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# Construction Skills Network East Midlands 2014-2018

Labour Market Intelligence



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# Contents

1	Summary and key findings.....	4
2	The outlook for construction in the East Midlands.....	6
3	Construction employment forecasts for the East Midlands.....	12
4	Comparisons across the UK.....	14

## Tables and charts

1	Annual average construction output growth 2014-2018.....	4
2	Regional comparison 2014-2018.....	5
3	Construction output 1996-2012.....	6
4	Construction industry structure 2012 – UK vs. East Midlands.....	6
5	Economic structure.....	7
6	Economic indicators.....	7
7	New construction orders growth 1996-2012.....	8
8	New work construction orders.....	8
9	Construction output 2014-2015.....	9
10	Annual average construction output growth 2014-2015.....	9
11	Annual average construction output growth 2014-2018.....	10
12	Construction output 2014-2018.....	11
13	Total employment by occupation.....	12
14	Annual recruitment requirement by occupation.....	13
15	Annual average output growth by region.....	15
16	Annual recruitment requirement by region.....	15

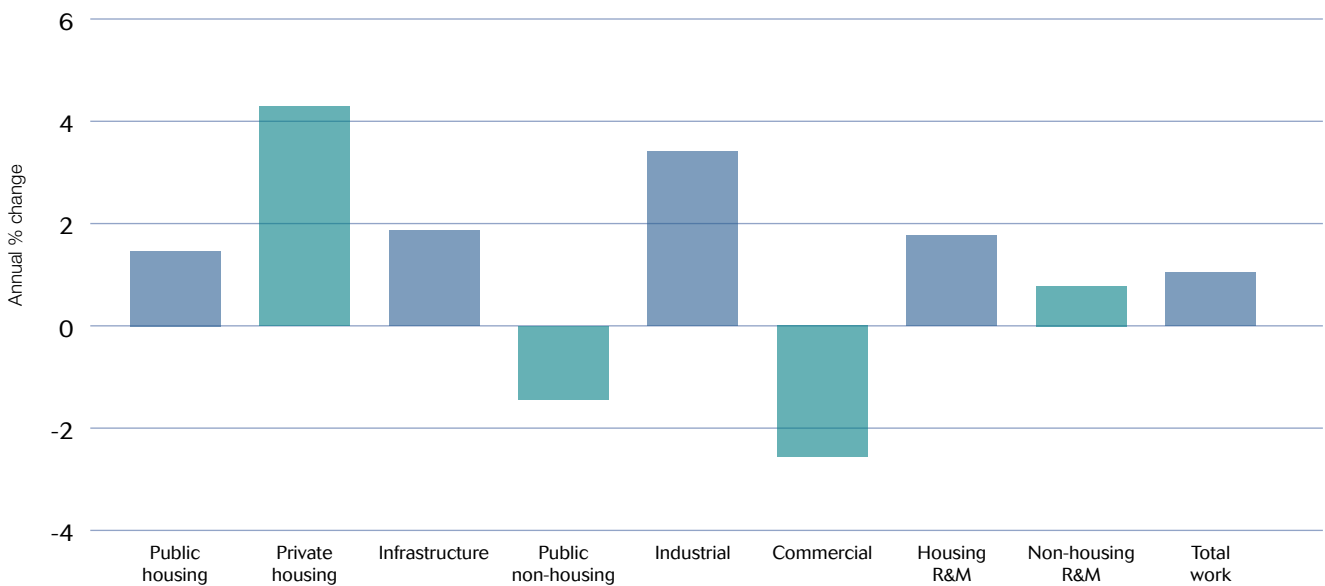
## CSN explained

1	CSN methodology.....	17
2	Glossary of terms.....	18
3	Notes and footprints.....	19
4	Definitions: types and examples of construction work.....	20
5	Occupational groups.....	22
6	CSN website and contact details.....	25

# 1 Summary – East Midlands

The East Midlands is expected to see growth in construction activity over the forecast period. However, at an average annual rate of 1.1% it performs worse than the UK as a whole, which is set to see growth of 2.2%. Repair and maintenance (R&M) output is expected to pick up by 1.2% per year on average, a slightly better growth rate than new work (1%) over the same period. The private housing sector is expected to be the strongest performer, with annual average growth of 4.3%. The region is set to see construction employment increase at an annual average rate of 0.7%, lower than the UK rate of 1.2%. The annual recruitment requirement (ARR) for the East Midlands is 1,980, among the lower figures across the regions and devolved nations.

**Annual average construction output growth 2014-2018 – East Midlands**



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



## 1.1 Key findings

Growth is projected for all but two sectors in the East Midlands over the forecast period. Public non-housing and commercial construction are the exceptions, with forecasted contractions of 1.5% and 2.6% respectively.

Average annual growth of 4.3% is expected for the private housing sector, with output expected to rise in each year to 2018. Government incentives such as Help to Buy and the recently redirected Funding for Lending scheme have supported recent growth and Help to Buy should continue to do so, at least in the early part of the forecast period.

Activity in the infrastructure sector is projected to expand by an average of nearly 2% a year in the five years to 2018. Growth should be boosted by a number of key projects, such as the biomass-fuelled renewable power station in Lincolnshire (£300m), as well as ongoing development work on the Kettering bypass.

Solid growth is expected in the industrial sector over the forecast period, at an annual average rate of 3.4%. Work on a new rail distribution centre in Leicestershire, coupled with the development of a number of medium-sized industrial sites, should keep activity in the sector buoyant.

Commercial construction growth is set to see the largest contraction of any sector, at an annual average of 2.6%. The muted outlook for this sector is due to a lack of large scale projects currently on site and in the pipeline.

Construction employment in the East Midlands is projected to reach 165,000 in 2018, an annual average increase of 0.7% over the forecast period. Employment is expected to grow each year of the forecast period, but the overall growth rate is lower than the UK average (1.2%).

Employment growth is forecast to be strongest for plant mechanics/fitters (5.0% a year on average), plumbing and HVAC trades (3.6% a year) and construction project managers (3.4%). Just over half of occupational groups (15 out of 28) should see some growth in employment levels over the next five years.

The East Midlands' ARR is 1,980, equivalent to 1.2% of base 2014 employment and below the UK figure of 1.5%, although well above the West Midlands (0.2%).

The East Midlands is expected to see growth in construction activity over the forecast period at an average annual rate of 1.1%

### 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

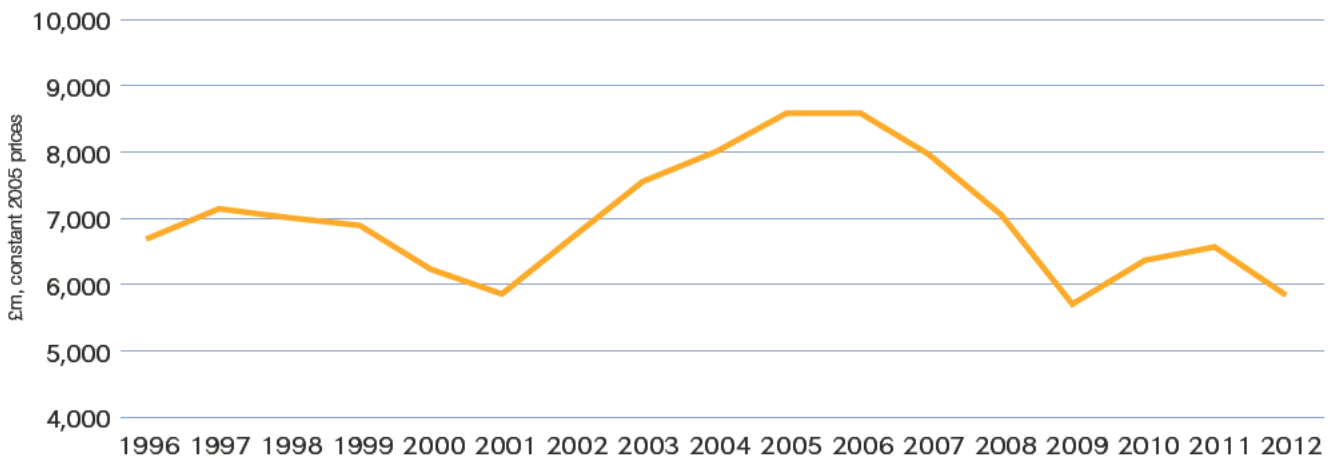
## 2 The outlook for construction in the East Midlands

### 2.1 Construction output in the East Midlands – overview

After two straight years of growth, construction activity in the East Midlands fell by 11% in 2012 to £5.9bn at 2005 prices, the first time that the overall figure dipped below the £6bn mark in three years. Both the new work and repair and maintenance sectors saw sizeable contractions, with the former falling at a double-digit rate.

Falls were seen across the majority of new work and R&M sectors in 2012, although public housing (4%) and infrastructure (1%) both managed modest upturns. The sharpest declines were seen in the public non-housing and commercial sectors, with falls of 20% and 18% respectively. While the former continued to feel the strain of funding cuts, the latter suffered from a lack of sizeable projects, as demonstrated by a second double-digit annual decline in as many years. The private housing and industrial sectors also performed poorly, both posting sizeable falls in output.

#### Construction output – East Midlands 1996-2012



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

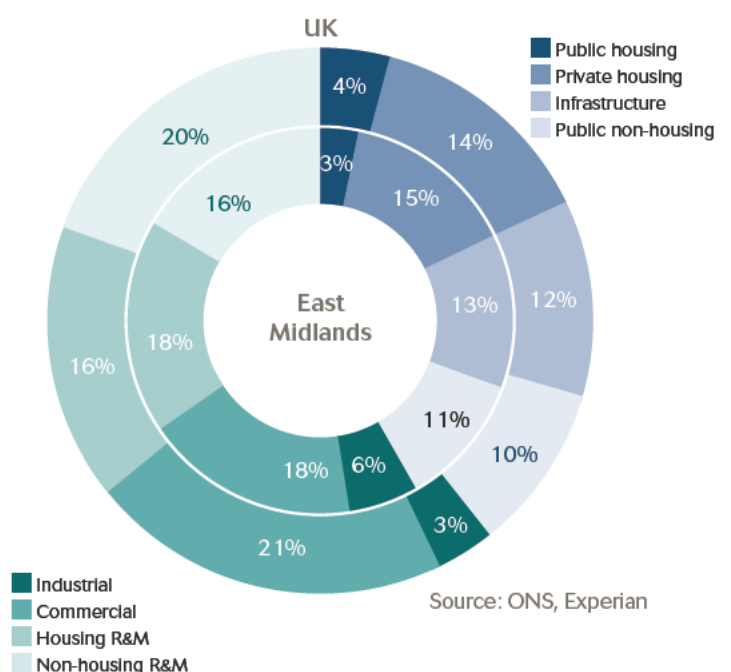
### 2.2 Industry structure

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

The new work sector in the East Midlands accounted for 65% of total construction output in 2012, roughly in line with the UK average (64%). The new work sector's share of output remained unchanged from 2011.

The overall structure of the construction market in the East Midlands is similar to that of the UK as a whole. The biggest difference is a proportionally smaller non-housing R&M sector in the region compared with the UK average (16% vs. 20%). Conversely, the housing R&M sector is proportionally larger, accounting for only 18% of output in the East Midlands compared with 16% in the UK as a whole. The commercial sector was also under-represented at the regional level with an 18% share, compared with a 21% national figure.

#### Construction Industry structure 2012 UK vs. East 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, the economy in the East Midlands remained relatively unchanged from 2011, with gross value added (GVA) totalling £80.5bn in 2010 prices, up 0.9% on 2011. The region accounted for 6% UK GVA, unchanged from 2011.

Professional and other private services once again formed the largest component of GVA within the East Midlands (22.9%), although the sector was slightly less important here than it was nationally (24.3%). The second-largest sector was public services, making up 19.2% of GVA, virtually unchanged from the previous year. The next largest sectors were manufacturing and wholesale and retail, with shares of 14.5% and 14.1% respectively,

above the corresponding UK figures of 10% and 11%. Meanwhile, construction accounted for 7.3% of the region's activity, which was above the UK level (5.8%).

Looking at the main sectors, growth was strongest in the professional and other private services sector at 5.8% in 2012, helping it retain its place as the largest sector in the region. Public services followed with an upturn of 3.3%. Manufacturing activity fell by 0.8% in 2012, while the wholesale and retail sector also saw a slight drop in activity, at 0.4%.

Overall, the structure of the East Midlands economy is similar to that of the UK as a whole, with the professional and other private and public services sectors accounting for the largest share of output in both areas.

### Economic structure – East Midlands (£ billion, 2010 prices)

Selected sectors	Actual	Forecast					
		Annual % change, real terms					
	2012	2013	2014	2015	2016	2017	2018
Public services	15.5	2.2	0.2	0.3	0.7	1.0	1.5
Professional and other private services	18.4	0.3	2.2	2.0	2.3	2.3	2.3
Manufacturing	11.6	-0.5	1.7	1.2	1.2	1.1	1.0
Wholesale and retail	11.4	6.8	2.4	2.2	2.4	2.2	2.2
Transport and storage	4.1	0.2	1.5	1.9	2.4	2.3	2.5
Total Gross Value Added (GVA)	80.5	1.1	1.6	1.7	1.9	2.0	2.0

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

## 2.5 Forward looking economic indicators

The economy in the East Midlands is expected to have grown by 1.1% in 2013, with the growth of the wholesale and retail sector particularly strong (6.8%). GVA is forecast to grow at an annual average rate of 1.8% over the 2014 to 2018 period, below the UK average of 2%.

The largest sector in the region, professional and other private services, is expected to see output rise by 2.2% per year on average over the five years to 2018, while the second-largest sector, public services is expected to see average growth of just 0.7% during the same period as financial constraints continue to impact on the sector. Manufacturing, the third-largest sector, is set for an annual average expansion of 1.2%. One of the most buoyant sectors is expected to be information and communication,

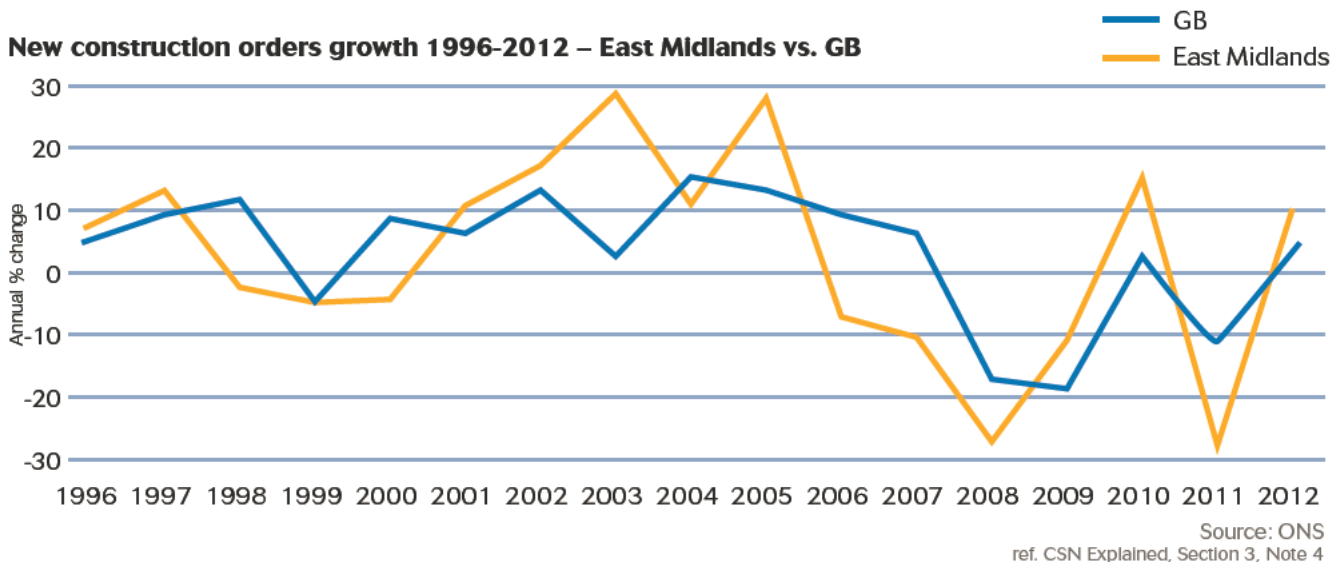
with an annual average growth rate of 2.8%. This sector is on a strong growth path across the UK as a whole, although its share of GVA in the East Midlands is lagging behind the UK average (4% vs. 6.5% in 2012).

In the East Midlands, household spending is estimated to have grown by 0.6% in 2012, mirroring a similar rise in real household disposable income (RHDI), by 0.9%. The East Midlands is one of the few regions in which spending is not thought to have outstripped RHDI growth in 2013, but over the forecast period this trend is likely to reverse. This coincides with a general improvement in the wider macro-economy, where, as economic sentiment improves, households do not feel the need to save as much of their income. We expect real household disposable income to rise at an annual average rate of 1.7% per year to 2018.

### Economic indicators – East Midlands (£ billion, 2010 prices – unless otherwise stated)

	Actual	Forecast					
		Annual % change, real terms					
	2012	2013	2014	2015	2016	2017	2018
Real household disposable income	65.1	-0.8	1.0	1.4	1.8	2.0	2.3
Household spending	61.4	1.3	1.4	1.6	2.0	2.1	2.2
Working age population (000s and as % of all)	2,788	61.31	61.63	61.91	62.11	62.23	62.25
House prices (£)	169,239	0.55	1.02	1.34	1.63	1.81	2.18
LFS unemployment (millions)	0.18	-1.67	-1.38	-6.47	-3.02	-2.46	-3.27

Source: ONS, DCLG, Experian



The working age population in the region stood at 2.8m in 2012, making up 61% of total population in the region, and the proportion is expected to edge upwards through the forecast period. The estimated unemployment rate for the region in 2013 is 7.9%, slightly above the UK average of 7.8%, and is expected to fall to 6.5% by 2018.

### 2.6 New construction orders – overview

Following a sharp contraction in 2011, the new construction orders in the East Midlands managed growth of 10% in 2012 to total £2.87bn.

The strongest upturn in 2012 was in the infrastructure sector, which saw its orders more than double on an annual basis to £760m, well above the long term average for the sector. Upturns were also seen in the private and public housing sectors, at 20% and 5% respectively, although new orders in the former sector remain less than half of their 2006 value.

Conversely, public non-housing orders dropped by 31%, to £454m, their lowest level since 2001. Sharp falls were also seen in the industrial sector, with orders falling by 29% on an annual basis, to £209m in 2012.

### 2.7 New construction orders – current situation

In the six months to June 2013, construction new orders in the East Midlands totalled £1.5bn in current prices, 4% below the corresponding period of 2012. Both the private housing and public non-housing sectors saw large increases in new orders, with the former up 62% to £593m and the latter up 55% to £302m.

In contrast, significant declines were seen in the infrastructure (£296m), industrial (£70m) and commercial (£198m) sectors, with contractions of 49%, 24% and 34% 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.

In the six months to June 2013, construction output in the East Midlands totalled £3.1bn in current prices, 10% lower than in the corresponding period of 2012. New work output fared better than R&M, although both

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

	Actual	Annual % change				
	2012	2008	2009	2010	2011	2012
Public housing	124	-18.8	5.2	-20.2	-9.2	5.1
Private housing	678	-58.6	-41.3	108.4	-26.5	19.6
Infrastructure	760	-16.7	55.9	52.8	-64.3	116.5
Public non-housing	454	23.7	12.7	-22.3	-12.8	-30.6
Industrial	209	-46.2	-28.7	-19.5	40.0	-28.9
Commercial	642	-11.8	-28.6	6.0	-22.2	1.7
<b>Total new work</b>	<b>2,867</b>	<b>-27.1</b>	<b>-9.3</b>	<b>15.5</b>	<b>-28.5</b>	<b>9.7</b>

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



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

	Actual	Forecast			Annual average
		Annual % change			
	2012	2013	2014	2015	2014-15
Public housing	185	2%	-6%	5%	-0.7%
Private housing	858	4%	6%	6%	6.0%
Infrastructure	750	1%	3%	0%	1.8%
Public non-housing	657	-22%	-9%	-1%	-5.1%
Industrial	346	-19%	11%	8%	9.6%
Commercial	1,040	-5%	-14%	-2%	-7.8%
<b>New work</b>	<b>3,835</b>	<b>-6%</b>	<b>-2%</b>	<b>2%</b>	<b>-0.1%</b>
Housing R&M	1,056	-18%	1%	3%	2.1%
Non-housing R&M	966	12%	-1%	3%	1.1%
<b>Total R&amp;M</b>	<b>2,023</b>	<b>-4%</b>	<b>0%</b>	<b>3%</b>	<b>1.5%</b>
<b>Total work</b>	<b>5,857</b>	<b>-5%</b>	<b>-1%</b>	<b>2%</b>	<b>0.5%</b>

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

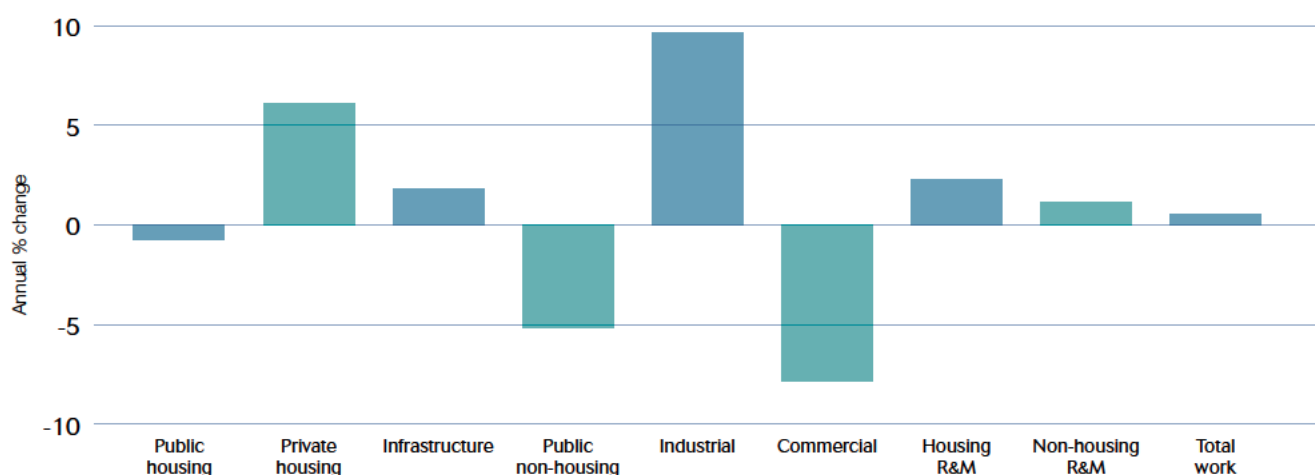
saw declines, at 8% and 13% respectively. In the first half of 2013, the only sectors to see growth were public housing (9%) and private housing (1%). Conversely, the sharpest declines were seen in public non-housing and industrial construction, with respective falls of 24% and 36% over this period.

For 2013 as a whole, construction output in the East Midlands is estimated to have fallen by 5% in real terms. The outlook for 2014 is also pessimistic, as further declines are anticipated, but activity in the sector should return to growth in 2015, resulting in an expected annual average growth rate of 0.5% over 2014–2015. Activity in the R&M sector is expected to outpace that of the new work sectors over the period.

Output in the industrial sector is set to see the largest upturn in the short term, with forecasted annual average growth of nearly 10% over the two years to 2015. Work on the new £248m rail freight distribution facility in north-west Leicestershire will help to support activity going forward.

The private housing sector is expected to see growth averaging 6% in each year to 2015. Improvement in the macro-economy and incentives such as Help to Buy will continue to support growth in the sector. Overall, output is still well below its long-term average and the figure for 2012 was less than half of the 2006 level. This was also reflected in private housing starts, which were at their lowest level for three years in 2012 and just 41% of their 2004–2007 peak average. However, the negative trend did reverse in the first three quarters of 2013, with starts up by 33% on the same period of 2012.

In the short term, the strongest declines are expected to be in the public non-housing and commercial sectors, with annual average falls of 5.1% and 7.8% respectively between 2014 and 2015. Funding remains an issue in the former sector, while lack of significant projects is the main reason for the fall in the latter. The contractions are less severe than those seen in recent years and noteworthy growth is expected in all remaining new work sectors, with the exception of public housing,

**Annual average construction output growth 2014-2015 – East Midlands**

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

The private housing sector is expected to be the strongest performer with annual average growth of 4.3%

which is forecast to see an average contraction of 0.7% over the same period. While the prospects for the economy are much better than they were a year ago, the impacts of the 2008–2009 recession still remain.

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

The East Midlands’ annual average output growth rate over the longer period is better than that over the short term, with anticipated annual average growth of 1.1%, half the UK rate (2.2%). In line with the shorter term forecast, R&M (1.2%) is expected to perform slightly better than new work (1%).

Private housing activity is set to see the highest growth in the medium to-long term, with an annual average growth rate of 4.3% over the five years to 2018. Work on projects such as a new 5,000 home development in Kettering, valued at £500m, should help keep the sector buoyant in the medium term. However, there is concern that, once the funding for the current Help to Buy scheme runs out, activity could stall across the country.

Growth in the industrial sector should cool down over the medium term, dropping to 3.4% in the five years to 2018, as work on current projects begins to wind down without replacement. Nevertheless, it is still forecast to see the second-highest growth out of all the new work sectors, with a number of medium-sized projects in the pipeline.

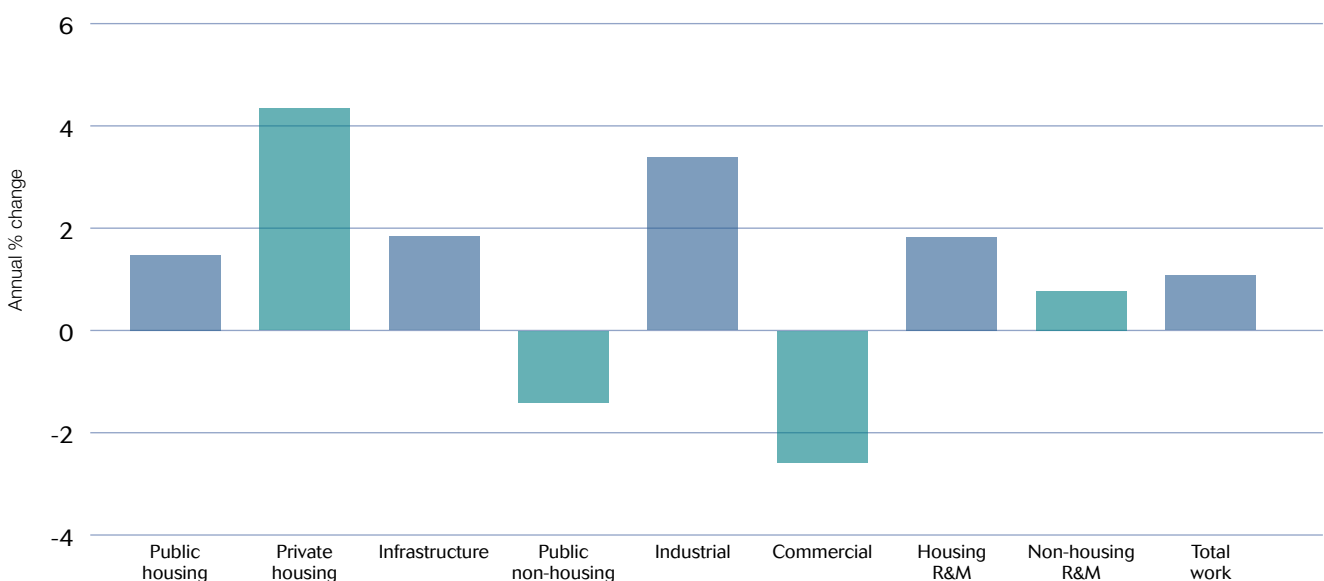
Infrastructure construction output in the East Midlands is projected to grow by an annual average of 1.9%, although most of this growth will be in the second half of the forecast period, as better economic conditions help boost activity. A number of projects in the pipeline are due to start in the latter half of the forecast period, such as the new £100m flood protection system in Derby and a new gas pipeline in South Derbyshire.

Conversely, commercial construction activity is expected to struggle over the five year period to 2018, with a forecasted annual average contraction of 2.6%. However, most of the heavy declines are expected in the first half of the forecast period, and the sector should return to moderate growth by 2016. The redevelopment of Broadmarsh shopping centre is one of the largest schemes in the commercial sector pipeline. The £500m plan involves a full refurbishment and expansion of the current facility, with work scheduled to begin in 2016–2017 and continue until 2020–2021.

### 2.10 Beyond 2018

Towards the end of the forecast and beyond, activity is expected to be driven by a number of large-scale projects, with an emphasis on the infrastructure sector. The key drivers are a number of significant wind farm developments such as Triton Knoll, which is expected to be worth £2bn. While not all of that figure will be realised from an offshore site, onshore assembly plants and other peripheral infrastructure will be required, all of which will no doubt benefit activity at a local level. Work on the scheme is scheduled to commence in 2017 at the earliest, although there remains uncertainty over the exact timing of the project.

### Annual average construction output growth 2014-2018 – East Midlands



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

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

	Estimate	Forecast Annual % change					Annual average
		2013	2014	2015	2016	2017	
Public housing	189	-6%	5%	0%	3%	6%	1.5%
Private housing	888	6%	6%	4%	2%	3%	4.3%
Infrastructure	761	3%	0%	-5%	6%	5%	1.9%
Public non-housing	510	-9%	-1%	1%	0%	2%	-1.5%
Industrial	281	11%	8%	0%	0%	-1%	3.4%
Commercial	988	-14%	-2%	2%	0%	1%	-2.6%
<b>New work</b>	<b>3,617</b>	<b>-2%</b>	<b>2%</b>	<b>1%</b>	<b>2%</b>	<b>3%</b>	<b>1.0%</b>
Housing R&M	869	1%	3%	3%	1%	0%	1.8%
Non-housing R&M	1,082	-1%	3%	2%	1%	-1%	0.8%
<b>R&amp;M</b>	<b>1,951</b>	<b>0%</b>	<b>3%</b>	<b>2%</b>	<b>1%</b>	<b>0%</b>	<b>1.2%</b>
<b>Total work</b>	<b>5,567</b>	<b>-1%</b>	<b>2%</b>	<b>1%</b>	<b>2%</b>	<b>2%</b>	<b>1.1%</b>

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

Construction employment in the East Midlands is projected to reach 165,000 in 2018, an annual average increase of 0.7% over the forecast period



# 3 Construction employment for the East 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 East 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 East Midlands is forecast to increase by 0.7% a year on average over the five years to 2018. Employment is expected to return to growth in 2014 and to accelerate in 2015, although growth is expected to slow down in the latter end of the forecast period. The expected rate of employment growth is lower than the UK average of 1.2%.

The largest construction-specific occupation in the East Midlands is wood trades and interior fit-out (10.2%), roughly in line with the UK average of 9.9%. The mechanical and electrical trades are also important in

the region, with electrical trades and installation taking a 7.7% share of employment in 2012 and plumbing and HVAC trades representing 6.3%.

Employment growth is forecast to be strongest for plant mechanics/fitters, with average annual growth of 5%, followed by plumbing and HVAC trades at 3.6% a year, and then construction project managers (3.3%). Just over half of occupational groups (15 out of 28) should see some growth in employment levels over the next five years.

## 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

### Total employment by occupation – East Midlands

	Actual	Estimate	Forecast	
	2012	2013	2014	2018
Senior, executive and business process managers	9,930	10,680	10,630	10,710
Construction project managers	2,120	2,230	2,310	2,630
Other construction process managers	12,010	12,550	12,940	14,250
Non-construction professional, technical, IT and other office-based staff	22,220	22,210	22,120	22,280
Construction trades supervisors	1,420	1,550	1,590	1,680
Wood trades and interior fit-out	16,330	14,600	15,080	16,520
Bricklayers	4,070	3,640	3,620	3,620
Building envelope specialists	8,130	8,450	8,240	8,060
Painters and decorators	6,680	6,280	6,240	6,230
Plasterers	5,130	4,580	4,480	4,270
Roofers	1,530	1,670	1,690	1,760
Floorers	1,550	1,660	1,670	1,720
Glaziers	2,570	2,810	2,750	2,620
Specialist building operatives nec*	6,100	6,040	5,930	5,800
Scaffolders	460	10	400	310
Plant operatives	3,600	3,510	3,480	3,410
Plant mechanics/fitters	3,330	3,640	3,810	4,640
Steel erectors/structural fabrication	1,390	1,460	1,480	1,600
Labourers nec*	6,650	5,940	5,800	5,410
Electrical trades and installation	12,370	13,510	13,330	13,140
Plumbing and HVAC Trades	10,040	8,970	9,480	10,710
Logistics	1,250	1,120	1,140	1,240
Civil engineering operatives nec*	1,920	2,100	2,130	2,400
Non-construction operatives	2,820	2,520	2,500	2,450
Civil engineers	3,190	3,490	3,480	3,550
Other construction professionals and technical staff	7,650	7,420	7,560	8,110
Architects	640	570	570	560
Surveyors	5,060	5,530	5,450	5,380
<b>Total (SIC 41-43)</b>	<b>143,620</b>	<b>142,130</b>	<b>142,840</b>	<b>147,460</b>
<b>Total (SIC 41-43, 71.1, 74.9)</b>	<b>160,160</b>	<b>159,140</b>	<b>159,900</b>	<b>165,060</b>

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

training. Thus, the annual recruitment requirement provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output.

The ARR for the 28 occupations within the East Midlands construction industry is illustrated in the table. The figure of 1,980 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 plumbing and HVAC trades (230), but as a proportion of projected 2014 employment, logistics will be the most required (4.4%). The region's ARR of 1,980 is equivalent to 1.2% of base 2014 employment, a little 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 63% of the construction workforce in the East Midlands originated there, with 20% of the region's workforce originating from Yorkshire and the Humber and the West Midlands, and 8% coming from outside the UK.

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

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 – East Midlands

	2014-2018
Senior, executive and business process managers	70
Construction project managers	-
Other construction process managers	-
Non-construction professional, technical, IT and other office-based staff	1,060
Construction trades supervisors	<50
Wood trades and interior fit-out	-
Bricklayers	-
Building envelope specialists	-
Painters and decorators	60
Plasterers	100
Roofers	-
Floorers	-
Glaziers	<50
Specialist building operatives nec*	150
Scaffolders	-
Plant operatives	-
Plant mechanics/fitters	-
Steel erectors/structural fabrication	<50
Labourers nec*	170
Electrical trades and installation	-
Plumbing and HVAC Trades	230
Logistics	50
Civil engineering operatives nec*	-
Non-construction operatives	-
Civil engineers	-
Other construction professionals and technical staff	-
Architects	-
Surveyors	-
<b>Total (SIC 41-43)</b>	<b>1,980</b>
<b>Total (SIC 41-43, 71.1, 74.9)</b>	<b>1,980</b>

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

## 4 Comparisons across the UK

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

Once the South West and Wales are stripped away, the south east corner of England is again due to do rather better than the rest of the UK. The South East benefits 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.

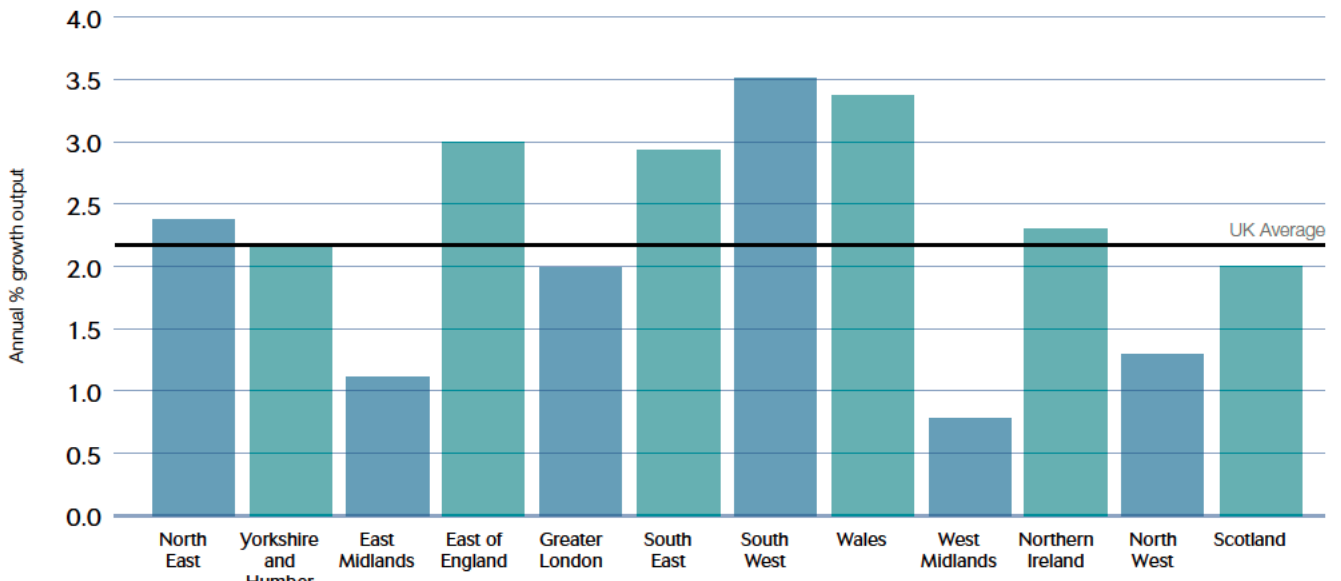
Interestingly however, Greater London's projected annual average output growth rate of 2% is slightly below the UK average (2.2%). Greater London is the only region to have experienced expansion in construction output in real terms over the five years to 2012; therefore activity in some sectors may be 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.

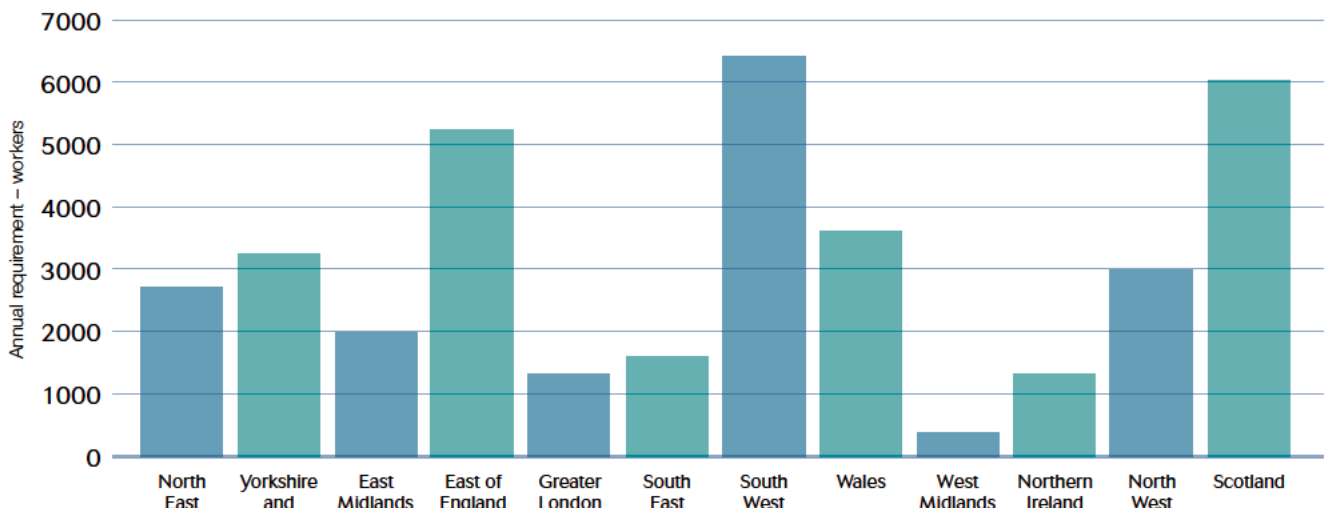


**Annual average output growth by region 2014-2018**



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

**Annual recruitment requirement (ARR) by region 2014-2018**



Source: CSN, Experian



# 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:

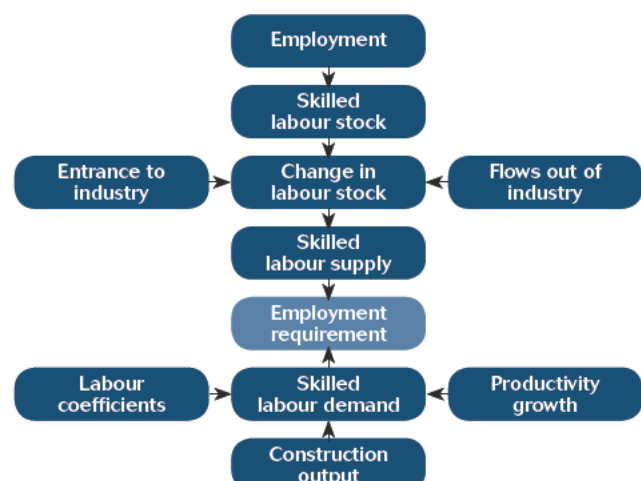
- Transfers to other industries
- International/domestic OUT migration
- Permanent retirements (including permanent sickness)
- Outflow to temporary sickness and home duties.

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 construction<sup>1</sup>**

#### **Factories and warehouses**

Publicly owned factories, warehouses, skill centres.

#### **Oil, steel, coal**

Now restricted to remedial works for public sector residual bodies.

#### **Schools, colleges, universities**

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

#### **Health**

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

#### **Offices**

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

#### **Entertainment**

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

#### **Garages**

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

#### **Shops**

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

#### **Agriculture**

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

#### **Miscellaneous**

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

## Private industrial work

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

## Private commercial work<sup>1</sup>

### 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.<sup>2</sup>

## 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.<sup>3</sup>

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		
<b>Construction trades supervisors</b>		<b>Steel erectors/structural fabrication</b>	
Skilled metal, electrical and electronic trades supervisors	5250	Steel erectors	5311
Construction and building trades supervisors	5330	Welding trades	5215
<b>Wood trades and interior fit-out</b>		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		
<b>Bricklayers</b>		<b>Labourers nec*</b>	
Bricklayers and masons	5312	Elementary construction occupations (100%)	9120
<b>Building envelope specialists</b>		<b>Electrical trades and installation</b>	
Construction and building trades nec* (50%)	5319	Electricians and electrical fitters	5241
<b>Painters and decorators</b>		Electrical and electronic trades nec*	5249
Painters and decorators	5323	Telecommunications engineers	5242
Construction and building trades nec* (5%)	5319	<b>Plumbing and heating, ventilation and air conditioning trades</b>	
<b>Plasterers</b>		Plumbers and heating and ventilating engineers	5314
Plasterers	5321	Pipe fitters	5216
<b>Roofers</b>		Construction and building trades nec* (5%)	5319
Roofers, roof tilers and slaters	5313	Air-conditioning and refrigeration engineers	5225
<b>Floorers</b>		<b>Logistics</b>	
Floorers and wall tilers	5322	Large goods vehicle drivers	8211
<b>Glaziers</b>		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
<b>Specialist building operatives nec*</b>		Transport and distribution clerks and assistants	4134
Construction operatives nec* (100%)	8149	<b>Civil engineering operatives nec*</b>	
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
<b>Scaffolders</b>		<b>Non-construction operatives</b>	
Scaffolders, staggers and riggers	8141	Metal making and treating process operatives,	8117
<b>Plant operatives</b>		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
<b>Plant mechanics/fitters</b>		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
		<b>Civil engineers</b>	
		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](http://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](mailto: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.