

ConstructionSkills Network 2011-2015 Blueprint for UK Construction Skills 2011-2015

LABOUR MARKET INTELLIGENCE





COMPARING THE SECTORS

Labour Market Intelligence

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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 gualified, as well as for improving the performance of the industry and the companies within it.

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Chairman's message

2010 hasn't quite been a game of two halves; but it has certainly been a year of highs and lows. We've said goodbye to familiar acronyms - BSF, PFI, RDA - and, regrettably, to some even more familiar company names. Yet, at the same time ONS figures suggest that construction made the largest contribution to UK output in guarters three and four last year, figures which many in the industry would challenge.

So what does 2011 hold in store? Even as we enter the year there are signs of longterm confidence returning to the market. As the Shard races skywards, it is joined by the Walkie-Talkie, the Cheese Grater and Darth Vader's Helmet – exotic nicknames, but proof that investment is still being made. Likewise, a massive programme of infrastructure investment has also been announced, from £14bn rail upgrades to the £22bn AMP 5.

The latest CSN figures outlined in this report confirm this long-term optimism, forecasting output in 2015 to be 6.2% higher than 2011, with a slow, but sustained, recovery from 2013.

However, in the short term, there is no escaping the difficulties the sector is experiencing, and the next two years will certainly be challenging for the industry, with further reductions in employment levels. What is certainly true is that the first few months of this year have the capacity to shape the whole year.

Equipping the UK with a well trained, productive construction workforce has always been central to the sector's growth and success. But it is now essential if our businesses are to succeed and grow, and it's important to replace the skills lost to the industry during this recession. For that to happen we need to have a very clear understanding of the UK skills picture, including future needs, so that we can effectively plan and invest. It is during such difficult times that understanding the labour market is so essential. That is what the CSN forecasts give us.

They continue to capture a unique evidence-base for the industry. They allow organisations to examine demand and its drivers, utilising significantly robust labour market intelligence to inform strategic and business planning.

Forecasting in this fast moving and unpredictable environment is extremely challenging. However, our CSN forecasts continue to gain currency with a wide spectrum of industry stakeholders. The accuracy, relevance and usefulness of our forecasts is widely recognised and reinforces our desire to validate results with industry stakeholders across the UK who represent the many facets of industry and are able to provide firsthand insight into market conditions. Insight that will help us to pinpoint opportunities for growth. And we publish the findings' retrospective accuracy to demonstrate their robustness and value.

The financial turbulence experienced over the past three years has enhanced the need to be able to forecast skills requirements and understand market drivers of the changing strategic environment that construction will operate in. The CSN Forecasts for 2011 to 2015 represent our sixth set of five-year forecasts helping to identify demand. I do hope they are of value in shaping the future of your organisation.



Judy Lowe Chairman. **Construction Skills Network**

The Big Picture

Total employment by occupation - UK Annual recruitment requirement (ARR) by occupation - UK

	2011 2015	ARR
Senior, executive, and business process managers	124,030 136,650	1,410
Construction managers	243,470 263,780	2,520
Ion-construction professional, technical, IT, and other office-based staff	305,210 325,780	2,400
Wood trades and interior fit-out	263,870 283,930	6,080
Bricklayers	64,940 67,970	2,130
Building envelope specialists	92,700 99,310	1,620
Painters and decorators	117,130 125,420	3,450
Plasterers and dry liners	49,060 54,080	1,220
Roofers	40,180 43,410	570
Floorers	32,150 33,490	1,500
Glaziers	27,580 29,650	1,240
Specialist building operatives nec*	50,440 54,760	1,340
Scaffolders	18,190 20,620	620
Plant operatives	41,690 45,300	1,560
Plant mechanics/fitters	38,550 40,820	1,140
Steel erectors/structural	29,770 32,390	960
Labourers nec*	86,220 100,020	3,870
Electrical trades and installation	200,070 206,800	1,670
Plumbing and HVAC Trades	168,060 180,340	1,180
Logistics	33,980 38,010	1,900
Civil engineering operatives nec*	49,070 55,910	490
Non-construction operatives	35,740 40,700	-
Civil engineers	40,700 47,180 52,260	1,340
Other construction professionals and technical staff	178,490 191,210	1,080
Architects	37,080 40,450	620
Surveyors	67,460 70,600	970



Construction industry structure 2009 - UK

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

Source: ONS, Experian

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*nec - not elsewhere classified

Public expenditure cuts are likely to lead to further declines or at best stagnation in construction activity in 2011 and 2012, and even by 2015 output is projected to be only 96% of its 2007 peak.

Employment in the industry is likely to continue to fall in 2011 before picking up to around 2.63 million in 2015, still 3.5% below the 2008 peak

The global economy has bounced back from its disastrous 2009 in 2010, with world GDP estimated to have expanded by 4.8%. World manufacturing trade has also recovered, posting over 8% growth in 2010 after a decline of more than 14% in 2009. However GDP growth within the eurozone, where most of the UK's main trading partners are situated, was a much more modest 1.6%.

UK GDP growth exceeded expectations in the second and third quarters of last year, with expansion of 1.2% in the former and 0.8% in the latter, driven in no small part by buoyancy in the construction sector according to the official data. The UK economy is estimated to have grown by around 1.8% in 2010, a much better result than most analysts were predicting at the beginning of the year. Manufacturing has had a good year, with growth estimated at over 4%, boosted by a good export performance. For a change, it outstripped the financial and business services sector in growth terms, the latter posting only a moderate increase of 2.7%.

Based on official statistics, the UK construction industry is estimated to have grown by around 4% to 5% in 2010, in real terms. However the industry has experienced significant deflation, 3.6% to the Q3 2010, with clients able to obtain more work for their money. The implication of this is that in terms of current prices there is little change in the level of output between 2009 and 2010. This view is much closer to that indicated by most State of Trade surveys over the course of 2010, with the majority showing a slowdown in the rate of decline rather than any upturn in workloads.

The most buoyant sectors in 2010 have been the public housing and public non-housing ones, with significant levels of work being pushed forward before public expenditure cuts begin to bite. The Kickstart Housing Delivery programme has delivered an uplift in both public and private starts over the year, and this, combined with a high level of funding allocations under the National Affordable Housing Programme, have driven a very strong increase in public housing output. The surviving Building Schools for the Future projects have been the main engine of output growth in the public non-housing sector.

The infrastructure sector has also performed well during 2010. Growth is being driven for the most part by large transport projects. Crossrail got going in earnest during the course of the year, and ongoing projects include M74 completion, Thameslink, M25 widening, Manchester Metrolink expansion, and the second Tyne Tunnel.

The private housing sector saw some moderate recovery on the back of a stronger housing market in the first half of 2010, although it weakened somewhat in the second half. The sector also benefitted from the Kickstart programme, which was designed to restart stalled mixed-tenure developments.

The commercial sector did not experience the second year of sharp decline that was expected. While output is likely to have fallen, the drop was only moderate, at least in constant price terms. This sector has experienced even stronger deflation than the industry as a whole. thus in current price terms, output could have decline by around 10%.

It is quite possible that GDP growth in 2011 may be a little lower than last year as public expenditure cuts begin to bite, with their knock-on effects on employment and the private sector. Over the five years to 2015 GDP growth is projected to average 2% a year, well down on its long-term average of 2.5%. Not surprisingly, growth

COMPARING THE SECTORS

in public services is expected to be negligible and for the biggest sector of the economy, financial and business services it is predicted to average 3.7% a year to 2015, considerable slower than seen in the earlier part of the 2000s.

The profile of this recession for the construction industry is turning out to be an odd one. In the normal course of events the expectation would have been for a period of decline, followed by a recovery. However, after a relatively short period of contraction - only two years - the industry has bounced back, at least in real terms, in 2010, but is then projected to go back into decline in 2011 and possibly 2012.

The reasons for this are threefold. The first is a statistical one, in that the strong deflation seen in 2010 is distorting perceptions for that year. While deflation means that clients have been able to obtain more work for their money, for contractors and professional practices it often means cutting margins to the bone. For those working within the industry, 2010 will not have seemed like a recovery period.

Secondly, the effects of severe public capital expenditure cuts will be felt most strongly in 2011/12 and 2012/13, that is the early part of the forecast period, and this will depress public housing and public non-housing output in the short term. Departmental capital budgets, which were announced for the period 2011/12 to 2014/15 in the October 2010 Spending Review, show falls in planned budgets of between 14% and 51% between 2010/11 and 2011/12 across the main capital spending departments except for Defence.

Third, the effects of public expenditure cuts will spill over into the private sector, affecting the construction industry directly through government and local authority contracts, and indirectly through further rises in unemployment and continued economic uncertainty impacting on household spending. Indeed, large projects aside the current uncertainty impacting on consumer confidence might present a significant barrier to growth in the short-term.

Thus it is probably not until 2013 that we will start to see sustained recovery in construction activity overall. The relatively depressed first part of the forecast period leads to a projected annual average output growth rate over the five years to 2015 of only 1%, well below that seen in the decade to 2007 (2.5%). This is consistent with the below trend GDP growth expected over the period.

Under these conditions, employment is likely to continue to fall in 2011 and only start to pick up in 2012, with the growth rate then strengthening to 2015. Construction employment is predicted to grow by 7.8% between 2011 and 2015, a higher rate than output (5.2%). This initially might suggest a falling level of productivity in the industry. However, it is more to do with where the bulk of the output growth is likely to be, in the repair and maintenance (R&M) sectors (1.9% a year) rather than new work (0.5% a year). R&M work is about twice as labour intensive as new work, thus more employment is created per amount spent in real terms.

Employment in the industry will have experienced three years of decline between 2008 and 2011, with a loss of around 300,000 from the workforce on an annualised basis. The return to employment growth from 2013 will repair some of this damage, but even by 2015, employment will remain 3.5% lower than in its 2007 peak on the current forecasts.

Not surprisingly, the annual recruitment requirement (ARR) for the industry between 2011 and 2015 remains relatively low at a little below 43,000. The ARR brings together increases in demand for employment based on anticipated levels of workload, with the supply-side 'churn' in the industry, i.e. those moving in and out of the industry for one reason or another - retirement, death, movements between industries, etc. - but not including flows in from training. The ARR represents the levels of recruitment required over and above the normal 'churn' rates in a particular period. One of the main reasons for the low ARR over the current forecast period is that there will be a considerable level of normal inflow from unemployment once the industry starts to show sustained recovery.

Comparing the Sectors

Public and private housing

The public and private housing sectors are projected to move in very different directions over the forecast period. Allocations under the 2008-11 National Affordable Housing Programme (NAHP), combined with restarted work funded by the Kickstart Housing Delivery programme have boosted activity in the public sector recently. In total over 16,000 units, both public and private, have been started under the Kickstart programme to September 2010, and of these nearly 7,000 were for affordable housing. Furthermore, the public housing sector has also seen a significant number of starts come through the tail end of the National Affordable Housing Programme - around 11,500 in the six months to September. However, the public funding regime going forward will be far less generous. Only £4.4bn of public money will be available to fund social housing for the four-year period to March 2015. compared with the £8.4bn available under the 2008-11 NAHP. This will inevitably lead to sharp falls in public housing output, particularly in the early part of the forecast period.

As mentioned above, the private housing sector has also benefitted from funding under the Kickstart scheme. However, all units funded under round 1 of the scheme are required to be completed by April 2011 and those in round 2 by April 2012, thus the positive effects of this programme will soon start to unwind. The housing market, having looked quite buoyant superficially in the first half of 2010, began to look more fragile during the second half. However, this backed up our assertion that recent house price rises were largely as a result of constrained supply than any real rise in demand. Prices began to fall again in the second half of 2010 and rises in mortgage approvals and loans have stalled. Thus the first half of 2011 may be a difficult time for the housing market, although the expectation is that demand will strengthen towards the end of the year. Output is projected to grow at an annual average rate of 6% in the five years to 2015, slightly above the long-term average of 5%, due to a post-recession bounce-back effect. However, this will still leave output in the sector in 2015 at only 79% of its level at the peak in 2006 in real terms.

Infrastructure

For the first time in five years, the infrastructure sector is not predicted to be the star performer, although annual average growth will still be reasonably strong at 4.4%. Large transport projects will be driving growth in the first half of the forecast period, with Crossrail, Thameslink, M25 widening, Manchester Metrolink expansion, A1 upgrades and M74 completion all on site and the Forth Replacement crossing due to start in 2011. The Spending Review was relatively kind to publicly-funded infrastructure, with a number of major projects, such as upgrading of the A11, extensions to the Midlands Metro, and upgrades to the Tyne and Wear Metro, all getting the go-ahead. However, some projects have been cancelled, such as the A1 upgrade from Leeming to Barton. Furthermore local authorities will be under pressure to cut back on local roads programmes.

In the second half of the forecast period, focus is likely to shift to the energy sector. That is not to say that there will not be transport projects still ongoing, but any further growth is projected to come from the nuclear build programme in particular, with power stations at both Hinkley Point and Sizewell expected to be in construction phase by 2015 or earlier. These are likely to be joined by significant work in the renewables sector, particular on wind farms and biomass plants.

Annual average construction output growth 2011-2015 - UK



Source: CSN, Experian Footnote: 2 (See Appendix III)

Public non-housing

Public non-housing output is estimated to have reached an all-time high in 2010 and the probability was that the only way forward for this sector was downwards, even without the much more constrained picture for public investment. The sector has been dominated in recent years by education construction, and the Spending Review indicates a fall of 60 per cent in the capital budget for education between 2010/11 and 2014/15. The lion's share of this fall takes place in 2011/12, when its level drops to £4.9bn from £7.6bn in the previous financial year in the light of the cancellation of the BSF programme. Combine this with completion of main works on the Olympic Park - most of the major venues are due to be handed over the London Organising Committee of the Olympic Games (LOCOG) in mid-2011 - and the fall off in activity in the sector is likely to be very sharp over the next few years.

Commercial

While the commercial construction sector did not suffer as badly last year as was expected, the current year is likely to show little growth. Demand has been returning to the offices market, albeit patchily, and some developers have reactivated high profile projects in London that have lain dormant over the past couple of years. However, below the large project level, developers are likely to be warv of bringing new schemes on until they can be assured of the sustainability of economic recovery, while oversupply remains a problem in regional office markets. Thus office construction growth does not really take off strongly until the second half of 2012. Growth in the retail and leisure sub-sectors will be constrained by sluggish growth in consumer spending, and activity in both is projected to drift off further over the next couple of years before growth returns in 2013. PFI health projects are in long-term decline and there is no reason to believe that this will end, despite the goahead for two large hospital schemes in the Spending Review. PFI education construction is likely to suffer in the shorter-term from the truncation of the BSF programme, but some growth is predicted from 2013, as some sort of private financing mechanism may be the only realistic way forward to address the problem of poor facilities that still exist in some areas.

R&M

However, over the longer term the retrofitting of energy efficiency measures and renewable technologies in an effort to reduce the carbon emission levels of our built environment, is likely to prove a significant driver of activity both within the commercial market and amongst housing-stock holders and private homeowners. There are already a number of programmes up and running, such as the Community Energy Savings Programme (CESP), and others are due to come on stream in the not-too-distant future, such as the Green Deal. An increasing need for businesses to demonstrate their Corporate Social Responsibility, particularly in relation to lowering their carbon footprint may prove to be a largely unheralded diver in addition to legislatively driven initiatives. However, take-up may be slow, at least over the short term, and there is always the problem of displacement of other more traditional types of repair, maintenance and improvement unless these installations are fully funded from external sources.

Construction output - UK (£ million, 2005 prices)

	Estimate	Forecast annual % change				Annual average	
	2010	2011	2012	2013	2014	2015	2011-2015
Public housing	4,957	-20%	-15%	5%	0%	5%	-5.6%
Private housing	11,759	5%	10%	6%	5%	4%	6.0%
Infrastructure	10,161	7%	5%	5%	3%	2%	4.4%
Public non-housing	17,509	-10%	-25%	-15%	-10%	0%	-12.4%
Industrial	2,851	5%	7%	4%	3%	3%	4.4%
Commercial	16,541	2%	10%	4%	4%	3%	4.6%
New work	63,778	-2%	-1%	1%	2%	3%	0.5%
Housing R&M	20,988	-1%	2%	2%	3%	3%	1.9%
Non-housing R&M	18,073	1%	3%	2%	2%	2%	1.9%
R&M	39,061	0%	2%	2%	3%	3%	1.9%
Total work	102,840	-1%	0%	1%	2%	3%	1.0%

Industrial

Industrial construction output hit a historic low in 2009, but it has recovered somewhat in 2010, driven largely by export growth. The 'export effect' is expected to continue for the next couple of years, as long as the financial crisis affecting some eurozone members does not spread too far. By 2013 the warehouse sub-sector is projected to take over as the main engine of growth, particularly due to demand for distribution and logistics facilities around new or expanded ports, such as London Gateway. Annual average growth of 4.4% is projected to take output up to £3.5bn in 2015, although this will still be 27% below its last peak in 2006.

In the short term, growth in the R&M sectors will remain muted, with constrained budgets likely to affect local authorities' expenditure on routine and cyclical maintenance, and the major corporate players with large property portfolios still wary of incurring costs in this area.

> Source: CSN Experian Footnote: 2 (See Appendix III)

Comparing the UK regions and nations



There is little doubt that we are seeing a north/south divide re-emerge over the forecast period and this is in no small part linked to regional and devolved nation economies' exposure to the public sector. In terms of the wider economy, public services account for a larger share of output the further north one goes, with the highest proportions in Wales and Northern Ireland, both over 30%. In contrast, public services accounts for less than 22% of the economy of the South East and 23% of the East of England and Greater London.

In construction terms the division is not so clear cut. While the Welsh construction industry has the largest estimated share of output reliant on the public sector, nearly 45%, Greater London is in second place with over 43%, due to its large social housing sector. In contrast, the North East had the lowest share of construction output publicly driven in 2009, around 35%.

How well the construction industry will fare in each of the regions and devolved nations depends not only on the direct effects of public expenditure cuts on construction projects, but the indirect effects on the economy as a whole and how this will impact on the private construction sectors, which in every region and devolved nation make up the majority of construction output.

Thus it is no surprise that the three regions projected to have the highest annual average growth rates in construction are the East of England (2.4%), the South East (2.2%) and Greater London (1.8%)

The East of England has one of the lowest exposures to the public sector across its economy as a whole (22.6% in 2009), but has quite a high reliance on publicly driven construction activity (40.5%). Construction output growth in the region is predicated on the London Gateway port project driving good levels of infrastructure activity and its knock-on affect on industrial construction through demand for new distribution and logistics facilities in the port's hinterland. The East of England also has a strong R&M sector which is expected to benefit from the retrofitting agenda, while its exposure to the BSF programme was less than many other English regions.

The South East is even less exposed to the cancellation of the BSF programme, thus is projected to suffer only half the fall in public non-housing activity than the UK mean. Its strong commercial sector is also expected to recover well, particularly in the Thames Valley and along the M4 corridor. This region is the least vulnerable to the effects of public expenditure cuts on the wider economy, with public services accounting for less than 22% of regional output.

Greater London also has a low exposure to public expenditure cuts overall, although the construction industry is quite vulnerable, with publicly-driven work taking a 43% share of construction output in 2009. However, London has two big pluses in its favour. The first is that it is home to some of the biggest ongoing infrastructure projects in the country. Crossrail on its own is estimated to be worth £14.6bn, down from the £15.9bn originally projected, but still far and away the largest project in the UK. Thus growth in infrastructure output in the capital is projected to be a strong 7.2% a year on average to 2015, well above the UK mean of 4.4%. Its second big advantage over the forecast period is likely to be the size of its financial and business services sector and its global role as a financial centre. Thus its commercial construction sector, and in particular offices, is much bigger than in other regions and devolved nations, and growth of over 6% a year on average is expected on the back of general economic recovery.

In contrast, the average size of the public services sector across the northern English regions – the North East, North West, and Yorkshire and Humber – is 27%. Thus, while the North East's construction industry is the least exposed to the public sector, its economy as a whole is more vulnerable to the impact of public expenditure cuts. This is likely to depress GVA growth and thus demand for retail, leisure and office facilities for example.

It is also the case that many of the northern English regions benefitted disproportionally from the early phases of the BSF programme. Thus output in the public non-housing sector has a greater distance to fall once schemes that were allowed to go-ahead are completed.

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Some regions, such as the North East, also received a boost from a high level of funding allocations under the 2008-11 NAHP programme, producing very strong growth in public housing output in recent years. A much more constrained funding regime going forward is likely to impact heavily on these regions.

In the light of these factors, all three northern English regions are forecast to see declining levels of output overall between 2011-2015, although the average falls are actually quite modest, 0.6% a year in the North West and Yorkshire & Humber and 0.4% in the North East.

For the devolved nations, the situation is slightly different. While they all have a large public services sector and a high level of publicly-driven construction, the fact that capital expenditure priorities are set by the devolved administrations rather than Westminster may lead to a different effect on the construction industry. Scotland has already indicated that, in the short-term at least, it will continue to fund expenditure on transport infrastructure, and to that end has recently given the go-ahead for work on the Forth Replacement Crossing to start in 2011. Furthermore, it is developing a number of innovative funding mechanisms which it hopes will allow it to deliver on a larger slice of the required infrastructure than would otherwise be the case. In Northern Ireland, public expenditure on construction seems to have taken a big hit in 2010, a year earlier than in most other regions and devolved nations, and thus it may not have so far to fall going forward. An almost moribund housing market in the province, where affordability remains a severe problem, is also likely to mean that R&M work should grow strongly once householders feel that a sustained economic upturn is on the way. Wales is likely to have an even stronger housing R&M sector, with a significant retrofitting programme, worth up to £1bn over the decade to 2020, already underway.

Construction employment growth across the regions and devolved nations is not just reliant on overall levels of output growth, but also on which sectors the growth is in, particularly whether it is in new work or R&M. The R&M sectors are around twice as labour intensive as new work and thus generate more employment for the same level of output growth. Employment growth across the UK as a whole between 2011 and 2015 is projected to be 7.8%, but growth in the regions and devolved nations ranges from 12.2% in the East of England to just 3.7% in the North West. The East of England has the highest rate of output growth, combined with a large R&M sector which is projected to grow at an annual average rate of 2.6%, only beaten by Wales (4.3%) and the North East (2.9%).

In contrast, the North West's construction industry is projected to contract by an annual average of 0.6% in the five years to 2015, and the only reason it has employment growth at all is that all the decline is in new work (-1.8%) and the much more labour intensive R&M sectors are forecast to grow by 1.4% a year.

The annual recruitment requirement (ARR) tends primarily to be a function of the size of the construction market in a particular region and devolved nation. Thus big markets, such as the East of England tend to have high ARRs and small ones, such as Northern Ireland, tend to have low ARRs. However, this is not always the case as other factors do come into play. Thus the East of England may have the highest output growth, but because it is only the fourth largest construction market, it only has the second largest recruitment requirement, of 5,220. The South East is projected to have the largest ARR at 5,440 due to its relatively high output growth and the fact that it is the second largest market, behind Greater London. Greater London's AAR of 4,190 is relatively low, given that it is the largest market and it predicted to have the third strongest output growth. However, London tends to have strong natural net inflows of workers from other regions. In contrast, Wales' high ARR of 4,160 given its size is due to a high level of net outflow, not only to other regions, but also to other industries.

DMPARING THE UK REGION AND NATIONS

Scotland

Total employment by occupation - Scotland Annual recruitment requirement (ARR) by occupation - Scotland

	2011 2015	ARR
Senior, executive, and business process managers	11,870 13,030	-
Construction managers	26,820 29,250	190
Non-construction professional, technical, IT, and other office-based staff	29,240 31,190	-
Wood trades and interior fit-out	31,480 34,100	520
Bricklayers	3,820	-
Building envelope specialists	4,940 5,400	50
Painters and decorators	9,550 10,220	290
Plasterers and dry liners	3,660 4,050	160
Roofers	3,220 3,490	-
Floorers	2,700 2,830	<50
Glaziers	1,480 1,630	<50
Specialist building operatives nec*	5,320 5,850	160
Scaffolders	2,530 2,830	160
Plant operatives	6,760 7,340	560
Plant mechanics/fitters	4,300 4,580	510
Steel erectors/structural	3,170 3,420	140
Labourers nec*	6,410 7,370	-
Electrical trades and installation	15,540 16,230	-
Plumbing and HVAC Trades	13,020 14,180	50
Logistics	3,380 3,720	200
Civil engineering operatives nec*	5,830 6,480	-
Non-construction operatives	4,530 5,110	-
Civil engineers	3,400 3,860	110
Other construction professionals and technical staff	20,040 21,570	210
Architects	5,130 5,640	<50
Surveyors	6,250 6,510	<50



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

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

Non-housing R&M Source: ONS, Experian

*nec - not elsewhere classified

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%.

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 vear. Looking further ahead, the strength of investment in Scottish infrastructure - transport, energy and social - will to a large extent by predicated on the success of innovative funding mechanisms that the Scottish Government is developing.

Scotland is forecast to show annual average output growth of

1.0% between 2011 and 2015



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Riverside, Glasgow

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 forcasted. 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 about the longterm 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.

North East

Total employment by occupation - North East Annual recruitment requirement (ARR) by occupation - North East

ARR	2011 2015	
<50	3,730 4,120	Senior, executive, and business process managers
150	9,620	Construction managers
-	8,920	Non-construction professional, technical, IT, and other office-based staff
260	9,130 7,560	Wood trades and interior fit-out
	8,360 2,540	
390	2,680 2,300	Bricklayers
80	2,620	Building envelope specialists
160	4,040 4,280	Painters and decorators
130	3,000 3,330	Plasterers and dry liners
<50	3,580 3,990	Roofers
290	1,860 1,990	Floorers
<50	1,020 1,200	Glaziers
160	2,540 2,930	Specialist building operatives nec*
<50	1,310 1,460	Scaffolders
-	2,240 2,270	Plant operatives
<50	2,290 2,320	Plant mechanics/fitters
<50	1,570 1,690	Steel erectors/structural
330	3,930 4,460	Labourers nec*
260	7,340	Electrical trades and installation
-	8,640 9,890	Plumbing and HVAC Trades
<50	1,580	Logistics
<50	1,640 2,760	Civil engineering operatives nec*
-	3,260 1,580	Non-construction operatives
<50	1,680 2,190	Civil engineers
-	2,590 8,200	Other construction professionals and technical staff
	8,730 660	
<50	780 1,740	Architects
-	1,740	Surveyors



Construction industry structure 2009 -UK vs. North East (NE)

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

Source: ONS, Experian

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*nec - not elsewhere classified

Construction output in the North East is projected to decline at an annual average rate of 0.4% between 2011 and 2015, making the region one of the weakest in the UK. The repair and maintenance (R&M) sector is expected to fare much better than new work, with average growth rates of 2.9% and -2.5% per year, respectively. Total construction employment is forecast to reach just over 105,290 in 2015, 8.8% higher than 2011's projected outturn but 7.6% below the 2009 level.

Key findings

With an average annual rate of decline of 17.5% between 2011 and 2015, the public non-housing sector is predicted to be almost entirely responsible for the poor performance of new work over the next five years. The sector quickly increased its size in recent years, it accounted for almost 13% of total new work output in 2007 but this rose to nearly 30% in 2009. This was as a result of the continued level of investment under the Building Schools for the Future (BSF) programme while the private sectors had gone into recession. The fact that the North East has been one of the bigger recipients of BSF funding leaves it in a vulnerable position once those projects not cancelled by the Coalition Government have been completed.

At -11.3%, the public housing sector is projected to be the only other sector in the region with a negative annual average rate of change over the next five years. The small size of the sector, combined with significant rises in the past couple of years, means it will suffer as public expenditure cuts come into effect. The level of funding available for the UK from 2011-2015 period has almost halved to £4.4bn and this pot of money is believed to be "back-end loaded" meaning that the sector is likely to be worse hit in the short term, although some growth should return in the latter part of the forecast period. In contrast, the industrial sector is forecast to be the best performing in the region with an annual average rate of increase of 5.9% over the five years to 2015. The North East's large manufacturing base holds it in good stead to benefit from a buoyant manufacturing industry in the short to medium term, driven by export growth.

The private housing and commercial sectors are expected to see average yearly increases of 2.9% and 3.8% respectively between 2011 and 2015. For private housing the region's dependency on the public sector is likely to cause uncertainty in the labour market once the cuts begin to implemented, with knock on effects on the housing market. However a lower house price-to-income ratio than the national average and easing credit conditions should keep private housing output in positive territory over the forecast period. In commercial construction, weak consumer spending and relatively high unemployment are unlikely to provide much of an incentive for developers to invest in new retail and leisure premises. In 2009 the largest occupation in the North East was construction managers which accounted for 9.7% of total construction employment, a slightly smaller proportion than in the UK as a whole

CHAIRMAN'S MESSAGE



The Sage, Gateshead

(10%). It is expected to remain the largest occupation over the forecast period. At 1,250, the largest increase in employment in absolute terms is projected to be for plumbing and HVAC trades but in percentage terms the strongest rises are forecast to be for civil engineers (18.3%), with architects (18.2%) in second place. The ARR of 2,400 is equivalent to 2.5% of 2011 base employment.

Construction output for the North East is forecast to decline by

0.4% per year between 2011 and 2015

North West

Total employment by occupation - North West Annual recruitment requirement (ARR) by occupation - North West

	2011 2015	ARR
Senior, executive, and business process managers	12,140 12,520	<50
Construction managers	24,590 25,170	-
Non-construction professional, technical, IT, and other office-based staff	36,710	
	38,040 25,650	_
Wood trades and interior fit-out	26,740	540
Bricklayers	6,450 6,650	260
Building envelope specialists	7,970 8,360	140
Painters and decorators	11,980 12,190	660
Plasterers and dry liners	7,680 7,800	370
Roofers	5,470 5,760	250
Floorers	3,630 3,700	390
Glaziers	2,410 2,600	200
Specialist building operatives nec*	3,330 3,630	<50
Scaffolders	1,200 1,260	-
Plant operatives	4,930 5,160	<50
Plant mechanics/fitters	5,150 5,400	240
Steel erectors/structural	3,610 3,650	-
Labourers nec*	9,680 10,440	-
Electrical trades and installation	21,890 22,360	470
Plumbing and HVAC Trades	18,630 19,670	-
Logistics	3,660 3,800	290
Civil engineering operatives nec*	2,760 2,820	130
Non-construction operatives	3,880 4,090	-
Civil engineers	4,030	<50
Other construction professionals and technical staff	21,330 21,840	-
Architects	1,520 1,610	50
Surveyors	8,020 8,130	-



Construction industry structure 2009 -UK vs. North West (NW)

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

Source: ONS, Experian

*nec - not elsewhere classified

With an annual average rate of decline of 0.6% between 2011 and 2015, the North West's construction industry is predicted to underperform the UK average quite significantly. Following a reasonable increase in 2010, total output is forecast to sink back into negative territory in 2011 and 2012 as public sector cuts weigh down the new work market. The decline is expected to come to a halt in 2013, but little growth is projected for the region to 2015. At 268,770, total construction employment in 2015 is forecast to be up 3.7% on the 2011 level but remain 1.4% below the 2009 figure.

Key findings

Before its cancellation in the summer of 2010, the Building Schools for the Future (BSF) programme was especially important in driving output in the region's public non-housing construction sector. Thus as work on existing education projects begins to come to an end and little else comes online to replace them, output should begin to see year-on-year declines in each of the years between 2011 and 2015. With an annual average rate of contraction of 22.8% for new public non-housing work over the review period, the North West is likely to be the hardest hit of any region or nation in the UK.

The two housing sectors – public and private – are expected to see equal magnitudes of change over the forecast period. Although public housing is predicted to decline at an annual average rate of 5.6% between 2011 and 2015, private housing should grow by 5.6%. The end of the Kickstart Housing Delivery Programme and a lower level of funding being available to the Homes and Community Agency (HCA) going forward, as announced in the Comprehensive Spending Review (CSR), will be responsible for falling activity levels in public housing construction. In contrast, private housing output should return to growth in 2011, albeit from a very low base, following four consecutive years of decline. Easing credit conditions, for both consumers and developers should help to stimulate the market, although a relatively weak demographic profile should keep the region from performing to quite the same level as the UK as a whole.

With a projected annual average growth rate of 6.3%, the industrial construction sector in the North West is likely to outperform the commercial one (2.4%). The former is well placed to benefit from the uplift in manufacturing due to the region's larger production base, when compared to the UK as a whole. Furthermore, an improving infrastructure network should help to drive demand for distribution centres linked to new/improved transport hubs. In the commercial sector, the return of demand for office and retail space will be slow.

The infrastructure construction sector is predicted to be the best performer, with average growth of around 6.4% per year between 2011 and 2015. The level of activity should be highest in 2013, with output forecast to increase by 19% year-on-year, as Phase 3B of the Manchester Metrolink scheme begins to build a head of steam. The £430m Mersey Crossing, recently given the green light in the Comprehensive Spending Review, should also play a vital role in driving output.

Between 2011 and 2015, total construction employment in the North West is projected to increase by 3.7% to 268,770. Specialist building operatives nec* (9%) and civil engineers (8.9%) are predicted to see the largest increases in employment in percentage terms over the period, although in absolute terms, wood trades and interior fit-out (1,090) and plumbing HVAC trades (1,040) should see the greatest rises. At 4,090, the annual recruitment requirement in the region is forecast to be equivalent to just 1.6% of base 2011 employment. CHAIRMAN'S MESSAGE



Media City, Salford

The Infrastructure sector is predicted to be the best performer, with growth of around

6.4% per year between 2011 and 2015

Yorkshire and Humber

Total employment by occupation - Yorkshire and Humber Annual recruitment requirement (ARR) by occupation - Yorkshire and Humber





Construction industry structure 2009 -UK vs. Yorkshire and Humber (NW)

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

Source: ONS, Experian

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*nec - not elsewhere classified

Construction output in Yorkshire and Humber is forecast to decline at an annual average rate of 0.6% between 2011 and 2015, making it the worst performing of all the regions and nations. This figure masks a stark divergence between the new work and repair and maintenance (R&M) sectors; new work output is projected to decline at an average rate of 2% per year, whilst R&M work is expected to rise by 1.4%. Total construction employment in the region is projected to reach almost 239,700 in 2015, 7.1% higher than 2011's forecast level.

Key findings

The region's private housing sector is expected to be the most buoyant over the forecast period, growing at an annual average rate of 9.7%. This is markedly higher than the UK figure of 6%. Favourable demographic trends in Yorkshire and Humber, coupled with improving credit conditions and a relatively low house-price-toincome ratio, are likely to drive the buoyant growth in the sector. The industrial sector is expected to see output rise by 5.9% on average per year over the forecast period, as strengthening global conditions underpin demand for new facilities.

With an annual average rate of decline of 18.5%, the public nonhousing sector is projected to be the worst performing sector in Yorkshire and Humber, as the remaining work on the conventionallyfunded Building Schools for the Future (BSF) programmes is completed. Around 82 schools projects from later waves of the BSF programme were affected by its axing and this, coupled with wider government funding cuts, will have a significant impact on the sector.

The public housing sector is also expected to see an annual average decline over the forecast period, albeit by a weaker 5.1%. Funding for the public housing sector in England has been cut by almost 50% to £4.4bn for the 2011-2015 period and every region will be impacted. As work on the Kickstart programme begins to wind down in 2011 and 2012, and with the majority of funding for the 2011-2015 period "back-end loaded", the sector is likely to be particularly badly affected in the shorter term, with moderate growth projected towards the end of the forecast period.

The Leeming to Barton section of the A1 improvement scheme was cancelled in the Spending Review and this will have a negative impact on the infrastructure sector over the forecast period, with output in the sector expected to grow at an annual average rate of just 1.7%. Construction on a planned biomass power station in Sheffield is due to start in 2011, but there are very few other major infrastructure projects on the horizon in Yorkshire and Humber. Commercial construction output is projected to see average growth of 3.3% per year over the 2011-2015 period, with work recently



Winter Graden, Sheffield

having resumed on the Trinity Leeds scheme and a number of other retail and office projects due to start over the next five years.

Taking a 12.1% share of total construction employment, wood trades and interior fit-out was the largest trade occupation in Yorkshire and Humber in 2009 and is expected to remain so over the forecast period. This occupational group is also forecast to see the largest increase in construction-specific employment at 2,380, but in percentage terms the strongest rise is for specialist building operatives nec*, civil engineers (17%) and glaziers (15%). At 2,510, the ARR over the forecast period is equivalent to 1.1% of base 2011 employment, the weakest across the UK.

Private housing is expected to be the most buoyant sector, growing at an annual average rate of

9.7% and higher than the UK figure of 6%

CHAIRMAN'S MESSAGE

East Midlands

Total employment by occupation - East Midlands Annual recruitment requirement (ARR) by occupation - East Midlands





Construction industry structure 2009 - UK vs. East Midlands (EM)

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

Source: ONS, Experian

*nec - not elsewhere classified

Construction output in the East Midlands is predicted to grow at an annual average rate of 0.9% between 2011 and 2015, a marginally weaker increase when compared with the UK as a whole (1%). The repair and maintenance (R&M) sector (1.8%) should perform better than new work (0.3%), with the latter being weighed down by the declining public housing and public non-housing sectors. Total construction employment in the region is forecast to reach 162,440 in 2015, up 7.4% on the 2011 projected outturn and 2.2% above the 2009 result.

Key findings

Public housing output is predicted to see year-on-year contractions in each of the forecast years, with the sharpest declines expected to materialise in 2011 and 2012. The near 50% cut in the funding available to 2014, compared with the National Affordable Housing Programme (NAHP) for 2008-11, is likely to result in double digit declines both this year and next, especially considering that output will be falling from a historical high. However the rate of contraction should ease in the later part of the forecast period.

In contrast the private housing sector is predicted to be the most buoyant with an annual average growth rate of 8.1% between 2011 and 2015. Following significant declines in 2008 and 2009, it is estimated that output grew in 2010. The sector is likely to continue building momentum this year and next, giving double digit increases. The relatively modest house price boom in the region during 2004-2007 and good income growth over the last decade leaves the region's housing market in a better position to make a recovery than other parts of the UK.

At 1.3%, the projected annual average growth rate for East Midlands' infrastructure sector is weaker than the UK mean (4.4%). Although short-term prospects for the sector are good – with Phase 2 of Nottingham Express Transit scheme providing a boost – there is little in the pipeline thereafter. Unsurprisingly, the public non-housing sector is predicted to fare badly between 2011 and 2015. Output is forecast to decline in each of the years to 2014 as the cancellation of the Building Schools for the Future (BSF) programme impacts on the sector – although this is likely to be the case across all of the English regions. Activity levels in the industrial and commercial construction sectors are predicted to be relatively subdued in the East Midlands over the forecast period. The former is predicted to grow by 3.4% and the latter by 3.2%, on an annual average basis – weaker than the projected outturns for the UK as a whole (4.4% and 4.6%, respectively). The region has been shifting away from the low value-added manufacturing sector in recent years and therefore is not in as strong a position to benefit from the upturn in exports, which by implication is likely to result in weaker demand for new industrial facilities. In the commercial sector, slow growth in household disposable incomes and the region's dependence on the public sector is likely to suppress demand for new space as government cuts take effect.

Lab see althe occ proj repr



Lincoln Cathedral

Labourers nec* (15.3%) and civil engineers (14.3%) are predicted to see the largest increases in employment between 2011 and 2015, although in absolute terms, wood trades and interior fit-out occupation should experience the biggest rise (1,430). At 3,860, the projected annual recruitment requirement for the region is representative of 2.6% of base 2011 employment.

The private housing sector is predicted to be the most buoyant between

2011 and 2015 with annual average

growth of around

8.1% over the period, although output will be rising from a very low base

CHAIRMAN'S MESSAGE

West Midlands

Total employment by occupation - West Midlands Annual recruitment requirement (ARR) by occupation - West Midlands





Construction industry structure 2009 -UK vs. West Midlands (WM)

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

Source: ONS, Experian

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*nec - not elsewhere classified

Construction output in the West Midlands is projected to decline at an annual average rate of 0.5% between 2011 and 2015. The new work (-2.4%) and repair and maintenance (2.3%) sectors are predicted to see similar magnitudes of change, albeit in opposite directions. Total construction employment is expected to reach 222,420 in 2015, up 7.1% on the 2011 level and 4.8% above the 2009 outturn. At 2.680. the annual recruitment requirement (ARR) over 2011-2015 is representative of 1.3% of base 2011 employment, lower than the UK average of 1.8%

Key findings

The public housing and public non-housing sectors are projected to decline at annual average rates of 5.6% and 15.7%, respectively, between 2011 and 2015, with the former expected to perform in line with the national average. At £4.4bn, there is half the level of funding available for social housing in England over 2011-2015, compared with the 2008-2011 National Affordable Housing programme, thus all of the regions are projected to see a downward trend. However the poor outlook for public non-housing construction is likely to have a much larger impact on the region's industry as it accounts for a significantly higher proportion of total construction output. The cancellation of the Building Schools for the Future (BSF) programme will affect public non-housing construction activity going forward since it was largely responsible for pushing output to a new high in recent vears.

In contrast, the industrial construction sector is predicted to be the most buoyant in the West Midlands with an annual average growth rate of 4.5% over 2011-2015 – roughly in line with the UK mean (4.4%). Following moderate growth this year, the expectation is that the pace of increase will broadly decelerate to the end of the forecast period as the recent manufacturing recovery runs out of steam and thus dampens demand for new facilities.

Infrastructure and commercial construction output are projected to see similar magnitudes of growth of 2.3% and 2.1%, respectively, on an average annual basis over the five years to 2015. The largest projects in the former sector are the £600m redevelopment of Birmingham New Street station and the £127m Midland Metro extension – approved in the October 2010 Comprehensive Spending Review (CSR). In the commercial sector, the most important scheme is the £1.5bn redevelopment of land surrounding the rail station in Coventry. Work is estimated to commence onsite in 2011 and should take eight years to complete.

Library of Brimingham Although private housing is forecast to be one of the better performing construction sectors in the West Midlands with an annual average growth rate of 4.3% between 2011 and 2015, it is actually likely to underperform when compared with the UK mean (6%). Output is projected to decline for the sixth consecutive year in 2011 - leaving the sector as the only one in the UK in negative territory. This poor outturn is likely to be responsible for constraining the sector's growth rate over 2011-2015.

Of the trade occupations, wood trades and interior fit-out (9.6%) accounted for the largest proportion of total employment in the region in 2009 and should see the biggest absolute increase between 2011 and 2015, of 1,570. However over the same period, civil engineers (16%) and labourers nec* (13%) are predicted to see the biggest rises in percentage terms. The ARR of 2,680 is equivalent to 1.3% of 2011 base employment, weaker than the UK average (1.8%).

4.3% between 2011 and 2015



Private housing is forecast to be one of the better performing construction sectors in the West Midlands with an annual average growth rate of

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Wales

Total employment by occupation - Wales Annual recruitment requirement (ARR) by occupation - Wales

	2011 2015	ARR
Senior, executive, and business process managers	2,540 2,790	<50
Construction managers	6,760 7,180	260
Ion-construction professional, technical, IT, and other office-based staff	10,790 11,170	650
Wood trades and interior fit-out	13,870 14,600	1,010
Bricklayers	4,950 4,990	260
Building envelope specialists	4,070 4,270	130
Painters and decorators	3,860 4,030	310
Plasterers and dry liners	2,790 3,020	<50
Roofers	660 700	<50
Floorers	1,440 1,420	<50
Glaziers	1,690 1,770	140
Specialist building operatives nec*	2,190 2,320	80
Scaffolders	1,850 2,050	50
Plant operatives	2,220 2,280	<50
Plant mechanics/fitters	1,030 1,050	<50
Steel erectors/structural	1,930 2,070	<50
Labourers nec*	5,530 6,250	440
Electrical trades and installation	8,040 7,850	<50
Plumbing and HVAC Trades	7,430 7,890	170
Logistics	2,700 2,900	220
Civil engineering operatives nec*	3,800 4,310	<50
Non-construction operatives	1,050 1,150	-
Civil engineers	1,300 1,420	80
Other construction professionals and technical staff	5,110 5,310	90
Architects	540 590	<50
Surveyors	4,110	70



Construction industry structure 2009 -**UK vs. Wales**

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

Non-housing R&M

Source: ONS, Experian

*nec - not elsewhere classified

Construction output in Wales is projected to grow by an annual average rate of 1.2% between 2011 and 2015, slightly better than for the UK as a whole (1%). However, growth is likely to be centred in the repair and maintenance (R&M) sectors, with new work output stagnating over the period. Total construction employment in the principality is forecast to reach 107,500 in 2015, 5% up on the projected 2011 level, but still 20% down on the peak year of 2007.

Key findings

Public housing output in Wales is likely to hold up for one more year (2011), before declining thereafter, assuming the indicative plans put forward in the Welsh Assembly Government's (WAG) November 2010 draft Budget are adopted. As public funding for social housing in the English regions is budgeted to fall from April 2011, Wales' annual average decline in the sector of 4.7% is a little softer than for the UK as a whole (-5.6%).

The private housing sector is expected to be the most buoyant in Wales over the forecast period, in line with the UK as a whole. Levels of activity in the sector have fallen to historic lows, thus the only way is up in the medium term, despite the current fragility of the housing market. There has already been evidence of more starts on site in the first half of 2010, and while growth may be variable and patchy over the next few quarters, it is likely to strengthen in the second half of 2011.

The strength of infrastructure output in Wales is heavily predicated on two biomass power station projects whose futures have become more uncertain in recent months. Furthermore, there is a concern that the electrification of the main rail line to Swansea may be delayed. We have thus erred on the cautious side in our forecasts for activity in the sector going forward.

Not surprisingly, public non-housing output is projected to decline over the forecast period in Wales, by an annual average of 7.8%. However, the principality is not exposed to the main engine of decline in the English regions, the Building Schools for the Future programme, thus its fall is less severe than that predicted for the UK as a whole (an annual average of -12.4%). Nevertheless, the Capital Budgets for the main areas that spend on construction - education. health, and transport - will be on their way down according to WAG's draft Budget.

The industrial and commercial sectors are predicted to have moderate growth rates over the forecast period, the former benefitting from prospective good export growth, and the latter from long-term regeneration projects, such as that in Newport. Wood trades and interior fit out will remain by far the largest occupational category in Wales during the forecast period, accounting for around 13.5% of total construction employment, a

somewhat higher proportion than in the UK as a whole (10.8%). However, this occupation is only forecast to see moderate growth in employment between 2011 and 2015, of around 5.3%. Most in demand are expected to be civil engineering operatives nec (13.4%) and labourers nec (13%).

The annual recruitment requirement for Wales is projected to be 4,160, representing 4.1% of 2011 base employment. This is the highest relative level in the UK, due to the significant level of net outflow that Wales experiences in its construction workforce



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THE BIG PICTURE





The private housing sector is projected to have the strongest rate of increase between

2011 and 2015, of just below 7% a year on average.

East of England

Total employment by occupation - East of England Annual recruitment requirement (ARR) by occupation - East of England





Construction industry structure 2009 -UK vs. East of England (ET)

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

Non-housing R&M

Source: ONS, Experian

*nec - not elsewhere classified

Construction output in the East of England is forecast to grow at an annual average rate of 2.4%, the strongest of all the regions and nations and significantly stronger than the UK figure of 1%. Repair and maintenance (R&M) output is expected to be slightly more buoyant than new work, with growth rates of 2.6% and 2.2%, respectively. Total construction employment in the region is projected to reach almost 249,000 in 2015, 12% higher than 2011's forecast level, but still 3.5% lower than 2006's peak level.

Key findings

The infrastructure sector is projected to be one of the best performing sectors in the region, growing at average rate of 7% per year over the 2011-2015 period. Work on DP Port's London Gateway is due to start in late 2011 and is expected to continue throughout the forecast period, driving growth in the sector. The industrial sector is also expected to benefit from this ports project, which is likely to drive demand for distribution facilities, such as warehouses. Thus, the annual average growth of 9% forecast for the industrial sector is one of the strongest across the UK.

Easing credit conditions will benefit both potential buyers and housing developers looking for finance, and this will stimulate activity in the housing market. Output in the private housing sector is projected to rise in each year of the forecast period at an average rate of 7% per annum. In contrast, the outlook for the public housing sector is gloomy with the sector expected to see an annual average decline of 6.3% over the 2011-2015 period. Levels of funding available for public housing have been almost halved - there was £8.4bn of funding available under 2008-2011 National Affordable Housing programme compared with the £4.4bn announced in the Comprehensive Spending Review for the 2011-2015 period.

The worst performing sector in the East of England over the forecast period is expected to be the public non-housing one, with output expected to decline at an average rate of 8.9% per year over the period to 2015. Although the region was not one of the main beneficiaries from the early waves of the Building Schools for the Future (BSF) programme it has seen around 70 schools projects cancelled in the later stages of the programme and this, along with wider government expenditure cuts, will act as a significant dampener on activity in the sector.

With an annual average growth rate of 4.7% over the period to 2015, the commercial sector is expected to fare reasonably well over the forecast period. Two PFI hospital projects in Cambridge -Addenbrooke's Hospital and Papworth Hospital – are due to start in 2011 and construction will continue throughout most of the forecast period. Work is also expected to start on the £350m Snoasis scheme near Ipswich, with a build time of around two and a half years. Wood trades and interior fit-out was the largest trade occupation in the East of England in 2009 – as is the case across most of the UK - accounting for 11.4% of total construction employment, and is projected to remain so over the forecast period. In absolute terms, this occupation is forecast to see the largest increase in construction-specific employment at 2,860, but in percentage terms the strongest rises in employment are projected to be for scaffolders (22%), logistics personnel (21%) and plasterers and dryliners (21%). The ARR of 5,220 is equivalent to 2.4% of 2011 base employment.

Infrastructure is projected to be one of the best performing sectors in the region, growing at an average rate of 7% per year between

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2011 and 2015

Mathematical Science Centre, Cambrodge

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Greater London

Total employment by occupation - Greater London Annual recruitment requirement (ARR) by occupation - Greater London

ARR	2011 2015	
800	19,540 21,430	Senior, executive, and business process managers
130	36,990	Construction managers
100	40,090	
-	43,340 29,150	Ion-construction professional, technical, IT, and other office-based staff
350	30,850	Wood trades and interior fit-out
60	4,180 4,380	Bricklayers
430	16,270 17,020	Building envelope specialists
150	20,710 22,370	Painters and decorators
170	3,970 4,420	Plasterers and dry liners
-	3,870 4,070	Roofers
130	1,900 1,990	Floorers
110	2,330 2,350	Glaziers
110	5,550 5,690	Specialist building operatives nec*
<50	2,830 3,290	Scaffolders
430	3,600 4,170	Plant operatives
<50	3,530 3,810	Plant mechanics/fitters
360	3,570 3,960	Steel erectors/structural
240	12,840 15,130	Labourers nec*
110	28,240 29,520	Electrical trades and installation
-	22,680 23,320	Plumbing and HVAC Trades
<50	4,710 5,610	Logistics
<50	5,520 6,300	Civil engineering operatives nec*
-	5,410	Non-construction operatives
310	6,440 7,150 7,420	Civil engineers
-	7,420 22,420 24,230	Other construction professionals and technical staff
-	24,220 12,960	Architects
210	13,800 12,330	Surveyors
210	13,460	Surveyors



Construction industry structure 2009 -UK vs. Greater London (GL)

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

Source: ONS, Experian

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*nec - not elsewhere classified

Construction output in Greater London is projected to grow at an annual average rate of 1.8% between 2011 and 2015, one of the strongest growth rates across the UK. It is also higher than the UK figure of 1%. The repair and maintenance (R&M) sector is expected to fare slightly better than new work, with average growth rates of 1.9% and 1.7% per year, respectively. Total construction employment is forecast to reach just over 358,400 in 2015, 7.8% higher than 2011's projected outturn and 6.7% above 2009's level.

Key findings

The most buoyant sector over the forecast period is expected to be Infrastructure with a number of projects including Crossrail, Thameslink, Thames Tideway and various Underground station upgrades underway during the 2011-2015 period. Growth in the sector is forecast to average 7.2% per year. The commercial sector is also projected to fare well, with annual average growth of 6.2% as demand strengthens across a number of sub-sectors. A number of large office projects in the capital which had been mothballed over the past couple of years are now in the process of restarting, demonstrating developers' confidence in the London market.

Greater London's housing market has not been as badly affected by the recession as other regions and devolved nations. Easing credit conditions for both developers and potential buyers coupled with strong underlying demand are likely to drive growth in the sector over the forecast period. Output for private housing is forecast to increase at an annual average rate of 5.2%. In contrast, the public housing sector will be hit badly by the funding cuts announced in the Comprehensive Spending Review in 2010, and is expected to see average falls in output of 4.1% per year. Levels of funding have almost halved to £4.4bn for the 2011-2015 period and this pot of money is believed to be "back-end loaded" meaning that the sector is likely to be hit in the shorter term with some output growth expected towards the end of the forecast period.

The public non-housing sector is projected to be the worst performing over the 2011-2015 period, with an annual average decline of 11.4%. A wide range of government spending cuts will impact on this sector throughout the forecast period, not least the axing of the Building Schools for the Future (BSF) programme. Around 150 post-Wave 4 schools projects have been scrapped in Greater London, with just 24 continuing unaffected.

Following a return to growth in 2010, the industrial sector is expected to see output rise by an average of 2.5% per year, although the outlook is brighter at the beginning of the forecast period. The sector is likely to benefit from an increase in demand for logistics and warehousing facilities, rather than any improvement in the manufacturing sector. The largest trade occupation in Greater London in 2009 was wood

trades and interior fit-out which accounted for 8.7% of total construction employment, a smaller proportion than in the UK as a whole (10.7%) and it is expected to remain the largest trade occupation over the forecast period. With an increase in employment of 3,100 between 2011 and 2015, construction managers are forecast to have the largest rise in construction-specific employment in absolute terms, however in percentage terms the strongest rises are forecast to be for logistics personnel (19%), with labourers nec*. in second place (18%) followed by scaffolders and plant operatives (16%). The ARR of 4,190 is equivalent to 1.3% of 2011 base employment.



Olympic Stadium, South East facing aerial view of the Olympic Stadium with the Aquatics Centre to the left. Taken on 11 Nov 10 by Anthony Charlton.

With projects including Crossrail, Thameslink and Thames Tideway, Infrastructure sector growth is forecast to average

7.2% per year from 2011-2015.

South East

Total employment by occupation - South East Annual recruitment requirement (ARR) by occupation - South East

	2011 2015	ARR
Senior, executive, and business process managers	21,290 24,120	70
Construction managers	43,410 48,140	420
Non-construction professional, technical, IT, and other office-based staff	51,690	130
	55,800 35,370	
Wood trades and interior fit-out	37,940 9,740	720
Bricklayers	10,160	110
Building envelope specialists	15,430 16,310	110
Painters and decorators	19 <mark>,220</mark> 21,020	780
Plasterers and dry liners	5,420 6,280	<50
Roofers	5,960 6,320	-
Floorers	4,890 5,110	-
Glaziers	3,490 3,580	270
Specialist building operatives nec*	6,160 6,340	230
Scaffolders	2,270 2,700	120
Plant operatives	3,580 4,120	200
Plant mechanics/fitters	4,210 4,510	<50
Steel erectors/structural	3,940 4,530	170
Labourers nec*	10,270 12,350	430
Electrical trades and installation	29,600 30,550	-
Plumbing and HVAC Trades	23,850 24,970	-
Logistics	4,330 5,210	490
Civil engineering operatives nec*	6,570 7,940	200
Non-construction operatives	4,670 5,640	-
Civil engineers	7,80 7,830	400
Other construction professionals and technical staff	28,740 31,420	<50
Architects	3,460 3,730	370
Surveyors	8,430 9,120	130



Construction industry structure 2009 -UK vs. South East (SE)

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

Source: ONS, Experian

*nec - not elsewhere classified

Construction output in the South East is expected to grow at an annual average rate of 2.2% between 2011 and 2015, faster than the UK as a whole (1.0%). The new work sector (2.6%) is likely to outperform repair and maintenance (1.6%) largely on the basis of public non-housing experiencing a relatively small contraction. Total construction employment in the region is predicted to reach 395,740 in 2015, up 8.9% on the 2011 projected level and 6.4% above the 2009 outturn.

Key findings

Between 2011 and 2015, public housing output in the South East is expected to decline at an annual average rate of 6.2% - a little sharper than the national mean (5.6%). The end of the Kickstart Housing Delivery programme and the significantly lower level of funding available for social housing going forward should be responsible for the declining trend. In contrast, private housing activity is forecast to increase at an average rate of 6.0% per annum over the same period. Government cuts are like to undermine house buyers' confidence this year, although easier access to credit and a strengthening residential market should increase demand for new units in 2012. Positive demographics, including in-migration and a faster expansion in the working-age population (0.5% per annum) than the UK (0.3%), should support the sector in the long-term.

The £850m redevelopment of Reading station and the £1.2bn widening of the M25 are likely to be the most important infrastructure projects in the region. However, the latter project is due to complete its widening phase in 2012, with hard shoulder running, a cheaper option, being used for further work. Thus the annual average growth rate of 2.5% between 2011 and 2015 is likely to be below the national average (4.4%).

The fact that the South East benefitted little from the early waves of the Building Schools for the Future (BSF) programme should mean that it will experience a lower rate of decline than many other English regions due to its cancellation. Output in the public non-housing sector is projected to contract at an average rate of 6.3% per year over the five years to 2015, only about half the rate of fall of the UK as a whole.





The New Medway Bridge Kent

Over this year and next, industrial construction output in the region is predicted to grow faster than the national average. The concentration of high-tech manufacturing industries in the South East should continue to benefit from a buoyant export market, with likely positive implications for new industrial facilities. However, strengthening sterling is likely to counteract this effect in the medium term, giving muted increases in industrial construction output in the final three years of the forecast period. In commercial construction, the region's low dependency on the public sector bodes well for consumer spending once the expenditure cuts begin to bite, giving developers the confidence to invest in new retail facilities. The upturn in financial and business services - an important component of the region's economy - should also help to drive the construction of offices. These factors are likely to elevate the South East's commercial sector to the top of the UK regions and nations rankings - output is forecast to grow at an annual average rate of 6.7% between 2011 and 2015.

Civil engineering operatives nec* (20.9%) should see the largest increase in employment between 2011 and 2015, although in absolute terms, construction managers should experience the biggest rise (4.730). At 5.440, the projected annual recruitment requirement for the region is representative of 1.5% of base 2011 employment.

Commercial sector is forecast to grow at an

average rate of 6.7% per year between 2011 and 2015

South West

Total employment by occupation - South West Annual recruitment requirement (ARR) by occupation - South West

	2011 2015	ARR
Senior, executive, and business process managers	21,290	80
	24,120 43,410	
Construction managers	43,410	180
Ion-construction professional, technical, IT, and other office-based staff	51.690	390
	55,800 35,370	
Wood trades and interior fit-out	33,370	620
Bricklayers	9,740 10,160	180
Building envelope specialists	15,430 16,310	-
Painters and decorators	19,220	<50
	21,020	
Plasterers and dry liners	6,280	300
Roofers	5,960 6,320	90
Floorers	4,890 5,110	-
Glaziers	3,490 3,580	-
Specialist building operatives nec*	6,160 6,340	-
Scaffolders	2,270 2,700	<50
Plant operatives	3,580	240
Plant mechanics/fitters	4,210	50
Steel erectors/structural	3,940 4,530	100
Labourers nec*	10,270 12,350	880
Electrical trades and installation	29,600 30,550	290
Plumbing and HVAC Trades	23,850 24,970	-
Logistics	4,330 5,210	160
Civil engineering operatives nec*	6,570 7,940	-
Non-construction operatives	4,670	-
Civil engineers	5,640 7,280	50
Other construction professionals and technical staff	7,830 28,740	250
· · · · · · · · · · · · · · · · · · ·	31,420 3,460	
Architects	3,730	-
Surveyors	8,430 9,120	<50



Construction industry structure 2009 -UK vs. South West (SW)

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

Source: ONS, Experian

*nec - not elsewhere classified

Construction output in the South West is projected to grow at an average rate of 1.1% per year, marginally better than for the UK as a whole (1%). The pace of increase in activity is expected to be similar across both the new work and repair and maintenance (R&M) sectors. Total construction employment in the region is forecast to reach 204,540 in 2015, 8% higher than the projected total in 2011 but still 16% lower than 2008's peak level.

Key findings

The infrastructure sector is expected to be the most buoyant construction sector in the South West over the 2011-2015 period, with average growth of 8% per year. Main construction works are due to start on Hinkley Point C nuclear power station towards the end of 2013, and this will be the main driver of growth over the forecast period, with few other major infrastructure projects in the region.

In contrast, the public housing and non-housing sectors are expected to see output decline during most of the forecast period. The public non-housing sector, with an annual average decline of 9.1%, is not projected to be as badly affected as some other regions and devolved nations due to its limited exposure to the Building Schools for the Future (BSF) programme. The public housing sector - expected to decline at an average rate of 6.5% per year - will be affected by the significant cuts to funding announced in the Comprehensive Spending Review last Autumn, with half the levels of funding available for public housing in England over the 2011-2015 period (£4.4bn) compared with the 2008-2011 National Affordable Housing programme.

The private housing sector, on the other hand, is expected to see moderate growth of 5.5% per year on average, with output in the sector projected to rise in each year of the forecast period. Credit conditions will continue to ease, facilitating access to mortgages and making obtaining finance less difficult for housebuilders. Gradually improving conditions in the wider economy will also boost demand for housing.

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Growth in industrial construction output is also expected in each year of the forecast period to 2015. Following a strong bounceback from very low levels in 2011, output will rise at more modest rates during the later years of the 2011-2015 period. Improving conditions in the manufacturing sector are likely to drive demand for new facilities. The commercial sector is projected to see annual average growth of 3.7% over the 2011-2015 period, boosted by work on the £430m Southmead Hospital in Bristol and also by improving demand for commercial and retail facilities.

Wood trades and interior fit-out was the largest trade occupation in the South West in 2009, accounting for 10.3% of total construction employment, and is expected to remain so over the forecast period. This occupation is projected to see the largest increase in construction-specific employment in absolute terms at 1,410 but in percentage terms the strongest increases in employment are projected to be for logistics personnel and labourers nec. (20%). The ARR of 3,920 is equivalent to 2.1% of 2011 base employment.

Construction output in the South West is projected to grow at an average rate of

1.1% per year

Northern Ireland

Total employment by occupation - Northern Ireland Annual recruitment requirement (ARR) by occupation - Northern Ireland

ARR		2011 2015	
70	1,010 1,130		Senior, executive, and business process managers
<50	2,580 2,740		Construction managers
-	6,820 7,310		Non-construction professional, technical, IT, and other office-based staff
160	10,030		Wood trades and interior fit-out
	10,950 2,940		
70	3,130		Bricklayers
<50	2,000 2,250		Building envelope specialists
-	2,310 2,410		Painters and decorators
<50	2,530 2,740		Plasterers and dry liners
<50	1,790 1,980		Roofers
<50	510 520	<u> </u>	Floorers
<50	1,000		Glaziers
80	1,780 2,040		Specialist building operatives nec*
90	430 460		Scaffolders
-	3,090 3,250		Plant operatives
70	860 920		Plant mechanics/fitters
<50	890		Steel erectors/structural
200	920 2,840		Labourers nec*
200	3,290 6,200		
-	6,480		Electrical trades and installation
80	3,650 4,110		Plumbing and HVAC Trades
-	780 830		Logistics
-	410	Ī	Civil engineering operatives nec*
-	450 490		Non-construction operatives
60	<u>540</u> 2,140		
60	2,470 2,210	_	Civil engineers
-	2,350		Other construction professionals and technical staff
<50	1,050 1,140		Architects
50	520 540		Surveyors



Construction industry structure 2009 -**UK vs. Northern Ireland**

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

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Non-housing R&M

Source: ONS, Experian

*nec - not elsewhere classified

The construction industry is predicted to expand at an annual average rate of 1.4% over the five year period to 2015, a stronger rate than for the UK as a whole (1%). The repair and maintenance (R&M) sectors (+2.5%) are expected to grow at over twice the rate of the new work ones (+1.1%), and as the former are considerably more labour intensive than the latter, employment growth is predicted to be a relatively strong 8.5% over the forecast period, compared with 7.8% in the UK as a whole. The annual recruitment requirement (ARR) for the province is projected to be 1,050, which represents 1.7% of base 2011 employment.

Key findings

It is guite unusual for an English region or devolved nation to move in a significantly different direction from the UK as a whole in terms of construction activity as so much, particularly in the private sector, is driven by the health of the economy as a whole. However, 2010 has proved to be an exception. While construction output in the UK is estimated to have risen by between 4% and 5% in real terms, for Northern Ireland the estimate is for a decline of 15%. A large part of the difference has been how the public sectors have performed in 2010, with very strong growth in public housing and public nonhousing construction in the UK, but big falls in Northern Ireland.

The profile of output for 2010 colours projections for the future. As Northern Ireland will have already seen big falls in publicly funded construction in 2010, the expectation is that the decline will not be so great during the forecast period. This in part is borne out by the recent draft budget announcement by the Northern Ireland Executive. Combining the two big capital spending areas on the non-housing side, health and education, the draft budget for Northern Ireland shows capital investment in 2014/15 18% lower than in 2010/11, whereas for English regions the decline in capital budget across these two areas is 37% over the same period.

A lesser fall in public sector activity in large part explains the higher overall annual average output growth rate of 1.4% in Northern Ireland compared with 1% for the UK.

Construction employment is expected to rise by 8.5% between 2011-2015, a slightly higher rate of growth than the UK as a whole (7.8%). However, that will still leave employment nearly 7% below its 2009 level and almost 19% down on its peak in 2007. Most in demand are expected to be labourers nec* and civil engineers, with projected increases in these two occupations of 16% and 15% respectively over the five-year forecast period. The annual average recruitment requirement (ARR) for Northern Ireland is estimated at 1,050, with the biggest requirements in absolute terms for labourers nec* (200) and wood trades and interior fit-out occupations (160). The former's requirement is largely driven by its high level of employment growth, while for the latter it is the substantial size of the occupational category.



Titanic Signature Building, Belfast

The biggest development project in the province remains the Titanic Quarter in Belfast, which is expected to generate £7bn of construction activity over a 25-year period. Work is currently ongoing on the Quarter's signature project, which is worth £97m and is due for completion in 2012.

With average growth rates of +2.5% the repair and maintenance sectors are expected to grow at twice the rate of the new work

F	or more	information	about	the

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Cskills website http://www.cskills.org/ http://www.cskills.org/contact-us/offices.aspx

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