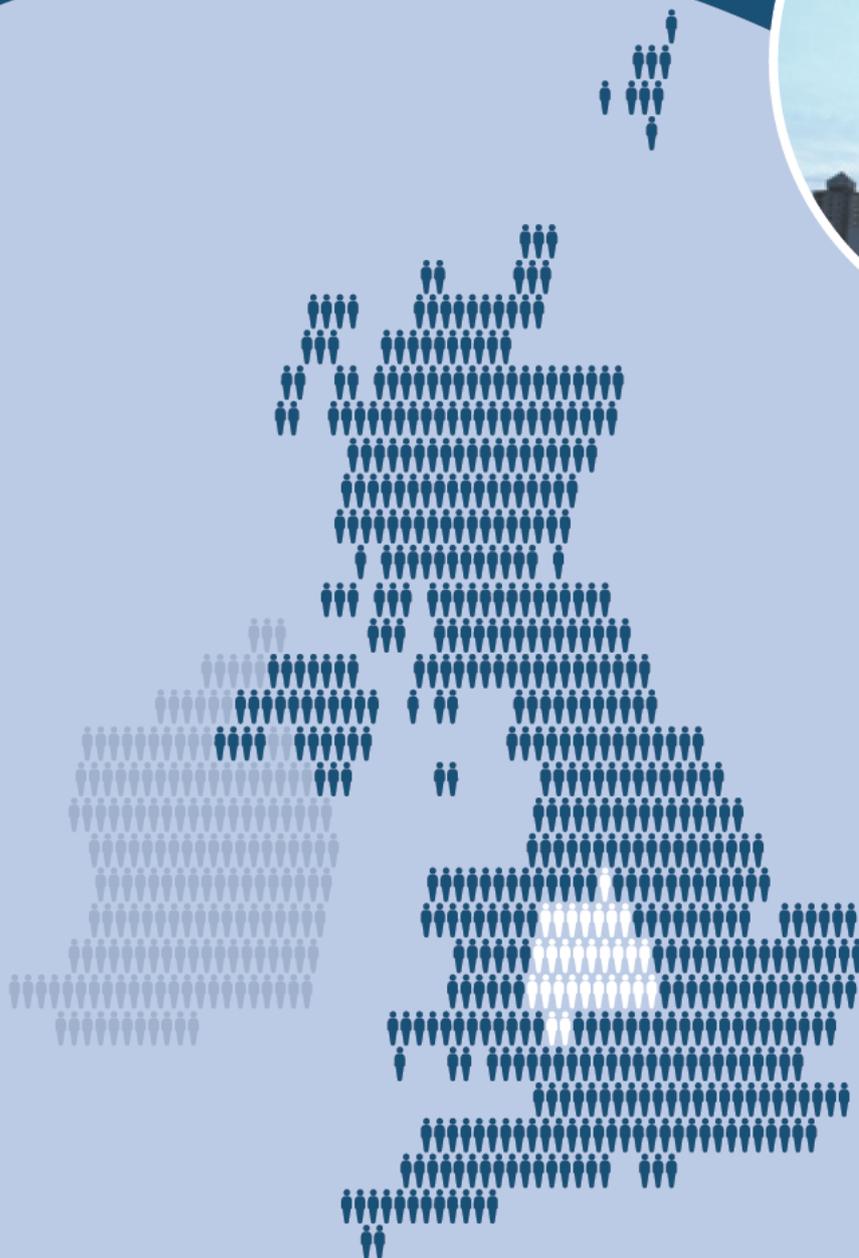


Construction Skills Network West Midlands 2014-2018

Labour Market Intelligence



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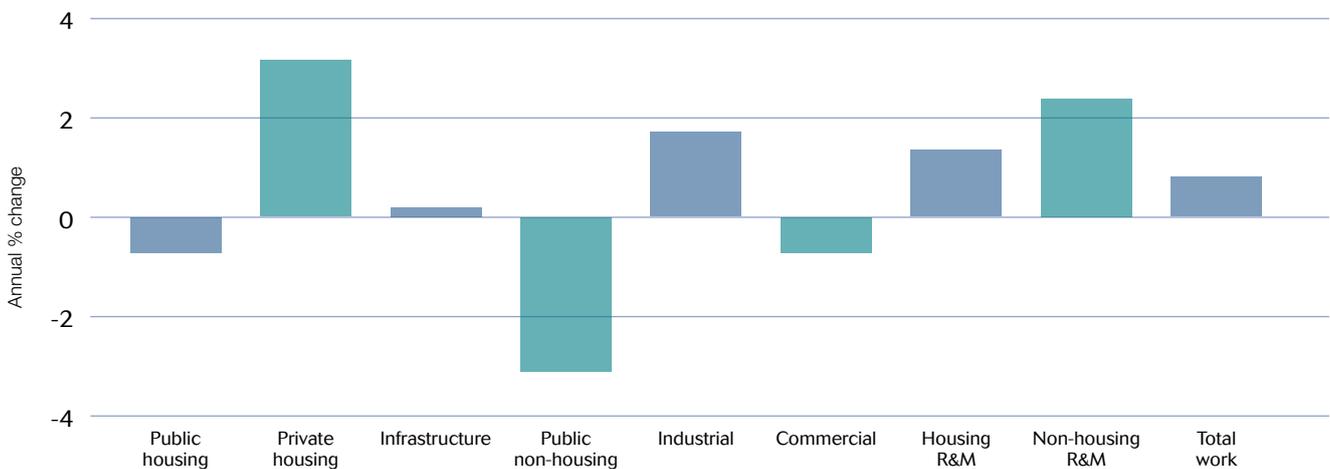
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1 Summary – West Midlands

The West Midlands is expected to see an increase in construction output over the forecast period, albeit at an average annual rate of 0.8%, which is well below the UK rate of 2.2%. Repair and maintenance (R&M) activity is expected to pick up by 1.9% per year on average, well above new work, which is set to remain largely flat (0.1%) over the same period. The private housing sector is expected to be the strongest performer, with annual average growth of 3.1%. This is the only projected region or devolved nation to see a decline in construction employment over the forecast period, at an annual average rate of 0.2%, as output growth of 0.8% a year is not enough to boost employment levels. Given the weak prospects for employment, the annual average recruitment requirement (ARR) for the West Midlands, at 380, is by far the lowest figure out of all regions and devolved nations.

Annual average construction output growth 2014-2018 – West Midlands



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



1.1 Key findings

Only two new work sectors are projected to experience significant growth over the five years to 2018 in the region – private housing and industrial construction, with average annual growth rates of 3.1% and 1.7% respectively.

Output in the private housing sector is expected to rise each year to 2018, although the first half of the forecast period will see the bulk of the upturn. The growth is partly the result of the sector benefitting from Government incentives such as Help to Buy.

Speculative building does seem to be returning to the industrial construction sector and the region has also been benefitting recently from some large factory projects in the automotive sector, such as the £350m engine works for Jaguar Land Rover in Wolverhampton. Work on the new £250m logistical and technology park in Coventry is planned to begin in early 2014 and it should help to support growth in first half of our forecast period.

Activity in the infrastructure sector is projected to flatten out (0.2%) on average in the five years to 2018. Some large long-term programmes of work currently on site, such as £1bn of local roads maintenance in Birmingham, are keeping activity levels stable, but there is little in the pipeline to drive growth over the forecast period.

Public non-housing construction is expected to see the sharpest decline, at an average annual rate of 3.1%. Funding cuts remain an issue in the region, as highlighted by double-digit declines in the first half of the forecast period.

Construction employment in the West Midlands is expected to total 186,480 in 2018, an annual average decline of 0.2% over the five years to 2018. This compares to forecast annual average growth across the UK as a whole of 1.2%.

However, not all occupational groups are predicted to see a fall. Employment growth is forecast to be strongest for other construction professionals and technical staff (2.9% a year on average), followed by construction project managers (1.8% a year) and scaffolders (1.5%). Nevertheless, the majority of occupational groups (21 out of 28) are expected to see a fall in employment over the next five years.

The West Midlands' ARR is 380, equivalent to 0.2% of base 2014 employment, well below the UK figure of 1.5%, and the lowest proportion of all regions and devolved nations.

The West Midlands is expected to see an increase in construction output over the forecast period, at an average annual rate of 0.8%

Regional comparison 2014-2018

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

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

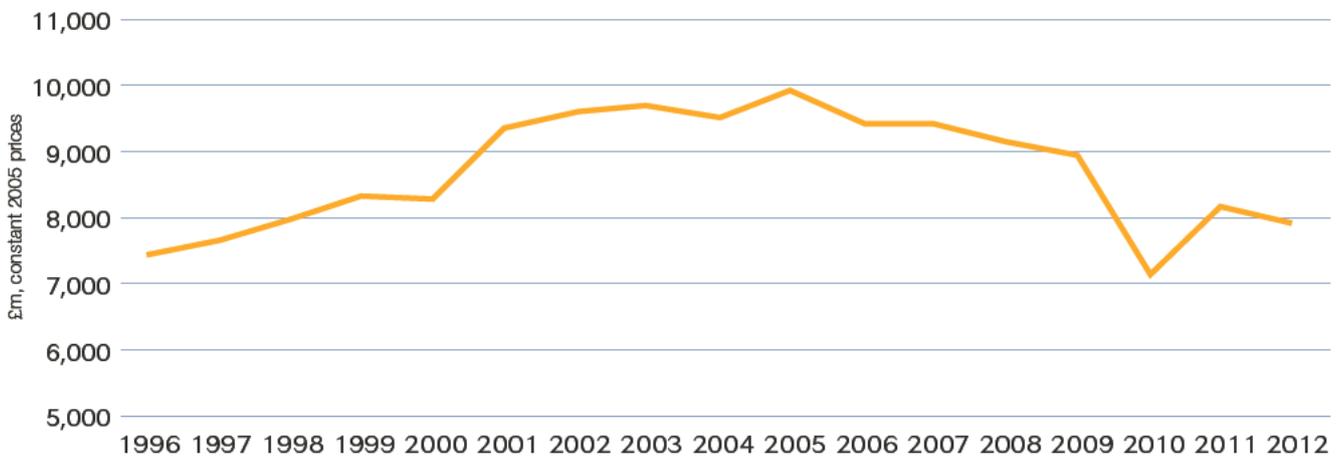
2 The outlook for construction in the West Midlands

2.1 Construction output in the West Midlands – overview

Construction activity in the West Midlands fell by 11% in 2012 to £7.1bn at 2005 prices, the second consecutive annual contraction. All the decline was on the new work side, with output falling by 17% while R&M rose by 5%.

Only two sectors experienced growth in 2012 – public housing, with output up 27% in real terms, and housing R&M, which grew by 13%. The sharpest declines were seen in the public non-housing and commercial sectors, with falls of 35% and 20% respectively. While the former continued to struggle due to public expenditure cuts, the latter has suffered from a lack of sizeable projects, highlighted by especially low investment figures and drop off in new orders. The infrastructure and industrial sectors also performed poorly, both contracting at a double-digit rate.

Construction output – West Midlands 1996-2012



Source: ONS ref. CSN Explained, Section 3, Note 1

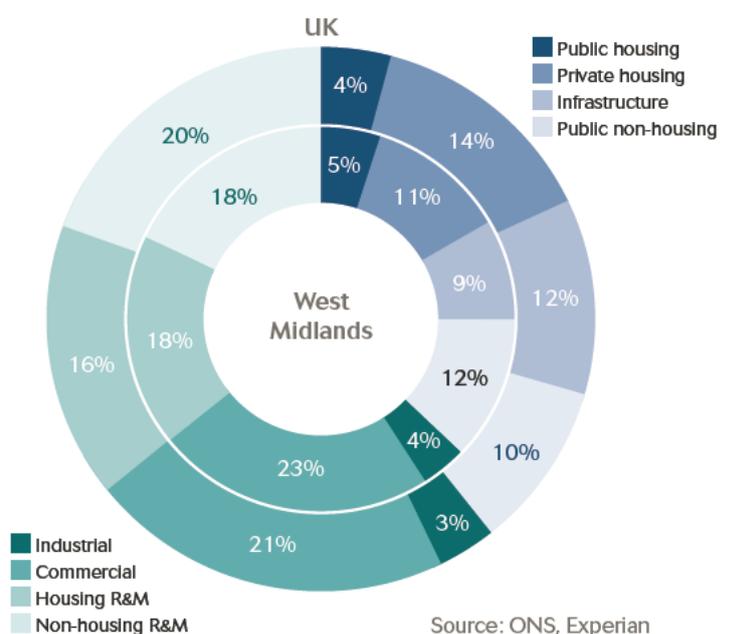
2.2 Industry structure

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

The new work sector in the West Midlands accounted for 64% of total construction output in 2012, in line with the UK average. This represented a drop of 5% on its 2011 share.

The overall structure of the construction market in the West Midlands is comparable to that of the UK as a whole. The biggest differences are proportionally smaller private housing and infrastructure sectors in the West Midlands compared with the UK as a whole. The former accounted for 11% of output in the region in 2012, compared with 14% across the UK, and the latter 9% compared with 12%. All other sector shares were within 2% of each other.

Construction Industry structure 2012 – UK vs. West Midlands



Source: ONS, Experian

2.3 Economic overview

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

2.4 Economic structure

In 2012 gross added value (GVA) totalled £94.8bn at 2010 prices in the West Midlands, up 0.5% on 2011, and the region accounted for 7% of UK GVA, which was consistent with the 2011 proportion.

Professional and other private services was again the largest component of GVA within the West Midlands, with a slightly higher proportion of output than in the UK as a whole (25% vs. 24%). Public services followed, with 20% of GVA. Both sectors' shares remained similar to 2011 levels. The next largest sectors were manufacturing and wholesale and retail, with shares of 14% and 13%

respectively. Both sectors are more important to the West Midlands than to the UK economy as a whole (10% and 11%). Meanwhile, construction accounted for 6% of the region's GVA, similar to the UK level.

Growth was strongest in the professional and other private services sector, at 4.2% in 2012, confirming its position as the largest sector in the region. Public services saw an increase of 2.7% in real terms, which is surprising given current public expenditure constraints. Manufacturing activity rose by 0.6% in 2012, while the wholesale and retail sector was largely flat with very slightly positive growth forecast (0.1%).

Economic structure – West Midlands (£ billion, 2010 prices)

Selected sectors	Actual	Forecast					
		Annual % change, real terms					
	2012	2013	2014	2015	2016	2017	2018
Professional and other private services	23.6	2.2	2.3	2.2	2.4	2.4	2.4
Public services	18.9	-0.6	0.0	0.3	0.6	0.9	1.5
Manufacturing	13.1	0.8	1.6	1.2	1.1	0.8	0.7
Wholesale and retail	12.1	4.3	2.3	2.3	2.5	2.3	2.3
Transport and storage	5.7	4.6	1.1	2.0	2.7	2.7	2.6
Total Gross Value Added (GVA)	94.8	0.9	1.6	1.7	2.0	1.9	2.0

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

2.5 Forward looking economic indicators

The West Midlands' economy is estimated to have expanded by 0.9% in 2013, with the strongest of the major sectors being finance and insurance with growth of 4.6%, followed by wholesale and retail with 4.3%. Of the two largest sectors, output in the public services sector is likely to have fallen by 0.6% but growth of 2.2% is forecast for professional and other private services. GVA in the region is forecast to grow at an annual average rate of 1.8% over the 2014 to 2018 period, a little below the UK average of 2%.

Professional and other private services is expected to see output rise by 2.3% per year on average over the five years to 2018, while public services is projected to see an average 0.7% upturn over the corresponding period. The wholesale and retail sector should see good growth, of around 2.3% a year on average over the forecast period, but manufacturing expansion is predicted to be a much more modest 1.1%.

Household spending is estimated to have increased by 0.5% in 2012, falling significantly behind the rise in household disposable income (1.9%) as consumers serviced debt and increased their savings. However, the profile is expected to have reversed in 2013, with household spending running ahead of growth in real household disposable incomes (2% vs. -1.0%).

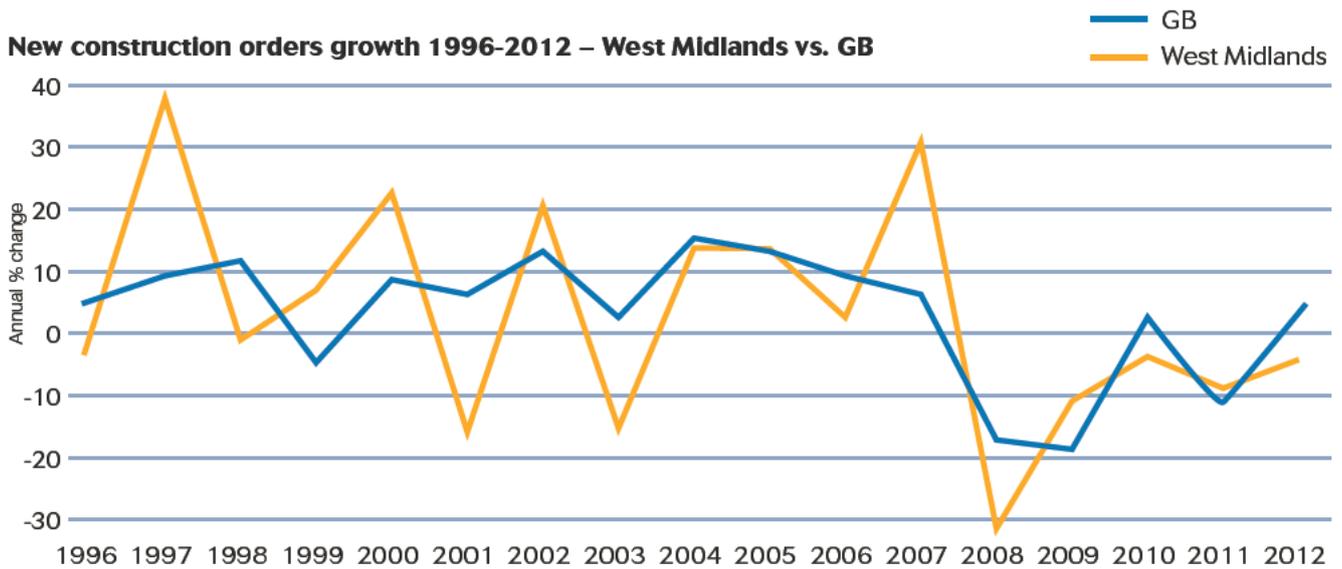
Over the forecast period, household spending growth is expected to run significantly ahead of real household disposable income (2.1% vs. 1.5%) in the West Midlands, suggesting that debt levels in the region may be about to start rising again.

The working age population in the region stood at 3.33 million in 2012, making up 60% of the total population, and the proportion is expected to edge upwards through the forecast period. The estimated unemployment rate for the region in 2013 is 9.2%, notably above the UK average of 7.8%, although it should drop below 8% by 2018.

Economic Indicators – West Midlands (£ billion, 2010 prices – unless otherwise stated)

	Actual	Forecast					
		Annual % change, real terms					
	2012	2013	2014	2015	2016	2017	2018
Real household disposable income	78.7	-1.0	1.0	1.3	1.5	1.7	1.9
Household spending	74.7	2.0	1.7	1.9	2.3	2.3	2.3
Working age population (000s and as % of all)	3,331	60.5	60.8	61.1	61.3	61.4	61.4
House prices (£)	177,886	0.9	1.5	2.7	2.7	2.5	2.8
LFS unemployment (millions)	0.23	8.7	-2.6	-6.0	-3.0	-2.4	-3.0

Source: ONS, DCLG, Experlan



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

2.6 New construction orders – overview

New construction orders in the region fell for the fifth consecutive year in 2012, by nearly 5% to £3.5bn, approximately half of its 2006 level.

However, sector performance was mixed. The two housing sectors and the industrial sector saw rises in new order levels, while the infrastructure, public non-housing and commercial sectors saw falls. Unfortunately for the overall picture, two of the three sectors recording new orders increases – public housing and industrial – are the smallest, each accounting for only 7% of total new orders in the region in 2012.

The worst performance was in the public non-housing sector, with a fall in new orders of 21% in 2012. The region was one of the biggest beneficiaries of the Building Schools for the Future programme (BSF) prior to its cancellation in mid-2010, so as ‘legacy’ projects under the scheme have completed output has dropped sharply.

2.7 New construction orders – current situation

Construction new orders in the West Midlands totalled close to £2bn in current prices in the six months to June 2013, 12% above the corresponding period of 2012, suggesting that the outturn for the year as a whole could be positive for the first time since 2007.

Growth was driven by significant annual upturns in private housing (£538m), public non-housing (£350m), and industrial (£395m) construction orders; up by 84%, 39%, and 154% respectively on a year on year basis.

On the other hand, significant declines were seen in the infrastructure (£198m) and commercial (£371m) sectors, with contractions of 59% and 26% respectively.

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

Regional Office for National Statistics (ONS) output statistics are published in current prices and are thus inclusive of any inflationary effect. At the time of writing, regional ONS construction output statistics were only available for the first two quarters of 2013.

New work construction orders – West Midlands (£ million, current prices)

	Actual	Annual % change				
	2012	2008	2009	2010	2011	2012
Public housing	253	-19.6	-14.1	-35.4	26.8	27.1
Private housing	699	-40.4	-27.0	-1.1	19.1	11.1
Infrastructure	675	-41.9	66.2	-60.4	107.9	-11.8
Public non-housing	665	2.2	20.7	25.1	-44.2	-21.1
Industrial	259	-52.1	-37.2	-22.5	19.5	28.2
Commercial	913	-32.1	-40.6	22.1	-21.3	-8.0
Total new work	3,464	-31.5	-10.7	-4.1	-9.1	-4.5

Source: ONS. Ref. CSN Explained, Section 3, Note 4

Construction output 2014-2015 – West Midlands (£ million, 2005 prices)

	Actual	Forecast			Annual average
		Annual % change			
	2012	2013	2014	2015	2014-15
Public housing	349	13%	-7%	-4%	-5.6%
Private housing	813	16%	6%	3%	4.6%
Infrastructure	608	11%	1%	0%	0.8%
Public non-housing	851	-15%	-11%	-5%	-8.1%
Industrial	280	53%	3%	5%	4.1%
Commercial	1,647	-10%	-9%	-3%	-5.6%
New work	4,548	2%	-3%	-1%	-2.0%
Housing R&M	1,265	-4%	1%	2%	1.7%
Non-housing R&M	1,274	11%	1%	4%	2.5%
Total R&M	2,538	4%	1%	3%	2.1%
Total work	7,086	3%	-2%	1%	-0.5%

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

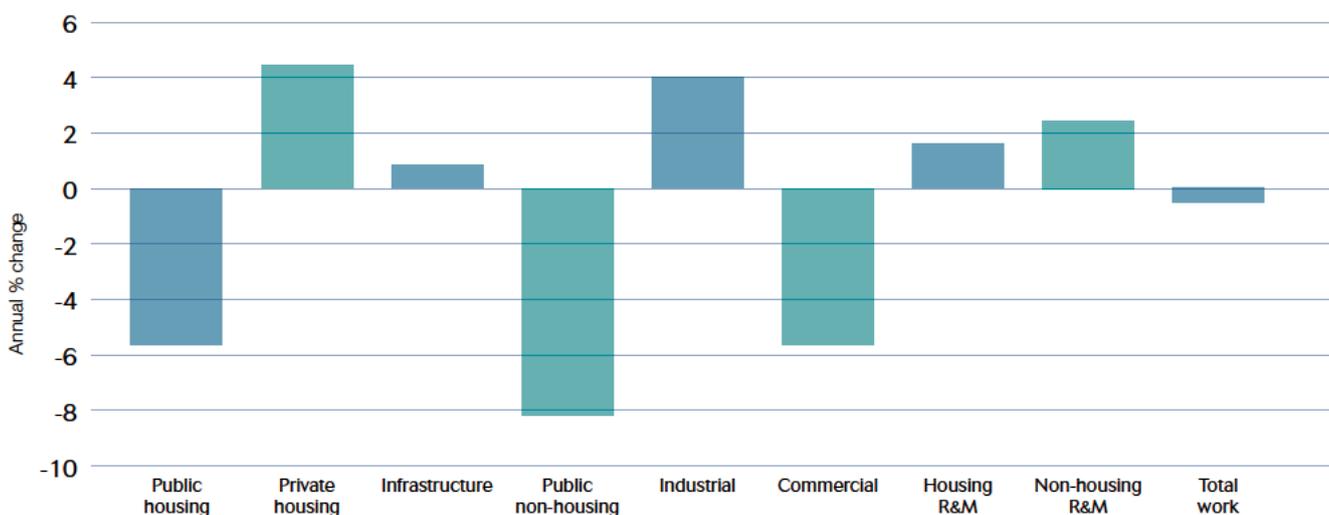
In the six months to June 2013, construction output in the West Midlands totalled £4.2bn in current prices, 6% above the corresponding period of 2012. New work output lagged behind R&M activity, although both saw increases, of 3% and 10% respectively. In the first half of 2013, public housing, private housing, infrastructure and industrial construction all saw double-digit increases in output, with the industrial sector up by 78% to £270m.

For 2013 as a whole, construction output in the West Midlands is estimated to have risen by 3% in real terms, with the strongest growth sectors expected to have been the industrial (53%) and private housing (16%) ones.

However, the forecast for the short term is slightly negative, with an annual average decline of 0.5% projected for the 2014 to 2015 period. Some of the sectors that fared well in 2013 are likely to be less buoyant, in particular the public housing sector, which is currently at an unusually high level.

The private housing sector is forecast to see the strongest growth in the short term, at an annual average rate of 4.6% over the two years to 2015. Work is soon to commence on a 350-home development in Stafford, worth £65m, as well as a new set of apartments in Shrewsbury at an estimated cost of £52m. The former should be completed by 2015 while the latter will run on until 2021. Improving economic conditions and the Help to Buy scheme should mean that an increasing number of these types of projects will join the development pipeline over the next couple of years.

However, overall output is still well below its long-term average – the figure for 2012 was 30% below its 2003 level. This was also reflected in private housing starts, which were up on an annual basis but were less than half of their 2003 figure. Nevertheless, they now seem to be on a rising trend, up by 25% in first three quarters of 2013 in comparison to the same period of 2012.

Annual average construction output growth 2014-2015 – West MidlandsSource: Experian
ref. CSN Explained, Section 3, Note 2

The private housing sector is expected to be the strongest performer with annual average growth of 3.1%

Industrial construction activity is projected to rise by an annual average rate of 4.1% over the short term, although this is well down on its estimated growth of over 50% in 2013. Work on automotive factory projects such as the £350m engine plant in Wolverhampton for Jaguar Land Rover, and a smaller assembly plant for Solihull, will

continue to keep output high in the short term.

Over the 2014 to 2015 period, the strongest declines are expected to be in the public non-housing, commercial and public housing sectors, with annual average falls of 8.1%, 5.6% and 5.6% respectively. The West Midlands' over-reliance on the BSF programme to provide growth in public non-housing output means that the sector has a lot further to fall in the region than in many others, although there still remain one or two BSF projects to complete in the Wolverhampton area. The short-term outlook for commercial construction is dull, as despite the general improvement in economic conditions, it will take a while to move new large office, retail, leisure and mixed-use developments from design stage to start of construction.

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

The annual average output growth rate in the West Midlands over the longer period is positive, at 0.8%, albeit much lower than the UK rate (2.2%). Growth in the R&M sector (1.9%) is expected to continue to outperform growth in the new work one (0.1%).

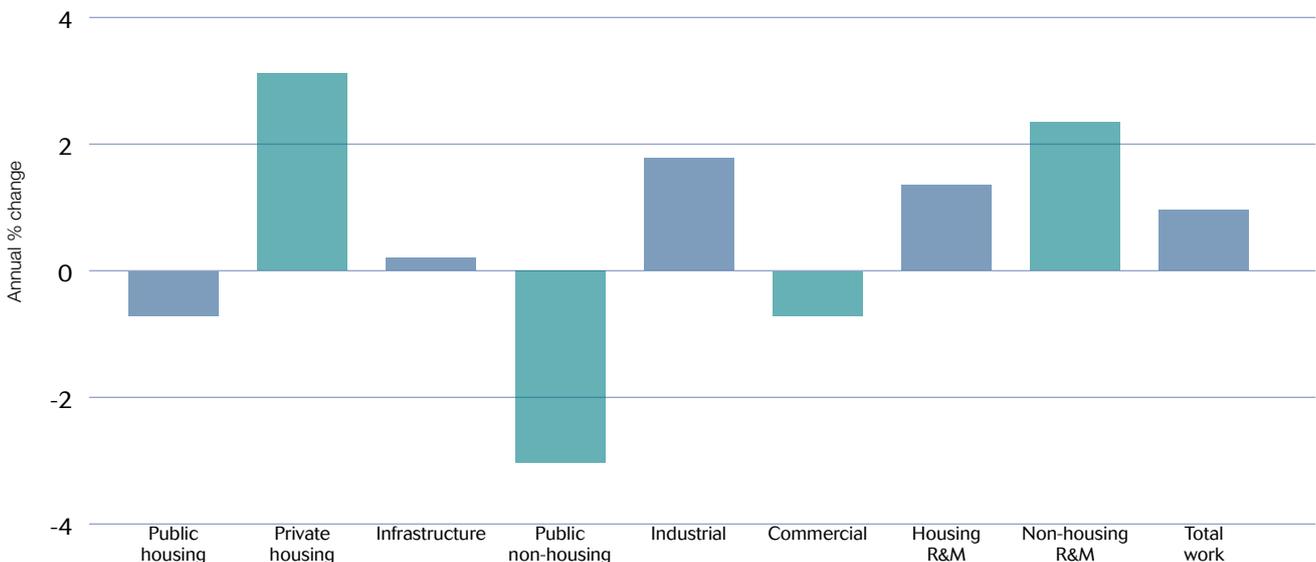
Private housing activity is forecast to see the highest growth in the medium term, with an annual average growth rate of 3.1% over the five years to 2018. Improving disposable income and a higher availability of consumer credit both point towards sustained growth, although activity in the latter part of the forecast period is expected to slow down as incentives such as Help to Buy wind down. The mortgage guarantee part of the scheme has a total of £12bn of funding to underpin it, but once this runs out there is uncertainty about how the market may react.

Growth in the industrial sector should slow down over the medium term, falling to 1.7% in the five years to 2018, as work on the factory projects completes. Nevertheless, the distribution and logistics sector is expected to see some growth after a long period of stagnation. Recent analysts' reports suggest that speculative building is returning to the sub-sector after a long absence.

Infrastructure construction, output in the West Midlands is expected to flatten out (0.2%) over the medium term. This reflects a lack of major projects in the development pipeline within the region that are likely to start within the forecast period. The bulk of infrastructure work is likely to be in the form of highway maintenance and rail improvements.

The negative projection for the public non-housing sector is based upon the premise that activity should fall to levels similar to those before the start of the BSF programme. The Priority School Building Programme (PSBP) is much smaller than BSF, and £2bn of its £2.4bn funding will be coming from the private sector; thus the majority of output will be registered in the commercial sector. There is little planned in the way of publicly funded health, office and leisure development to suggest that these sectors could replace the contraction in education work.

Annual average construction output growth 2014-2018 – West Midlands



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

Construction output 2014-2018 – West Midlands (£ million, 2005 prices)

	Estimate	Forecast Annual % change					Annual average
		2013	2014	2015	2016	2017	
Public housing	395	-7%	-4%	1%	2%	5%	-0.8%
Private housing	946	6%	3%	1%	2%	3%	3.1%
Infrastructure	676	1%	0%	0%	0%	-1%	0.2%
Public non-housing	721	-11%	-5%	-1%	0%	2%	-3.1%
Industrial	427	3%	5%	0%	1%	0%	1.7%
Commercial	1,484	-9%	-3%	1%	3%	4%	-0.7%
New work	4,648	-3%	-1%	1%	2%	2%	0.1%
Housing R&M	1,220	1%	2%	1%	1%	0%	1.3%
Non-housing R&M	1,414	1%	4%	3%	3%	1%	2.4%
R&M	2,633	1%	3%	2%	2%	1%	1.9%
Total work	7,281	-2%	1%	1%	2%	2%	0.8%

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

2.10 Beyond 2018

Past the forecast period, the most significant project will be High Speed Rail 2 (HS2). The project is under scrutiny because of its high financial and ecological costs. However, the scheme has strong backing from Parliament, and its potential economic advantages are difficult to ignore. The multi-billion pound project would require new rail lines to go straight through the West Midlands, which would provide a much-needed boost to the region's infrastructure sector.

Given the size of this scheme, it is the most significant project in the pipeline by some distance. Work on phase 1, from London to Birmingham, is scheduled to start in 2017. However, the uncertainty still surrounding the project, as well as the fact that large public infrastructure projects rarely start when originally scheduled, means that it is not included in the current forecast. Phase 2, from Birmingham to the North West and Yorkshire, is likely to start sometime in the mid-2020s. Should the project go ahead, it will provide an output stream for the UK infrastructure sector for the best part of two decades.

Construction employment in the West Midlands is forecast to decrease by 0.2% a year on average over the five years to 2018



3 Construction employment forecasts for the West Midlands

3.1 Total construction employment forecasts by occupation

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

Construction employment in the West Midlands is forecast to decrease by 0.2% a year on average over the five years to 2018. Employment is expected to fall in each year of the five years to 2018. This is in stark contrast to the UK average, which outlines growth of 1.2% over the same period.

Construction output in the West Midlands in real terms is estimated to have peaked in 2004 and has generally been declining since then. By 2012, it was 29% below its peak. Meanwhile, employment has only fallen by

14% from its 2008 peak, suggesting significant excess capacity in the industry. This, combined with low output growth over the next five years, leads to a slightly negative employment growth forecast, assuming some productivity gain over the period.

The largest construction-specific occupations in the West Midlands are other construction process managers (8.3%) followed by wood trades and interior fit-out (7.7%). Wood trades and interior fit-out's share of total construction employment in the West Midlands is below above the UK average (9.9%).

Employment growth is forecast to be strongest for other construction professionals and technical staff, with an average annual rate of 2.9%, followed by construction project managers at 1.8% a year and then scaffolders (1.5%). The majority of occupational groups (21 out of 28) are projected to see a fall in employment levels over the next five years.

Total employment by occupation – West Midlands

	Actual	Estimate	Forecast	
	2012	2013	2014	2018
Senior, executive and business process managers	19,150	17,200	17,350	17,820
Construction project managers	2,260	2,200	2,250	2,400
Other construction process managers	16,180	17,670	17,540	17,330
Non-construction professional, technical, IT and other office-based staff	28,920	26,060	25,790	24,920
Construction trades supervisors	4,100	4,130	4,180	4,350
Wood trades and interior fit-out	15,080	15,280	15,230	15,180
Bricklayers	4,780	4,270	4,190	3,990
Building envelope specialists	6,160	5,820	5,800	5,700
Painters and decorators	7,340	6,990	6,880	6,560
Plasterers	2,100	1,880	1,810	1,620
Roofers	3,050	2,990	2,940	2,780
Floorers	1,250	1,360	1,360	1,350
Glaziers	3,390	3,030	3,010	2,950
Specialist building operatives nec*	3,220	2,880	2,900	3,010
Scaffolders	2,310	2,520	2,570	2,720
Plant operatives	2,240	2,000	1,980	1,900
Plant mechanics/fitters	5,280	5,190	5,160	5,130
Steel erectors/structural fabrication	2,820	3,080	3,020	2,840
Labourers nec*	9,650	10,500	10,240	9,390
Electrical trades and installation	14,470	13,720	13,670	13,520
Plumbing and HVAC Trades	12,960	13,050	12,930	12,640
Logistics	3,010	2,690	2,660	2,600
Civil engineering operatives nec*	2,060	2,110	2,070	1,980
Non-construction operatives	2,660	2,650	2,670	2,720
Civil engineers	1,980	1,990	1,970	1,900
Other construction professionals and technical staff	12,470	11,140	11,540	12,870
Architects	1,350	1,200	1,200	1,180
Surveyors	4,640	4,970	5,010	5,130
Total (SIC 41-43)	174,440	169,270	168,200	165,400
Total (SIC 41-43, 71.1, 74.9)	194,880	188,570	187,920	186,480

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

3.2 Annual recruitment requirements (ARR) by occupation

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

The ARR for the 28 occupations within the West Midlands construction industry is illustrated in the table. The figure of 380 is indicative of the average requirements per year for the industry, as based on the output forecasts for the region. This takes into account 'churn' i.e. the flows into and out of the industry, excluding training flows.

In absolute terms, the largest requirement for a construction-specific trade is for electrical trades and installation (140), and it has the highest requirement based upon projected 2014 employment at 1%. The region's ARR of 380 is equivalent to just 0.2% of base 2014 employment, the lowest of all regions and devolved nations and substantially lower than the UK average (1.5%).

CITB's 2012 Workforce Mobility and Skills report provides some useful figures on geographical migration of the construction workforce. According to the report, only 57% of the construction workforce in the West Midlands originated there, the fourth-lowest proportion after the East of England, the South East, and Greater London. This is probably a largely a function of the central geographical position of the West Midlands, meaning that it attracts workers from many other regions. It also has the third-highest proportion of its workforce from overseas (8%), behind only Greater London (16%) and the South East (10%).

Note that all of the ARR's presented in this section are employment requirements and not necessarily training requirements. This is because some new entrants to the construction industry, such as skilled migrants or those from other industries where similar skills are used, will be able to work in the industry without the need for significant retraining.

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

Annual recruitment requirement by occupation – West Midlands

	2014-2018
Senior, executive and business process managers	-
Construction project managers	-
Other construction process managers	-
Non-construction professional, technical, IT and other office-based staff	-
Construction trades supervisors	<50
Wood trades and interior fit-out	120
Bricklayers	-
Building envelope specialists	-
Painters and decorators	-
Plasterers	-
Roofers	-
Floorers	<50
Glaziers	-
Specialist building operatives nec*	<50
Scaffolders	-
Plant operatives	-
Plant mechanics/fitters	-
Steel erectors/structural fabrication	-
Labourers nec*	-
Electrical trades and installation	140
Plumbing and HVAC Trades	-
Logistics	-
Civil engineering operatives nec*	-
Non-construction operatives	-
Civil engineers	-
Other construction professionals and technical staff	-
Architects	<50
Surveyors	-
Total (SIC 41-43)	350
Total (SIC 41-43, 71.1, 74.9)	380

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

4 Comparisons across the UK

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

Once the South West and Wales are stripped away, the south east corner of England is again due to do rather better than the rest of the UK. The South East benefits disproportionately from growth in the private housing sector which takes a larger share of output in the region than the UK average (18% vs. 14%). This combined with a higher than average growth rate (5.7% vs. 4.6%) helps boost overall expansion in the South East's construction sector (with an annual average growth of 2.9% to 2018). The East of England has a slightly stronger average growth rate of 3% a year. The main reasons for the region's higher than average increase in construction output are good growth in private housing, combined with higher than average infrastructure

expansion when work starts on the site of the Sizewell C new nuclear project at the beginning of 2018. In addition, strong growth in industrial construction is linked to the development of distribution and logistics facilities around London Gateway Port.

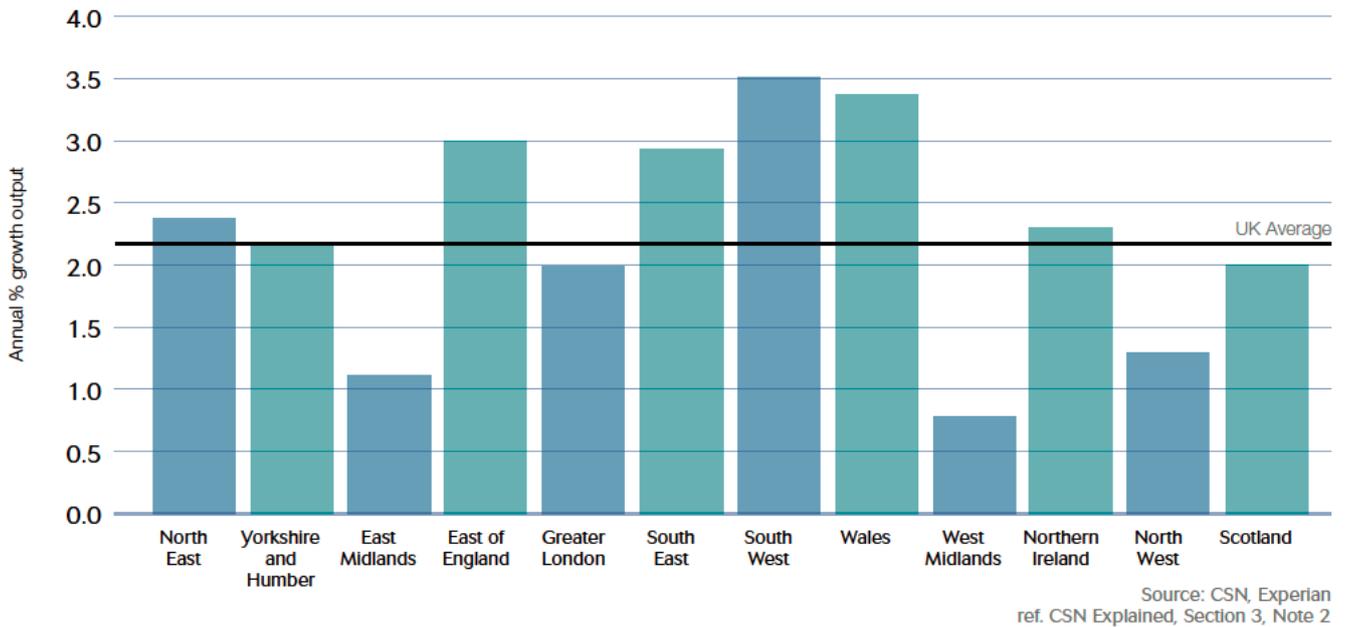
Interestingly however, Greater London's projected annual average output growth rate of 2% is slightly below the UK average (2.2%). Greater London is the only region to have experienced expansion in construction output in real terms over the five years to 2012; therefore activity in some sectors may be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

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

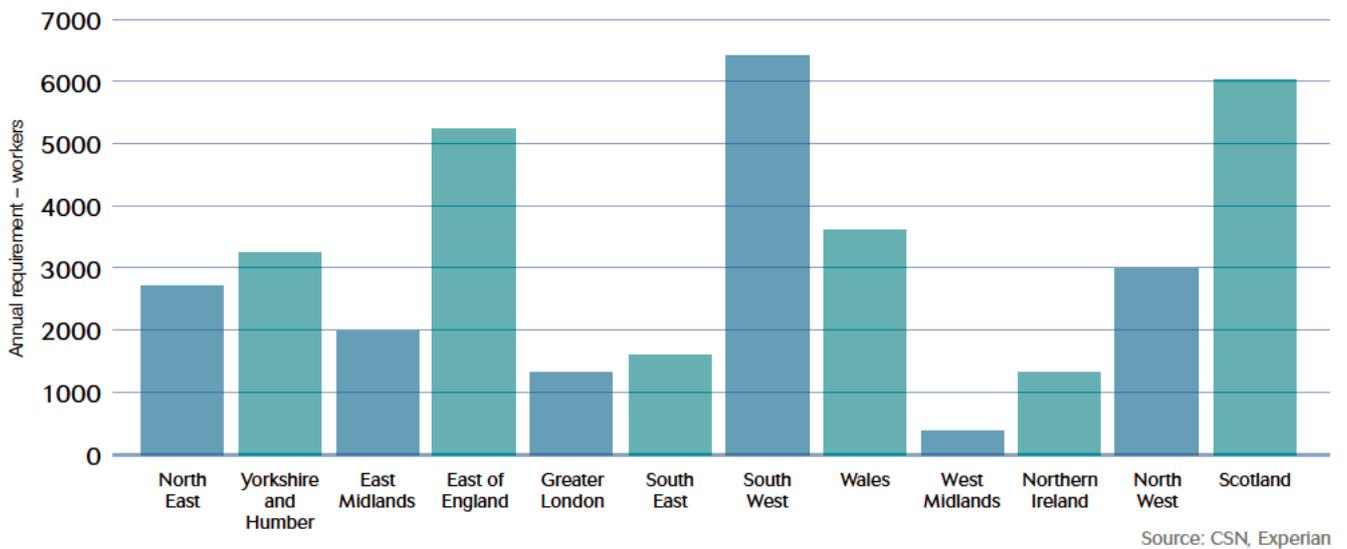
Concerns about prospective skills shortages have been increasing in some quarters recently, which may initially seem surprising given the industry's position in the recovery cycle. Construction output in 2013 is likely still to be 15% below its 2007 peak, and employment is likely to be 13% down on its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



Annual average output growth by region 2014-2018



Annual recruitment requirement (ARR) by region 2014-2018



CSN Explained

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

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

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

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

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

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

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



1 CSN methodology

Background

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

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

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

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

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

The model approach

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

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

The **annual recruitment requirement** (ARR) is a gross requirement that takes into account workforce flows into and out of construction, due to such factors as movements between industries, migration, sickness and retirement. However, these flows do not include movements into the industry from training, although robust data on training provision is being developed by CITB in partnership with public funding agencies, further education, higher education and employer representatives. Thus, the annual recruitment requirement provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output. Estimates of demand are based upon the results of discussion groups comprising industry experts, a view of construction output and integrated models relating to wider national and regional economic performance. The models are dynamic and reflect the general UK economic climate at any point in time. To generate the labour demand, the models use a set of specific statistics for each major type of work to determine the employment, by trade, needed to produce the predicted levels of construction output. The labour supply for each type of trade or profession is based upon the previous year's supply (the total stock of employment) combined with flows into and out of the labour market.

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

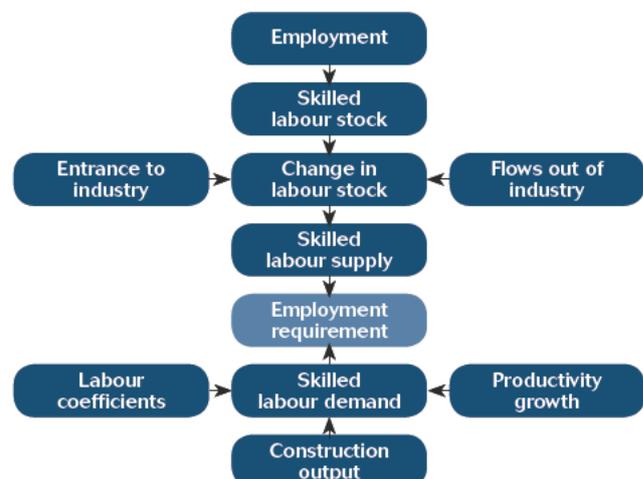
- Transfers to other industries
- International/domestic OUT migration
- Permanent retirements (including permanent sickness)
- Outflow to temporary sickness and home duties.

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

Flows into the labour market include:

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

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



2 Glossary of terms

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

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

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

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

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

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

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

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

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

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

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

Productivity – output per employee.

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

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

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



3 Notes and footprints

Notes

- 1 Except for Northern Ireland, output data for the English regions, Scotland and Wales is supplied by the Office for National Statistics (ONS) on a current price basis. Thus, national deflators produced by the ONS have been used to deflate prices to a 2005 constant price basis, so that the effects of inflation have been stripped out.
- 2 The annual average growth rate of output is a compound average growth rate, i.e. the rate at which output would grow each year if it increased steadily over the forecast period.
- 3 Only selected components of gross value added (GVA) are shown in this table and so do not sum to the total.
- 4 For new construction orders, comparison is made with Great Britain rather than the UK, owing to the fact that there are no orders data series for Northern Ireland.
- 5 Employment numbers are rounded to the nearest 10.
- 6 The tables include data relating to plumbers and electricians. As part of SIC 43, plumbers and electricians working in contracting are an integral part of the construction process. However, it is recognised by ConstructionSkills that SummitSkills has responsibility for these occupations across a range of SIC codes, including SIC 43.2.
- 7 A reporting minimum of 50 is used for the annual recruitment requirement (ARR). As a result some region and devolved nation ARR forecasts do not sum to the total UK requirement.
- 8 The Employment and ARR tables show separate totals for SIC 41-43 and SIC 41-43, 71.1 and 74.9. The total for SIC 41-43 covers the first 24 occupational groups on the relevant tables and excludes civil engineers, other construction professionals and technical staff, architects and surveyors. The total for SIC 41-43, 71.1 and 74.9 includes all occupations.

Footprints for Built Environment SSCs

ConstructionSkills is responsible for SIC 41 Construction of buildings, SIC 42 Civil engineering, SIC 43

Specialised construction activities and SIC 71.1 Architectural and engineering activities and related technical consultancy.

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

The sector footprints for the other SSCs covering the Built Environment

SummitSkills

Footprint – plumbing, heating, ventilation, air conditioning, refrigeration and electrotechnical.

Coverage – Building services engineering.

ConstructionSkills shares an interest with SummitSkills in SIC 43.21 Electrical installation and SIC 43.22 Plumbing, heat and air-conditioning installation. ConstructionSkills recognises the responsibility of SummitSkills across Standard Industrial Classifications (SIC) 43.21 and 43.22; thus data relating to the building services engineering sector is included here primarily for completeness.

AssetSkills

Footprint – property services, housing, facilities, management, cleaning.

Coverage – property, housing and land managers, chartered surveyors, estimators, valuers, home inspectors, estate agents and auctioneers (property and chattels), caretakers, mobile and machine operatives, window cleaners, road sweepers, cleaners, domestics, facilities managers.

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

Energy and Utility Skills

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

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

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

AssetSkills has a peripheral interest in SIC 71.1

4 Definitions: types and examples of construction work

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

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

Private sector housing

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

Infrastructure – public and private

Water

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

Sewerage

Sewage disposal works, laying of sewers and surface drains.

Electricity

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

Gas, communications, air transport

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

Railways

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

Harbours

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

Roads

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

Public non-residential construction¹

Factories and warehouses

Publicly owned factories, warehouses, skill centres.

Oil, steel, coal

Now restricted to remedial works for public sector residual bodies.

Schools, colleges, universities

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

Health

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

Offices

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

Entertainment

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

Garages

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

Shops

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

Agriculture

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

Miscellaneous

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

Private industrial work

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

Private commercial work¹

Schools and universities

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

Health

Private hospitals, nursing homes, clinics.

Offices

Office buildings, banks.

Entertainment

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

Garages

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

Shops

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

Agriculture

All buildings and work on farms, horticultural establishments.

Miscellaneous

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

New work

New housing

Construction of new houses, flats, bungalows only.

All other types of work

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

Repair and maintenance

Housing

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

All other sectors

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

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

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

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

5 Occupational groups

Occupational group

Description, SOC (2010) reference.

Senior, executive, and business process managers

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

Construction project managers

Construction project managers and related professionals	2436
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Other construction process managers

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

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

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

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

*Not elsewhere classified

Sales supervisors	7130	Tool makers, tool fitters and markers-out	5222
Customer service managers and supervisors	7220	Vehicle body builders and repairers	5232
Office managers	4161		
Construction trades supervisors		Steel erectors/structural fabrication	
Skilled metal, electrical and electronic trades supervisors	5250	Steel erectors	5311
Construction and building trades supervisors	5330	Welding trades	5215
Wood trades and interior fit-out		Metal plate workers and riveters	5214
Carpenters and joiners	5315	Construction and building trades nec* (5%)	5319
Paper and wood machine operatives	8121	Smiths and forge workers	5211
Furniture makers and other craft woodworkers	5442	Metal machining setters and setter-operators	5221
Construction and building trades nec* (25%)	5319		
Bricklayers		Labourers nec*	
Bricklayers and masons	5312	Elementary construction occupations (100%)	9120
Building envelope specialists		Electrical trades and installation	
Construction and building trades nec* (50%)	5319	Electricians and electrical fitters	5241
Painters and decorators		Electrical and electronic trades nec*	5249
Painters and decorators	5323	Telecommunications engineers	5242
Construction and building trades nec* (5%)	5319	Plumbing and heating, ventilation and air conditioning trades	
Plasterers		Plumbers and heating and ventilating engineers	5314
Plasterers	5321	Pipe fitters	5216
Roofers		Construction and building trades nec* (5%)	5319
Roofers, roof tilers and slaters	5313	Air-conditioning and refrigeration engineers	5225
Floorers		Logistics	
Floorers and wall tilers	5322	Large goods vehicle drivers	8211
Glaziers		Van drivers	8212
Glaziers, window fabricators and fitters	5316	Elementary storage occupations	9260
Construction and building trades nec* (5%)	5319	Buyers and purchasing officers (50%)	3541
Specialist building operatives nec*		Transport and distribution clerks and assistants	4134
Construction operatives nec* (100%)	8149	Civil engineering operatives nec*	
Construction and building trades nec* (5%)	5319	Road construction operatives	8142
Industrial cleaning process occupations	9132	Rail construction and maintenance operatives	8143
Other skilled trades nec*	5449	Quarry workers and related operatives	8123
Scaffolders		Non-construction operatives	
Scaffolders, staggers and riggers	8141	Metal making and treating process operatives,	8117
Plant operatives		Process operatives nec*	8119
Crane drivers	8221	Metal working machine operatives	8125
Plant and machine operatives nec*	8129	Water and sewerage plant operatives	8126
Fork-lift truck drivers	8222	Assemblers (vehicles and metal goods)	8132
Mobile machine drivers and operatives nec*	8229	Routine inspectors and testers	8133
Plant mechanics/fitters		Assemblers and routine operatives nec*	8139
Metal working production and maintenance fitters	5223	Elementary security occupations nec*	9249
Precision instrument makers and repairers	5224	Cleaners and domestics	9233
Vehicle technicians, mechanics and electricians	5231	Street cleaners	9232
Elementary process plant occupations nec*	9139	Gardeners and landscape gardeners	5113
		Caretakers	6232
		Security guards and related occupations	9241
		Protective service associate professionals nec*	3319
		Civil engineers	
		Civil engineers	2121

*Not elsewhere classified

Other construction professionals and technical staff

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

Architects

Architects	2431
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Surveyors

Quantity surveyors	2433
Chartered surveyors	2434

*Not elsewhere classified



6 CSN website and contact details

The CSN website

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

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

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

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

The website also contains information about:

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

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

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

- Details of specific projects
- Demand within various types of work or sectors
- Labour supply issues
- Inflows and outflows across the regions and devolved nations.

CSN members therefore have:

- Early access to forecasts
- The opportunity to influence and inform the data
- The ability to request scenarios that could address 'What would happen if...?' types of questions using the model.

Through contact with the CITB research team CSN members can:

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

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

Contact details

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

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