

2012–2016 Construction Skills Network Greater London

LABOUR MARKET INTELLIGENCE



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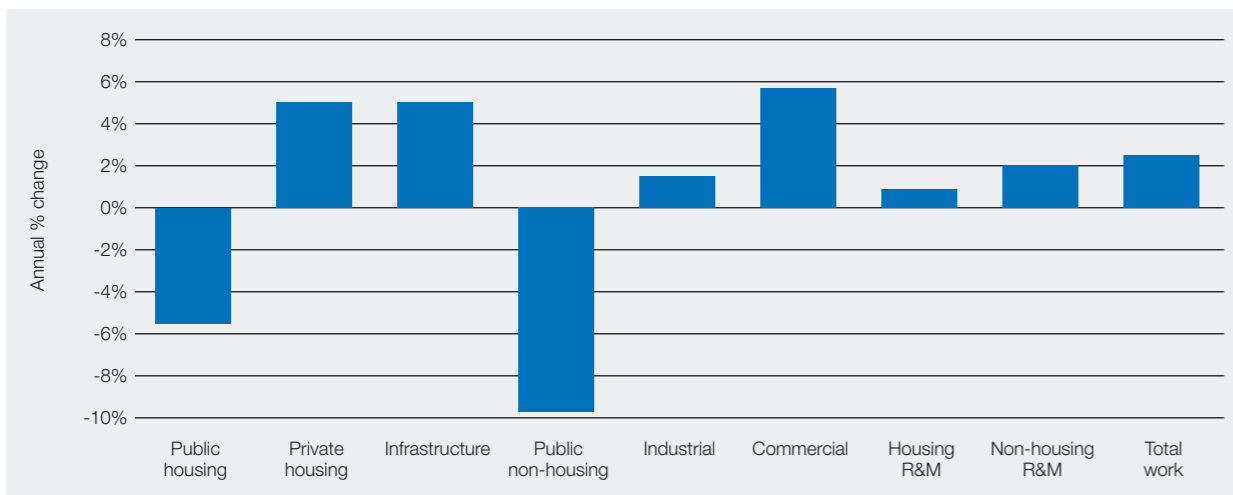
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1. Summary – Greater London

Construction output in Greater London is forecast to rise at an average rate of 2.5% over the five years to 2016, stronger than the national average of 1.4%, and weaker only than the East of England (2.9%). Growth in new work output is projected to average 2.9% per year, substantially stronger than the average of 1.5% for the repair and maintenance sector. Construction employment in the capital is expected to rise by 6% from 2012's projected level to around 371,270 in 2016. This is also 3% higher than the previous peak in 2008.

Annual average construction output growth 2012-2016 - Greater London



Source: CSN, Experian ref. CSN Explained, Section 5.3, Note 2



With projects such as Crossrail and Thameslink, infrastructure will rise on average 5% per year for the forecast period 2012-2016

Key findings

Greater London's infrastructure sector is expected to fare well over the forecast period, as there are a number of large projects underway or due to start during the forecast period. Work is ongoing on Crossrail and various station upgrade projects in the capital, and a further part of the Thameslink project, the upgrade of London Bridge station is due to start in 2013.

The private housing sector in London has held up well during the recession, partly due to overseas buyers at the higher end of the market. It is expected to fare well over the forecast period, and output in 2016 could be 65% higher than its previous peak in 2007. Commercial construction output in the capital will be boosted by a number of large office projects, certainly in the shorter term, with work having restarted on the 'Shard of Glass', 'Cheesegrater' and the 'Walkie-Talkie'. As conditions improve in the wider economy, demand for retail and leisure facilities is expected to pick up, boosting commercial construction output.

It will come as no surprise that it is the two public sectors, housing and non-housing, that will fare the worst over the forecast period, as is the case across most of the UK. The capital benefitted strongly from the early waves of the Building Schools for the Future (BSF) programme and the National Affordable Housing Programme (NAHP) and thus these sectors have further to fall than across some other English regions.

Funding levels have been almost halved for the 2011-15 Affordable Housing Programme, compared with the 2008-11 period, although the capital has been allocated 36% of the total funding for new programme, which may provide some boost to output towards the end of the period. That said, the latest figures from the Homes and Communities Agency (HCA) suggest that in the six months to September 2011 there were just 56 affordable housing units started in London, a decline of 98% on the corresponding period of 2010. Thus the short term outlook for the sector is very bleak.

Construction employment in the capital is expected to total 371,270 in 2016, 6% higher than 2012's projected level and 3% above the previous peak in 2008. In absolute terms, the largest increases in construction-specific occupations are for other construction professionals and technical staff (3,610), electrical trades and installation (3,600) and surveyors (2,300). In terms of the percentage of base 2012 employment, surveyors (20%) and other construction professionals and technical staff (17%) are likely to be most in demand.

The ARR for Greater London is 1,790, equivalent to just 0.5% of base 2012 employment. This is the lowest of all the regions and devolved nations, and reflects the high level of flows into the region.

Regional comparison 2012-2016

Region	Annual average % change in output	Growth in total employment	Total ARR
North East	0.5%	4,840	2,170
Yorkshire and Humber	0.0%	-6,370	2,630
East Midlands	1.0%	-1,800	3,460
East of England	2.9%	10,660	5,710
Greater London	2.5%	16,560	1,790
South East	2.2%	28,020	4,520
South West	2.2%	9,560	7,220
Wales	1.3%	11,590	4,280
West Midlands	-1.1%	-7,360	3,730
Northern Ireland	2.1%	3,880	1,170
North West	-0.9%	-6,990	5,080
Scotland	1.3%	13,520	4,480
UK	1.4%	76,110	46,240

Source: CSN, Experian ref. CSN Explained, Section 5.3, Note 2

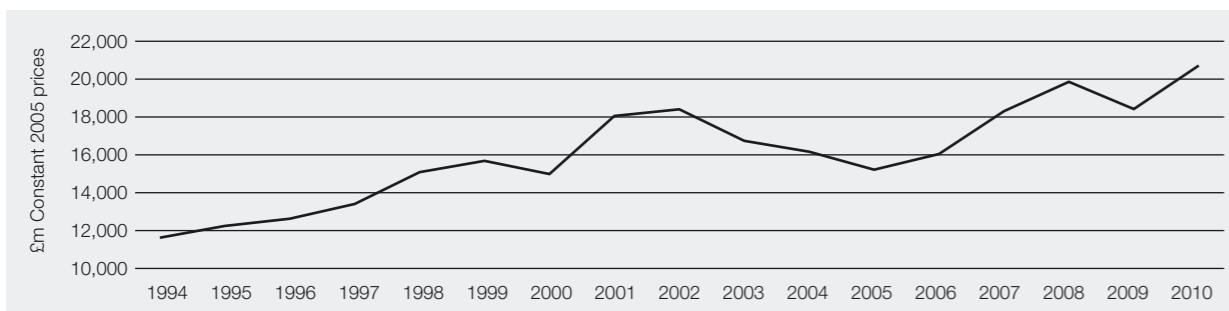
2. The outlook for construction in Greater London

2.1 Construction output in Greater London – overview

Construction output in Greater London rose by 13% in 2010 to total £20.7bn, in 2005 prices. This was the highest annual outturn since at least 1990, the first year in our deflated regional data series in constant prices. New work output rose by 16%, whilst the repair and maintenance (R&M) sector saw more modest growth of 4%.

On a sectoral basis, output rose markedly across all the new work sectors, with the exception of the commercial one, where it dropped by 5%, falling to its lowest level for 7 years. Output rose by 74% in the public housing sector, reaching the highest level seen in the deflated regional series. Infrastructure construction output in the capital also saw substantial growth, rising by 45% to £2.9bn, also a new high.

Construction output 1994-2010 - Greater London



Source: ONS
ref. CSN Explained, Section 5.3, Note: 1

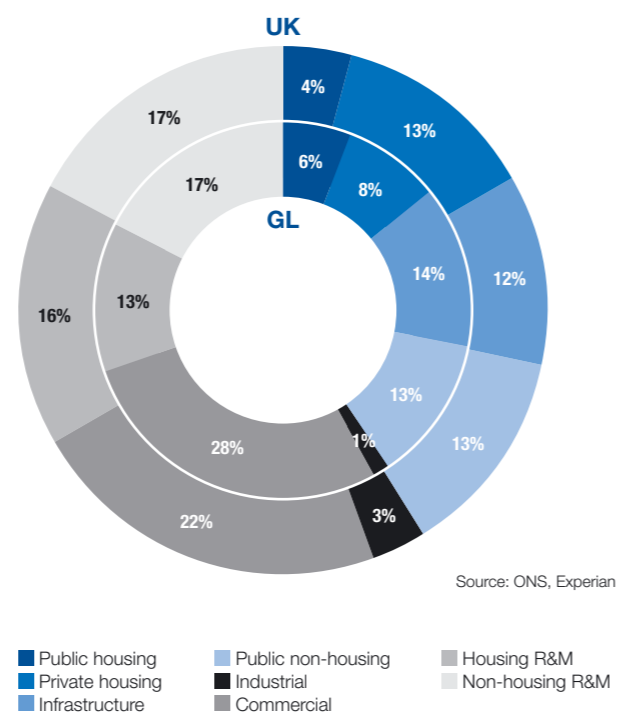
2.2 Industry structure

The diagram, Construction Industry structure 2010 – UK vs. Greater London, illustrates the sector breakdown of construction in Greater London compared to that in the UK. Effectively, the percentages for each sector illustrate what proportion of total output each sector accounts for.

There are a number of substantial differences in the structure of Greater London's construction industry compared with the UK as a whole. The R&M sector accounts for 30% of total construction output in the capital, compared with 33% for the UK as a whole. Within this, it is the housing R&M sector which is relatively less important, taking a 13% share of output, compared with a national figure of 16%.

Greater London's commercial construction sector took a 28% share of output in 2010, larger than the national figure of 22%. Whilst the public housing sector in the capital is slightly more important than nationally (6% compared with 4%), the private housing sector is substantially smaller, accounting for just 8% of construction output in Greater London, compared with 13% nationally.

Construction industry structure 2010 - UK vs. Greater London



Source: ONS, Experian

Economic structure - Greater London (£ billion, 2006 prices)

Selected sectors	Actual	Forecast					
		Annual % change, real terms					
	2010	2011	2012	2013	2014	2015	2016
Public services	56	1.9	-0.1	0.5	0.6	0.8	1.0
Financial and business services	104	0.4	2.0	3.1	3.4	3.6	3.8
Transport and communications	20	3.2	1.9	2.8	3.0	3.0	3.0
Manufacturing	11	2.7	3.1	3.8	3.1	2.2	1.6
Distribution, hotels and catering	30	1.9	1.2	2.7	3.1	3.1	3.3
Total Gross Value Added (GVA)	248	1.1	1.4	2.4	2.7	2.8	2.9

Source: Experian
ref. CSN Explained, Section 5.3, Note 3

2.3 Economic overview

The expected performance of a regional or national economy over the forecast period (2012–2016) provides an indication of the construction sectors in which demand is likely to be strongest.

2.4 Economic structure

Greater London accounts for 20.7% of the UK's Gross Value Added (GVA) and 12.6% of its population. Thus, GVA per head is substantially above the national average.

In 2010, Gross Value Added (GVA) in Greater London rose by 2.7% to total £247.5bn, in 2006 prices. This was stronger than the national growth rate of 1.8%. The distribution, hotels and catering sector saw the strongest increase, of 5.1%, and output in the transport and communications sector rose by 4.5%.

The financial and business services sector in the capital accounted for 42% of total GVA in 2010, substantially higher than the UK figure of 25%. The sector's share of output in Greater London increased from 32.5% in 1997 to 43.7% in 2008, before dropping slightly in the wake of the financial crisis. In contrast, the capital's manufacturing sector accounted for just 4.6% of output in 2010, compared with a national figure of 11.6%.

After returning to growth in 2010, GVA in Greater London is expected to have risen by 1.1% in 2011.

2.5 Forward looking economic indicators

GVA in Greater London is expected to rise at an average annual rate of 2.5% over the 2012-2016 period, slightly weaker than the 2.8% forecast for the capital for the 2011-2015 period. However, it is substantially higher than the UK figure of 1.8% for 2012-2016.

The financial and business services sector is expected to fare well over the forecast period, rising at an average rate of 3.2% to 2016. Transport and communications, distribution, hotels and catering and manufacturing are also forecast to see strong growth, with output rising by 2.7% per year on average over the 2012-2016 in each sector.

The macroeconomic conditions across the whole of the UK remain weak, with high inflation, rising unemployment and falling confidence impacting consumer spending, and it is no exception in Greater London. Consumer spending is expected to have declined in the capital in 2011 and although it will return to growth in 2012, at 1.1% the pace of increase is much weaker than the 10 year average to 2010 of 2%. Real household disposable incomes are likely to remain under pressure over the next 12 months, but inflation is expected to moderate in 2012, providing some boost to incomes.

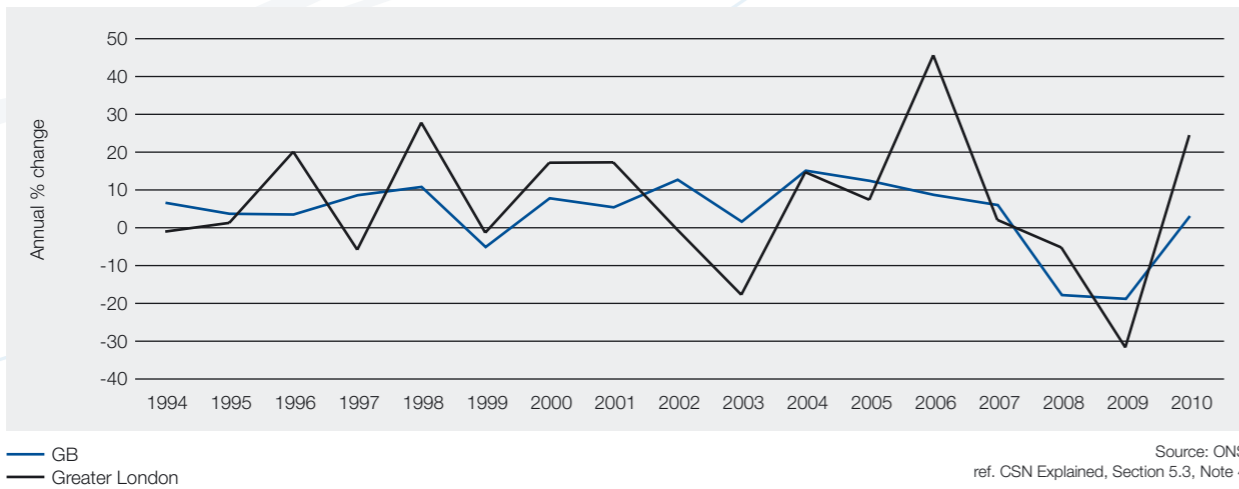
Average house prices in London rose by 11% in 2010 to £335,340, according to the Department of Communities and Local Government (CLG), stronger than the 8% recorded across the UK as a whole. House prices in London held up better than the UK as whole during the recession, seeing only one year of decline (2009). It is a similar story over the forecast period, with house price inflation in the capital expected to average almost 4% over the 2012-2016 period compared with a national figure of 2.7%.

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

	Actual	Forecast					
		Annual % change, real terms					
	2010	2011	2012	2013	2014	2015	2016
Real household disposable income	120	-1.8	0.6	2.0	2.2	2.9	3.3
Household spending	122	-0.4	1.1	2.4	2.7	3.0	2.9
Working age population (000s and as % of all)	5,184	66.3	66.4	67.0	67.5	67.9	68.3
House prices (£)	335,340	2.8	1.9	4.1	4.4	4.3	4.5
LFS unemployment (millions)	0.38	0.41	0.43	0.42	0.40	0.38	0.35

Source: ONS, DCLG, Experian

New construction orders growth 1994-2010 - Greater London vs. GB



2.6 New construction orders – overview

After declining to a 5-year low in 2009, construction orders in Greater London rose by 25% to total £11.4bn, in current prices.

With the exception of the public non-housing sector, new orders rose across the board in 2010. Growth was strongest in the private housing sector which saw new orders more than double to £1.5bn, a new high. Industrial construction new orders rose by 69%, but it is worth highlighting that the sector is very small and thus changes are often magnified in percentage terms.

A number of contracts were let for Crossrail during the year, and thus it is not surprising that infrastructure new orders saw strong growth, rising by 44% to a record £3.2bn in 2010.

2.7 New construction orders – current situation

In the first six months of 2011, new construction orders in Greater London declined by 15% from the corresponding period of 2010, to total £4.8bn (current prices). Orders were also 16% lower than the second half of 2010.

The private housing sector was the only one to see new orders increase during the period, rising by 91% on an annual basis to just over £1bn. Moreover, the outturn of £622m in the three months to June 2011 was the strongest quarterly total on record. In contrast, new orders for the public non-housing sector declined by 37% compared with the corresponding period of 2010, not entirely surprising considering the widespread public spending cuts.

The public housing and infrastructure sectors both saw new orders decline by 34%, year-on-year, with the former also affected by substantial funding cuts for affordable housing. The outturn in the first half of 2011 for the infrastructure sector looked weak in comparison to the exceptionally strong first quarter of 2010, but was relatively strong compared with historic figures, in light of a number of orders for Crossrail being placed during the period.

Industrial construction new orders fell by 28% in the six months to June 2011, whilst new orders in the commercial construction sector saw a much weaker fall of just 6%.

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

	Actual	Annual % change				
	2010	2006	2007	2008	2009	2010
Public housing	951	39.1	-16.3	-15.8	10.0	22.8
Private housing	1508	32.3	-4.5	-17.6	-31.0	102.6
Infrastructure	3222	47.8	25.8	13.2	39.0	43.9
Public non-housing	2279	4.4	58.8	78.9	-33.7	-11.0
Industrial	176	100.9	-41.3	14.2	-71.2	68.8
Commercial	3270	55.8	-4.1	-28.5	-52.7	19.5
Total new work	11,405	45.6	2.1	-5.2	-31.6	24.5

Source: ONS ref. CSN Explained, Section 5.3, Note 4

2.8 Construction output – short-term forecasts (2012–2013)

Regional Office for National Statistics (ONS) output statistics are published in current prices and are thus inclusive of any inflationary effect. At the time of writing, ONS construction output statistics were only available for the first two quarters of 2011.

In current prices, construction output in Greater London rose by 8%, year-on-year, in the six months to June 2011. It was also 1% higher, half-year on half-year. This growth was driven by new work which rose by 13% on an annual basis, whilst the repair and maintenance (R&M) sector saw a 3% contraction in output. On a sectoral basis, the industrial sector was the best performing as output rose by 50% from a year earlier, whilst the private housing sector grew by 45%. However, the industrial sector is the smallest in the capital, and changes are magnified in percentage terms.

Greater London is one of only two regions and devolved nations expected to see output rise in 2011, along with Wales. However, the increase in the capital is estimated to have been only a modest 1%.

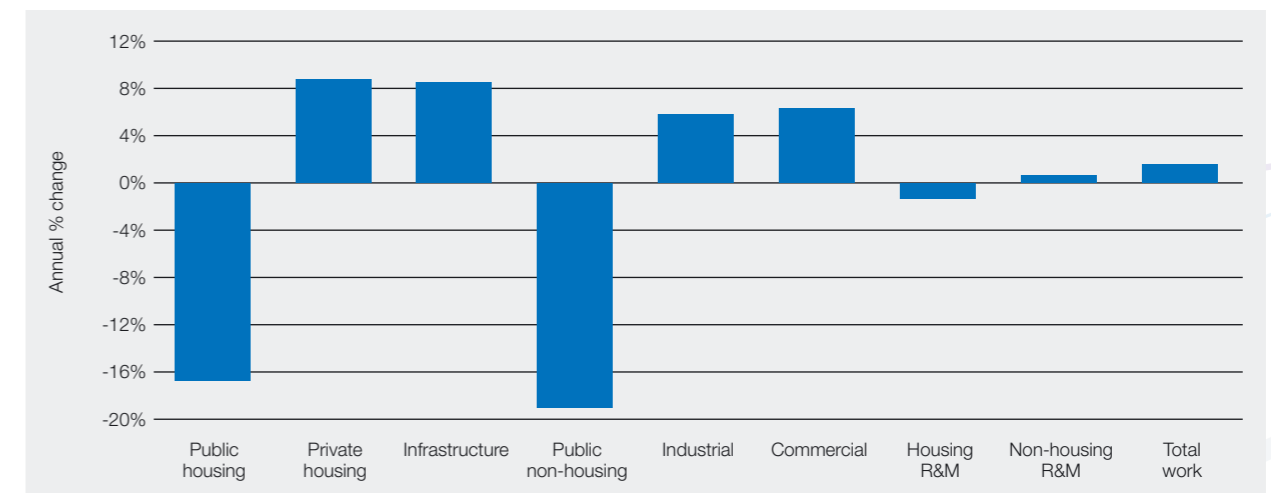
The private housing and infrastructure sectors are expected to be the best performing in the short term, with average growth of 8.7% and 8.5%, respectively. Recent survey data

suggests that the housing market in the capital is holding up better than across the rest of the country, partly due to foreign investment at the top end of the market. There are a number of significant infrastructure projects ongoing in Greater London, including Crossrail, Thameslink and various station upgrade projects.

In contrast, the public housing and public non-housing sectors in the capital have seen substantial growth in recent years, benefitting strongly from the early waves of the Building Schools for the Future (BSF) programme and National Affordable Housing programme allocations, and thus they are expected to see marked declines in the short term. Public housing output is forecast to decline at an average rate of 16.7% per year in 2012-13, whilst public non-housing output will fall by a stronger 19%.

Work has restarted on a number of high-profile office projects in Greater London, including the 'Shard of Glass', with construction due to complete in 2012, the Leadenhall Tower (the 'Cheesegrater') and 20 Fenchurch Street (the 'Walkie-Talkie tower'), with the latter two due to complete by 2013/4. Demand for retail and leisure facilities remains weak as consumer spending continues to be affected by poor wage growth, high inflation and concerns over rising unemployment. Commercial construction output is expected to rise by 6.3% over the 2012-13 period.

Annual average construction output growth 2012-2013 - Greater London



Source: Experian ref. CSN Explained, Section 5.3, Notes 1 and 2

Construction output - Greater London (£ million, 2005 prices)

	Actual	Forecast annual % change			Annual average
	2010	2011	2012	2013	2012-13
Public housing	1,212	-6%	-26%	-7%	-16.7%
Private housing	1,756	13%	8%	9%	8.7%
Infrastructure	2,889	21%	3%	14%	8.5%
Public non-housing	2,610	-18%	-24%	-14%	-19.0%
Industrial	281	2%	5%	7%	5.8%
Commercial	5,769	3%	1%	12%	6.3%
New work	14,516	3%	-3%	8%	2.3%
Housing R&M	2,616	-6%	-3%	0%	-1.3%
Non-housing R&M	3,612	-5%	-1%	2%	0.6%
Total R&M	6,228	-5%	-2%	1%	-0.2%
Total work	20,744	1%	-3%	6%	1.6%

Source: Experian
ref. CSN Explained, Section 5.3, Notes 1 and 2

2.9 Construction output – long-term forecasts (2012–2016)

Construction output in Greater London is forecast to rise at an average annual rate of 2.5% over the 2012-2016 period, above the UK average of 1.8%. New work output is forecast to rise at an average rate of 2.9% per year over the period, compared with 1.5% for the R&M sector.

With the exception of 2012, construction output in the capital is expected to rise in each year of the forecast period to 2016. The public sectors, housing and non-housing, have largely held up better than expected in 2011 and thus the contraction is likely to be stronger in both sectors in 2012, as spending cuts filter through into output.

The commercial sector is expected to be the best performing over the forecast period, with output rising by 5.7% per year on average. In addition to work on a number of high profile office developments, the improving economic conditions are likely to stimulate demand for retail and leisure facilities. Work is due to get underway on the £1bn redevelopment of New Covent Garden Market in 2012 and be completed by 2017.

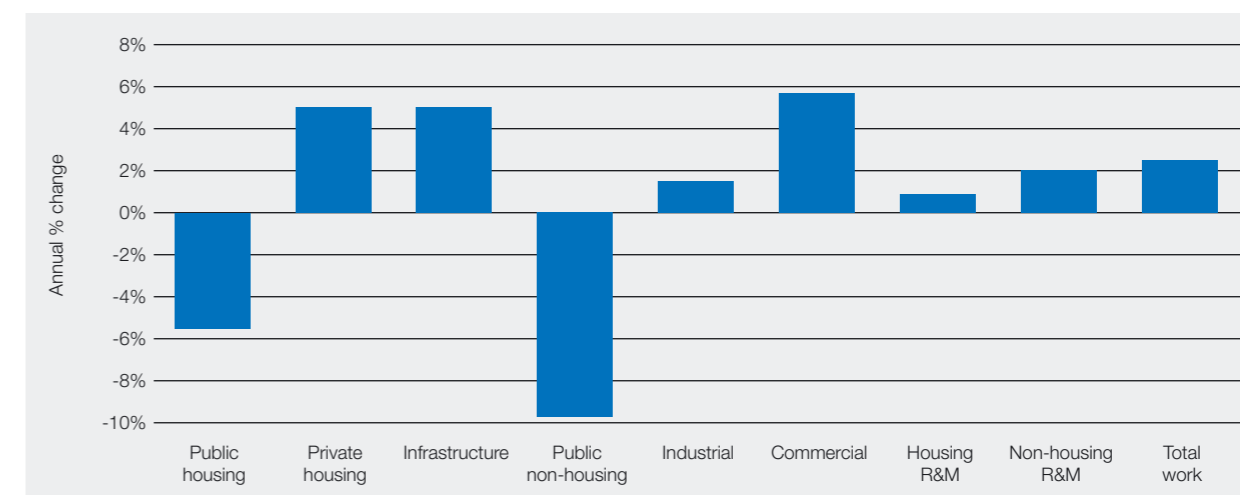
London's private housing sector has held up well during the recession, partly due to the fact that it benefits from foreign investment at the top end of the market. Improvements in the macroeconomic environment over the next 12 months or so should benefit the housing market. The sector is expected to rise at an average rate of 5% per year, and by 2016 output will be 65% higher than its previous peak in 2007.

There are a raft of infrastructure schemes currently underway or due to start during the forecast period, with Crossrail being the largest. Work on that project is building up steam at the moment and activity is due to peak in 2013/14, although it is not due to be completed until 2018. Work is ongoing on Thameslink and various station upgrades, although the former is due to finish by 2012, with the exception of the London Bridge station upgrade part of the scheme which is not due to start until 2013. Output in the sector will rise by 5% per year, on average, and is likely to have reached a new record high by the end of the forecast period.

In contrast, the public non-housing sector is expected to decline by 9.7% per year, on average. Greater London benefitted strongly from the early stages of the BSF programme and thus has a long way to fall, highlighted by output in the sector rising from just £913m in 2006 to £2.6bn in 2010. The axing of the BSF programme and public spending cuts across the majority of departments will lead to double digit declines in the sector over the next few years.

Public housing output in the capital rose by 74% in 2010, reaching a new record high, and thus has further to fall than some other regions, certainly in the short term. The next Affordable Homes Programme (AHP), for 2011-15 is only half the previous programme's level, with social housing providers expected to find additional funding from other sources. The preliminary allocations for the 2011-15 AHP have been released, and London is expected to receive 36% of the total funding. As London has received a large share of the 2011-2015 allocation, public housing output in the capital is expected to fall at a slightly weaker rate than the UK as a whole (-5.5% compared with -6.3% respectively on an annual average basis).

Annual average construction output growth 2012-2016 - Greater London



Source: CSN, Experian
ref. CSN Explained, Section 5.3, Note 2

Construction output - Greater London (£ million, 2005 prices)

	Estimate	Forecast annual % change					Annual average
	2011	2012	2013	2014	2015	2016	2012-16
Public housing	1,141	-26%	-7%	1%	6%	2%	-5.5%
Private housing	1,991	8%	9%	4%	3%	1%	5.0%
Infrastructure	3,494	3%	14%	4%	3%	1%	5.0%
Public non-housing	2,140	-24%	-14%	-10%	0%	1%	-9.7%
Industrial	286	5%	7%	-1%	-1%	-3%	1.5%
Commercial	5,938	1%	12%	6%	4%	6%	5.7%
New work	14,991	-3%	8%	3%	3%	3%	2.9%
Housing R&M	2,467	-3%	0%	3%	3%	1%	0.9%
Non-housing R&M	3,432	-1%	2%	3%	3%	3%	2.0%
R&M	5,899	-2%	1%	3%	3%	2%	1.5%
Total work	20,890	-3%	6%	3%	3%	3%	2.5%

Source: CSN, Experian
ref. CSN Explained, Section 5.3, Notes 2

2.10 Beyond 2016

Work on Crossrail is expected to continue beyond the current forecast period and is not due to complete until 2018 at the earliest. The rail sector may also benefit from work starting on the High Speed 2 rail project, which is due to start in 2017, although there is a long way to go before the project is confirmed or indeed there is a concrete start date. The infrastructure sector will also benefit from work starting on the Thames Tunnel element of the Thames Tideway water and sewerage project, for which main construction work is due to start in 2016.

In addition to these infrastructure projects, it is likely that the focus will shift to the energy efficient retrofitting of existing buildings, both residential and non-residential, over the longer term, not just in Greater London but across the UK as a whole. Rising energy costs and increasing concern over carbon emission reduction targets is likely to stimulate demand for this work. Demand for microgeneration installations may also pick up, although this may be less applicable in the capital due to the suitability of the building stock for these measures.

3. Construction employment forecasts for Greater London

3.1 Total construction employment forecasts by occupation

The table presents actual construction employment (SICs 41-43, 71.1, and 74.9) in Greater London for 2010, the forecast total employment in 26 occupations and in the industry as a whole between 2012 and 2016. A full breakdown of occupational groups is provided in Section 5 of CSN explained.

Construction employment in Greater London is expected to total 371,270 in 2016, 6.2% higher than the projected level in 2012, and 3% above the previous peak in 2008.

Construction employment in the capital will decline in both 2012 and 2013, before increasing in the remaining years of the forecast period. Over the 2012-2016 period as a whole, employment will increase at an average rate of 0.9% per year, stronger than the UK figure of 0.6%.

Total employment by occupation - Greater London

	Actual	Forecast	
	2010	2012	2016
Senior, executive, and business process managers	20,290	22,590	23,340
Construction managers	38,630	35,980	47,070
Non-construction professional, technical, IT, and other office-based staff	41,630	40,500	46,270
Wood trades and interior fit-out	30,380	34,160	30,510
Bricklayers	4,320	4,070	3,830
Building envelope specialists	17,100	18,990	19,420
Painters and decorators	21,210	23,930	22,850
Plasterers and dry liners	4,040	4,570	3,680
Roofers	4,070	3,850	3,210
Floorers	1,980	2,160	2,050
Glaziers	2,530	2,270	2,170
Specialist building operatives nec*	5,970	6,730	6,510
Scaffolders	3,080	3,490	3,600
Plant operatives	3,820	3,440	3,340
Plant mechanics/fitters	3,600	4,070	3,990
Steel erectors/structural	3,620	3,310	3,750
Labourers nec*	13,940	13,170	13,020
Electrical trades and installation	29,140	27,560	31,160
Plumbing and HVAC trades	24,230	22,350	22,140
Logistics	4,980	5,630	5,120
Civil engineering operatives nec*	6,090	7,050	6,870
Non-construction operatives	5,730	6,540	6,690
Civil engineers	7,910	7,140	7,590
Other construction professionals and technical staff	23,220	21,480	25,090
Architects	13,700	13,020	14,080
Surveyors	12,550	11,620	13,920
Total (SIC 41-43)	290,380	296,410	310,590
Total (SIC 41-43, 71.1, 74.9)	347,760	349,670	371,270

Source: ONS, CSN, Experian
ref. CSN Explained, Section 5.3, Notes 5 and 6
NEC* - Not elsewhere classified

In absolute terms, the largest increases in construction-specific occupations are for other construction professionals and technical staff (3,610), electrical trades and installation (3,600) and surveyors (2,300). Electrical trades and installation is likely to overtake wood trades and interior fit-out as the largest construction-specific sector in Greater London by 2016.

In terms of the percentage of projected base 2012 employment, surveyors (20%) are likely to be the most in demand. Workers in this occupation will work across a range of sectors and are thus be able to benefit from growth in the private housing and commercial sectors, for example. They are also involved in the earlier stages of construction projects. Other construction professionals and technical staff (17%), electrical trades and installation (13%) and steel erectors/structural (13%) are also expected to see strong growth in employment over the period to 2016.

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, these flows do not include movements into the industry from training, although robust data on training provision is being developed by ConstructionSkills. Thus, the annual recruitment requirement provides an indication of the number of new employees that would need to be recruited into construction each year in order to realise forecast output.

The ARR for the 26 occupations within Greater London's construction industry is illustrated in the table. The figure of 1,790 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.

The capital's ARR is equivalent to just 0.5% of projected employment in 2012, substantially lower than the UK average (1.8%) and the lowest of all the regions and devolved nations. Given that Greater London experiences the largest inflows of both international and intra-regional migration, it is not surprising that the ARR, which is effectively a residue after normal flows are accounted for, is low. In absolute terms,

the largest requirements for construction-specific occupations are for specialist building operatives nec* (340), plasterers and dry liners (200) and floorers (180). In terms of base 2012 employment, floorers (8%) and specialist building operatives nec* (5%) will be most in demand.

Please 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 already used, will be able to work in the industry without the need for significant retraining.

Non-construction operatives is a diverse occupational group including all of the activities under the SICs 41-43, 71.1, and 74.9 umbrella that cannot be classified elsewhere, such as cleaners, elementary security occupations nec* and routine inspectors and testers. The skills required in these occupations are highly transferable to other industries and forecasting such movement is hazardous given the lack of robust supportive data. Therefore the ARR for non-construction operatives is not published.

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

Annual recruitment requirement by occupation - Greater London

	2012-2016
Senior, executive, and business process managers	500
Construction managers	-
Non-construction professional, technical, IT, and other office-based staff	-
Wood trades and interior fit-out	-
Bricklayers	150
Building envelope specialists	-
Painters and decorators	-
Plasterers and dry liners	200
Roofers	-
Floorers	180
Glaziers	90
Specialist building operatives nec*	340
Scaffolders	160
Plant operatives	80
Plant mechanics/fitters	-
Steel erectors/structural	50
Labourers nec*	-
Electrical trades and installation	-
Plumbing and HVAC trades	-
Logistics	<50
Civil engineering operatives nec*	-
Non-construction operatives	-
Civil engineers	<50
Other construction professionals and technical staff	-
Architects	-
Surveyors	-
Total (SIC 41-43)	1,750
Total (SIC 41-43, 71.1, 74.9)	1,790

Source: CSN, Experian
ref. CSN Explained, Section 5.3, Notes 5 and 6
NEC* - Not elsewhere classified

4. Comparisons across the UK

The North West (-0.9%) along with the West Midlands (-1.1%) are the only regions projected to see a decline in their annual average growth rate over the next five years. For the UK the yearly growth rate is 1.4%. The best performing region is expected to be the East of England with a rate of 2.9%.

Over the forecast period, we seem to be seeing the emergence of a north/south divide, with the greater south east (the South East, Greater London and the East of England) faring best, and the northern English regions faring worst. In between are the devolved nations, who, although they have their overall expenditure limits set by Westminster, through their devolved administrations have more control on what it will be spent than the English regions. Already the devolved administrations in Scotland and Northern Ireland have redirected a proportion of resource funding to the capital expenditure account, which should benefit the construction industry in these areas.

There are a number of reasons for the emergence of this north/south divide. The first is the more constrained outlook for public expenditure going forward. While declines in public housing activity are expected to be fairly similar across the board, with one or two exceptions, the profile for the public non-residential sector is very different. Output in this sector hit a new historic high in 2010 and since 2007 had grown by over 72% in real terms, primarily driven by work under the BSF programme. The capital did well out of the early stages of the BSF programme and thus has a way to fall once the remaining 'legacy' projects start to finish.

Second, major infrastructure projects are tending to be greater South East centric at present. Infrastructure activity in the UK is at a historic high, exceeding its previous peak in 1993 during the building of the Channel Tunnel. This level of activity is being driven largely projects in the South East corner of England – Crossrail, Thameslink, M25 widening, London Gateway port, to name a few. That is not to say that there are not projects elsewhere, there are, but they are tending to be of a lesser size. Greater London will benefit from a number of infrastructure projects over the forecast period, the largest of which is Crossrail, on which activity is due to peak in 2013/14 but will not complete until 2018.

Third, growth in the commercial sector is likely to be stronger in the greater South East than elsewhere in England. The offices market has already been strengthening in London and along the M4 corridor/Thames Valley, while excess capacity issues remain a problem across many regional centres. The northern English regions also have many currently mothballed retail and leisure developments for which it is difficult to see an economic imperative to restart, at least in the short term.

Greater London is projected to experience annual average growth in employment of 0.9% over the five years to 2016, stronger than the UK figure of 0.6%. Wales is predicted to have the strongest growth in employment, despite only moderate growth in output. That is because most of its growth is focussed in the more labour intensive repair and maintenance sectors. Not surprisingly, employment growth is also stronger than the UK average in the South East, East of England and the South West.

Greater London's ARR is 0.5% of projected 2012 employment, substantially weaker than the UK average and the lowest of all the regions and devolved nations. This is not surprising considering that the capital experiences by far the largest migratory inflows, thus the ARR, the residual, is smaller than in other regions and devolved nations.

Greater London construction output projected to grow at an annual rate of 2.5% between 2012-2016, one of the strongest rates across the UK

Annual average output growth by region 2012-2016



Source: CSN, Experian ref CSN Explained, Section 5.3, Note 2

Annual recruitment requirement (ARR) by region 2012-2016



Source: CSN, Experian

Olympic Site



Annual average rate of growth for employment in Greater London is 0.9% compared to UK average of 0.6%

5. CSN explained

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

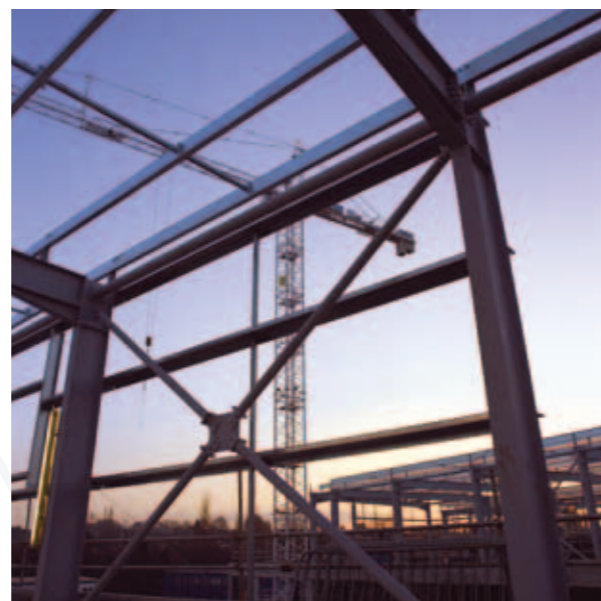
Section 5.1 gives an overview of the underpinning methods that are used by the CSN, working in partnership with Experian, to produce the suite of reports at both a UK, national and regional level.

Section 5.2 provides a glossary to clarify some of the terms that are used in the reports, while section 5.3 has some further notes that relate to the data sources that are used for the various charts and tables. Section 5.3 also outlines what is meant by the term footprint, when talking about the areas of responsibility that lie with a Sector Skills Council.

Section 5.4 explains the sector definitions used within the report and provides examples of what is covered in each.

Section 5.5 gives a detailed breakdown of the 26 occupational groups into the individual standard occupational classification (SOC) codes that are aggregated to provide the employment and recruitment requirement.

Section 5.6 then concludes by giving details about the range of LMI reports, the advantages of being a CSN member and the contact details should people be interested in joining.



5.1 CSN methodology

Background

The **Construction Skills Network (CSN)**, launched in 2005, represents a radical change in the way that ConstructionSkills collect and produce information on the future employment and training needs of the industry. CITB-ConstructionSkills, CIC and CITB Northern Ireland are working as ConstructionSkills, the Sector Skills Council for Construction to produce robust Labour Market Intelligence to provide 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 of 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 bi-annually and consist of key regional stakeholders invited from industry, Government, education and other SSCs, all of whom contribute 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 once a year and sets the national scene, effectively forming a backdrop for the Observatories.

At the heart of the CSN are a number of forecasting 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, comprised of statisticians and modelling experts.

It is envisaged that the models will evolve over time as new research is published and modelling techniques improve. 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 inter-related 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 ConstructionSkills 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.

Demand is based upon the results of discussion groups comprising industry experts, a view of construction output and a set of 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 make use of a set of specific statistics for each major type of work that 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 years' 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:

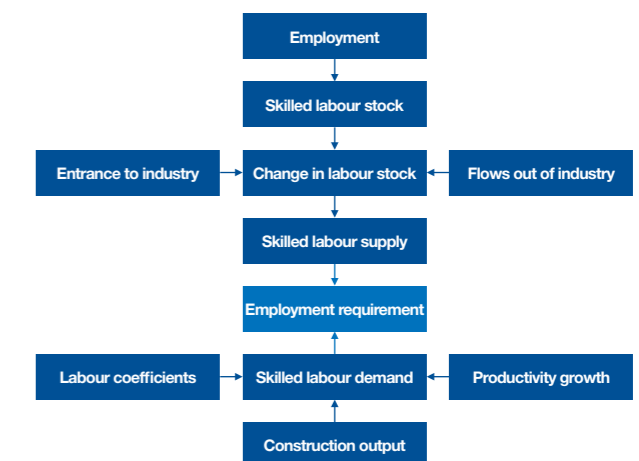
- transfers to other industries
- international/domestic OUT migration
- permanent retirements (including permanently sick)
- outflow to temporarily sick and home duties.

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

Flows into the labour market include:

- transfers in from other industries
- international/domestic IN migration
- inflow from temporarily sick 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.



5.2 Glossary of terms

- **Building envelope specialists** – any trade involved with the external cladding of the building other than bricklaying, e.g. curtain walling.
- **Demand** – demand 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 Employers Skills Survey, from the Department for Education and Skills. These data sets are translated into labour requirements by trade by using a series of **coefficients** to produce the labour demand that relates to the forecasted 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 years' supply. In essence this is the number of workers of each occupation/trade 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, from around 53,000 households each quarter (>100,000 people).
- **LMI** (Labour Market Intelligence) – data that are quantitative (numerical) or qualitative (insights and perceptions) on workers, employers, wages, conditions of work, etc.
- **Macroeconomics** – the study of an economy on 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 – official statistics on economy, population and society at national UK 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 UK Standard Industrial Classification of Economic Activities produced by the **ONS**.
- **SOC codes** – Standard Occupational Classification codes.
- **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.



5.3 Notes and footprints

Notes

- 1 Except for Northern Ireland, output data for the English regions, Scotland and Wales are 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 to a 2005 constant price basis, i.e. 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 year-on-year 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 45, 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 45.31 and 45.33.

Footprints for Built Environment SSCs

ConstructionSkills is responsible for SIC 45 Construction and part of SIC 74.2 Architectural and Engineering activities and related technical consultancy.

The table summarises the SIC codes (2003) covered by ConstructionSkills:

	SIC Code	Description
ConstructionSkills	45.1	Site preparation
	45.2	Building of complete construction or parts; civil engineering
	45.3	Building installations (except 45.31 and 45.33 which are covered by SummitSkills)
	45.4	Building completion
	45.5	Renting of construction or demolition equipment with operator
	74.2*	Architectural and engineering activities and related technical consultancy

* AssetSkills has a peripheral interest in SIC 74.2

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 45.31 Installation of wiring and fittings and SIC 45.33 Plumbing. ConstructionSkills recognises the responsibility of Summit Skills across Standard Industrial Classifications (SIC) 45.31 and 45.33, 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, Domestic, Facilities Managers.

AssetSkills has a peripheral interest in SIC 74.2.

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.

5.4 Definitions: types and examples of construction work

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

Housing schemes, old people's homes 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, and decommissioning of nuclear power stations, onshore wind farms.

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 & 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 work²

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.³

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.⁴

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 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'.

³ 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.

⁴ Except where stated, mixed development schemes are classified to whichever sector provides the majority (i.e. over 50%) of finance.

5.5 Occupational groups

Occupational group

Description, SOC reference.

Senior, executive and business process managers

Directors and chief executives of major organisations, 1112
Senior officials in local government, 1113
Financial managers and chartered secretaries, 1131
Marketing and sales managers, 1132
Purchasing managers, 1133
Advertising and public relations managers, 1134
Personnel, training and Industrial relations managers, 1135
Office managers, 1152
Civil service executive officers, 4111
Property, housing and land managers, 1231
Information and communication technology managers, 1136
Research and development managers, 1137
Customer care managers, 1142
Storage and warehouse managers, 1162
Security managers, 1174
Natural environment and conservation managers, 1212
Managers and proprietors in other services nec*, 1239

Construction managers

Production, works and maintenance managers, 1121
Managers in construction, 1122
Quality assurance managers, 1141
Transport and distribution managers, 1161
Recycling and refuse disposal managers, 1235
Managers in mining and energy, 1123
Occupational hygienists and safety officers (H&S), 3567
Conservation and environmental protection officers, 3551

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

IT operations technicians, 3131
IT user support technicians, 3132
Estimators, valuers and assessors, 3531
Finance and investment analysts/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 factories, utilities and trading standards, 3565
Software professionals, 2132
IT strategy and planning professionals, 2131
Estate agents, auctioneers, 3544
Solicitors and lawyers, judges and coroners, 2411
Legal professionals nec*, 2419
Chartered and certified accountants, 2421
Management accountants, 2422

Management consultants, actuaries, economists and statisticians, 2423
Receptionists, 4216
Typists, 4217
Sales representatives, 3542
Civil Service administrative officers and assistants, 4112
Local government clerical officers and assistants, 4113
Accounts and wages clerks, book-keepers, other financial clerks, 4122
Filing and other records assistants/clerks, 4131
Stock control clerks, 4133
Database assistants/clerks, 4136
Telephonists, 4141
Communication operators, 4142
General office assistants/clerks, 4150
Personal assistants and other secretaries, 4215
Sales and retail assistants, 7111
Telephone salespersons, 7113
Buyers and purchasing officers (50%), 3541
Marketing associate professionals, 3543
Personnel and industrial relations officers, 3562
Credit controllers, 4121
Market research interviewers, 4137
Company secretaries (excluding qualified chartered secretaries), 4214
Sales related occupations nec*, 7129
Call centre agents/operators, 7211
Customer care occupations, 7212
Elementary office occupations nec*, 9219

Wood trades and interior fit-out

Carpenters and joiners, 5315
Pattern makers, 5493
Paper and wood machine operatives, 8121
Furniture makers, other craft woodworkers, 5492
Labourers in building and woodworking trades (9%), 9121
Construction trades nec* (25%), 5319



Bricklayers

Bricklayers, masons, 5312

Building envelope specialists

Construction trades nec* (50%), 5319
Labourers in building and woodworking trades (5%), 9121

Painters and decorators

Painters and decorators, 5323
Construction trades nec* (5%), 5319

Plasterers and dry liners

Plasterers, 5321

Roofers

Roofers, roof tilers and slaters, 5313

Floorers

Floorers and wall tilers, 5322

Glaziers

Glaziers, window fabricators and fitters, 5316
Construction trades nec* (5%), 5319

Specialist building operatives nec*

Construction operatives nec* (80%), 8149
Construction trades nec* (5%), 5319
Industrial cleaning process occupations, 9132

Scaffolders

Scaffolders, staggers, riggers, 8141

Plant operatives

Crane drivers, 8221
Plant and machine operatives nec*, 8129
Transport operatives nec*, 8219
Fork-lift truck drivers, 8222
Mobile machine drivers and operatives nec*, 8229
Agricultural machinery drivers, 8223

Plant mechanics/fitters

Metal working production and maintenance fitters, 5223
Motor mechanics, auto engineers, 5231
Labourers in process and plant operations nec*, 9139
Tool makers, tool fitters and markers-out, 5222
Vehicle body builders and repairers, 5232
Auto electricians, 5233
Vehicle spray painters, 5234
Tyre, exhaust and windscreen fitters, 8135



Steel erectors/structural

Steel erectors, 5311
Welding trades, 5215
Sheet metal workers, 5213
Metal plate workers, shipwrights and riveters, 5214
Construction trades nec* (5%), 5319
Smiths and forge workers, 5211
Moulders, core makers, die casters, 5212
Metal machining setters and setter-operators, 5221

Labourers nec*

Labourers in building and woodworking trades (80%), 9121

Electrical trades and installation

Electricians, electrical fitters, 5241
Electrical/electronic engineers nec*, 5249
Telecommunications engineers, 5242
Lines repairers and cable jointers, 5243
TV, video and audio engineers, 5244
Computer engineers, installation and maintenance, 5245

Plumbing and heating, ventilation, and air conditioning trades

Plumbers and HVAC trades, 5314
Pipe fitters, 5216
Labourers in building and woodworking trades (6%), 9121
Construction trades nec* (5%), 5319

Logistics

Heavy goods vehicle drivers, 8211
Van drivers, 8212
Packers, bottlers, canners, fillers, 9134
Other goods handling and storage occupations nec*, 9149
Buyers and purchasing officers (50%), 3541
Transport and distribution clerks, 4134
Security guards and related occupations, 9241

Civil engineering operatives nec*

Road construction operatives, 8142
Rail construction and maintenance operatives, 8143
Quarry workers and related operatives, 8123
Construction operatives nec* (20%), 8149
Labourers in other construction trades nec*, 9129

Non-construction operatives

Metal making and treating process operatives, 8117
Process operatives nec*, 8119
Metal working machine operatives, 8125
Water and sewerage plant operatives, 8126
Assemblers (vehicle and metal goods), 8132
Routine inspectors and testers, 8133
Assemblers and routine operatives nec*, 8139
Stevedores, dockers and slingers, 9141
Hand craft occupations nec*, 5499
Elementary security occupations nec*, 9249
Cleaners, domestics, 9233
Road sweepers, 9232
Gardeners and groundsmen, 5113
Caretakers, 6232

Civil engineers

Civil engineers, 2121

Other construction professionals and technical staff

Mechanical engineers, 2122
Electrical engineers, 2123
Chemical engineers, 2125
Design and development engineers, 2126
Production and process engineers, 2127
Planning and quality control engineers, 2128
Engineering professional nec*, 2129
Electrical/electronic technicians, 3112
Engineering technicians, 3113
Building and civil engineering technicians, 3114
Science and engineering technicians nec*, 3119
Architectural technologists and town planning technicians, 3121
Draughtspersons, 3122
Quality assurance technicians, 3115
Town planners, 2432
Electronics engineers, 2124
Building inspectors, 3123
Scientific researchers, 2321

Architects

Architects, 2431

Surveyors

Quantity surveyors, 2433
Chartered surveyors (not Quantity surveyors), 2434

5.6 CSN website and contact details

The CSN website – <http://www.cskills.org/csn>

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 research reports such as the '2020Vision' and 'Closer look at Greater London' are also freely available.

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 into the workforce.

The website also contains further 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 ConstructionSkills research
- details for those interested in becoming members of the network.

The CSN website can be found at:

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

CSN members area

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, which play a vital role in being able to feed back observations, knowledge and insight on 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
- 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 the Members area of the CSN website, members can:

- access observatory related material such as meeting dates, agendas, presentations and notes
- access sub-regional LMI reports
- download additional research material
- comment/feedback to the CSN Team.

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 joining the CSN as a member, please contact us at:

csn@cskills.org



For more information about the
Construction Skills Network, contact

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Cskills website

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

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

CSN webpage

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

