriculture

All buildings and work on farms, horticultural establishments.

Miscellaneous

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

New work

New housing

Construction of new houses, flats, bungalows only.

All other types of work

All new construction work and all work that can be referred to as improvement, renovation or refurbishment and which adds to the value of the property.[2]

Repair and maintenance

Housing

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

All other sectors

Repair and maintenance work of all types, including planned and contractual maintenance.[3]

---

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

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

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

5 Occupational groups

Occupational group
Description, SOC (2010) reference.

Senior, executive, and business process managers

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

Construction project managers

Construction project managers and related professionals	2436

Other construction process managers

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

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

IT operations technicians	3131
IT user support technicians	3132
Finance and investment analysts and advisers	3534
Taxation experts	3535
Financial and accounting technicians	3537
Vocational and industrial trainers and instructors	3563
Business and related associate professionals nec*	3539
Legal associate professionals	3520
Inspectors of standards and regulations	3565

Programmers and software development professionals	2136
Information technology and telecommunications professionals nec*	2139
Estate agents and auctioneers	3544
Solicitors	2413
Legal professionals nec*	2419
Chartered and certified accountants	2421
Business and financial project management professionals	2424
Management consultants and business analysts	2423
Receptionists	4216
Typists and related keyboard occupations	4217
Business sales executives	3542
Book-keepers, payroll managers and wages clerks	4122
Records clerks and assistants	4131
Stock control clerks and assistants	4133
Telephonists	7213
Communication operators	7214
Personal assistants and other secretaries	4215
Sales and retail assistants	7111
Telephone salespersons	7113
Buyers and procurement officers	3541
Human resources and industrial relations officers	3562
Credit controllers	4121
Company secretaries	4214
Sales related occupations nec*	7129
Call and contact centre occupations	7211
Customer service occupations nec*	7219
Elementary administration occupations nec*	9219
Chemical scientists	2111
Biological scientists and biochemists	2112
Physical scientists	2113
Laboratory technicians	3111
Graphic designers	3421
Environmental health professionals	2463
IT business analysts, architects and systems designers	2135
Conservation professionals	2141
Environment professionals	2142
Actuaries, economists and statisticians	2425
Business and related research professionals	2426
Finance officers	4124
Financial administrative occupations nec*	4129
Human resources administrative occupations	4138
Sales administrators	4151
Other administrative occupations nec*	4159
Office supervisors	4162

*Not elsewhere classified

Sales supervisors	7130
Customer service managers and supervisors	7220
Office managers	4161

Construction trades supervisors

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

Wood trades and interior fit-out

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

Bricklayers

Bricklayers and masons	5312

Building envelope specialists

Construction and building trades nec* (50%)	5319

Painters and decorators

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

Plasterers

Plasterers	5321

Roofers

Roofers, roof tilers and slaters	5313

Floorers

Floorers and wall tilers	5322

Glaziers

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

Specialist building operatives nec*

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

Scaffolders

Scaffolders, stagers and riggers	8141

Plant operatives

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

Plant mechanics/fitters

Metal working production and maintenance fitters	5223
Precision instrument makers and repairers	5224
Vehicle technicians, mechanics and electricians	5231
Elementary process plant occupations nec*	9139

Tool makers, tool fitters and markers-out	5222
Vehicle body builders and repairers	5232

Steel erectors/structural fabrication

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

Labourers nec*

Elementary construction occupations (100%)	9120

Electrical trades and installation

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

Plumbing and heating, ventilation and air conditioning trades

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

Logistics

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

Civil engineering operatives nec*

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

Non-construction operatives

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

Civil engineers

Civil engineers	2121

*Not elsewhere classified

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Other construction professionals and technical staff

Mechanical engineers	2122
Electrical engineers	2123
Design and development engineers	2126
Production and process engineers	2127
Quality control and planning engineers	2461
Engineering professionals nec*	2129
Electrical and electronics technicians	3112
Engineering technicians	3113
Building and civil engineering technicians	3114
Science, engineering and production technicians nec*	3119
Architectural and town planning technicians	3121
Draughtspersons	3122
Quality assurance technicians	3115
Town planning officers	2432
Electronics engineers	2124
Chartered architectural technologists	2435
Estimators, valuers and assessors	3531
Planning, process and production technicians	3116

Architects

Architects	2431

Surveyors

Quantity surveyors	2433
Chartered surveyors	2434

*Not elsewhere classified

6 CSN website and contact details

The CSN website

citb.co.uk/research/construction-skills-network

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

The main UK report, along with the twelve LMI reports (one for Northern Ireland, Scotland, Wales and each of the nine English regions) can be downloaded from the site, while other CITB research reports are also freely available on the CITB website. Having access to this range of labour market intelligence and trend insight allows industry, Government, regional agencies and key stakeholders to:

- Pinpoint the associated specific, skills that will be needed year by year
- Identify the sectors 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 to enter the workforce.

The website also contains information about:

- How the CSN functions
- The CSN model approach
- How the model can be used to explore scenarios
- CSN team contact information
- Access to related CITB research
- Details for those interested in becoming members of the network.

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

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

- Details of specific projects
- Demand within various types of work or sectors
- Labour supply issues
- 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 contact with the CITB research team CSN members can:

- Access observatory-related material such as meeting dates, agendas, presentations and notes
- Access additional research material
- Comment/feedback on the CSN process.

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

Contact details

For further information about the CSN website, enquiries relating to the work of the CSN, or to register your interest in becoming a member of the CSN, please contact us at: **csn@citb.co.uk**

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For more information about the
Construction Skills Network,
contact:
Kirsty Woolsey
Research and Development
Research Analyst
0344 994 4400
kirsty.woolsey@citb.co.uk

citb.co.uk
citbcsni.org.uk

CITB, CIC and CITB-ConstructionSkills Northern Ireland are working as ConstructionSkills, the Sector Skills Council for Construction.