

ConstructionSkills Network 2010-2014
Blueprint for UK Construction Skills 2010 to 2014

**LABOUR MARKET INTELLIGENCE** 











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.

### Chairman's message

There can be no doubt that 2009 has proved to be one of the most difficult years for the construction industry since the 1940's.

Following a prolonged period of sustained growth our industry has been catapulted into recession following virtual meltdown in the financial sector which has impacted across all sections of the economy and in particular construction.

Projects cancelled or placed on hold, falling output in both new orders and repair and maintenance, job losses and a scarcity of financial stimuli has placed the entire supply chain under extreme pressure. Our industry's response has largely been measured and considered with businesses restructuring and diversifying where possible; however, small and medium sized construction firms have increasingly borne the brunt of the recession with a lack of cash-flow and the ability to competitively re-invent themselves proving limited.

Both public and privately funded projects will continue to face considerable challenges over our forecasting period as public investment decisions are reviewed and the risk of a double-dip recession looms unless financial markets gain suitable momentum and strength.

Equipping the UK with a well trained, productive construction workforce has never been more important as the skills lost to the industry during this recession must be replaced. For that to happen we need to have a very clear understanding of the UK skills picture, including future skills needs, so that effective planning and investment can take place.

The Construction Skills Network (CSN) forecasts continue to provide a unique evidence-base for the industry. They allow organisations to examine demand - and its drivers - and utilise robust labour market intelligence to inform effective strategic and business planning.

Forecasting remains extremely challenging in an external environment as fast moving and unpredictable as this. However, our CSN forecasts continue to be validated by stakeholders across the UK who represent the entire industry and are able to provide firsthand insight into market conditions.



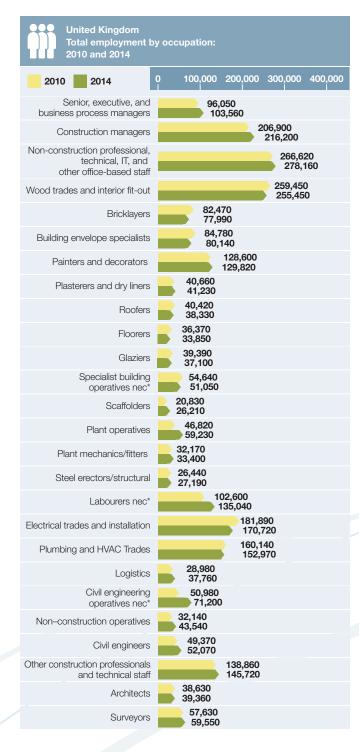
The CSN Forecasts for 2010 to 2014 represent our fifth set of five year forecasts which were initially devised to predict skills shortages. The recession has served to enhance the need to be able to predict skills requirements and understand market drivers and in particular the changing strategic environment that construction will operate in.

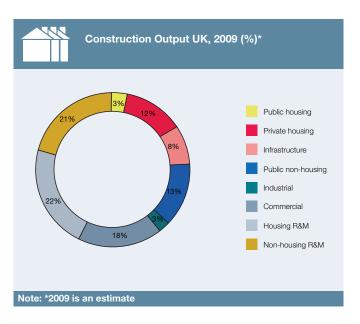
This will be my last message as Chairman of the CSN and I would like to express my sincere thanks to our much valued and supportive stakeholders who have enabled us to continue with this important work.

Sir Michael Latham Chairman **Construction Skills Network** 

Equipping the UK with a well trained, productive construction workforce has never been more important as the skills lost to the industry during this recession must be replaced

## 2 The Big Picture





Total employment and annual recruitment

**United Kingdom** 

	Emplo	yment	ARR
	2010	2014	2010-2014
Senior, executive, and business process managers	96,050	103,560	950
Construction managers	206,900	216,200	2,950
Non-construction professional, technical, IT, and other office-based staff	266,620	278,160	3,370
Wood trades and interior fit-out	259,450	255,450	4,530
Bricklayers	82,470	77,990	2,070
Building envelope specialists	84,780	80,140	990
Painters and decorators	128,600	129,820	3,720
Plasterers and dry liners	40,660	41,230	860
Roofers	40,420	38,330	270
Floorers	36,370	33,850	1,390
Glaziers	39,390	37,100	1,130
Specialist building operatives nec*	54,640	51,050	950
Scaffolders	20,830	26,210	1,080
Plant operatives	46,820	59,230	3,010
Plant mechanics/fitters	32,170	33,400	1,010
Steel erectors/structural	26,440	27,190	800
Labourers nec*	102,600	135,040	6,900
Electrical trades and installation	181,890	170,720	1,150
Plumbing and HVAC Trades	160,140	152,970	1,080
Logistics	28,980	37,760	2,620
Civil engineering operatives nec*	50,980	71,200	2,620
Non-construction operatives	32,140	43,540	
Total (SIC 45)	2,019,340	2,100,140	43,450
Civil engineers	49,370	52,070	1,480
Other construction professionals and technical staff	138,860	145,720	1,370
Architects	38,630	39,360	660
Surveyors	57,630	59,550	830
Total (SIC 45 and 74.2)	2,303,830	2,396,840	47,790

<sup>\*</sup> nec - not elsewhere classified

# Construction should begin its long and slow recovery in 2010, but even by 2014 output is still likely to be well below 2008's level.

Employment in the industry is likely to continue to fall until early 2011 and then begin to pick up to 2014.

The Global economy has just passed through its worst slump since the Second World War, with GDP falling across Organisation for Economic Cooperation and Development (OECD) countries by an estimated 4.1% in 2009, and the volume of manufacturing world trade dropping by a stunning 16%.

For the UK the contraction in GDP for 2009 is estimated at 4.8%. Contagion spread quickly from the financial markets to impact on every corner of the economy. It is one of the ironies of this recession that although it started in the financial sector, others, including manufacturing and construction, have been more severely affected, caught in a pincer movement of falling demand and difficulties in financing new projects.

In the construction industry, it has been the private sectors that have borne the brunt of the recession. The private housing sector has suffered its second consecutive double digit decline in output in 2009, taking the level of activity down to below that seen in the depths of the 1990s recession in real terms. Industrial construction has all but collapsed in the short term, with the most recent surveys showing a very low level of floorspace under construction. Commercial construction held up well in 2008 but has fallen sharply in 2009 as work-in-progress has been completed and little in the way of new projects have come on site.

In contrast, the public sectors have largely done better. Although public housing has struggled with supply issues as the number of sites on which to provide social housing through section 106 agreements shrunk alarmingly, the public non-housing sector saw good growth driven by the Building Schools for the Future programme and work on the Olympic Park.

The general feeling is that the worst of the recession is technically now over. GDP was originally reported as declining by 0.4% in the third quarter of 2009 by the Office for National Statistics, but this has now been revised upwards to -0.2%, more in line with analysts' expectations. It is likely that the final quarter of the year will have been at worst flat, bringing to an end the longest recession in the UK since the 1930s. A modestly positive outturn is projected for 2010 and then for GDP growth to strengthen to around 2% per annum to 2014. However, this rate of growth will be well below the long-term trend of 2.5% as lending regimes remain more stringent than they were in the decade to 2007, there is still a still high level of household indebtedness, and it is highly likely that there will be a drop in government investment to address the ballooning public debt issue.

The worst should also be over for construction as a whole although the impact of job losses will continue to reverberate throughout the industry for some time yet. A further but marginal decline is projected for output in 2010 but over the whole of the 2010 to 2014 period UK construction output is expected to average 1.7% growth each year.

However, the balance between public and private work will change. As economic conditions improve, stabilisation and then recovery are expected for the private housing, industrial and commercial sectors, although the timing of the upturn will vary across markets. In contrast, the public sectors are facing expenditure cuts as whichever political party comes to power in the General Election of 2010 they will need to start constraining growth in public debt, which is forecast to reach 80% of GDP by 2014.

At this time it is difficult to pinpoint exactly which major programmes of work will be affected most by public expenditure cuts, although the suspicion is that all will be impacted to some extent. One programme of work that will be exempted from the issue is the Olympic build programme, with its no-fail deadline. However, activity on the Olympic Park will begin to wind down in 2011 and the completion of the project will leave a big hole in activity that will only be replaced in small part by projects relating to the 2014 Commonwealth Games in Glasgow.

In a recession, falls in employment tend to lag falls in output as employers try to hold on to experienced and skilled staff for as long as is practicable. However, this means that a recovery in output does not immediately mean a rise in employment and employment in the industry is unlikely to bottom out until 2011. The situation has been further complicated by anecdotal evidence of a significant level of 'underemployment' in the industry such as those on short time working or who have taken unpaid sabbaticals. This is likely to mean that the lag between rising output and employment could be longer than normal, as excess capacity among those still in work is taken up before new employees are taken on.

Having said this, the fall in employment in the industry has been severe. From its peak in 2007, employment is projected to contract by over 400,000 by 2011, a 15% decline. Between 2010 and 2014 employment is forecast to grow by 93,000, a 4% increase, but this will still leave employment in the industry over 250,000 below its 2007 peak.

For employment in the UK construction industry to match the level of output growth forecast between 2010 and 2014, on average, nearly 48,000 new entrants will be needed each year. This average recruitment requirement takes account of the natural flow of workers into and out of the industry such as those retiring, or changing career.

### 2 Comparing the Sectors



For the fourth consecutive forecast, infrastructure is the sector predicted to be the strongest over the next five-year forecast period, with an annual average growth rate of 8.5% between 2010 and 2014. It seems to be the case that as one project completes another of equal or bigger size comes along to replace it. A good example of this is A1 improvement work where the section between Darrington and Dishforth has been completed and work is now ongoing from Dishforth to Barton. There is little doubt that the main driver of the sector over the next few years will be big transport projects such as Thameslink, M25 widening, Manchester Metrolink extension, and the Forth Replacement Crossing, which is due to start in 2011 to be ready to take over from the current bridge in 2016. There are also various overground and underground station redevelopments already on site and the biggest of them all, Crossrail, should start in earnest in mid-2010.

In the energy sector, starts are likely to be made on the first of the new generation of nuclear power stations around 2013 or 2014, with the first projects likely either at Hinckley Point or Sizewell. Total build costs for a nuclear power station are estimated at £4bn each, with about 50% of this being construction-related.

However, some projects have been delayed or fallen by the wayside in the course of 2009. The Victoria Underground station upgrade has been delayed due to lack of funds, DP World is still considering the future of the London Gateway port project, and it now looks highly unlikely that any Severn Barrage power project will get underway in the foreseeable future.

### Public and private housing

In theory a much higher level of funding in the 2008-2011 Affordable Housing Programme (AHP) should have delivered increasing output in the public housing sector. However, social housing providers have been hit by stricter lending conditions, both through their ability to access funds directly from private lenders, and through income generation from sales of units under low cost home ownership schemes (LCHO). Delivery through section 106 agreements also became problematical as the number of private developments where social units could be sited dried up.

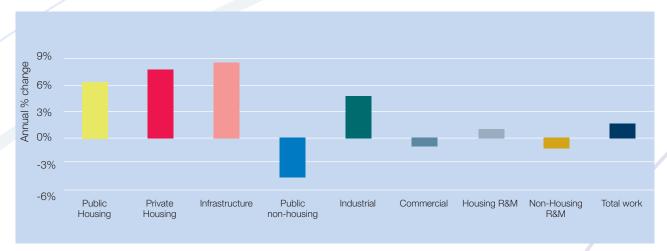
As a result output in the sector fell in 2008 and 2009. Funding allocations under the current AHP have gathered pace in 2009 and the next two years should be much better for the sector. Post-2011 the picture changes again as at best the next AHP is likely to have only the same level of funding as the present one and thus if social housing providers are going to increase the supply of new units they will need to access higher levels of private finance.

After two very bad years, which have pushed private housing output to below the level seen in the early 1990s, the recovery in house building activity is projected to begin in 2010. Rising levels of both mortgage approvals and loans in recent months, while not returning these indicators to what would be considered 'normal' levels, has at least pushed them well above their respective nadirs at the beginning of 2009. There is concern, however, that rising house prices in recent months will prove to be a bit of a false dawn, driven more by supply constraints than any significant increase in demand. Lending conditions still remain tight, although they have eased a little, with some return of the 90% mortgage.

Kickstart funding, designed to give impetus to stalled mixed tenure projects should benefit both the public and private sectors in the short term. As of the end of November 2009, nearly £360m had been allocated under the programme across 136 projects delivering nearly 10,300 new homes.

As the private housing sector recovers from a very low level, its annual average growth rate over the 2010 to 2014 period is projected to be 8%, higher than the sector's long-term average rate of 5%.

#### Annual average construction output growth 2010-2014 - UK



Source: Experian

Ref. CSN Explained, Section 4, Note 2

#### **Public non-housing**

Two major programmes of work are driving this sector in the short term, the Olympic Park and Building Schools for the Future. However, the former is due to start winding down from around mid-2011 and the latter could be subject to expenditure cuts from around the same time. This means that after three years of good growth, output is likely to start declining in the sector from 2011 onwards and the contraction could be steep and long term.

#### Industrial

Industrial construction all but collapsed in 2009, hit by the double whammy of falling global and domestic demand for manufactured products and the natural end to what had been an exceptionally strong boom in the supply of distribution and logistics facilities. Industrial construction output will have fallen to a lower level in 2009 than that seen in the depths of the 1980s recession, which hit manufacturing very hard. It is unlikely that activity can drop much lower and with a recovery in global demand already underway, the trend for the sector should turn upwards from 2011. However the strength of growth will be predicated to some extent on whether projects such as the London Gateway port go ahead, as this scheme is expected to generate long-term demand for around £1bn of distribution and logistics facilities in its hinterland.

#### Commercial

The commercial construction sector is projected to be one of the worst performing over the 2010 to 2014 period as a whole, due to further falls in output in the first two years. After holding up well in 2008 due to the amount of work in progress, output is likely to have fallen by around a quarter in 2009 as projects completed and few new ones have come on site. With demand for office, retail and leisure facilities likely to remain muted for some time to come, and significant levels of availability, it will be a while before these sectors see the start of the next development cycle. Of the big football stadia projects that were in the pipeline most have been abandoned or are still mired in financial problems. Only that for Tottenham Hotspur FC seems likely to go ahead at present, and as the planning application for this project has only just been submitted, start on site will not happen any time soon.

### Repair and maintenance (R&M)

Housing R&M activity is expected to increase only modestly between 2010 and 2014. In the early part of the forecast period activity is likely to decline in both the public and private sectors. The Decent Homes for All programme is winding down and while the Welsh and Scottish Housing Quality Standard Schemes are ongoing, they are not big enough to materially affect the UK figures in the light of a much more constrained environment for local authority finances. On the private side, disposable incomes are coming under pressure, particularly with the likelihood of further tax increases over and above the return of VAT to 17.5% from the start of 2010 and National Insurance increases from April 2011 recently announced. This and continuing employment uncertainties are likely to make home owners wary of big-ticket purchases until there is evidence of a sustained improvement in economic conditions.

Public non-housing R&M is likely to be under the same financial pressures as public housing R&M and thus is likely to decline slowly over the forecast period. On the private non-housing side, expenditure on routine and cyclical maintenance should increase once the corporate sector sees a sustained return to rising asset values and increasing profitability.



# 3 Comparing the UK regions and nations





It is interesting to note that there is wide divergence in annual average output growth rates across regions and devolved nations for the 2010 to 2014 period, from a high of 3.8% in the East of England to a low of just 0.1% in the North West. In large part the size of the range is due to when different regions and devolved nations went into recession and thus when they are likely to emerge from it.

The UK as a whole saw a modest reduction in output in 2008 (-1%), a very sharp contraction in 2009 (-13%), and is projected to experience another modest fall in 2010 (-1%). All regions and devolved nations have experienced fairly substantial falls in output in 2009, however Yorkshire and Humber, the East Midlands, the East of England, Wales, and Northern Ireland all had much bigger falls in output than the UK as a whole in 2008. With the exception of Yorkshire and Humber, each of these areas are projected to have positive growth rates in 2010.

The strongest growth is forecast for the infrastructure sector over the 2010 to 2014 period, however the main beneficiaries of this are Greater London and the East of England, with a raft of major transport projects on site or in the pipeline, such as Thameslink, Underground station redevelopment, London Gateway - although the future of this project has become more uncertain in recent weeks - and the biggest of them all, Crossrail. All other regions and devolved nations, except Northern Ireland, are also projected to have decent rates of growth in infrastructure activity.

For the past two years, Northern Ireland has led the growth rankings, with the strongest forecast increases over both the 2008 to 2012 and the 2009 to 2013 periods.. However, construction in the province is more heavily reliant on public funding than most other regions and devolved nations and there is increasing uncertainty whether the money will be available to deliver on the 2012 to 2018 part of the Northern Ireland Investment Strategy. Thus the forecast for the province's infrastructure sector in particular has become much weaker than in previous years, and Northern Ireland's overall annual rate of construction growth has fallen to 1.1% for the 2010 to 2014 period, placing it 8th out of 12 in the rankings.

The East of England is forecast to be the most buoyant region, with an annual average growth rate of 3.8% between 2010 and 2014. The region is expected to emerge from the recession in 2010, a year earlier than some and all the major construction sectors are expected to grow to a greater or lesser extent. The East of England is the only region or devolved nation where this is predicted to be the case. Even the public non-residential sector is expected to grow, albeit modestly, largely because of a negative – the fact that it has not benefited strongly from Building schools for the Future (BSF) work in the recent past so will lose out less in any cuts programme.

In contrast, regions such as the North West and North East, which have benefited strongly from the early waves of the BSF programme, are likely to see quite sharp declines in public non-residential output if prospective expenditure cuts hit the education building sector hard.

In Wales, housing R&M activity is projected to hold up much better than across the English regions as work under the National Housing Quality Standard gathers pace. Thus the annual average growth rate for housing R&M in Wales is forecast to be 3.8% between 2010 and 2014, much higher than the 0.4% predicted for the UK as a whole. With good growth also forecast for the private housing and infrastructure sectors, the principality's annual average growth rate stands at 2.5%, placing it 4th in the rankings after the East of England, Scotland and the East Midlands.

Scotland is towards the top end of the rankings in terms of output growth performance, with a projected annual average increase of 2.8%, well above the UK average of 1.7%. Like Wales, it also benefits from a public housing R&M expenditure programme along the lines of the Decent Homes for All in England, which gives Scotland a projected annual average rate of increase for housing R&M of 3.2%. This, combined with a good recovery in the private housing sector should provide the main impetus for increasing construction activity over the forecast period.

What do these output projections mean for employment across the regions and devolved nations?

Following severe job losses, employment in the UK as a whole is expected to rise by around 90,000 between 2010 and 2014, an increase of 4%. However, this growth is likely to be quite unevenly spread, with the East of England, Scotland and Wales seeing increases of around 9%, while the South East experiences no growth. The rate of change in employment is not just predicated on overall construction output growth, but also in which sectors this growth occurs. The R&M sectors are much more labour intensive than the new work ones, thus a 1% growth in R&M output will generate more employment than the equivalent level of output growth in new work. Even within new work there are significant differences in labour input between sectors, for example infrastructure projects tend to be less labour intensive than housing ones.

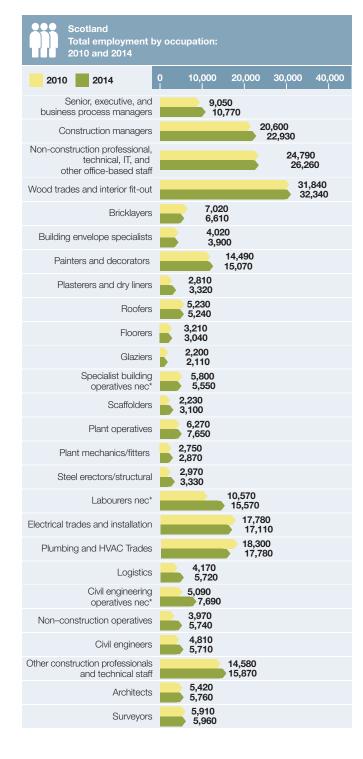
Thus the relatively strong employment growth projected for Scotland and Wales is not just due to good overall construction output increases, but more specifically to both devolved nations' housing R&M programmes.

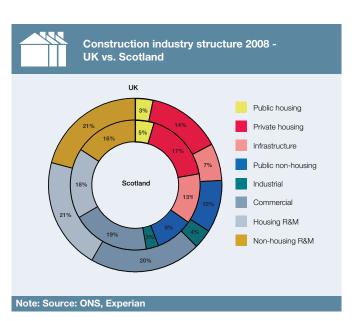
Not surprisingly, the annual recruitment requirement (ARR) tends primarily to be a function of the size of the construction market in a particular region and devolved nation. Thus big markets, such as the East of England tend to have high ARRs and small ones, such as Northern Ireland, tend to have low ARRs. However, this is not always the case as other factors do come into play. While the East of England is only the 4th largest construction market in the UK, it has the largest ARR at 7,350. The reason for this is a combination of the highest level of demand growth, allied to the fact that the region has the largest R&M market proportionally in the country and thus its level of employment in relation to output is higher than any other region or devolved nation.

In contrast, Greater London's ARR, at 3,300, is relatively low given that it is the largest construction market in the UK. However, the capital tends to act as a magnet for construction workers from other areas of the country and has high net natural inflows with a smaller replacement requirement than most other regions and devolved nations.

In summary, whilst the entire UK construction industry has taken a severe blow as a result of the recession some regions are experiencing much greater pain than others and this will clearly impact on the ability to recover, particularly in relation to job losses and subsequent loss of key skills.

### Scotland





Total employment and annual recruitment

**Scotland** 

	Emplo	yment	ARR
	2010	2014	2010-2014
Senior, executive, and business process managers	9,050	10,770	70
Construction managers	20,600	22,930	640
Non-construction professional, technical, IT, and other office-based staff	24,790	26,260	-
Wood trades and interior fit-out	31,840	32,340	750
Bricklayers	7,020	6,610	-
Building envelope specialists	4,020	3,900	<50
Painters and decorators	14,490	15,070	670
Plasterers and dry liners	2,810	3,320	300
Roofers	5,230	5,240	-
Floorers	3,210	3,040	-
Glaziers	2,200	2,110	<50
Specialist building operatives nec*	5,800	5,550	140
Scaffolders	2,230	3,100	390
Plant operatives	6,270	7,650	1,030
Plant mechanics/fitters	2,750	2,870	490
Steel erectors/structural	2,970	3,330	290
Labourers nec*	10,570	15,570	420
Electrical trades and installation	17,780	17,110	-
Plumbing and HVAC Trades	18,300	17,780	-
Logistics	4,170	5,720	620
Civil engineering operatives nec*	5,090	7,690	550
Non-construction operatives	3,970	5,740	-
Total (SIC 45)	205,160	223,700	6,370
Civil engineers	4,810	5,710	380
Other construction professionals and technical staff	14,580	15,870	410
Architects	5,420	5,760	60
Surveyors	5,910	5,960	-
Total (SIC 45 and 74.2)	235,880	256,980	7,220

<sup>\*</sup> nec - not elsewhere classified

Between 2010 and 2014, total construction output in Scotland is forecast to increase at an annual average rate of 2.8%, higher than the UK's average of 1.7%. New work output is expected to see stronger growth than repair and maintenance over the forecast period, which is likely to see the new work sector continue to remain relatively more important in the nation than it is in the UK as a whole. Employment is expected to increase to around 257,000 in 2014, 1.2% above 2008's level.

#### **Key findings**

The strongest sector in Scotland will be the private housing sector, with an annual average growth rate of around 10%, significantly more buoyant than the next strongest sector, public housing. However, whilst the recovery in private housing is likely to be fairly strong throughout the 2010–2014 period, the public housing sector is expected to see substantial growth in the short term, however output will rise only moderately towards the end of the period due to lower funding allocations as government spending comes under increasing pressure. The underlying demand for private housing remains, and once confidence returns to the market and concerns about job security begin to abate, this demand will filter through to the housing market.

Infrastructure output is currently driven by Transport Scotland's investment programme, which is continuing apace. There are a number of major programmes of work underway, including the Edinburgh tram project and the Airdrie-Bathgate rail line. A number of significant road schemes are also providing a stream of output, and work on the A90 Aberdeen Western Peripheral Route is due to start in 2011. However, with additional funding for the Forth Replacement Crossing highly unlikely, output growth is expected to tail off significantly at the end of the forecast period as funding for this project will have to largely come from the current budget.



Oran Mor, heritage building, Glasgow

The Scottish Government's budget for 2010 showed signs of what is to come as funding allocations were lower than expected, although this was partly due to investment being brought forward to try and ease the pain of the recession. Government spending is going to come under severe pressure over the next few years, and this will lead to lower availability of funding for education and health projects, among others. Thus, with the exception of 2010, public non-housing output is expected to decline in each year of the forecast period, with an annual average rate of decline of 8.3% forecast to 2014.

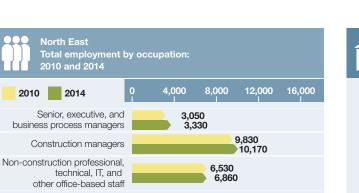
Total construction employment in Scotland is predicted to reach 257,000 in 2014, 9% higher than in 2010 and around 1% above 2008's level. The largest trade occupational group in 2008 was wood trades and interior fit-out, accounting for 13.8% of total construction employment, slightly higher than the UK figure of 11.2%. Between 2010 and 2014, the strongest employment growth is expected to be for civil engineering operatives nec\* (51%) and labourers nec\* (47%).

The annual recruitment requirement for Scotland is 7,220, with plant operatives (1,030) and wood trades and interior fit-out (750) expected to be most in demand.

The strongest sector in Scotland will be the private housing sector, with an annual average growth rate of around

10%

### North East









2,310 2,660

7,110 7,750

1,800



Steel erectors/structural

Labourers nec\*





**North East** 

	Employment		ARR
	2010	2014	2010-2014
Senior, executive, and business process managers	3,050	3,330	-
Construction managers	9,830	10,170	70
Non-construction professional, technical, IT, and other office-based staff	6,530	6,860	270
Wood trades and interior fit-out	11,580	11,340	240
Bricklayers	3,870	3,650	510
Building envelope specialists	2,200	2,260	70
Painters and decorators	4,810	5,100	240
Plasterers and dry liners	1,840	1,790	70
Roofers	2,700	2,550	-
Floorers	1,760	1,700	350
Glaziers	1,490	1,590	<50
Specialist building operatives nec*	3,300	3,440	210
Scaffolders	940	1,080	<50
Plant operatives	2,350	2,760	70
Plant mechanics/fitters	1,660	1,700	<50
Steel erectors/structural	1,950	1,800	-
Labourers nec*	4,250	5,380	550
Electrical trades and installation	7,840	7,410	270
Plumbing and HVAC Trades	7,740	7,690	-
Logistics	1,260	1,480	-
Civil engineering operatives nec*	4,320	5,320	70
Non-construction operatives	1,420	1,820	-
Total (SIC 45)	86,690	90,220	3,100
Civil engineers	2,310	2,660	70
Other construction professionals and technical staff	7,110	7,750	-
Architects	1,170	1,300	<50
Surveyors	540	560	-
Total (SIC 45 and 74.2)	97,810	102,470	3,190

<sup>\*</sup> nec - not elsewhere classified

Construction output in the North East is forecast to increase at an annual average rate of just 0.6% between 2010 and 2014, weaker than the UK figure of 1.7%. Growth is expected to be stronger in the repair and maintenance (R&M) sector than in new work over the forecast period, with housing R&M work particularly robust. Employment is expected to rise to around 102,500 in 2014, 4.8% above employment in 2010, although still significantly below 2008's level.

#### **Key findings**

There are significant variations projected across the construction Over the 2010–2014 forecast period, the most buoyant sector in the North East will be the industrial sector, with an annual average growth rate of 6.4%. Work is due to start on the hinterland work related to the expansion of Teesport in 2012, and this will be a significant driver of output in the sector. However, in the short term, the public housing sector is expected to fare particularly well, growing at an annual average rate of 11% in 2010 and 2011, due to increased government funding from projects such as Kickstart. Towards the end of the forecast period, output in the public housing sector is predicted to rise only modestly, largely as a result of lower funding allocations as government spending comes under increasing pressure and the current Affordable Housing programme ends in 2011.

The private housing sector has been badly affected by the credit crunch and subsequent recession over the past few years, however recent signs of improvement will continue and lead to a modest recovery over the forecast period. Growth is expected to average 4.3% in each year to 2014, as demand conditions continue to strengthen and uncertainty over job security begins to evaporate.

The outlook for the public non-housing sector is much gloomier. It is the only sector in which output is expected to decline over the 2010–2014 period, and at a significant annual average rate of 11.4%.



The Sage, Gateshead

Government spending will come under significant pressure over the next few years as attempts are made to reduce the rapidly ballooning public deficit, and this will lead to lower availability of funding for education and health projects, among others. This will be exacerbated by the spending cuts that were expected due to government funding having been brought forward to try to ease the pain of recession.

Total construction employment in the North East is predicted to reach 102,470 in 2014, 4.8% higher than 2010's level but 18% lower than construction employment levels in the region in 2008. The largest trade occupational group was wood trades and interior fit-out in 2008, which accounted for 12.7% of total construction employment, slightly higher than the UK figure of 11.2%. The strongest employment growth between 2010 and 2014 is expected to be for labourers nec\* (27%) and civil engineering operatives nec\* (23%).

The annual recruitment requirement for the region is 3,190, with labourers  $nec^*$  (550) and bricklayers (510) expected to be the most in demand.

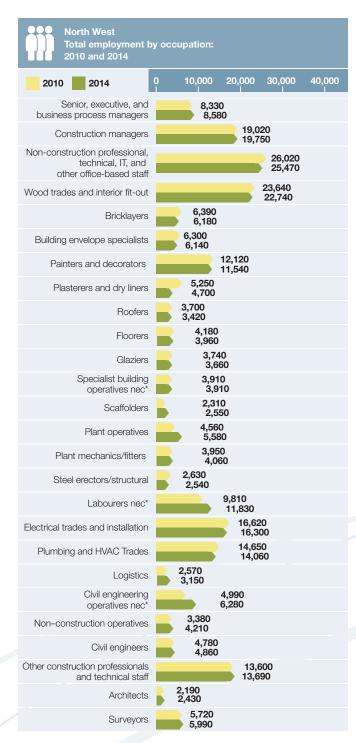
### Over the

# 2010-2014

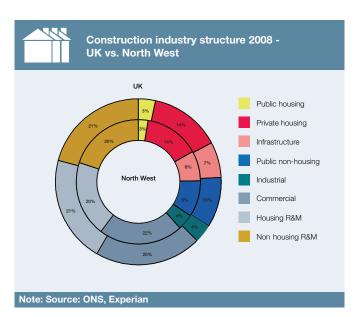
forecast period, the most buoyant sector in the North East will be the industrial sector, with an annual average growth rate of

6.4%

**North West** 



North West



	Employment		Employment		ARR
	2010	2014	2010-2014		
Senior, executive, and business process managers	8,330	8,580	80		
Construction managers	19,020	19,750	200		
Non-construction professional, technical, IT, and other office-based staff	26,020	25,470	-		
Wood trades and interior fit-out	23,640	22,740	240		
Bricklayers	6,390	6,180	210		
Building envelope specialists	6,300	6,140	60		
Painters and decorators	12,120	11,540	620		
Plasterers and dry liners	5,250	4,700	170		
Roofers	3,700	3,420	170		
Floorers	4,180	3,960	410		
Glaziers	3,740	3,660	190		
Specialist building operatives nec*	3,910	3,910	<50		
Scaffolders	2,310	2,550	-		
Plant operatives	4,560	5,580	140		
Plant mechanics/fitters	3,950	4,060	230		
Steel erectors/structural	2,630	2,540	-		
Labourers nec*	9,810	11,830	<50		
Electrical trades and installation	16,620	16,300	430		
Plumbing and HVAC Trades	14,650	14,060	-		
Logistics	2,570	3,150	460		
Civil engineering operatives nec*	4,990	6,280	350		
Non-construction operatives	3,380	4,210	-		
Total (SIC 45)	188,070	190,610	3,980		
Civil engineers	4,780	4,860	-		
Other construction professionals and technical staff	13,600	13,690	-		
Architects	2,190	2,430	120		
Surveyors	5,720	5,990	-		
Total (SIC 45 and 74.2)	214,390	217,580	4,100		

<sup>\*</sup> nec - not elsewhere classified

Between 2010 and 2014, total construction output in the North West is expected to increase at a negligible annual average rate of just 0.1%, significantly below the UK's average of 1.7%. A stronger performance from the new work sector will be the main factor behind this weak growth, with repair and maintenance output forecast to decline each year, on average. Employment in the region is expected to increase to around 217,600 in 2014, 1.5% higher than 2010's level.

#### **Key findings**

The most buoyant sector in the North West is likely to be the infrastructure sector, with an annual average growth rate of 5.2%. The planned Mersey Crossing is due to start in 2011, and this will significantly boost output in the sector. In addition, work on Phase 3a of Manchester Metrolink is underway and due to be completed by 2012, along with a number of projects at Sellafield, including construction of a new facility.

The private housing sector is also expected to fare well over the 2010–2014 period, with growth accelerating towards the end of the period as housing market conditions continue to strengthen. There have been some recent signs of improvement, and these are likely to continue into 2010, as the macroeconomic climate strengthens and consumer confidence picks up. Although there are concerns that recent increases in house prices are more reflective of restricted supply rather than improved demand, this situation will begin to reverse once concerns about job security begin to abate and credit conditions continue to gradually ease.

Government debt is already beginning to come under increasing scrutiny and public spending cuts are inevitable. This will impact on the public non-housing sector and the North West could be particularly vulnerable to cuts in the Building Schools for the Future (BSF) programme, as it has been one of the main beneficiaries of its early Waves. The public non-housing sector is forecast to fare worst over the 2010–2014 period, with an annual average decline of 8.7%.



Liver Building, Liverpool

However, the public housing sector is expected to see average annual growth of 4.7% over this period. This is largely due to strong growth in 2010 and 2011, as work on the 2008–2011 Affordable Housing programme (AHP) continues, in addition to higher levels of government funding in the form of the Kickstart programme. Rates of increase will ease significantly after 2011 as government funding cuts begin to be felt.

Total construction employment in the North West is predicted to be 217,580 in 2014, 1.5% higher than in 2010, but 20% lower than 2008's level. Wood trades and interior fit-out was the largest trade occupational group in the region in 2008, accounting for 11% of total construction employment, in line with the UK figure. Employment growth between 2010 and 2014 is expected to be strongest for civil engineering operatives nec\* (26%) and logistics (25%).

The region's annual recruitment requirement is 4,100, with painters and decorators (620) and logistics (460) expected to be the most in demand.

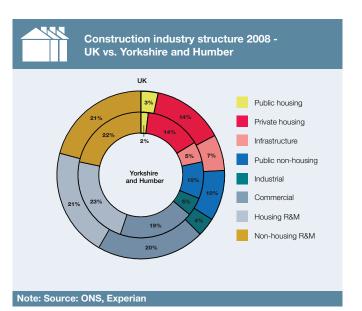
Employment in the region is expected to increase to around

217,600 in 2014

### Yorkshire and Humber







Yorkshire and Humber

	Employment		ARR
	2010	2014	2010-2014
Senior, executive, and business process managers	6,980	7,060	-
Construction managers	15,010	15,330	90
Non-construction professional, technical, IT, and other office-based staff	20,190	21,690	70
Wood trades and interior fit-out	20,700	20,710	270
Bricklayers	8,670	8,490	130
Building envelope specialists	6,580	6,220	-
Painters and decorators	8,670	9,090	220
Plasterers and dry liners	3,860	3,960	-
Roofers	2,600	2,610	-
Floorers	3,390	3,260	340
Glaziers	3,220	3,060	-
Specialist building operatives nec*	4,520	4,050	-
Scaffolders	1,870	2,340	50
Plant operatives	3,890	4,830	<50
Plant mechanics/fitters	3,240	3,350	110
Steel erectors/structural	2,160	2,500	80
Labourers nec*	8,110	10,680	540
Electrical trades and installation	15,550	14,430	-
Plumbing and HVAC Trades	15,330	14,740	-
Logistics	2,250	2,710	120
Civil engineering operatives nec*	4,790	6,310	-
Non-construction operatives	2,950	3,690	-
Total (SIC 45)	164,530	171,110	2,040
Civil engineers	4,390	4,780	100
Other construction professionals and technical staff	10,110	10,390	80
Architects	1,720	1,610	-
Surveyors	4,290	4,160	-
Total (SIC 45 and 74.2)	185,010	192,050	2,220

<sup>\*</sup> nec - not elsewhere classified

The annual average rate of growth in construction output for Yorkshire and Humber is expected to be 1.6% between 2010 and 2014. This is broadly in line with the UK figure of 1.7%. The new work sector is forecast to see an annual average increase in output over the forecast period, whilst the repair & maintenance sector will generally see no change in output. Construction employment in the region is predicted to reach just over 192,000 in 2014, 3.8% higher than employment in 2010, but still significantly below 2008's level.

### **Key findings**

The most buoyant sector over the 2010 to 2014 forecast period in Yorkshire and Humber will be the private housing sector, with an annual average growth rate of 10.3%. The recent weak improvements in the housing market are likely to strengthen in 2010 and the recovery in demand will be more sustained. This increase in demand will underpin the growth that is expected in each year of the forecast period. The public housing sector is also forecast to fare well, although growth will largely be in the shorter term. The government has recently announced increased investment in housing, largely through the Kickstart Delivery programme, which is designed to help restart stalled mixed-tenure developments. However, in the longer term, the public sector will not be immune from the inevitable public spending cuts and this will dampen growth.

The outlook for the infrastructure sector is also rosy, with annual average growth of 6.1% over the 2010 to 2014 forecast period. Contracts were let on the Dishforth to Leeming section of the A1 improvement scheme in 2009 and work is well underway. This, along with further sections of this project, is expected to be the main driver of growth in the sector, with output forecast to rise in each year to 2014.



Winter Garden, Sheffield

Public non-housing output will be hit by the government spending cuts that are likely from 2011 onwards. Investment in education and health projects, among others, will be significantly scaled back as the government attempts to reduce the rapidly ballooning public deficit. Funding for waves 1-4 of the Building Schools for the Future (BSF) programme is probably guaranteed, however future waves are much less certain. The annual average decline in public non-housing output is forecast at 4.6%.

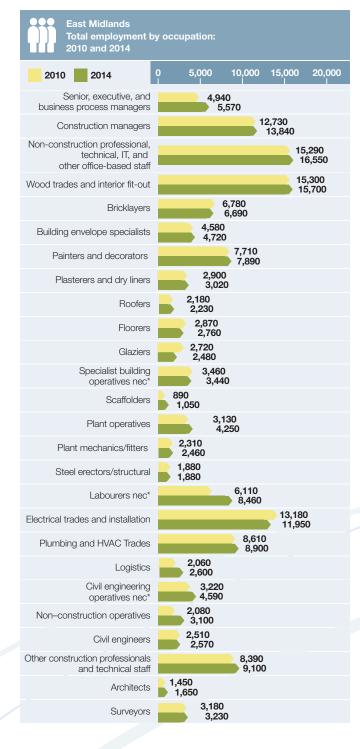
Construction employment in Yorkshire and Humber is predicted to reach 192,050 in 2014, around 4% higher than 2010's level, but still 15% below construction employment levels in the region in 2008. Wood trades and interior fit-out was the largest trade occupational group in the region in 2008, accounting for 10.8% of construction employment, marginally smaller than the UK figure of 11.2%. Between 2010 and 2014, the largest rises in employment are expected for civil engineering operatives nec\* and labourers nec\* (both 32%).

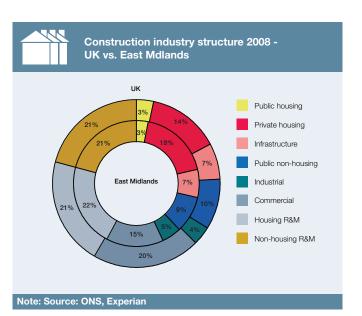
The annual recruitment requirement for the region is 2,220, with labourers nec\* (540) and floorers (340) expected to be most in demand.

The annual average rate of growth in construction output for Yorkshire and Humber is expected to be

1.6%

### East Midlands





**East Midlands** 

	Employment		ARR
	2010	2014	2010-2014
Senior, executive, and business process managers	4,940	5,570	-
Construction managers	12,730	13,840	100
Non-construction professional, technical, IT, and other office-based staff	15,290	16,550	1,220
Wood trades and interior fit-out	15,300	15,700	800
Bricklayers	6,780	6,690	190
Building envelope specialists	4,580	4,720	360
Painters and decorators	7,710	7,890	160
Plasterers and dry liners	2,900	3,020	-
Roofers	2,180	2,230	-
Floorers	2,870	2,760	<50
Glaziers	2,720	2,480	80
Specialist building operatives nec*	3,460	3,440	200
Scaffolders	890	1,050	<50
Plant operatives	3,130	4,250	230
Plant mechanics/fitters	2,310	2,460	-
Steel erectors/structural	1,880	1,880	-
Labourers nec*	6,110	8,460	1,210
Electrical trades and installation	13,180	11,950	-
Plumbing and HVAC Trades	8,610	8,900	130
Logistics	2,060	2,600	-
Civil engineering operatives nec*	3,220	4,590	160
Non-construction operatives	2,080	3,100	-
Total (SIC 45)	124,930	134,130	4,890
Civil engineers	2,510	2,570	210
Other construction professionals and technical staff	8,390	9,100	140
Architects	1,450	1,650	-
Surveyors	3,180	3,230	50
Total (SIC 45 and 74.2)	140,440	150,660	5,260

<sup>\*</sup> nec - not elsewhere classified

The East Midlands is ranked towards the top in annual average growth rate terms, with a projected increase of 2.6% between 2010 and 2014, well above the UK average of 1.7%. Year-on-year rises over the five years are predicted to remain steady at around 2-3%, although the expectation is that the new work sector will largely be responsible for keeping the growth rate at that level. In contrast, the performance of the repair and maintenance market will be relatively subdued. Employment is forecast to increase by 7% between 2010 and 2014, but it will remain well below 2008's level.

### **Key findings**

After severe falls in 2008 and 2009, private housing output is expected to return to growth in 2010, although the rate of increase is likely to be moderate. However, in the long term, the East Midlands is projected to have one of the fastest rates of household formation in England, and the pressure that this will put on the housing stock in the region is likely to lead to quite a buoyant outlook for new house building between 2010 and 2014.

At 2.6%, the public housing sector is expected to have the lowest rate of growth on an annual basis between 2010 and 2014. The  $\mathfrak L316m$  made available for new affordable housing between 2008 and 2011 should lead to year-on-year increases in output in the initial two years of the forecast period, although this should be followed by declines thereafter to 2014.

With an annual average growth rate of 6%, the infrastructure sector should be the second best performing in new work, driven by the projected outturn of 22% in 2010. This should be as a result of the £322m–£409m upgrading of the A46 between Newark and Widmerpool and the £340m scheme for the M1 between junctions 25 and 28. Thereafter, the increases in output are likely to be in low due to a lack of planned major projects.

The two new work sectors with negative average annual rates of growth between 2010 and 2014 are forecast to be the public non–housing and commercial, at 2.1% and 0.3%, respectively. Although public non–housing should benefit from the Building Schools for the Future (BSF) programme in the short-term, more constrained government expenditure post-2011 should lead to declines in output to the end of the forecast period.



Lincoln Cathedral, Lincoln

One of the region's biggest projects, the £400m Broadmarsh Shopping Centre in Nottingham, remains on hold and is an example of the difficulty being faced by retail developers as a result of depressed consumer spending. After two years of declines to 2011, improving economic conditions should allow easier access to finance for developers, thus leading to an increasing rate of growth in output to the end of the forecast period.

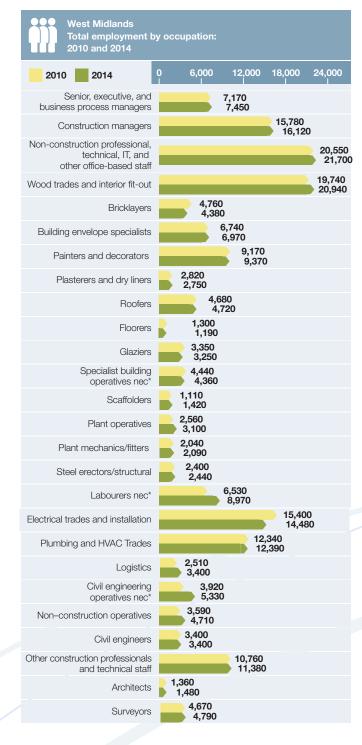
Between 2010 and 2014, total construction employment in the East Midlands is predicted to increase by around 7% to 150,660. In 2008, the biggest occupational group was wood trades and interior fit-out, accounting for around 11% of the total, in-line with the UK average. Of the trade occupations, civil engineering operatives nec\* (43%) are projected to see the largest rise in employment, not least due to some of the major roads projects in the pipeline. Labourers nec \* (38%) and plant operatives (36%) are also predicted to do well over the five years to 2014. After the East of England (7,350) and Scotland (7,220), the East Midlands' annual recruitment of 5,260 is forecast to be the highest in the UK.

Employment is forecast to increase by

7%

between 2010 and 2014

### West Midlands





	Employment	ARR	
	2010	2014	2010-2014
Senior, executive, and business process managers	7,170	7,450	-
Construction managers	15,780	16,120	720
Non-construction professional, technical, IT, and other office-based staff	20,550	21,700	620
Wood trades and interior fit-out	19,740	20,940	640
Bricklayers	4,760	4,380	-
Building envelope specialists	6,740	6,970	250
Painters and decorators	9,170	9,370	100
Plasterers and dry liners	2,820	2,750	-
Roofers	4,680	4,720	-
Floorers	1,300	1,190	-
Glaziers	3,350	3,250	-
Specialist building operatives nec*	4,440	4,360	-
Scaffolders	1,110	1,420	-
Plant operatives	2,560	3,100	90
Plant mechanics/fitters	2,040	2,090	-
Steel erectors/structural	2,400	2,440	<50
Labourers nec*	6,530	8,970	700
Electrical trades and installation	15,400	14,480	310
Plumbing and HVAC Trades	12,340	12,390	-
Logistics	2,510	3,400	280
Civil engineering operatives nec*	3,920	5,330	320
Non-construction operatives	3,590	4,710	-
Total (SIC 45)	152,900	161,530	4,050
Civil engineers	3,400	3,400	-
Other construction professionals and technical staff	10,760	11,380	-
Architects	1,360	1,480	-
Surveyors	4,670	4,790	-
Total (SIC 45 and 74.2)	173,110	182,570	4,050

Total construction output is expected to increase at an annual average rate of 1.5% between 2010 and 2014 in the West Midlands, slightly slower than the national average of 1.7%. New work is forecast to have a higher rate of growth when compared to repair and maintenance (R&M), at 2% and 0.8%, respectively. Two of the six new work sectors are projected to see declines over the medium term, public non-housing and commercial, while private housing and infrastructure are expected to be the best performing. In 2014 total construction employment in the region is predicted to reach 182,570, up 5% on the 2010 projection.

#### **Key findings**

The construction industry in the West Midlands has grown by just 4.7% over the eight years to 2008. This is well below the national average of 21% and less than all the other regions and devolved nations in the UK, with the exception of Northern Ireland.

Looking forward, private housing at 8.1% and infrastructure at 7.7% are the sectors likely to have the highest annual average growth rates between 2010 and 2014. The latter is expected to see a significant stream of output coming through roads projects such as the hard shoulder running scheme on the M6 between junctions 8 and 10a and the A46 Newark to Widmerpool improvement project, which crosses both Midland regions. A further boost should come from the £600m enhancement programme for Birmingham New Street, where construction is due to be completed on phase one of the project in 2012.

Although underlying demand for housing has been depressed during the recession, our expectation is that stability in the housing market and improved lending conditions should be drivers behind the private housing sector in the medium term. In the short term, the sector will benefit from the Kickstart Delivery programme, designed to help stalled mixed tenure developments get started again.

The healthy growth in output in the early part of the forecast period for the public non–housing sector should be offset by strong declines in the three years to 2014. Overall an annual average rate of decline of 4% between 2010 and 2014 is projected, making the sector the weakest in the region. In Birmingham, the West Midlands has the largest BSF project in the country, while other schemes include the ones in Sandwell, Wolverhampton, Coventry, Worcestershire, Walsall and Staffordshire. However, there are significant risks associated with projects that have not got on site before a prospective new government in 2010 starts to assess where public expenditure cuts should fall.



Library of Birmingham

Weak consumer spending and growing unemployment are likely to be the main obstacles for retail and office construction in the commercial sector. Following two years of decline in 2010 and 2011, improving economic conditions should help output to bounce back in 2012, albeit weakly. However, the rate of growth should increase in each of the years thereafter to 2014, as confidence returns to the corporate sector and it begins to invest in new facilities.

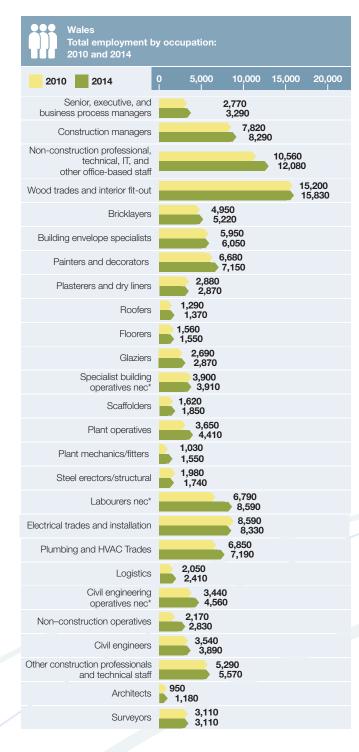
Between 2010 and 2014, total construction employment in the West Midlands is expected to grow by 5% to reach 182,570. Of the trade occupational groups, labourers nec\* (37%), civil engineering operatives nec\* (36%) and logistics (35%) should see the largest increase in employment over the period. At 20,940, the largest trade occupation in 2014 is estimated to be wood trades and interior fit-out, constituting 11% of the total workforce.

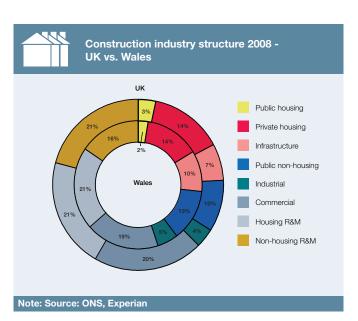
The annual recruitment requirement of 4,050 for the West Midlands is expected to be broadly in-line with the national average. The region contends with significant net outflows from its construction workforce thus there is expected to be a need to replace them.

In 2014 total construction employment in the region is predicted to reach

182,570

### Wales





	Emplo	yment	ARR	
	2010	2014	2010-2014	
Senior, executive, and business process managers	2,770	3,290	-	
Construction managers	7,820	8,290	280	
Non-construction professional, technical, IT, and other office-based staff	10,560	12,080	960	
Wood trades and interior fit-out	15,200	15,830	1,070	
Bricklayers	4,950	5,220	340	
Building envelope specialists	5,950	6,050	110	
Painters and decorators	6,680	7,150	370	
Plasterers and dry liners	2,880	2,870	-	
Roofers	1,290	1,370	<50	
Floorers	1,560	1,550	<50	
Glaziers	2,690	2,870	250	
Specialist building operatives nec*	3,900	3,910	90	
Scaffolders	1,620	1,850	<50	
Plant operatives	3,650	4,410	<50	
Plant mechanics/fitters	1,030	1,550	100	
Steel erectors/structural	1,980	1,740	-	
Labourers nec*	6,790	8,590	660	
Electrical trades and installation	8,590	8,330	-	
Plumbing and HVAC Trades	6,850	7,190	80	
Logistics	2,050	2,410	270	
Civil engineering operatives nec*	3,440	4,560	<50	
Non-construction operatives	2,170	2,830	-	
Total (SIC 45)	104,400	113,920	4,670	
Civil engineers	3,540	3,890	220	
Other construction professionals and technical staff	5,290	5,570	60	
Architects	950	1,180	60	
Surveyors	3,110	3,110	<50	
Total (SIC 45 and 74.2)	117,290	127,680	5,030	

Total construction output in Wales is expected to grow at an annual average rate of 2.5% between 2010 and 2014, higher than the national average figure of 1.7%. The new work sector is predicted to perform better than the repair and maintenance (R&M) sector, with the former growing by 3% and the latter by 1.8%. In 2014, total employment in the principality is projected to reach 127,680, slightly below the 2008 level but up 8.9% on the 2010 figure of 117,290. The annual recruitment requirement (ARR) over 2010–2014 for the principality is likely to be 5,030, well above the UK average.

### **Key findings**

At nearly 8%, the private housing sector is expected to have the highest annual average growth rate between 2010 and 2014. Output should grow especially strongly in the medium term as a combination of underlying demand for housing, an easing in credit lending conditions and a stabilised house market drives developers to increase their construction activity. However, the improvement will be from a very low base as output in sector has now dropped to levels not seen since the recession of the early 1990s.

The infrastructure sector is predicted to have a similarly robust annual average growth rate although increases in output are likely to be in the earlier part of the forecast period. A number of large road projects, such as the £350m dual three-lane motorway link between Magor and Castleton and the £140m development of the A465 Trunk Road will get underway and the £800m 200MW combined cycle gas turbine generating station in Pembroke should also contribute to output over the forecast period.

The industrial sector is projected to be the next best performing in Wales between 2010 and 2014. On an annual average basis, output is expected to grow at a rate of 3.9% as improving economic conditions and increased domestic and export demand provides the impetus for manufacturers to build new facilities. This should lead to steady, but moderate, growth in the sector from 2011 to the end of the forecast period, although again from a historically very low base.



National Botanic Garden of Wales, Carmarthen

Public housing output is expected to grow particularly robustly in the short term as funding to build social housing units begins to stream through from the Welsh Assembly. However the rate of growth should slow in the medium term, before output drops into negative territory in the final two years of the forecast period, as constraints on public expenditure begin to bite in earnest.

The public non-housing and commercial sectors are the only ones in new work to have negative annual average growth rates over the medium term (-1.7% and -1.1%, respectively). The public non-housing sector is expected to suffer as a result of falling public expenditure in the latter part of the forecast period as the UK government attempts to address its ballooning deficit, while the commercial sector is predicted to suffer in the shorter term (2010 and 2011) due to fragile consumer confidence and weak spending growth.

In 2014, total construction employment in Wales is projected to reach 127,680, down marginally on the 2008 figure, although up 8.9% on the 2010 figure. The largest trade occupational groups in the principality in 2008 were wood trades and interior fit-out (16,950) and construction managers (8,710), with the former accounting for around 13% of total employment and the latter 8%. The greatest growth between 2010 and 2014 is expected to be for the plant mechanics/fitters (50%) and civil engineering operatives nec\* (33%) groupings, with the latter predicated to benefit from the strength of the infrastructure sector.

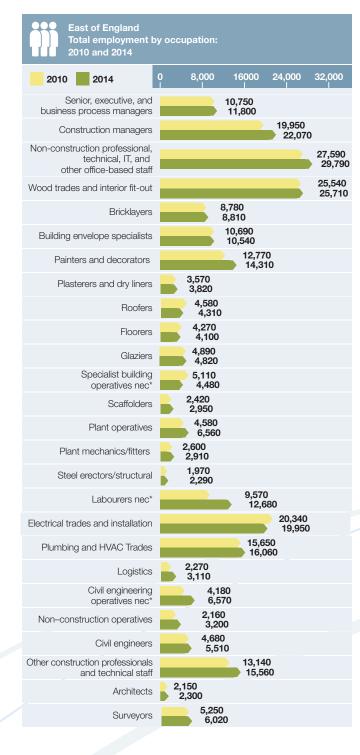
The annual recruitment requirement for 2010–2014 for Wales is projected to stand at around 5,030, with wood trades and interior fitout (1,070) likely to be most in demand.

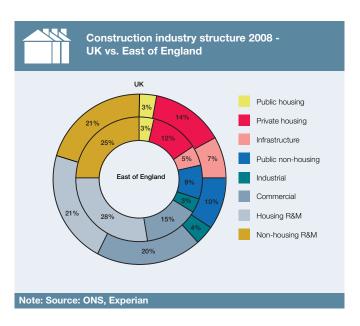
The annual recruitment for Wales is likely to be

5,030

well above the UK average.

### East of England





East of England

	Employment		Employment ARR	ARR
	2010	2014	2010-2014	
Senior, executive, and business process managers	10,750	11,800	190	
Construction managers	19,950	22,070	600	
Non-construction professional, technical, IT, and other office-based staff	27,590	29,790	-	
Wood trades and interior fit-out	25,540	25,710	-	
Bricklayers	8,780	8,810	580	
Building envelope specialists	10,690	10,540	-	
Painters and decorators	12,770	14,310	1,000	
Plasterers and dry liners	3,570	3,820	-	
Roofers	4,580	4,310	60	
Floorers	4,270	4,100	260	
Glaziers	4,890	4,820	370	
Specialist building operatives nec*	5,110	4,480	150	
Scaffolders	2,420	2,950	190	
Plant operatives	4,580	6,560	390	
Plant mechanics/fitters	2,600	2,910	-	
Steel erectors/structural	1,970	2,290	60	
Labourers nec*	9,570	12,680	490	
Electrical trades and installation	20,340	19,950	-	
Plumbing and HVAC Trades	15,650	16,060	870	
Logistics	2,270	3,110	455	
Civil engineering operatives nec*	4,180	6,570	400	
Non-construction operatives	2,160	3,200	-	
Total (SIC 45)	204,230	220,840	6,065	
Civil engineers	4,680	5,510	-	
Other construction professionals and technical staff	13,140	15,560	680	
Architects	2,150	2,300	150	
Surveyors	5,250	6,020	480	
Total (SIC 45 and 74.2)	229,460	250,220	7,350	

Between 2010 and 2014, total construction output in the East of England is expected to grow at an annual average rate of 3.8%, considerably higher than the UK's average of 1.7%. Over the same period, the repair and maintenance (R&M) sector (accounting for 53% of total construction output in 2008) is predicted to grow slowly relative to the new work sector, thus leading to new work becoming the dominant market by 2011. Employment is projected to total 250,230 in 2014, slightly below the 2008 level due in particular to significant falls in R&M activity in 2009 and 2010, which is much more labour intensive than new work.

#### **Key findings**

Of the regions and nations in the UK, the East of England is forecast to be the only one not to see annual average declines in any of its new work sectors over the medium term. The best performing sector is projected to be infrastructure construction, with average growth of 13.4% in each of the years between 2010 and 2014. Roads projects in the early part of the forecast period – such as the duelling of A11 between Barton Mills and Thetford, and the A120 between Braintree and Marks Tey, are likely to be the driving forces behind the high rate of growth. The Felixstowe Port scheme is already onsite, thus contributing to the high rate of growth for the infrastructure sector. The forecast assumes that a start is made on the London Gateway Ports project in 2011.

Private housing output is likely to grow by double-digits in annual average terms between 2010 and 2014. At 11.1%, construction should be driven by underlying demand for housing as the flow of mortgage credit to consumers picks up and confidence in the housing market returns. The public housing sector should benefit from the uptake in private housing as delivery of social housing units through section 106 resumes, while pressure to increase the provision of affordable housing should also lead to an upward trend in activity.



Mathematical Science Centre, Cambridge

The healthy average annual rate of increase (8.9%) for industrial output between 2010 and 2014 is predicated upon recovery in the manufacturing sector and rising warehouse construction activity in the hinterlands of the new port schemes. In contrast, the modest rate of growth for public non-housing over 2010–2014 is likely to be a function of pressure on the government to reduce public expenditure post-2011. Drivers in the early part of the forecast period such as the Building Schools for the Future (BSF) Programme and the Primary Capital Programme are likely to be particularly prone to cuts. The commercial sector should also have a weak growth rate over the medium term (0.2%) due to the large falls in activity predicted in the early part of the forecast period.

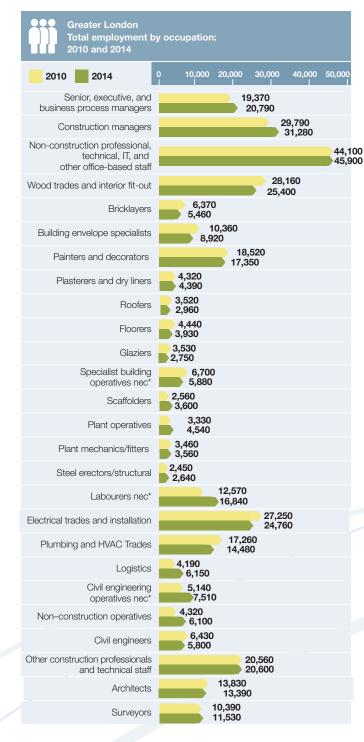
In 2014, total construction employment in the region is expected to reach 250,230, up 9% on the 2010 projected total but down 0.8% on the 2008 outturn. The largest trade occupation in 2008 was wood trades and interior fit-out, accounting for approximately 11.4% of the total construction employment in the East of England. This was broadly in-line with the UK average. Between 2010 and 2014, civil engineering operatives nec\* are expected to see the greatest growth in employment (11.4%), while plant operatives (43%) should also do very well, not least due to the strength of the infrastructure sector.

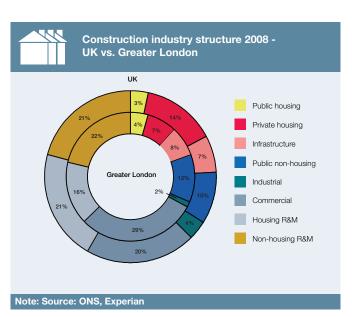
Finally the annual recruitment requirement for the region stands at around 7,350 in the region, with painters and decorators (1,000) and plumbing and Heating, Ventilation and Air Conditioning (HVAC) trades (870) likely to be the most in demand.

Construction output in the East of England is expected to grow at an annual rate of

3.8%

### Greater London





	Employment		Employment AR	ARR
	2010	2014	2010-201	
Senior, executive, and business process managers	19,370	20,790	1,470	
Construction managers	29,790	31,280	190	
Non-construction professional, technical, IT, and other office-based staff	44,100	45,900	-	
Wood trades and interior fit-out	28,160	25,400	-	
Bricklayers	6,370	5,460	-	
Building envelope specialists	10,360	8,920	140	
Painters and decorators	18,520	17,350	-	
Plasterers and dry liners	4,320	4,390	130	
Roofers	3,520	2,960	-	
Floorers	4,440	3,930	-	
Glaziers	3,530	2,750	<50	
Specialist building operatives nec*	6,700	5,880	<50	
Scaffolders	2,560	3,600	140	
Plant operatives	3,330	4,540	510	
Plant mechanics/fitters	3,460	3,560	-	
Steel erectors/structural	2,450	2,640	250	
Labourers nec*	12,570	16,840	640	
Electrical trades and installation	27,250	24,760	-	
Plumbing and HVAC Trades	17,260	14,480	-	
Logistics	4,190	6,150	-	
Civil engineering operatives nec*	5,140	7,510	330	
Non-construction operatives	4,320	6,100	-	
Total (SIC 45)	261,710	265,190	2,870	
Civil engineers	6,430	5,800	180	
Other construction professionals and technical staff	20,560	20,600	-	
Architects	13,830	13,390	-	
Surveyors	10,390	11,530	250	
Total (SIC 45 and 74.2)	312,890	316,510	3,300	

Greater London has the largest construction market among the English regions and devolved nations, overtaking the South East in 2007. Output is expected to grow in the capital at an annual average rate of 2% between 2010 and 2014, a little higher than the UK average of 1.7%. New work dominates in the region, accounting for 63% of output in 2008, compared with 58% in the UK as a whole. This dominance is predicted to increase over the forecast period as new work grows but repair and maintenance (R&M) declines. Employment is forecast to reach around 316,500 in 2014, just over 1% up on 2010's level, but nearly 10% below 2008, as most growth is expected in capital intensive areas of the industry, such as infrastructure.

#### **Key findings**

There are significant variations projected across the construction sectors in Greater London between 2010 and 2014 with robust growth rates in both the housing sectors and infrastructure and more modest rises or declines in the rest.

By far the most buoyant sector is expected to be the infrastructure one, with its 17% plus annual average growth rate in large part predicated on the Crossrail project. Funding for the Crossrail project was confirmed in the pre-budget report and even if there was a change of government in 2010 it is hard to see the project being cancelled with around £3bn having already been spent by that time. There are arguments that the project could be scaled down or spread over a longer period of time, but the former would somewhat defeat the object of the scheme in the first place and the latter would ultimately mean a higher cost.



30, St Mary Axe, City of London

Public housing output is also expected to grow strongly between 2010 and 2014, although the rate of growth will slow after 2011 as the 2008–2011 Affordable Housing Programme (AHP) completes. The feeling is that public funding for the sector post-2011 will at best be flat and thus growth in the second half of the forecast period will be heavily predicated on social housing providers' ability to raise private finance. In the private housing sector the underlying strength of demand in the capital is likely to push activity up. In the short term, London should benefit from the Kickstart programme, with over £52m allocated by the end of November to help nine stalled mixed tenure projects across the region.

Construction employment across the region is projected to fall sharply between 2008 and 2010 and then slowly pick up again to 2014. However growth over the forecast period is a very modest 1.2% to around 316,500 by 2014, constrained by the fact that output will be rising in the less labour intensive sectors, such as infrastructure, and falling in the more labour intensive repair and maintenance sectors.

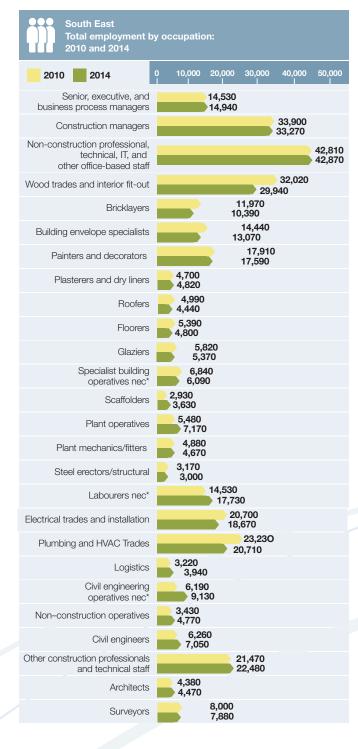
Finally the annual recruitment requirement (ARR) for the region stands at around 3,300, relatively low in relation to its size. The largest requirements are likely to be for labourers nec\* (640) and plant operatives (510), although those most in demand on a relative basis (as a % of 2010 employment) are expected to be plant operatives (15%) and steel erectors (10%).

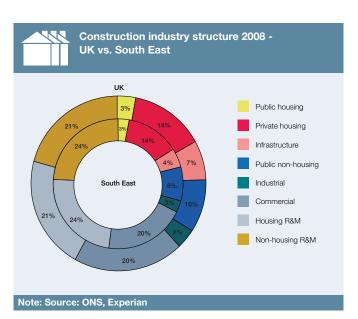
By far the most buoyant sector is expected to be the infrastructure, with over

17%

annual average growth, predicated largely on the Crossrail project.

### South East





	Employment ARR	ARR	
	2010	2014	2010-2014
Senior, executive, and business process managers	14,530	14,940	-
Construction managers	33,900	33,270	-
Non-construction professional, technical, IT, and other office-based staff	42,810	42,870	-
Wood trades and interior fit-out	32,020	29,940	50
Bricklayers	11,970	10,390	-
Building envelope specialists	14,440	13,070	-
Painters and decorators	17,910	17,590	340
Plasterers and dry liners	4,700	4,820	-
Roofers	4,990	4,440	-
Floorers	5,390	4,800	-
Glaziers	5,820	5,370	160
Specialist building operatives nec*	6,840	6,090	90
Scaffolders	2,930	3,630	110
Plant operatives	5,480	7,170	170
Plant mechanics/fitters	4,880	4,670	-
Steel erectors/structural	3,170	3,000	<50
Labourers nec*	14,530	17,730	290
Electrical trades and installation	20,700	18,670	-
Plumbing and HVAC Trades	23,230	20,710	-
Logistics	3,220	3,940	250
Civil engineering operatives nec*	6,190	9,130	290
Non-construction operatives	3,430	4,770	-
Total (SIC 45)	283,080	281,010	1,770
Civil engineers	6,260	7,050	320
Other construction professionals and technical staff	21,470	22,480	-
Architects	4,380	4,470	240
Surveyors	8,000	7,880	-
Total (SIC 45 and 74.2)	323,170	322,890	2,330

Total construction output in the South East is expected to increase at an annual average rate of 0.8% between 2010 and 2014, weaker than the UK's average of 1.7%. This muted growth will be largely due to a relatively stronger performance from the new work sector, with repair and maintenance (R&M) likely to see an annual average decline in output over the period. Employment in the region is predicted to total around 322,900 in 2014, 0.1% lower than 2010's level.

#### **Key findings**

The infrastructure sector is expected to be the most buoyant over the 2010–2014 period, increasing at an annual average rate of 6.7%. Work started on the M25 widening work in Spring 2009, with the project due to be completed in time for the Olympics in 2012. In addition, the £425m redevelopment of Reading station is expected to get underway in 2010 and work is due to be finished in 2015.

Output in the public non-housing sector is expected to decline in each year of the forecast period, as the government significantly scales back expenditure in order to contain its ballooning deficit. However, the South East relies much less than other regions and devolved nations on the public sector to fund investment in construction and thus may not be as badly affected as other areas of the UK. The annual average decline in public non-housing output is predicted to be 3.9% over the period to 2014. The public housing sector is likely to be affected by cuts in investment, with the next Affordable Housing Programme (AHP) unlikely to be see any significant increase. However, the sector is expected to fare well in the shorter term, with work on the current AHP continuing, along with developments benefiting from the Kickstart programme.



The New Medway Bridge, Kent

The private housing sector is predicted to return to growth in 2010 and output will increase in each year of the forecast period. There have been some recent signs of an upturn in the housing market and the recovery will strengthen over the coming months, as the macroeconomic climate continues to improve and consumer confidence picks up. There are concerns that the recent month-onmonth house price rises are more reflective of restricted supply rather than a sustained recovery in demand, although demand should rise as credit conditions continue to ease and concerns about job security begin to abate.

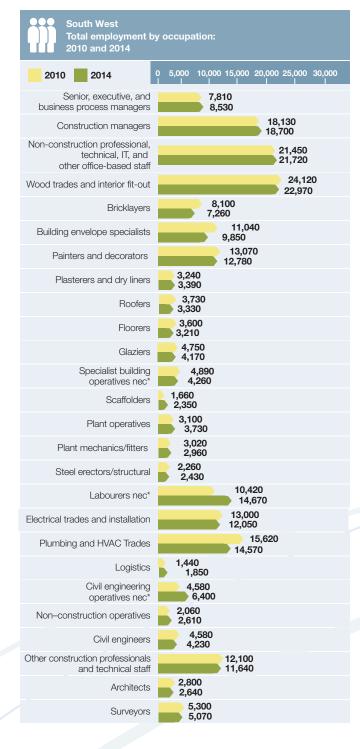
Construction employment in the region is expected to total 322,890, a very slight decline of 0.1% on the projected level for 2010 and 14% lower than employment in 2008. Wood trades and interior fit-out was the largest trade occupational groups in the South East, accounting for 10% of total construction employment in the region. The strongest construction-specific employment growth between 2010 and 2014 is forecast for civil engineering operatives nec\* (47%) and plant operatives (31%).

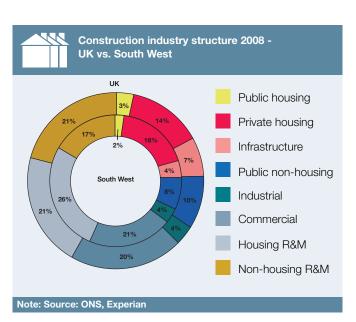
The annual recruitment requirement for the South East is 2,330, with demand expected to be strongest for painters and decorators (340) and civil engineers (320).

Total construction output in the South East is expected to increase by

0.8%

### South West





	Employment		ARR
	2010	2014	2010-2014
Senior, executive, and business process managers	7,810	8,530	60
Construction managers	18,130	18,700	60
Non-construction professional, technical, IT, and other office-based staff	21,450	21,720	230
Wood trades and interior fit-out	24,120	22,970	350
Bricklayers	8,100	7,260	60
Building envelope specialists	11,040	9,850	-
Painters and decorators	13,070	12,780	-
Plasterers and dry liners	3,240	3,390	190
Roofers	3,730	3,330	<50
Floorers	3,600	3,210	-
Glaziers	4,750	4,170	-
Specialist building operatives nec*	4,890	4,260	-
Scaffolders	1,660	2,350	100
Plant operatives	3,100	3,730	220
Plant mechanics/fitters	3,020	2,960	-
Steel erectors/structural	2,260	2,430	80
Labourers nec*	10,420	14,670	1,260
Electrical trades and installation	13,000	12,050	140
Plumbing and HVAC Trades	15,620	14,570	-
Logistics	1,440	1,850	170
Civil engineering operatives nec*	4,580	6,400	80
Non-construction operatives	2,060	2,610	-
Total (SIC 45)	181,090	183,790	3,020
Civil engineers	4,580	4,230	-
Other construction professionals and technical staff	12,100	11,640	-
Architects	2,800	2,640	-
Surveyors	5,300	5,070	-
Total (SIC 45 and 74.2)	205,880	207,360	3,020

At 0.4%, the South West is expected to have one of the lowest annual average rates of growth in the UK between 2010 and 2014. The repair and maintenance (R&M) market is likely to be responsible for the weak prognosis due to its negative projected outturn of 1.8% per year, in contrast to the new work market which is forecast to grow by 2.3%. Total construction employment in the region is likely to reach 207,360 in 2014, less than 1% above the 2010 level.

#### **Key findings**

The public non–housing and commercial sectors are expected to be the only ones in new work projected to see annual average declines between 2010 and 2014, of 5.9% and 0.6%, respectively. Public non–housing construction output has grown very strongly in the region in 2008 and 2009, despite the lack of Building Schools for the Future (BSF) projects. However, falling government expenditure going forward is likely to mean that output has peaked in the sector in 2009 and that activity will decline during the 2010 to 2014 forecast period.

Meanwhile, the poor performance of the commercial sector is projected to be as a result of declines in the initial two years of the forecast period when demand for retail, office and entertainment floorspace is expected to be extremely limited. However, from 2012 onwards, output in the sector should grow at an increasing rate as projects such as the  $\pounds475\text{m}$  PFI redevelopment of Southmead Hospital for North Bristol NHS Trust and the  $\pounds350\text{m}$  redevelopment of Kings shopping centre in Gloucester begin to come online.

In contrast, the private housing sector should have the highest rate of growth on an annual average basis in the South West between 2010 and 2014. At 9.1%, the sector should benefit from funding through the Kickstart programme getting projects moving again, while an easing in mortgage lending and stabilisation in house prices should further boost demand. The recovery of the private market should help in the delivery of social housing units through section 106 agreements, while Homes and Communities Agency (HCA) funding of over  $\mathfrak{L}130m$  to provide 2,736 affordable homes should further improve matters for the public housing sector. The average rate of growth for this sector is predicted to be 2.5% per year between 2010 and 2014.



The Eden Project, Cornwall

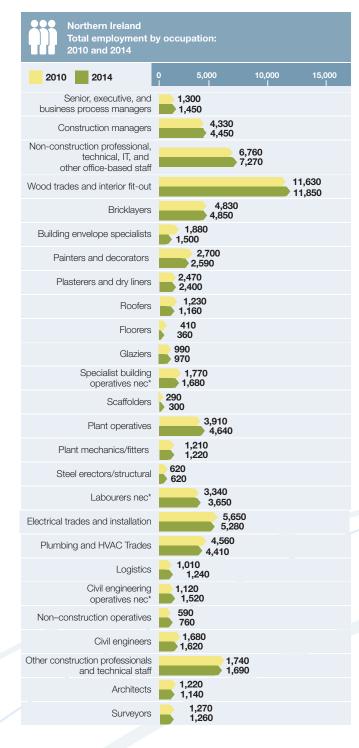
The performance of the infrastructure sector should be relatively buoyant when compared to other new work sectors in the South West. With an annual average rate of growth of 5.1%, output should see increases in each of the years between 2010 and 2014. The £87m Weymouth Relief Road should help provide a stream of output in the short to medium term, while the construction of the Hinckley Point nuclear power station should also be a contributory factor behind the growth in the latter part of the forecast period. However, the omens for the Severn Barrage scheme are not good with reports suggesting that the government may indefinitely postpone the project as part of its cost cutting drive.

In 2014, total construction employment in the South West is expected to reach 207,360, up slightly on the 2010 projected figure of 205,880. In 2008, the biggest occupational group was wood trades and interior fit-out (27,090), accounting for around 12% of total construction employment in the region, slightly above the UK average. Between 2010 and 2014, scaffolders (42%), labourers nec\* (41%) and civil engineering operatives nec\* (40%) are expected to see the largest increases in employment, while specialist building operatives (-13%) and glaziers (-12%) are predicted to be among the 12 occupational groups likely to see falls. The annual recruitment requirement for the South West is expected to total 3,020, with labourers nec\* (1,260) and wood trades and interior fit-out (350) expected to be the most in demand.

Total construction employment in the region is likely to reach

207,360 in 2014.

### Northern Ireland





	Employment		ARR
	2010	2014	2010-2014
Senior, executive, and business process managers	1,300	1,450	80
Construction managers	4,330	4,450	-
Non-construction professional, technical, IT, and other office-based staff	6,760	7,270	-
Wood trades and interior fit-out	11,630	11,850	120
Bricklayers	4,830	4,850	50
Building envelope specialists	1,880	1,500	-
Painters and decorators	2,700	2,590	-
Plasterers and dry liners	2,470	2,400	-
Roofers	1,230	1,160	-
Floorers	410	360	-
Glaziers	990	970	-
Specialist building operatives nec*	1,770	1,680	<50
Scaffolders	290	300	60
Plant operatives	3,910	4,640	100
Plant mechanics/fitters	1,210	1,220	50
Steel erectors/structural	620	620	-
Labourers nec*	3,340	3,650	130
Electrical trades and installation	5,650	5,280	-
Plumbing and HVAC Trades	4,560	4,410	-
Logistics	1,010	1,240	-
Civil engineering operatives nec*	1,120	1,520	50
Non-construction operatives	590	760	-
Total (SIC 45)	62,600	64,170	660
Civil engineers	1,680	1,620	-
Other construction professionals and technical staff	1,740	1,690	-
Architects	1,220	1,140	-
Surveyors	1,270	1,260	60
Total (SIC 45 and 74.2)	68,500	69,880	720

Between 2010 and 2014, total construction output in Northern Ireland is expected to rise at an annual average rate of 1.1%, somewhat lower than the UK's average of 1.7%. New work activity is expected to be stronger than repair and maintenance (R&M) and thus the R&M share of the total is likely to shrink further in the province, where it makes up a much smaller share of total construction activity anyway compared to the UK as a whole (18% versus 42%). Employment is expected to reach close to 69,900 in 2014, a 2% rise on 2010's level but 14% down on its 2007 peak.

### **Key findings**

Increasing concerns have surfaced in the province regarding the future of funding for the Northern Ireland Investment Strategy and it is these concerns that are leading to a fairly modest rate of output growth between 2010 and 2014. In the short term it is the private sectors that are suffering, such as private housing, industrial and commercial, not only in Northern Ireland but across the UK as a whole. As these sectors begin to recover when the economy improves, the need to address ballooning public debt will lead to public expenditure cuts. Unfortunately for Northern Ireland, its economy is more reliant on the public sector than the UK as a whole, as is its construction industry and thus public expenditure cuts are likely to affect the province disproportionately.

Across the UK as a whole the infrastructure sector is projected to be the best performing, while in Northern Ireland it is likely to be the private housing sector as credit conditions ease and demand returns to the market. However, even here, the average annual growth rate is likely to be only a moderate 3.6%, significantly lower than in the most buoyant areas.

Industrial construction is forecast to be the next strongest sector, although this is largely on the premise that with output in the sector dropping to a historic low in 2009, the only way is up. It is likely to be a long slow recovery for manufacturers as they await a sustained upturn in global trade, or particularly with other members of the European Union, and thus can take advantage of the current weakness of sterling.



The Boat, Belfast

Activity at the Titanic Quarter is likely to drive commercial construction activity in the province over the medium term, although there are sizeable retail developments planned for other towns as well, such as Newtownabbey, Newtownards, and Lisburn. However, growth in the sector is expected to be at best modest over the forecast period.

Under threat will be activity in the infrastructure and public non-housing sectors as prospective public expenditure cuts start to bite. In particular it is likely to affect projects under the Investment Strategy that have not yet reached invitation to tender and this is a significant number of schemes, particularly in the education market. Work currently on site in the infrastructure sector, such as A4 dualling is likely to deliver growth in the sector in the short term and keep the rate marginally positive over the whole of the 2010–2014 period. The public non-housing sector, in contrast, is projected to contract between 2010 and 2014 by around 1.4% a year.

The relatively low annual average output growth rate for Northern Ireland implies a very modest rate of employment growth for the province, projected at 2%, once productivity gains have been factored in, which delivers an Annual Recruitment Requirement (ARR) of 720.

Total construction output is expected to rise at an annual rate of

1.1%

between 2010 and 2014.



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