



ConstructionSkills Network 2011-2015 Scotland

LABOUR MARKET INTELLIGENCE



CONTENTS

SUMMARY AND KEY FINDINGS

THE OUTLOOK FOR CONSTRUCTION
IN SCOTLAND

CONSTRUCTION EMPLOYMENT FORECASTS
FOR SCOTLAND

COMPARISONS ACROSS THE UK



Contents

Labour Market Intelligence

1	Summary and key findings	02
2	The outlook for construction in Scotland	04
3	Construction employment forecasts for Scotland	10
4	Comparisons across the UK	12

Tables and Charts

1	National / Regional Comparison 2011–2015	02
2	Annual average construction output growth 2011–2015	03
3	Construction output 1993–2009	04
4	Construction industry structure 2009	04
5	Economic structure	05
6	Economic indicators	05
7	New construction orders growth 1993–2009	06
8	New work construction orders	06
9	Construction output 2011–2012	07
10	Annual average construction output growth 2011–2012	08
11	Annual average construction output growth 2011–2015	09
12	Construction output 2011–2015	09
13	Total employment by occupation	10
14	Annual recruitment requirement by occupation	11
15	Annual average output growth by nation / region	12
16	Annual recruitment requirement by nation / region	13

For more information about ConstructionSkills, please visit our [website](#).

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 - Scotland

Scotland is forecast to have an annual average output growth rate of 1% for the five years to 2015, in line with the UK average. Repair and maintenance (R&M) growth (1.9%) is projected to be stronger than new work (0.6%) and this also reflects the UK pattern. Construction employment is predicted to reach 253,900 in 2015, an 8.3% increase on 2011's level. The annual recruitment requirement (ARR) of 3,360 represents 1.4% of base 2011 employment, a little lower than the UK average of 1.8%.

National / Regional comparison 2011-2015

	Annual average % change in output	Growth in total employment	Total Annual Recruitment Requirement
North East	-0.4%	4,590	2,400
Yorkshire and Humber	-0.6%	7,670	2,510
East Midlands	0.9%	7,930	3,860
East of England	2.4%	21,900	5,220
Greater London	1.8%	10,720	4,190
South East	2.2%	19,560	5,440
South West	1.1%	4,970	3,920
Wales	1.2%	10,700	4,160
West Midlands	-0.5%	9,290	2,680
Northern Ireland	1.4%	4,140	1,050
North West	-0.6%	2,510	4,090
Scotland	1.0%	11,090	3,360
UK	1.0%	115,070	42,880

Source: CSN, Experian
ref. CSN Explained, Section 4, Note 2



Scotland is forecast to show annual average output growth of

1.0% between
2011
and **2015**

Key findings

2010 looks like it was a year of construction output growth for Scotland (+6%), but it is projected to be sandwiched between periods of decline, as is the case for the UK as a whole. Strong growth in public sector construction as government departments and local authorities pushed as much through the system as possible before the inevitable public expenditure cuts were announced, combined with a better than expected performance from the private sectors has driven the 2010 increase.

However, the prospects going forward are less rosy, at least in the short term. Significant cuts in public capital budgets will start to take effect from April 2011, with the Departmental Expenditure Limit (DEL) for Scotland falling by 38% from £3.4bn in 2010/11 to £2.3bn in 2014/15. Draft detailed expenditure plans for Scotland are only available for 2011/12, but these show planned falls across all the main capital spending areas except for roads in the next financial year. Looking further ahead, the strength of investment in Scottish infrastructure – transport, energy and social – will to a large extent be predicated on the success of innovative funding mechanisms that the Scottish Government is developing.

It is difficult to see anything but falls in the levels of activity in the public housing and public non-housing sectors over the five years to 2015, with declines of 5.3% and 13% respectively forecasted. The infrastructure sector fares better as not all of it is in the public domain, and because there are a number of large transport projects ongoing or due to start in the forecast period, including M74 completion, the Forth Replacement Crossing, and the Aberdeen Western Peripheral Route. Growth in this sector is predicted to be similar to the UK, with an annual average increase of 4.5%.

The private housing sector is forecast to be the most buoyant, with demand returning as the economic recovery strengthens and credit conditions continue to ease. The annual average growth rate for the sector in Scotland is projected to be 6.2%, a little above the long-term average growth rate for private housing output (5%).

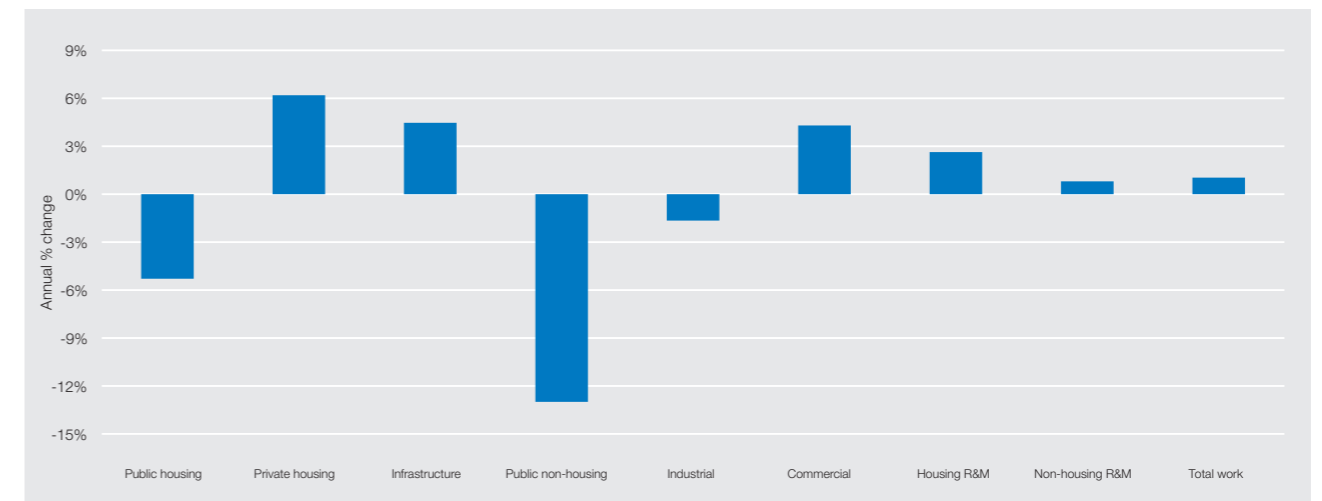
Housing R&M output is expected to show reasonable growth over the five years to 2015 as the Scottish Government pushes ahead with its carbon emission reduction programme. Its plans are set out in the Energy Efficiency Action Plan for Scotland, which was published in October 2010.

Construction employment in Scotland is projected to rise by 8.3% to 253,900 between 2011 and 2015, slightly stronger growth than in the UK as a whole (7.8%). The biggest increases are predicted for wood trades and interior fit out (2,620) and construction managers (2,430) in absolute terms, although the fastest growing in percentage terms are forecast to be labourers nec* (15%), and civil engineers (13.5%). The ARR for Scotland, at 3,360, represents 1.4% of base 2011 employment.



Riverside, Glasgow

Annual average construction output growth 2011-2015 - Scotland



Source: CSN, Experian
ref. CSN Explained, Section 4, Note 2

*nec - not elsewhere classified

2. The outlook for construction in Scotland

2.1 Construction output in Scotland – overview

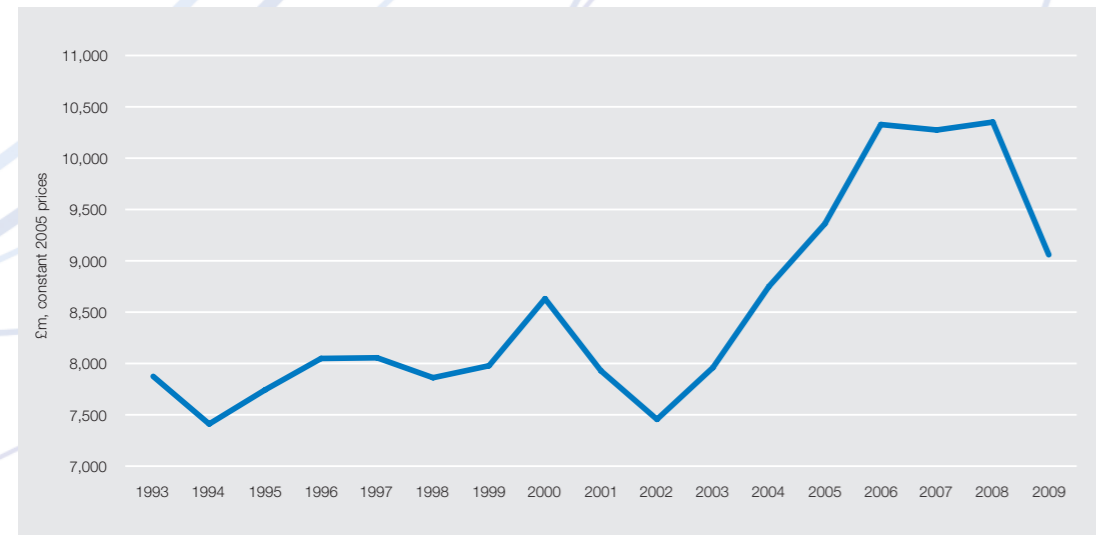
Construction output in Scotland totalled a little over £9bn in 2005 prices in 2009, a 12% decline on the previous year, which was similar to the fall across the UK as a whole. New work was more depressed than R&M, with output in the former dropping by 15% compared with 8% in the latter.

As was the case across many of the devolved nations and English regions, there was a distinct public/private split in the performance of the major construction sectors in 2009. The public housing and public non-housing sectors both experienced rises of 15% in output, the only two sectors to report increases.

The biggest falls in activity were in the wholly private sectors. Private housing output declined by 21% in 2009, although this was a lesser fall than across the UK as a whole (-27%). The industrial and commercial sectors fared even worse, with falls in activity of 27% and 34% respectively, as both export and domestic demand evaporated in the depths of the recession.

Drops in output were less steep in those sectors which are part public and part private, such as infrastructure and R&M. Housing R&M barely declined at all, with expenditure related to the Scottish Quality Housing Standard in particular helping to keep output up.

Construction output 1993-2009 - Scotland



Source: ONS ref. CSN Explained, Section 4, Note: 1

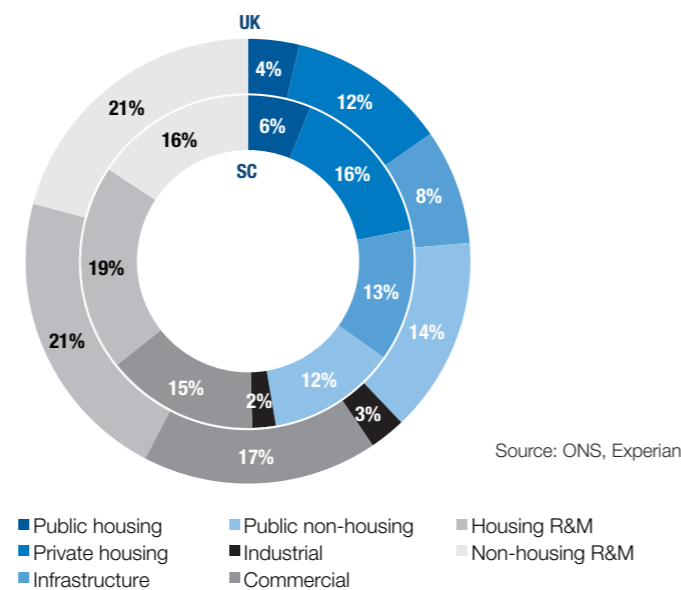
2.2 Industry structure

The diagram, Construction Industry structure 2009 – UK vs. Scotland, illustrates the sector breakdown of construction in Scotland compared to that in the UK. Effectively, the percentages for each sector illustrate what proportion of total output each sector accounts for.

There are some significant structural differences between the Scottish construction industry and the UK's in 2009. The housing sector (public and private) accounted for 22% of output in Scotland compared with just 16% in the UK. The infrastructure sector was also proportionally bigger in Scotland at 13% than in the UK as a whole (8%). Conversely Scotland has a smaller R&M market, accounting for only 35% of output in 2009 compared with a UK figure of 42%.

The main change from 2008 in the Scottish construction industry has been the fall in the share of commercial construction, down from close to 20% to 15% in 2009.

Construction industry structure 2009 - UK vs. Scotland (SC)



Source: ONS, Experian

Economic structure - Scotland (£ billion, 2006 prices)

Selected sectors	Actual	Forecast Annual % change, real terms					
	2009	2010	2011	2012	2013	2014	2015
Public services	24.8	-0.4	-0.9	-0.5	0.0	0.0	0.4
Financial and business services	19.9	0.4	2.9	3.7	3.5	3.1	3.5
Transport and communications	6.6	-1.4	2.0	3.2	3.1	3.5	3.7
Manufacturing	11.9	1.4	3.6	1.5	0.9	0.8	0.9
Distribution, hotels and catering	13.0	1.0	2.3	2.8	3.1	3.1	2.8
Total Gross Value Added (GVA)	90.8	0.9	1.9	1.9	1.7	1.5	1.7

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

2.3 Economic overview

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

2.4 Economic structure

Gross Value Added (GVA) for the Scottish economy totalled £90.8bn in 2006 prices in 2009, a 4.3% decline on the previous year. This fall was less steep than that across the UK, of 4.8%. Thus Scotland slightly increased its share of overall UK output from 7.81% in 2008 to 7.85% in 2009.

The public services sector remains the largest in the Scottish economy, and it has increased its share in the past two years, up 25.9% in 2007 to 27.3% in 2009. In fact its share of the Scottish economy has only declined by around 3% over the past 30 years, compared with a 6% fall across the UK as a whole.

The financial and business services sector is the second largest in Scotland, taking a share of GVA of 21.9% in 2009, although this was down from 23.6% in 2008. However, over the long term the sector has been increasing in importance to the Scottish economy, with its share up from around 12% in the early 1980s.

2.5 Forward looking economic indicators

The Scottish economy is expected to have returned to growth in 2010, although at 0.9% the recovery is much weaker than that predicted for the UK as a whole (1.8%). Between 2011 and 2015, growth is projected to average 1.7% a year in Scotland, a little lower than the UK value of 2%.

The most buoyant sector is forecast to be the financial and business services one, with an annual average growth rate of 3.3% between 2011 and 2015, followed by transport and communications (3.1%) and distribution, catering and hotels (2.8%). Not surprisingly, public services GVA is predicted to decline over the same period, by an annual average rate of 0.2%, as the long haul to put the UK on a more sustainable financial footing takes place.

Real household disposable income (RHDI) is likely to have fallen in 2010 for the first time since 1994, and a further decline is forecast for 2011 on the back of low earnings growth, tax increases and stubbornly high inflation. Growth is expected to return in 2012, but it will remain below 2% per year to 2015. Under this scenario for RHDI, growth in household spending is likely to be muted, and the modest increases predicted for 2010 and 2011 are largely due to a fall-back in the savings ratio. As with RHDI, household spending growth is not expected to top 2% throughout the forecast period.

According to Communities and Local Government (CLG) average mix-adjusted house prices fell by 3 per cent to £157,586 in 2009, a relatively small decline compared with the UK as a whole. House prices are likely to have risen by the same amount in 2010, but rates of growth are expected to moderate to around 1% to 2% in the next two years, and to accelerate to between 3% and 4% in the remainder of the forecast period.

With consumers keeping spending well under control, and only moderate rises in house prices, the debt-to-income ratio is expected to continue the decline started in 2008 and for it to subside to 1.13 in 2015 from a peak of 1.28 in 2007.

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

	Actual	Forecast Annual % change, real terms					
	2009	2010	2011	2012	2013	2014	2015
Real household disposable income	72	-0.7	-0.2	0.8	1.1	1.5	1.8
Household spending	69	0.9	1.9	0.9	1.2	1.3	1.5
Debt:Income ratio	1.2	1.2	1.1	1.1	1.1	1.1	1.1
House prices (Index 2003 = 100)	171.2	176.4	178.8	181.9	187.9	194.6	201.5
LFS unemployment (millions)	0.21	0.17	0.18	0.18	0.17	0.16	0.15

Source: ONS, DCLG, Experian

2. The outlook for construction in Scotland

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

	Actual	Annual % change				
	2009	2005	2006	2007	2008	2009
Public housing	390	-1.2	31.4	19.8	10.9	-9.9
Private housing	714	3.0	-23.6	3.1	-27.0	-40.3
Infrastructure	775	-8.0	-7.1	42.2	56.0	-36.6
Public non-housing	1,160	48.9	-11.7	-6.9	-1.7	10.7
Industrial	226	49.0	4.1	-9.7	-16.4	-32.0
Commercial	1,011	8.2	69.7	-14.3	-37.5	-39.2
Total new work	4,277	12.3	10.6	-3.0	-15.0	-27.4

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

2.6 New construction orders – overview

New construction orders fell by over 27% to £4.8bn in current prices in 2009, the third consecutive year of decline, and one that has been accelerating.

Only the public non-housing sector saw an increase in new orders, of nearly 11%, but this was after three years of contraction, thus the outturn in 2009, at £1.16bn, was only 89% of the 2005 peak.

In contrast, private housing and commercial new orders fell by around 40% apiece, and the infrastructure sector by nearly 37%, although the latter experienced two very strong years in 2007 and 2008.

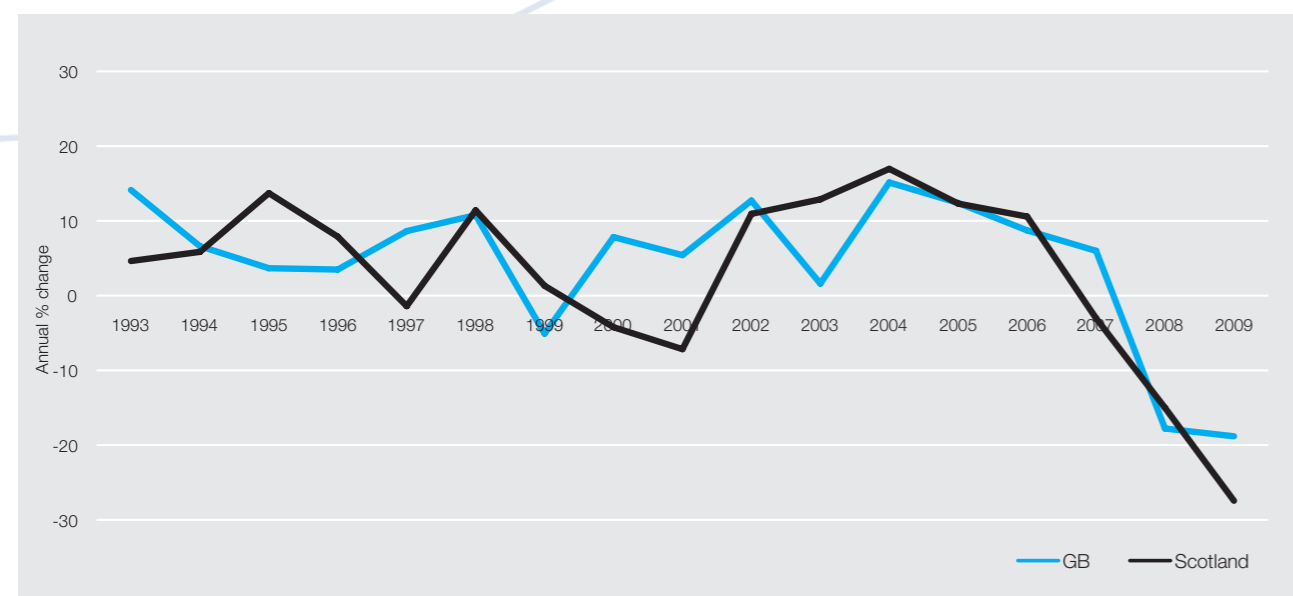
2.7 New construction orders – current situation

New construction orders totalled £2.49bn in current prices in the first half of 2010, a 23% increase on the previous half year and up by 10% compared with the corresponding period of 2009.

The most buoyant sector in terms of new orders was the industrial one. Its first half outturn of £259m was the strongest since the first half of 1997 and was nearly three times the new orders level in the first half of 2009. The public housing and public non-housing sectors also saw rises in the level of new orders compared to the two preceding half years.

In contrast, new infrastructure orders, at £334m, were down by 17% against the previous half year and 11% compared with the corresponding period of 2009. However, the sector is coming off from a period of sustained high levels of new orders between 2007 and 2009.

New construction orders growth 1993-2009 - Scotland vs. GB



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

2.8 Construction output – short-term forecasts (2011–2012)

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 are only available for the first two quarters of 2010.

In the first six months of 2010, construction output in Scotland totalled £5.22bn in current prices, 11% up on the previous half year and 8% higher than in the same period of 2009. Growth was stronger in the R&M sectors than in new work. Thus the outturn for 2010 as a whole is expected to be positive, with an estimated increase in output of 6% in real terms.

However, this recovery in 2010, which was driven in large part by increases in activity in the public sectors, is expected to run out of steam in 2011 and 2012 as public expenditure cuts begin to bite. According to the October 2010 Spending Review, the Capital Budget for Scotland is planned to decline by 38% from £3.4bn in 2010/11 to £2.3bn in 2014/15, with the bulk of the fall, 26.5%, in 2011/12.

In the aftermath of the Spending Review, the Scottish Government published its spending plans and draft budget for 2011/12 in November 2010, which shows the following changes to Departmental Expenditure Limits across the main capital expenditure areas:

	2010/11	2011/12
Roads	£313m	£345m
Rail	£401m	£359m
Water and climate change	£150m	£-
Health	£578m	£488m
Education	£228m	£159m
Housing	£312m	£240m
Justice	£179m	£71m
Local government	£843m	£679m

As can be seen, all but one major area of capital expenditure will see falls in funding in the next financial year. Thus it is no surprise that the short-term forecasts for the public housing and non-housing sectors is for significant declines, at an annual average rate of 18.5% for the former, and 24.4% for the latter between 2011 and 2012.

For infrastructure, the situation is more complex as not all of the sector is public, and not all sub-sectors are projected to see falls in activity in the short term. The capital budget for roads, for example is due to rise by 10% between 2010/11 and 2011/12. A number of major transport projects remain ongoing, such as the completion of the M74, which is due to finish in 2011. Furthermore, the Forth Crossing Bill was passed by MSPs in December 2010, and work on the Forth Replacement Crossing is now expected to start in the second half of 2011, boosting output in the infrastructure sector in 2012 and beyond.

Whereas private housing output is estimated to have risen modestly across the UK in 2010, Scotland is likely to have suffered another year of decline, thus the recovery in the sector north of the border does not start until 2011. However, as credit conditions continue to ease and confidence slowly returns to the sector, good growth, of around 8% a year is expected for the two years to 2012. House prices in Scotland are predicted to continue to rise in 2011, albeit only modestly, while in many other areas of the UK they are likely to fall, suggesting that the housing market north of the border will be more robust than elsewhere in the short term.

Growth in commercial construction will be only modest in the short term with over supply issues remaining a problem in both major markets – Glasgow and Edinburgh. The office development pipeline in Glasgow is currently at a historic low, with only 90,000 square feet under construction at the end of 2010 according to Drivas Jonas Deloitte.

Overall, the relative weakness of the private sector recovery combined with a sharp fall in public capital budgets means that a significant fall in construction activity is on the cards for Scotland in the short term, averaging at 2.4% a year for 2011 and 2012

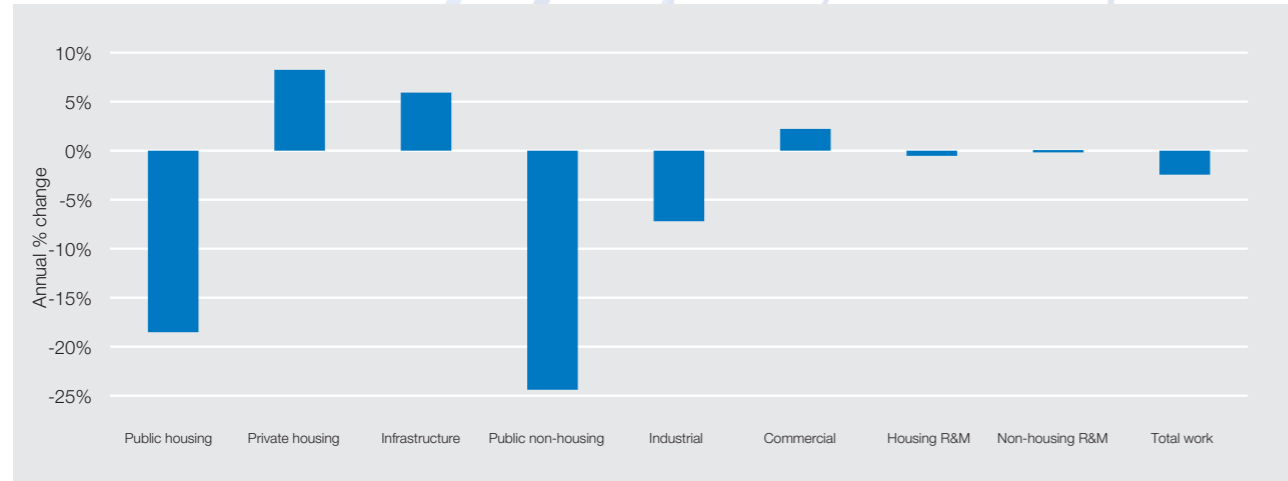
Construction output - Scotland (£ million, 2005 prices)

	Actual 2009	Forecast annual % change			Annual average 2011-2012
		2010	2011	2012	
Public housing	556	30%	-23%	-14%	-18.5%
Private housing	1,431	-6%	10%	7%	8.2%
Infrastructure	1,168	10%	1%	11%	5.9%
Public non-housing	1,133	23%	-19%	-29%	-24.4%
Industrial	207	82%	-6%	-8%	-7.2%
Commercial	1,336	-3%	2%	3%	2.2%
New work	5,830	10%	-4%	-3%	-3.6%
Housing R&M	1,805	9%	1%	-2%	-0.5%
Non-housing R&M	1,424	-11%	-1%	1%	0.1%
Total R&M	3,229	0%	0%	-1%	-0.3%
Total work	9,059	6%	-3%	-2%	-2.4%

Source: Experian
ref. CSN Explained, Section 4, Notes 1 and 2

2. The outlook for construction in Scotland

Annual average construction output growth 2011-2012 - Scotland



Source: Experian
ref. CSN Explained, Section 4, Note 2

2.9 Construction output – long-term forecasts (2011–2015)

The longer term outlook for Scotland is more favourable, with annual average output growth of 1% projected over the period 2011 to 2015. The bulk of this growth is predicted to be driven by the R&M sectors, with an annual average rate of 1.9% compared with a much more modest 0.6% for new work.

The bulk of the fall in capital budget for Scotland takes place between 2010/11 and 2011/12, the decline thereafter to 2014/15 being a much more moderate 7.5%. However, this is still a downward trend and the Scottish Government has recognised that if it wishes to deliver the sort of infrastructure – transport, energy and social – that it believes is needed, then it needs to develop innovative funding mechanisms.

Unfortunately the Scottish Government's draft budget, published in the aftermath of the Spending Review, only provides definitive capital budgets for the next financial year, 2011/12, on the basis that elections for the Scottish Parliament are due this year and the political complexion of the government may change. However it has indicated some of the funding mechanisms that it would be seeking to develop such as the Non-Profit Distributing Model in preference to PFI, Tax Increment Financing, the National Housing Trust, and the JESSICA Fund.

How successful the Scottish government is in attracting funding through these schemes will determine the level of construction activity across a range of sectors – infrastructure, social housing, education and health in particular.

Falls in activity in the early part of the forecast period give a negative overall annual average growth rate for public housing in the five years to 2015, of 5.3%, roughly in line with the projected UK decline. The capital budget for housing and regeneration is due to fall by 25% in the 2011/12 financial year. Thereafter the assumption is that activities under the National Housing Trust will return the sector to growth from 2013. The private housing sector is projected to experience an annual average growth rate of 6.2% for the five years to 2015, in line with the UK average, and around the long-term sector growth rate.

With the Forth Replacement Crossing, a project worth between £1.7bn and £2.3bn, due to start in 2011 and other major projects such as the Borders Railway and the Aberdeen Western Peripheral Route in the pipeline, infrastructure output is projected to rise by an annual average rate of 4.5% over the forecast period.

In contrast public non-housing output will fall heavily, by an average of 13% a year, with 2012 projected to have the fastest rate of decline. Without successful new funding mechanisms, it is difficult to see how Scotland's Schools for the Future programme can be delivered upon in full as it currently stands. Construction has started on the new laboratory development of the £842m South Glasgow Hospitals project, with work due to begin on the new adult and children's hospitals in the first quarter of 2011. This project will provide an output stream to 2015, but the future of further hospital developments is tied to the success of the Non-Profit Distributing Model of financing.

Commercial construction output growth is expected to strengthen from 2013 as continued economic recovery strengthens demand for new office, retail and leisure facilities. By then, oversupply in the two major office markets in Scotland, Glasgow and Edinburgh should have eased, and there is the potential for the Commonwealth Games in 2014 to act as a catalyst for regeneration. The biggest ongoing commercial development in Scotland remains the £1bn Menie Estate project, which is due to deliver two golf courses, a golfing academy a five-star hotel and a mixed residential development. However, the Donald Trump Organisation, the developer of the project, is now embroiled in a row over a proposed offshore windfarm which it says will spoil the views from the golf complex.

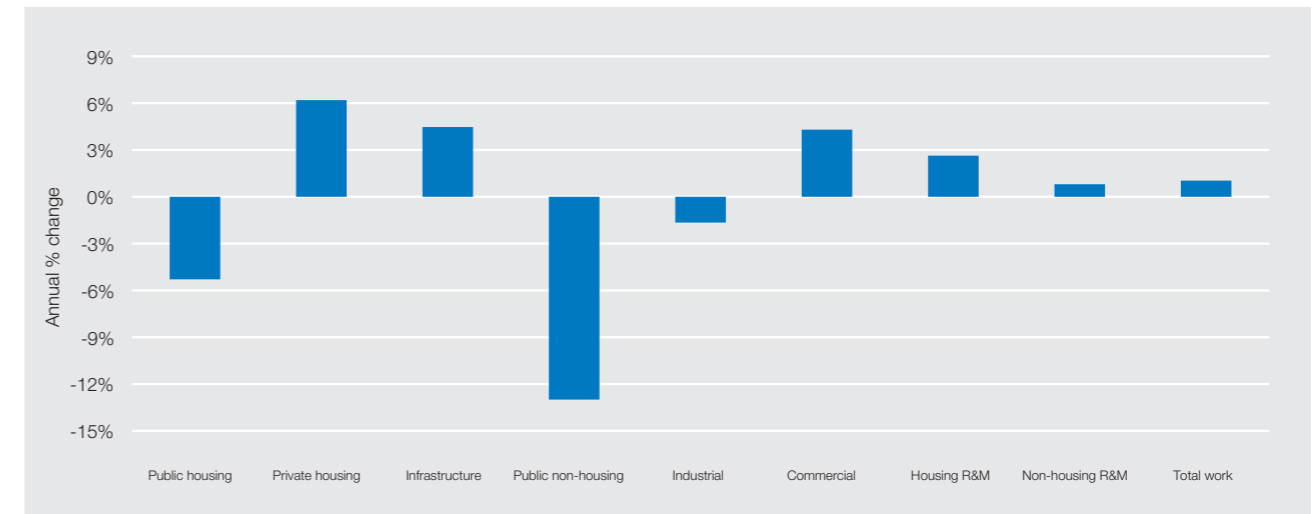
As has already been mentioned, stronger growth over the medium term is expected for the R&M sectors rather than the new work one. Scotland is pushing ahead with its carbon emission reduction programme, which should benefit the retrofitting market in particular. Programmes set out in the Energy Efficiency Action Plan for Scotland include the Energy Assistance package and the Home Insulation Scheme, as well as UK-wide ones such as the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP). Expenditure through the various schemes is expected to peak in 2011 at around £510m, but then fall off to between £285m - £310m a year to 2015 as some of the major programmes complete.

Construction output - Scotland (£ million, 2005 prices)

	Estimate 2010	Forecast annual % change					Annual average 2011-2015
		2011	2012	2013	2014	2015	
Public housing	724	-23%	-14%	7%	4%	4%	-5.3%
Private housing	1,344	10%	7%	5%	5%	5%	6.2%
Infrastructure	1,280	1%	11%	9%	0%	1%	4.5%
Public non-housing	1,392	-19%	-29%	-13%	-7%	7%	-13.0%
Industrial	377	-6%	-8%	2%	2%	2%	-1.7%
Commercial	1,291	2%	3%	6%	7%	5%	4.3%
New work	6,408	-4%	-3%	4%	2%	4%	0.6%
Housing R&M	1,962	1%	-2%	5%	5%	5%	2.6%
Non-housing R&M	1,264	-1%	1%	2%	1%	1%	0.8%
R&M	3,225	0%	-1%	4%	3%	3%	1.9%
Total work	9,634	-3%	-2%	4%	3%	4%	1.0%

Source: CSN, Experian
ref. CSN Explained, Section 4, Note 2

Annual average construction output growth 2011-2015 - Scotland



Source: CSN, Experian
ref. CSN Explained, Section 4, Note 2

2.10 Beyond 2015

In infrastructure terms the focus in Scotland in recent years has been on upgrading the country's transport system and this is set to continue through the current forecast period. However the longer term emphasis is likely to shift towards energy and in particular, the generation of renewable energy. A whole host of large wind farms are planned in the Firth of Forth, Moray Firth, Tiree and Stornaway, to name just a few, and these could result in upwards of £10bn in investment over the next decade.

Tidal schemes are also being designed, with four in the pipeline around the coast of Orkney, worth around £600m with construction due to start in 2015.

Following on from the macro side, the Scottish Government has been keen to push forward its energy efficiency and microgeneration plans, as mentioned previously, and these will not stop at 2015. Recent analysis of investment in this area suggests that it could average around £750m a year between 2016-2020 taking in both public and private sources and across the totality of the built environment, both new and existing.

3. Construction employment forecasts for Scotland

3.1 Total construction employment forecasts by occupation

The table presents actual construction employment (SIC 45 and 74.2) in Scotland for 2009, the forecast total employment in 26 occupational groups and in the industry as a whole between 2011 and 2015. A full breakdown of occupational groups is provided in Section 5 of CSN Explained.

In 2015, total construction employment in Scotland is expected to reach 253,900, 8.3% higher than the projected 2011 level, and 7.2% up on 2009's output. Employment is estimated to have risen in 2010 on the back of a 6% increase in output, but it is likely to fall back again in 2011 and 2012 as public expenditure cuts begin to bite. Thus sustained recovery in construction employment is not expected before 2013, although it is then likely to be reasonably strong.

Woods trades and interior fit out traditionally account for a larger share of construction employment in Scotland than in the UK as a whole, largely due to the higher level of timber framed housing built north of the border. In 2009 this occupation took a 13.2% share of Scottish construction employment, against 10.7% across the UK and it remains the largest construction-specific occupation. It has the highest growth in absolute terms (2,620) between 2011 and 2015, followed by construction managers (2,430), although the fastest growing in percentage terms are forecast to be labourers nec. (15%), and civil engineers (13.5%). These occupations are prevalent across a wide range of sectors and thus are not subject to the vagaries of movement in any one. Civil engineering work, for example, accounts for about 15% of the value of a housing development.

The lowest growth is forecast for surveyors (4.2%) and electrical trades and installation (4.4%).

Total employment by occupation - Scotland

	Actual 2009	Forecast	
		2011	2015
Senior, executive, and business process managers	12,350	11,870	13,030
Construction managers	27,400	26,820	29,250
Non-construction professional, technical, IT, and other office-based staff	28,790	29,240	31,190
Wood trades and interior fit-out	31,230	31,480	34,100
Bricklayers	3,580	3,820	4,020
Building envelope specialists	4,990	4,940	5,400
Painters and decorators	9,380	9,550	10,220
Plasterers and dry liners	3,950	3,660	4,050
Roofers	3,200	3,220	3,490
Floorers	2,620	2,700	2,830
Glaziers	1,490	1,480	1,630
Specialist building operatives nec*	5,390	5,320	5,850
Scaffolders	2,890	2,530	2,830
Plant operatives	6,980	6,760	7,340
Plant mechanics/fitters	3,970	4,300	4,580
Steel erectors/structural	3,190	3,170	3,420
Labourers nec*	7,340	6,410	7,370
Electrical trades and installation	14,460	15,540	16,230
Plumbing and HVAC Trades	13,130	13,020	14,180
Logistics	3,620	3,380	3,720
Civil engineering operatives nec*	7,080	5,830	6,480
Non-construction operatives	5,020	4,530	5,110
Civil engineers	3,680	3,400	3,860
Other construction professionals and technical staff	20,040	20,040	21,570
Architects	5,350	5,130	5,640
Surveyors	5,830	6,250	6,510
Total (SIC 45)	202,050	199,570	216,320
Total (SIC 45 and 74.2)	236,950	234,390	253,900

Source: ONS, CSN, Experian ref. CSN Explained, Section 4, Notes 5 and 6

*nec - not elsewhere classified

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 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. 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 between 2011 and 2015 for the 26 occupational groups within the Scottish construction industry is illustrated in the table. The ARR of 3,360 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', flows into and out of the industry, excluding training flows. This represents 1.4% of projected 2011 employment, a little lower than the UK figure of 1.8%.

In absolute terms, the biggest requirements are for plant operatives (560), wood trades and interior fit out (520) and plant mechanics/fitters (510). Wood trades and interior fit out traditionally have a high ARR because of the overall size of the occupation. Plant operatives and plant mechanic/fitters are much smaller in employment

terms and as they are not projected to have exceptionally strong employment growth over the five-year period (8.6% and 6.5% respectively), the large ARR is due to strong net outflows from the occupations, particularly to other industries. As a percentage of base 2011 employment plant operatives and plant mechanics/fitters also have the biggest requirement (8.3% and 11.9% respectively).

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 retraining.

Non-construction operatives is a diverse occupational group including all of the activities under the SIC 45 and SIC 74.2 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 - Scotland

	2011-2015
Senior, executive, and business process managers	-
Construction managers	190
Non-construction professional, technical, IT, and other office-based staff	-
Wood trades and interior fit-out	520
Bricklayers	-
Building envelope specialists	50
Painters and decorators	290
Plasterers and dry liners	160
Roofers	-
Floorers	<50
Glaziers	<50
Specialist building operatives nec*	160
Scaffolders	160
Plant operatives	560
Plant mechanics/fitters	510
Steel erectors/structural	140
Labourers nec*	-
Electrical trades and installation	-
Plumbing and HVAC Trades	50
Logistics	200
Civil engineering operatives nec*	-
Non-construction operatives	-
Civil engineers	110
Other construction professionals and technical staff	210
Architects	<50
Surveyors	<50
Total (SIC 45)	3,010
Total (SIC 45 and 74.2)	3,360

Source: CSN, Experian ref. CSN Explained, Section 4, Notes 5 and 6

*nec - not elsewhere classified

4. Comparisons across the UK

While Scotland's annual average output growth rate of 1% is in line with the UK average it is certainly not immune from public expenditure cuts. However, it may suffer a little less than many of the English regions, by dint of having an extra layer of government in place. Public expenditure on construction in the English regions will be particularly hard hit by the abandonment of the Building Schools for the Future (BSF) programme post Wave 4. Those regions that benefitted strongly from the early waves of BSF are likely to see public non-housing expenditure fall sharply once current schemes are completed. Scotland has its own Schools for the Future building programme and with its education capital budget planned to fall by 29% between 2010/11 and 2011/12, expenditure in this area is likely to decline, at least in the short term. Unlike England, the Scottish programme has not been cancelled, but how much can actually be delivered will rely heavily on the success of the Non-Profit Distributing funding model.

The public housing sector in the English regions has been hit hard by the cuts in government expenditure going forward, with only £4.4bn available between 2011 and 2015, compared with £8.4bn in the Affordable Housing Programme for 2008-2011. The Scottish housing and regeneration capital budget is planned to decline by 25% between 2010/11 and 2011/12, indicating a fall in public housing output in the short term. In the medium term the sector may fare a little better in Scotland than England, with the National Housing Trust driving forward some growth in the former.

The private housing sector is expected to be the strongest performer in UK construction, with an annual average rate of increase of 6% between

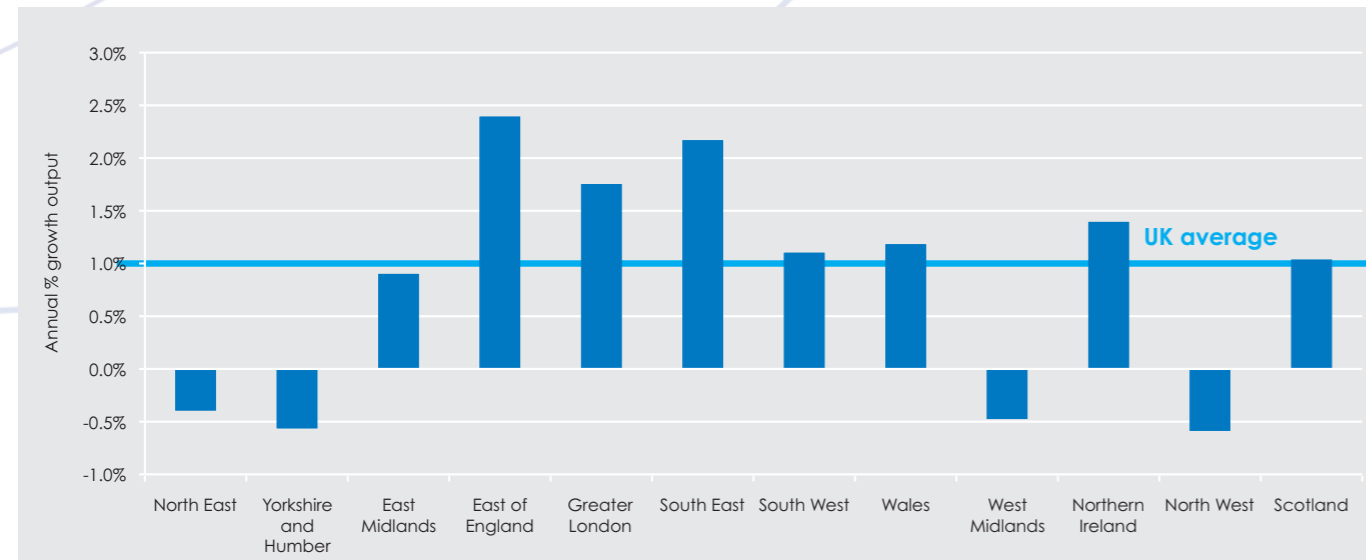
2011 and 2015, well above the overall industry average of 1%. Yorkshire and Humber's sector is likely to be especially buoyant, with a growth rate of 9.7%. Greater affordability in the region – the house price to earnings ratio is expected to remain below the national average – and easier access to mortgage finance should be vital in driving growth. Scotland's performance is projected to be in line with the UK average.

In the UK, both the infrastructure and industrial sectors are predicted to grow at an annual average rate of 4.4% over the four years to 2015. Greater London has a number of large transport projects, the biggest of which are Crossrail (worth £16bn) and the £5.5bn Thameslink scheme (although there are other sizeable infrastructure schemes such as Thames Tideway, Heathrow Terminal East and various Underground station upgrades). Again Scotland is expected to perform in line with the UK average with annual average output growth of 4.5%

Large transport schemes can dictate demand for distribution facilities, such as warehouses, hence the strength of industrial construction growth in the East of England at 9% a year to 2015 on the back of the construction of the new London Gateway port.

Employment growth between 2011 and 2015 is projected to be slightly higher in Scotland (8.3%) than the UK as a whole (7.8%). Strongest growth in Scotland is expected to be in labourers nec. (15%) and civil engineers (13.5%), while for the UK it is labourers nec. (16%) and civil engineering operatives nec. (14%). The ARR for Scotland, at 3,360, represents 1.4% of 2011 base employment, lower than the corresponding UK figure of 1.8%.

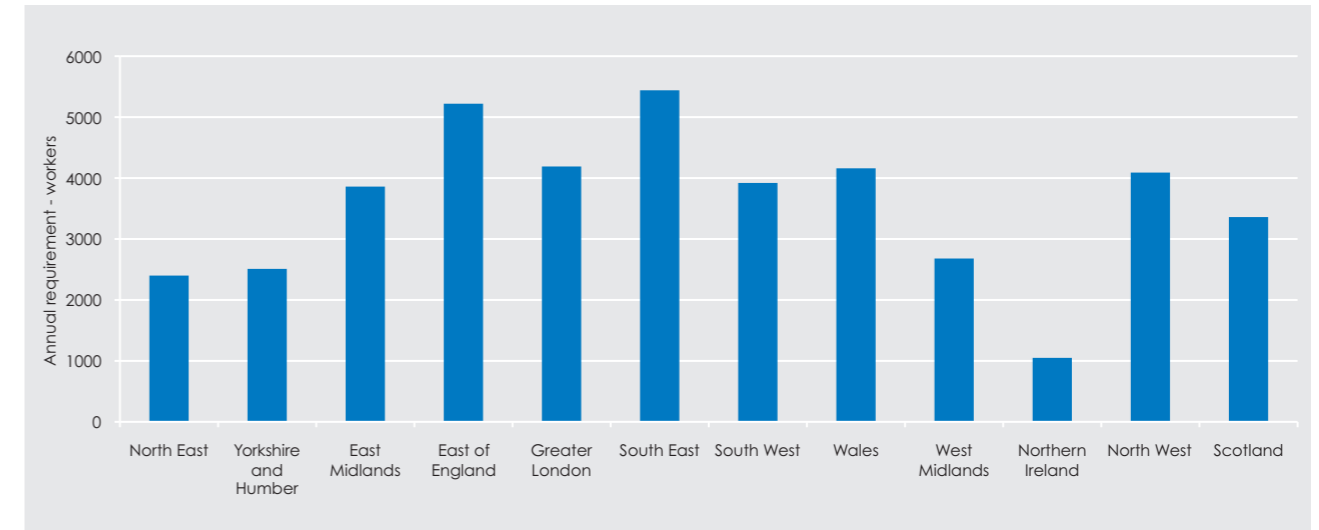
Annual average output growth by region 2011-2015



Source: CSN, Experian
ref CSN Explained, Section 4, Note 2

Private housing, along with R&M will be two of the stronger performing sectors

Annual recruitment requirement (ARR) by region 2011-2015



Source: CSN, Experian



M74 - Port Eglinton Viaduct

The ARR for Scotland of **3,360** is **1.4%** of base **2011** employment.

For more information about the
Construction Skills Network, contact:

Lee Bryer

Research and Development

Operations Manager

0344 994 4400

Lee.bryer@cskills.org

Cskills website

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

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

CSN Webpage

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

