

# Construction Skills Network

## East of England

Labour Market Intelligence  
2006

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This document provides labour market intelligence for the East of England and also includes national UK data. Similar reports have been produced for the other English regions and for Scotland, Wales and Northern Ireland. These reports are all available upon request from ConstructionSkills.

The document replaces the Skills Foresight Report that was previously published annually for the East of England. This new Labour Market Intelligence Report links into the work of the Construction Skills Network.

For information on the numbers of people currently entering construction training, as well as workload and recruitment difficulties being experienced by the industry, this report should be read in conjunction with the CITB-ConstructionSkills Trainee Numbers Survey and Employers' Skills Needs Survey Reports.

Future papers and briefings that reconcile the employment forecasts with the results from these other ConstructionSkills surveys will be published through the Network. Similarly, the Network will produce discussion papers that compare the differences between the Construction Skills Network forecasts with those published from other sources.

A glossary of terms used in this document is provided in Appendix I. Supplementary information, including the CITB-ConstructionSkills Employers' Skills Needs Survey and Trainee Numbers Survey, is available on the ConstructionSkills website at:

[www.constructionskills.net](http://www.constructionskills.net)

Extra resources for members of the Construction Skills Network are available at:

[www.constructionskills.net/csn/membersarea](http://www.constructionskills.net/csn/membersarea)

# 1 The headlines

- Across the UK, total employment in the construction industry is expected to rise by approximately 250,000 to 2.8 million during the forecast period (2006–2010).
- Total employment in the East of England construction industry is expected to increase by approximately 16% during the forecast period.
- In the East of England, the average annual employment requirement for SIC 45<sup>1</sup> (Construction) is 13,880. An Average Annual Requirement in Architects and Technical Engineers (SIC 74.2<sup>1</sup>) of 710 means that the annual requirement for both SIC 45 and 74.2 combined is 14,590.
- The greatest Average Annual Requirement in the East of England will come from Electricians<sup>2</sup>, with 2,080 employees needed annually between 2006 and 2010. Nationally, the greatest requirement will come from Wood Trades (11,090), which in the East of England has the fourth largest requirement at 1,610.
- In annual terms, construction output in the East of England has been rising continually since 1999, a trend that is likely to have continued in 2005. All work output over the first three quarters of 2005 was up by 14% on the same period of 2004.
- In the region, construction output is expected to grow year-on-year to 2010, although the rate of increase will slow towards the end of the forecast period. Output is forecast to increase by an annual average rate of 4.5%. Robust 7.4% growth is forecast for 2007, mainly due to strong performances in the commercial, infrastructure and repair and maintenance (R&M) sub-sectors.
- The infrastructure sub-sector in the East of England is expected to expand strongly over the forecast period, rising by 12.7% on average each year. The outlook for both the industrial and commercial sub-sectors is less encouraging, with both expected to have only moderate growth towards the end of the forecast period.
- Growth in economic activity in the East of England eased in 2005, although it is projected to be above the UK average for the coming years. Growth prospects for the region remain high, with Gross Value Added (GVA) forecasted to rise by 3% in 2006, well above the national average.

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<sup>1</sup> For definitions and a list of SIC Codes covered by ConstructionSkills see Appendices I and IV

<sup>2</sup> For the ConstructionSkills and SummitSkills sector footprints see Appendix IV

## 2 Introduction

### Background

CITB-ConstructionSkills, CIC and CITB(NI) are working in partnership as the Sector Skills Council (SSC) for Construction. The **Construction Skills Network**, launched in 2005, represents a radical change in the way that ConstructionSkills will collect and produce information on the future employment and training needs of the industry. The model generates forecasts of recruitment and training requirements within the industry for a range of trades and will provide a crucial foundation on which to plan for future skills needs and target investment.

The Construction Skills Network functions at both national and regional levels, comprising a National Group, 12 Observatory groups, a redesigned model and a Technical Reference Group. The Observatories consist of key stakeholders invited from industry, government, education and other SSCs who can contribute local knowledge of the industry and views on training, skills, recruitment, qualifications and policy. An Observatory group currently operates in each of the nine English regions and also in Wales, Scotland and Northern Ireland (note that in the context of the model, Wales, Scotland and Northern Ireland are hereafter referred to as "regions"). The input of the members of the Construction Skills Network is fundamental to the forecasting process and the contributions made to date have been invaluable.

### The model approach

The new model approach relies on a combination of primary research and views from the Construction Skills Network to facilitate it. National data were used as the basis for the assumptions that augment the model, which was then adjusted with the assistance of the Observatories and National Group.

Each "region" has a separate model (although all models are inter-related due to labour movements) and, in addition, there is one national UK model that acts as a constraint to the "regional" models and enables best use to be made of the most robust data (which is available at the national level). Each model considers the skilled trades within the industry as well as the professionals.

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 on the question "How many people will be needed to produce forecast output, given the assumptions made about productivity?"

The **Average Annual Requirement** is a gross requirement which takes into account the dynamic factors that influence all of the flows into and out of construction employment, such as movement to and from other industries, migration, sickness, and retirement. Young trainees are not included in the flows. Therefore, the Average Annual 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. How the Average Annual Requirement is fulfilled can range from training the indigenous population to recruiting already skilled labour from overseas and will vary across the UK. At present the model does not separately forecast the numbers requiring "top-up" training although data are being collected and these figures should be included in future publications.

Demand is based upon the results of discussion groups comprising industry experts, an econometric model of construction output and a set of integrated models relating to wider "regional" economic performance. The model is dynamic and reflects the general UK economic climate at any point in time. To generate the labour demand, the model makes use of a set of specific statistics for each major type of work (labour coefficients) 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.

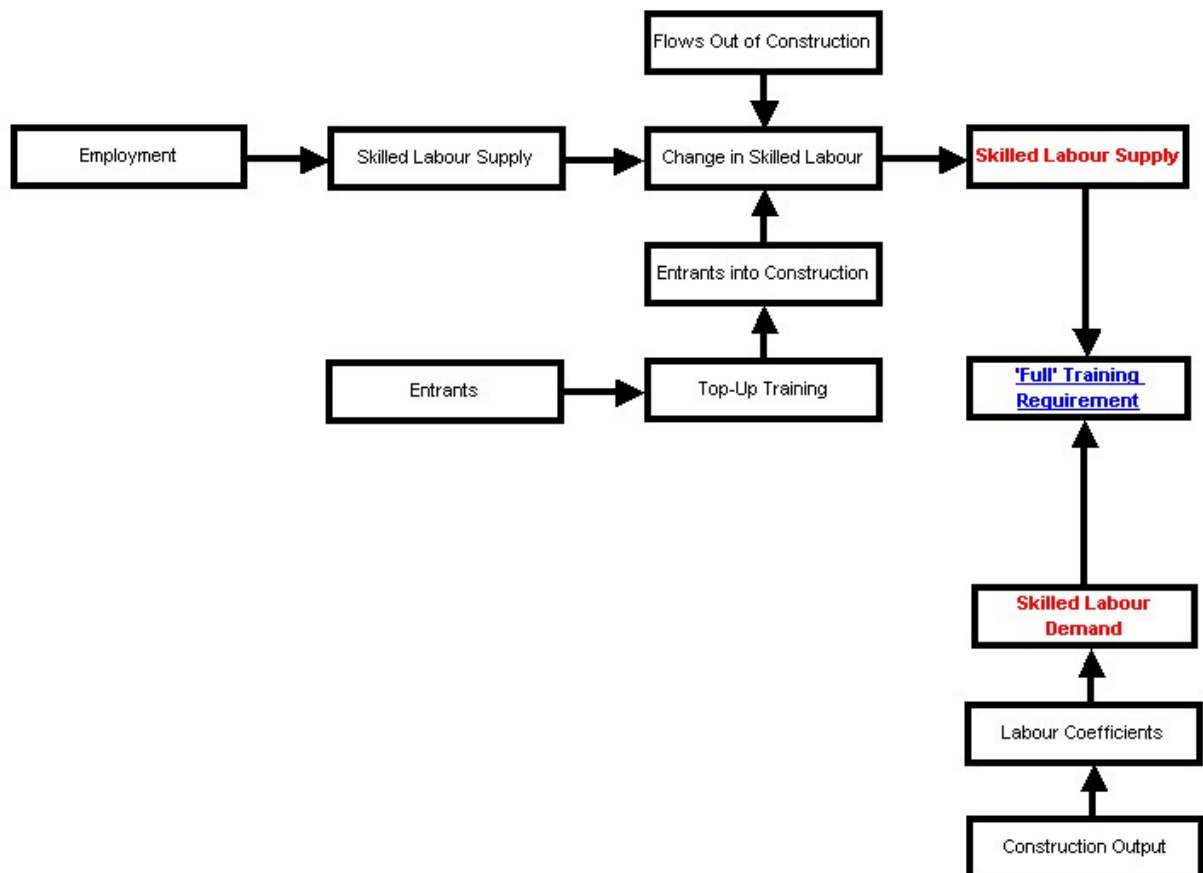
The main reason for outflow is likely to be transfer to other industries.

Flows into the labour market include:

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

New entrants (e.g. young trainees attached to formal training programmes) are not included in the flows of the labour market but are derived from the forecasted Average Annual Requirement for employment. The most significant inflow is likely to be from other industries. A summary of the model components is shown in Figure 1.

**Figure 1**  
**Model flowchart**



The flows into the market are not merely the counterbalancing figures for the flows out of the market, because those people flowing into the market are likely to require some form of training. It is likely that this training will merely be to top-up their skills, rather than full training. The model recognises two distinct types of training as an input: Top-up training and Full training.

### 3 The current situation

#### Economic overview

In 2005, Gross Value Added (GVA) in the East of England is estimated at £84.8bn (in 2002 prices), accounting for 8.5% of total UK GVA. On a structural basis, the East of England economy is highly geared towards financial and business services. Over the forecast period, transport & communications is expected to be the fastest growing sector with an annual average growth rate of 6.5%.

With 5.5m\* inhabitants, over 9% of the total UK population live in the East of England. GVA per capita, providing an indication of the region's standard of living, is almost 6% higher in the East of England than in the UK, at £18,267 compared to £17,258 nationally. Average gross weekly earnings in Autumn 2005 were estimated at £514 in the East of England compared to £466 nationally.

#### Economic performance and expectations

Table 1 shows macroeconomic forecasts for the years 2006 to 2010 in the East of England.

- Steady economic expansion seen in the early part of the century continued in 2004 and is likely to continue over the forecast period. GVA rose by 3% in 2004 in line with 3% national growth. Between 2005 and 2010 the East of England economy is expected to increase by 16.4%, above an estimated national increase of 14%. Year-on-year growth is forecast to accelerate marginally. Strong growth in financial and business services plus a more optimistic outlook for manufacturing and expansion in transport and communications will all have an affect.
- Total employment is estimated to have declined marginally in the East of England in 2005, by 0.5%. This is set to be a temporary blip and a return to growth is forecast from 2006. Total employment is expected to grow at an annual average rate of 0.5% for the remainder of the forecast period.
- Real household disposable income increased by an estimated 2% in 2005. Over the forecast period steady year-on-year increases are expected, averaging 2.8% a year. The growth in household real income in the East of England will be fairly strong compared to the rest of the UK.

**Table 1**  
**Macroeconomic forecasts for the East of England**

| EXPERIAN BUSINESS STRATEGIES FORECASTS FOR THE EAST OF ENGLAND |                                |      |      |      |      |      |
|--|--------------------------------|------|------|------|------|------|
|  | % change (except unemployment) |      |      |      |      |      |
|  | 2005                           | 2006 | 2007 | 2008 | 2009 | 2010 |
| Gross Value Added  | 2.2                            | 3.0  | 3.0  | 3.1  | 3.1  | 3.2  |
| Total employment   | -0.5                           | 0.4  | 0.5  | 0.5  | 0.5  | 0.5  |
| Unemployment rate (ILO)  | 3.9                            | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Real household disposable income                               | 2.0                            | 2.5  | 2.4  | 2.7  | 2.9  | 3.0  |

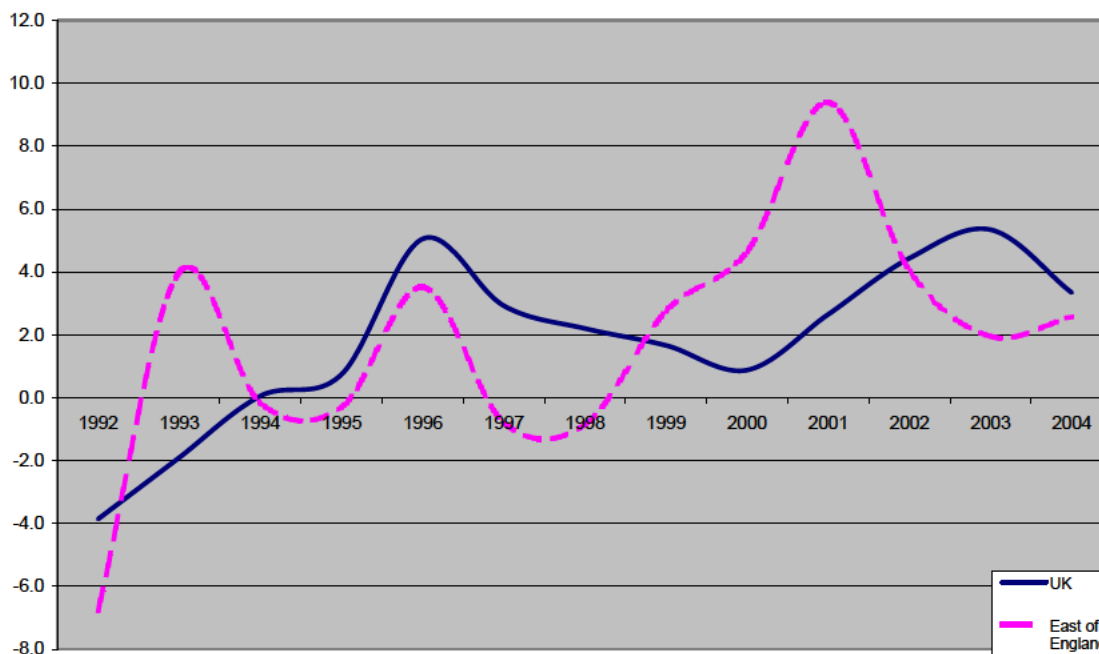
Source: Experian.

\* Population figures, in millions, rounded to the nearest one hundred thousand. Taken from the Office for National Statistics. Mid-2004 figures.

## Construction output in the East of England – Historical overview

- The annual percentage change in construction output in the East of England compared to the UK as a whole is shown in Figure 2.
- Construction output in the East of England has fared reasonably well since the turn of the century, increasing year-on-year but trailing growth in the strongest regions of the UK by a wide margin.
- Between 2000 and 2004, output rose by 51% to £9.7bn (in current prices). Annual growth over this period was fairly consistent, reaching a high of 15% in 2001 and a low of 8% in 2004.
- Expansion in 2004 was predominantly private housing and public non-housing driven. Private housing, the region's largest new work sub-sector, recorded the strongest growth at 24%. This was closely followed by a 21% increase in public non-housing output. More modest growth was achieved in all other sub-sectors except for infrastructure and commercial which declined by 12% and 10%, respectively.
- A four-year decline in infrastructure is likely to have come to an end in 2005. Infrastructure output in the first three quarters of 2005 was 23% higher than during the corresponding period of 2004. Except for a marginal 1% decline in public non-housing, heightened output over the first three quarters of 2005 was recorded across the board. The commercial sub-sector performed strongly, matching infrastructure's 23% rise. Private housing output continued to increase the rate of growth slowed to 8%.

**Figure 2**  
Construction output percentage change: UK vs. East of England



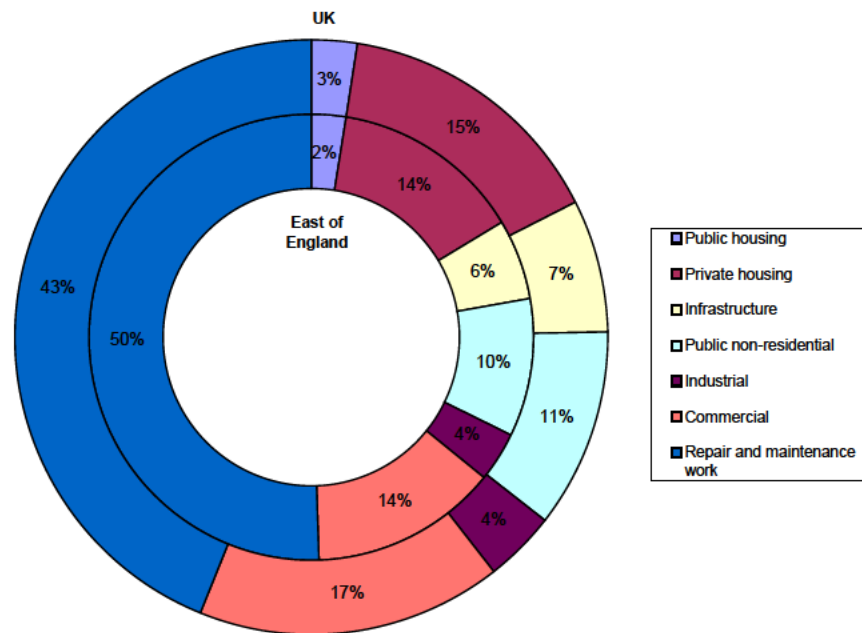
Notes: Except for Northern Ireland, output data for the English regions, Wales, and Scotland are supplied by the Department of Trade and Industry (DTI) on a current price basis. Thus national deflators produced by the DTI have been used to deflate to a 2000 constant price basis, i.e. the effects of inflation have been stripped out.

Source: DTI, Department of Finance and Personnel Northern Ireland (DFPNI), Experian.

## Structure of the construction industry

As illustrated by Figure 3, R&M output accounts for a largest sectoral share of the total in the East of England. While this is also the case for the UK as a whole, the East of England has a proportionally greater reliance because this sub-sector accounts for 50% of total work against 43% nationally. To accommodate this, the shares taken by all other sub-sectors, apart from industrial, are proportionally smaller. Commercial's share of output in the East of England is 14%, which is 3% less than in the UK as a whole. The proportion of total output taken by the industrial sub-sector in the region is comparable to the national level.

**Figure 3**  
**Construction output by main sub-sector: UK vs. East of England, 2004**



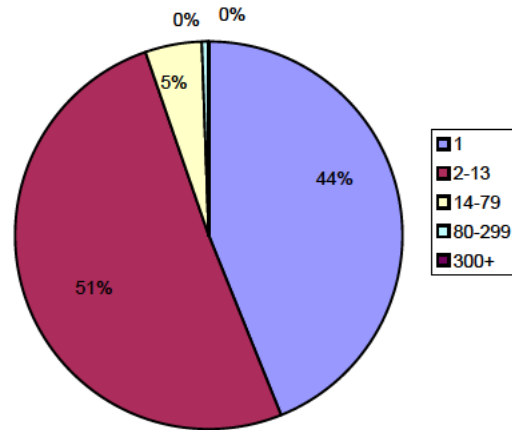
Source: DTI, DFPNI, Experian.



Figure 4 demonstrates that construction companies in the East of England are predominantly small. Over 94% of firms employ less than 13 people, while less than 1% employ more than 80 people. Firms employing more than 300 people are very scarce.

**Figure 4**  
**Percentage of construction companies by size, 2004**

| Employees    | 3rd Quarter 2004 | %          |
|--------------|------------------|------------|
| 1            | 10140            | 44.0       |
| 2-13         | 11720            | 50.8       |
| 14-79        | 1079             | 4.7        |
| 80-299       | 102              | 0.4        |
| 300+         | 29               | 0.1        |
| <b>Total</b> | <b>23070</b>     | <b>100</b> |



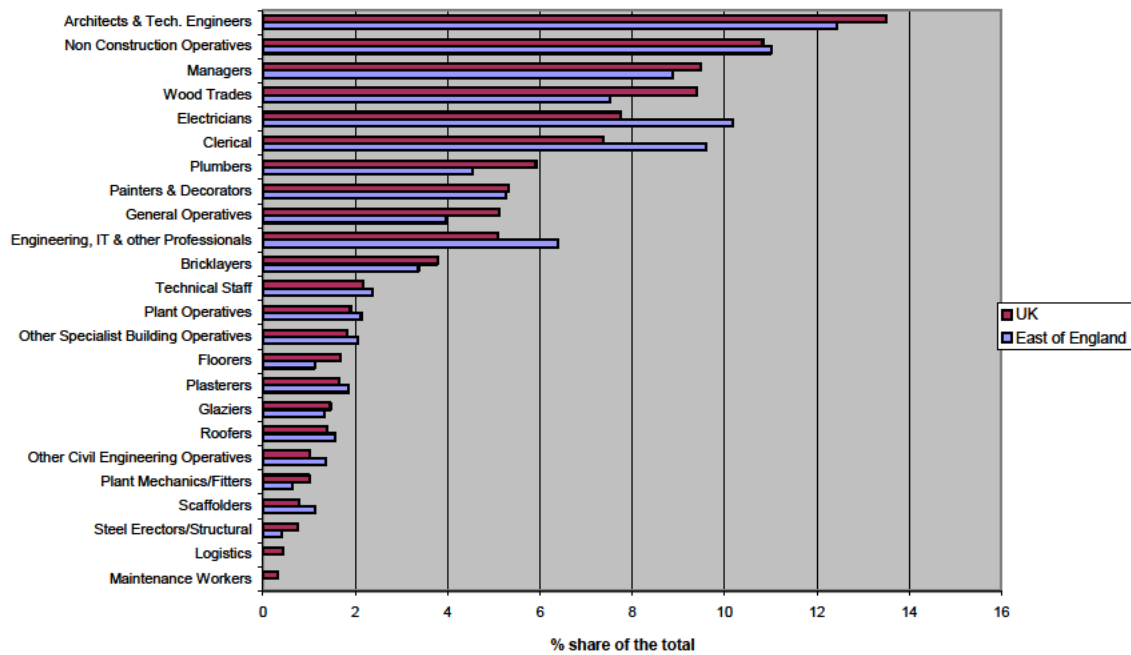
\* Note: One employee indicates one person working for the company

Source: DTI.

## Construction employment

Figure 5 shows that employment is particularly concentrated within a few occupations in the East of England. Electricians, Clerical and Engineering, IT & Other Professionals are the three main occupations that are over-represented. Architects & Technical Engineers (which includes all SIC 74.2 occupations) account for the greatest share of employment both nationally and in the East of England. However, this group accounts for a marginally smaller share of employment in the East of England compared with the UK as a whole.

**Figure 5**  
**Employment by occupation, UK vs. East of England: 2005**



Source: Construction Skills Network Model, 2006.

## 4 The outlook for construction

### New construction orders – Historical overview

In this section, comparison is made with GB rather than the UK, owing to the fact that official orders data for Northern Ireland are not available.

Table 2 shows new work orders figures for the main construction sub-sectors in the East of England, in current prices. With the exception of 2003, orders have been rising year-on-year since the turn of the century. A robust 44% rise in 2004 helped raise orders to £4.2bn in 2005, 55% higher than in 2000. The rate of increase in new orders slowed to just 3% in 2005, due mainly to declines in both commercial and public non-housing orders.

The change in new work orders in commercial, the largest sub-sector in value terms in the East of England, has been volatile in recent years. A 109% rise in 2004 was immediately followed by a 28% fall in 2005. However, individual projects in this sub-sector can be sizeable, particularly PFI schemes in the health and education sub-sectors, making orders prone to large fluctuations at a regional level. The resulting output streams can span several years and thus tend to appear somewhat smoother.

Industrial orders were particularly robust in 2005, being up by 121% from 2004. Indicators suggest that manufacturing is subdued in the region and warehousing takes the lion's share of this market. A number of warehouse and industrial schemes are being developed around the Peterborough area.

Growth in private housing orders slowed considerably in 2005 to 9%, after rising by a robust 32% in 2004. Strong orders growth in infrastructure in 2005 suggests that the sub-sector may have turned a corner. After declining in both 2003 and 2004 orders rose by 59% in 2005.

Nationally, new work orders rose strongly in 2004, increasing by 15%. With the exception of infrastructure and public non-housing, all sub-sectors saw their orders rise over the year. The rate of increase slowed slightly in 2005 to 11%, due mainly to a sharp slowdown in the growth of the private housing sub-sector. In contrast to 2004, orders in the public non-housing sub-sector increased robustly by 48% in 2005. Commercial orders were similarly buoyant over the year, also rising by 48%. Infrastructure orders failed to recover in 2005 and declined by a further 9%.

**Table 2**  
**New work orders for the East of England, 1999–2005**

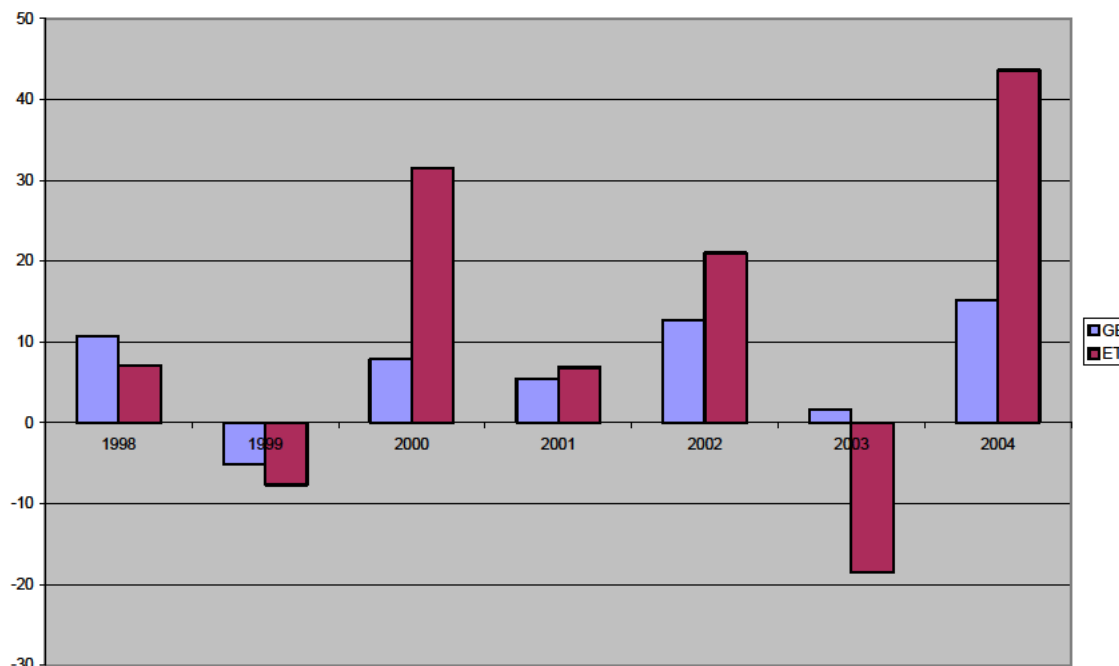
|                     | £ million/annual % change |             |             |             |             |             |             |
|---------------------|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                     | 1999                      | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        |
| Public housing      | 72                        | 78          | 97          | 76          | 145         | 142         | 258         |
|                     | 7                         | 8           | 24          | -22         | 91          | -2          | 82          |
| Private housing     | 602                       | 645         | 679         | 865         | 857         | 1128        | 1231        |
|                     | -12                       | 7           | 5           | 27          | -1          | 32          | 9           |
| Infrastructure      | 335                       | 605         | 560         | 679         | 325         | 313         | 499         |
|                     | -2                        | 81          | -7          | 21          | -52         | -4          | 59          |
| Public non-housing  | 274                       | 312         | 360         | 520         | 579         | 736         | 555         |
|                     | 5                         | 14          | 15          | 44          | 11          | 27          | -25         |
| Industrial          | 236                       | 347         | 342         | 247         | 201         | 244         | 540         |
|                     | 41                        | 47          | -1          | -28         | -19         | 21          | 121         |
| Commercial          | 514                       | 687         | 818         | 1068        | 709         | 1480        | 1072        |
|                     | -29                       | 34          | 19          | 31          | -34         | 109         | -28         |
| <b>All new work</b> | <b>2034</b>               | <b>2674</b> | <b>2856</b> | <b>3456</b> | <b>2816</b> | <b>4044</b> | <b>4155</b> |
|                     | -8                        | 31          | 7           | 21          | -19         | 44          | 3           |

Source: DTI.

Figure 6 shows that new orders growth in the East of England generally follows the national trend, although any swings tend to be more pronounced. The exception to this is 2003 when orders in the East of England suffered a sharp decline while marginal increases were seen across GB as a whole.

**Figure 6**  
**New orders: GB vs. East of England, 1998–2004**

Annual % change



Source: DTI.

## Construction output – forecasts

Table 3 indicates that real construction output is forecast to grow consistently over the coming years at a relatively strong rate.

- Annual growth<sup>\*</sup> is forecast to average 4.5% between 2006 and 2010. New work is likely to be the main driver of overall growth with an annual rate of around 5.3% expected. Activity in the R&M sub-sector will be a little more subdued, averaging 3.6% annually.
- In contrast with the recent past, the infrastructure sub-sector is forecast to be a key driver of growth going forward. Double-digit output growth is forecast in all but one year. Several road schemes and expansions at Felixstowe and Harwich ports should help to boost output over the forecast period.
- Strong demand and a shortage of supply suggest that the outlook for both housing sub-sectors is positive. The government's commitment to increase the supply of affordable housing in the south and east of the country should ensure public housing output continues to increase over the coming years. On the private side, a temporary slowdown is forecast before the sub-sector once again picks up to record double-digit growth from 2008.

<sup>\*</sup> The annual average growth in construction output is not simply an average of the percentages shown in Tables 3 or 4. It is a Compound Average Growth Rate, i.e. it is the rate at which output would grow each year if it increased steadily year-on-year over the forecast period. It is calculated by taking the *n*th root of the total percentage growth rate, where *n* is the number of years in the period being considered.

- The outlook for the remaining new work sub-sectors, namely public non-housing, industrial and commercial is much more subdued with expected annual average growth of 3.5%, 1.9% and 1.5% respectively.

**Table 3**  
**East of England construction output by sub-sector, 2004–2010**

|                     | Annual % change |            |           |           |           |           |           |
|---------------------|-----------------|------------|-----------|-----------|-----------|-----------|-----------|
|                     | 2004            | 2005       | 2006      | 2007      | 2008      | 2009      | 2010      |
| Public housing      | 7%              | 5%         | 13%       | 12%       | 13%       | 10%       | 8%        |
| Private housing     | 12%             | 5%         | 2%        | 3%        | 15%       | 11%       | 11%       |
| Infrastructure      | -12%            | 15%        | 10%       | 9%        | 15%       | 15%       | 13%       |
| Public non-housing  | 15%             | -7%        | -1%       | 4%        | 1%        | 4%        | 4%        |
| Industrial          | 13%             | 19%        | 7%        | 1%        | 0%        | 1%        | 2%        |
| Commercial          | -14%            | 18%        | 4%        | 6%        | 2%        | -1%       | -1%       |
| <b>All new work</b> | <b>1%</b>       | <b>8%</b>  | <b>4%</b> | <b>5%</b> | <b>8%</b> | <b>6%</b> | <b>6%</b> |
| R&M                 | 4%              | 12%        | 10%       | 10%       | 3%        | 2%        | 2%        |
| <b>Total Work</b>   | <b>3%</b>       | <b>10%</b> | <b>7%</b> | <b>7%</b> | <b>5%</b> | <b>4%</b> | <b>4%</b> |

Source: Experian.

Table 4 shows the total construction output and employment over the 1998–2010 period. Real construction output in the East of England is set to be 28.5% higher in 2010 than in 2004, with moderate year-on-year increases forecast. This is significantly stronger than a 14% increase forecast for the UK as a whole over the same period. Total employment is forecast to rise by 38.5% over the same period.

**Table 4**  
**Total construction output and employment, East of England: 1998–2010**

|                 | Year | Total Output Growth Rate % | Total Output £m 2001 prices | Total Employment (direct and indirect) 000s |
|-----------------|------|----------------------------|-----------------------------|---|
| <b>Actual</b>   | 1998 | -0.9                       | 6273                        | 177   |
|                 | 1999 | 2.8                        | 6446                        | 195   |
|                 | 2000 | 4.6                        | 6745                        | 206   |
|                 | 2001 | 9.4                        | 7379                        | 219   |
|                 | 2002 | 4.0                        | 7676                        | 220   |
|                 | 2003 | 2.0                        | 7826                        | 233   |
|                 | 2004 | 2.6                        | 8027                        | 242   |
| <b>Forecast</b> | 2005 | 10                         | 8846                        | 249   |
|                 | 2006 | 7                          | 9447                        | 265   |
|                 | 2007 | 7                          | 10148                       | 283   |
|                 | 2008 | 5                          | 10679                       | 295   |
|                 | 2009 | 4                          | 11116                       | 305   |
|                 | 2010 | 4                          | 11598                       | 315   |

Source: Experian, Construction Skills Network Model, 2006.

## 5 Construction industry employment requirements

Table 5 and Figure 7 show total employment levels and Average Annual Requirements for the UK, region, and Learning and Skills Council (LSC) areas in order to highlight where the greatest requirements are, and also for the purpose of comparison.

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 (SIC 45.31 and 45.33). Thus, outputs from the Construction Skills Network Model relating to these two occupations have been passed to SummitSkills for their analysis but have been included here for completeness.

The figures for the Average Annual Requirement are based upon the net balance of inflows and outflows, and cover replacement and expansion of the industry.

### The national UK forecasts

The average annual gross employment requirement across the UK over the period 2006 to 2010 is estimated at 87,000, including all occupations in SIC 74.2 and in SIC 45 with the exception of Non-construction Operatives (Table 5). Non-construction Operatives captures all of the other elements involved in construction as defined by SIC 74.2 and SIC 45, outside of the main occupations listed in the following charts and tables. The Average Annual Requirement for Non-construction Operatives is not shown because the activities covered by this group are too diverse.

Total employment is forecast to rise by 246,760 to 2.8 million between 2006 and 2010.

- At 11,090 Wood Trades is likely to have the highest Average Annual Requirement going forward (Table 5).
- Three out of the four occupations with the highest Average Annual Requirement from 2006 to 2010 are focused on management and organisation, namely Managers, Architects and Technical Engineers (SIC 74.2) and Clerical (Table 5).
- The Average Annual Requirement for Electricians, Plumbers, Engineering, IT & Other Professionals and Bricklayers is also expected to be high (Table 5).
- At the other end of the scale, the Average Annual Requirement for Scaffolders and Logistics is significantly lower at just 900 and 580 respectively (Table 5).
- Nationally, the professionals working within architectural and engineering activities and related technical consultancy (SIC 74.2) (Architects & Technical Engineers) take the largest share of total employment with an estimated 340,450 employed in 2006, rising to 354,270 by 2010. Second in line is Managers with 235,400 in 2006, increasing to 258,520 by 2010. Particularly strong demand for Wood Trades between 2006 and 2010 should make this the second largest occupation in employment terms by 2010 (Table 5 and Figure 7).
- Whilst the forecasts for an increase in total employment for **Maintenance Workers** are shown in Table 5, the Average Annual Requirement has been excluded. The model is currently forecasting a low requirement for this group compared to other occupations. Further research is being undertaken on the factors influencing this result and the Average Annual Requirement will be published when this work has been completed.

Please note that all of the Average Annual Requirements presented in this section are employment requirements and not necessarily training requirements. Recruiting from other industries with a similar skills base or employing skilled migrant labour could mean the actual training requirement is lower.

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\* For ConstructionSkills and SummitSkills sector footprints see Appendix IV

**Table 5**  
**UK**  
**Total employment and Average Annual Requirement by occupation: 2006–2010**

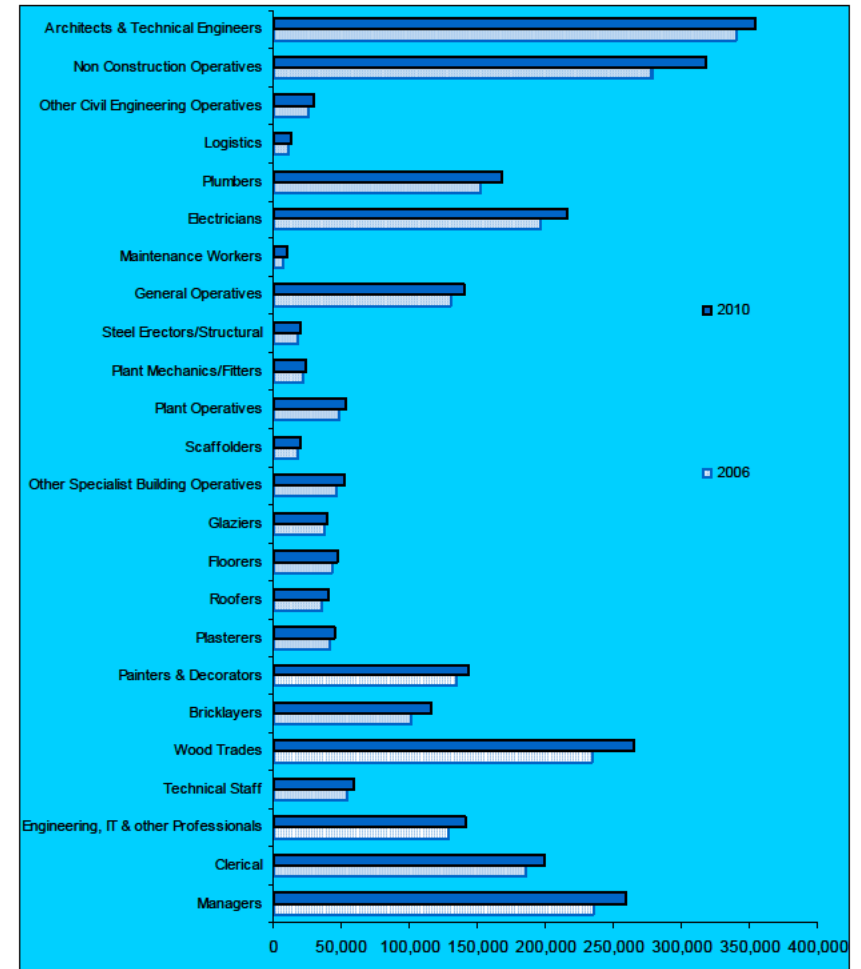
|  | Employment       |                  | Average Annual Requirement |
|--|------------------|------------------|----------------------------|
|  | 2006             | 2010             | 2006-2010                  |
| <b>Managers</b>                                  | 235,400          | 258,520          | 10,530                     |
| <b>Clerical</b>                                  | 185,270          | 198,600          | 8,610                      |
| <b>Engineering, IT &amp; other Professionals</b> | 129,320          | 140,890          | 4,790                      |
| <b>Technical Staff</b>                           | 54,280           | 59,260           | 3,260                      |
| <b>Wood Trades</b>                               | 233,790          | 265,290          | 11,090                     |
| <b>Bricklayers</b>                               | 101,290          | 116,220          | 4,730                      |
| <b>Painters &amp; Decorators</b>                 | 133,640          | 143,430          | 3,620                      |
| <b>Plasterers</b>                                | 41,060           | 44,930           | 1,780                      |
| <b>Roofers</b>                                   | 35,110           | 39,720           | 1,750                      |
| <b>Floorers</b>                                  | 42,670           | 46,840           | 1,510                      |
| <b>Glaziers</b>                                  | 36,660           | 38,660           | 990                        |
| <b>Other Specialist Building Operatives</b>      | 46,250           | 51,520           | 2,370                      |
| <b>Scaffolders</b>                               | 17,700           | 19,870           | 900                        |
| <b>Plant Operatives</b>                          | 48,200           | 52,750           | 1,780                      |
| <b>Plant Mechanics/Fitters</b>                   | 22,200           | 24,060           | 1,920                      |
| <b>Steel Erectors/Structural</b>                 | 17,570           | 19,760           | 1,150                      |
| <b>General Operatives</b>                        | 130,320          | 139,950          | 1,510                      |
| <b>Maintenance Workers</b>                       | 6,750            | 9,550            | *                          |
| <b>Electricians</b>                              | 196,400          | 216,240          | 8,130                      |
| <b>Plumbers</b>                                  | 152,450          | 167,810          | 5,330                      |
| <b>Logistics</b>                                 | 10,980           | 12,600           | 580                        |
| <b>Other Civil Engineering Operatives</b>        | 26,240           | 30,110           | 1,390                      |
| <b>Non Construction Operatives</b>               | 277,900          | 317,810          |                            |
| <b>Total (SIC 45)</b>                            | <b>2,181,450</b> | <b>2,414,390</b> | <b>77,720</b>              |
| <b>Architects &amp; Technical Engineers</b>      | <b>340,450</b>   | <b>354,270</b>   | <b>9,280</b>               |
| <b>Total (SIC 45 &amp; 74.2)</b>                 | <b>2,521,900</b> | <b>2,768,660</b> | <b>87,000</b>              |

Source: Construction Skills Network Model, 2006; Experian.

Note: Numbers are rounded to the nearest ten and may not sum to the total.

\* see text for note on Maintenance Workers

**Figure 7**  
**UK**  
**Total employment by occupation: 2006–2010**



Source: Construction Skills Network Model, 2006; Experian.

Note: No bar indicates less than 1,000.

## The East of England employment forecasts

Table 6 and Figure 8 outline the forecast employment and Average Annual Requirement for 24 occupations within the East of England between 2006 and 2010.

- Total construction employment in the East of England is forecast to increase by 49,460 between 2006 and 2010 (Table 6).
- The region has an Average Annual Requirement of 14,590 across both SIC 45 and SIC 74.2 (Table 6 and Figure 8).
- In the East of England, the greatest Average Annual Requirement will come from Electricians, which is estimated at 2,080. Nationally, Wood Trades is forecast to have the greatest requirement, whereas in the East of England, Wood Trades has the fourth largest requirement at 1,610 (Table 6).
- Three other occupations have an Average Annual Requirement in excess of 1,000, namely Clerical, Managers and Engineering, IT & Other Professionals. The Average Annual Requirements for these occupations are 1,850, 1,780 and 1,140 respectively (Table 6).
- At the other end of the scale the requirement in four occupations, Floorers, Steel Erectors/Structural, Maintenance Workers and Logistics, is less than or equal to 100 (Table 6).
- Non-construction Operatives is the occupational group forecast to see the greatest increase in total employment. By 2010 it is estimated that an additional 8,530 people will be working in this occupation in the East of England (Table 6 and Figure 8).

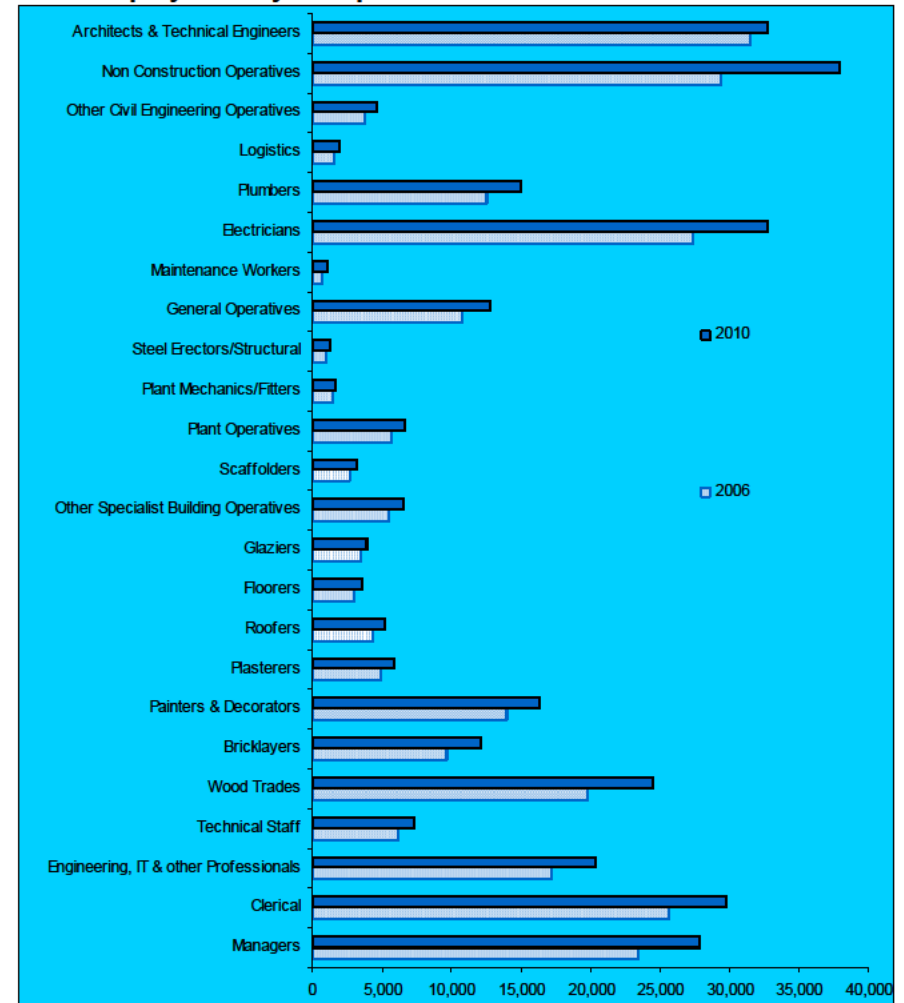


**Table 6**  
**East of England**  
**Total employment and Average Annual Requirement by occupation: 2006–2010**

|  | Employment     |                | Average Annual Requirement |
|--|----------------|----------------|----------------------------|
|  | 2006           | 2010           | 2006-2010                  |
| <b>Managers</b>                                  | 23,450         | 27,870         | 1,780                      |
| <b>Clerical</b>                                  | 25,610         | 29,700         | 1,850                      |
| <b>Engineering, IT &amp; other Professionals</b> | 17,170         | 20,360         | 1,140                      |
| <b>Technical Staff</b>                           | 6,220          | 7,330          | 580                        |
| <b>Wood Trades</b>                               | 19,790         | 24,430         | 1,610                      |
| <b>Bricklayers</b>                               | 9,640          | 12,130         | 930                        |
| <b>Painters &amp; Decorators</b>                 | 14,030         | 16,320         | 530                        |
| <b>Plasterers</b>                                | 4,960          | 5,830          | 270                        |
| <b>Roofers</b>                                   | 4,280          | 5,230          | 330                        |
| <b>Floorers</b>                                  | 3,000          | 3,590          | <10                        |
| <b>Glaziers</b>                                  | 3,460          | 3,870          | 140                        |
| <b>Other Specialist Building Operatives</b>      | 5,480          | 6,590          | 330                        |
| <b>Scaffolders</b>                               | 2,650          | 3,220          | 230                        |
| <b>Plant Operatives</b>                          | 5,620          | 6,700          | 330                        |
| <b>Plant Mechanics/Fitters</b>                   | 1,420          | 1,630          | 150                        |
| <b>Steel Erectors/Structural</b>                 | 1,000          | 1,220          | 100                        |
| <b>General Operatives</b>                        | 10,810         | 12,740         | 550                        |
| <b>Maintenance Workers</b>                       | 770            | 1,170          | 30                         |
| <b>Electricians</b>                              | 27,360         | 32,700         | 2,080                      |
| <b>Plumbers</b>                                  | 12,530         | 15,060         | 610                        |
| <b>Logistics</b>                                 | 1,580          | 1,940          | 90                         |
| <b>Other Civil Engineering Operatives</b>        | 3,770          | 4,630          | 220                        |
| <b>Non Construction Operatives</b>               | 29,400         | 37,930         |                            |
| <b>Total (SIC 45)</b>                            | <b>234,000</b> | <b>282,190</b> | <b>13,880</b>              |
| <b>Architects &amp; Technical Engineers</b>      | 31,420         | 32,690         | 710                        |
| <b>Total (SIC 45 &amp; 74.2)</b>                 | <b>265,420</b> | <b>314,880</b> | <b>14,590</b>              |

Source: Construction Skills Network Model, 2006; Experian.  
 Note: Numbers are rounded to the nearest ten and may not sum to the total.

**Figure 8**  
**East of England**  
**Total employment by occupation: 2006–2010**



Source: Construction Skills Network Model, 2006; Experian.  
 Note: No bar indicates less than 1,000.

The following charts give an indication of employment and requirement by occupation for the LSC areas in the East of England. The areas and populations being looked at are considerably smaller than those on a regional level and the data available at this sub-regional level are less robust. Construction employment and future requirements on a sub-regional level are created as ratios of the regional data and as such the results that are presented should be treated with a significant degree of caution. ConstructionSkills is currently working with Observatory members and other partners and stakeholders to review regional research to improve the robustness of these data.

**Table 7  
Norfolk  
Total employment and annual requirement by occupation: 2006–2010**

|  | Employment    |               | Average Annual Requirement |
|--|---------------|---------------|----------------------------|
|  | 2006          | 2010          | 2006-2010                  |
| <b>Managers</b>                                  | 3,060         | 3,510         | 220                        |
| <b>Clerical</b>                                  | 3,350         | 3,750         | 230                        |
| <b>Engineering, IT &amp; other Professionals</b> | 2,240         | 2,570         | 140                        |
| <b>Technical Staff</b>                           | 810           | 920           | 70                         |
| <b>Wood Trades</b>                               | 2,580         | 3,080         | 200                        |
| <b>Bricklayers</b>                               | 1,260         | 1,530         | 120                        |
| <b>Painters &amp; Decorators</b>                 | 1,830         | 2,060         | 70                         |
| <b>Plasterers</b>                                | 650           | 730           | 30                         |
| <b>Roofers</b>                                   | 560           | 660           | 40                         |
| <b>Floorers</b>                                  | 390           | 450           | <10                        |
| <b>Glaziers</b>                                  | 450           | 490           | 20                         |
| <b>Other Specialist Building Operatives</b>      | 720           | 830           | 40                         |
| <b>Scaffolders</b>                               | 350           | 410           | 30                         |
| <b>Plant Operatives</b>                          | 730           | 840           | 40                         |
| <b>Plant Mechanics/Fitters</b>                   | 190           | 210           | 20                         |
| <b>Steel Erectors/Structural</b>                 | 130           | 150           | 10                         |
| <b>General Operatives</b>                        | 1,410         | 1,610         | 70                         |
| <b>Maintenance Workers</b>                       | 100           | 150           | <10                        |
| <b>Electricians</b>                              | 3,570         | 4,120         | 260                        |
| <b>Plumbers</b>                                  | 1,640         | 1,900         | 80                         |
| <b>Logistics</b>                                 | 220           | 260           | <10                        |
| <b>Other Civil Engineering Operatives</b>        | 480           | 570           | <10                        |
| <b>Non Construction Operatives</b>               | 3,840         | 4,780         | <10                        |
| <b>Total (SIC 45)</b>                            | <b>30,560</b> | <b>35,580</b> | <b>1,690</b>               |
| <b>Architects &amp; Technical Engineers</b>      | 4,100         | 4,120         | 90                         |
| <b>Total (SIC 45 &amp; 74.2)</b>                 | <b>34,660</b> | <b>39,700</b> | <b>1,780</b>               |

Source: Construction Skills Network Employment Model, 2006; Experian.  
Note: Numbers are rounded to the nearest ten and may not sum to the total.

**Table 8  
Suffolk  
Total employment and annual requirement by occupation: 2006–2010**

|  | Employment    |               | Average Annual Requirement |
|--|---------------|---------------|----------------------------|
|  | 2006          | 2010          | 2006-2010                  |
| <b>Managers</b>                                  | 2,180         | 2,510         | 160                        |
| <b>Clerical</b>                                  | 2,380         | 2,670         | 170                        |
| <b>Engineering, IT &amp; other Professionals</b> | 1,600         | 1,830         | 100                        |
| <b>Technical Staff</b>                           | 580           | 660           | 50                         |
| <b>Wood Trades</b>                               | 1,840         | 2,200         | 140                        |
| <b>Bricklayers</b>                               | 900           | 1,090         | 80                         |
| <b>Painters &amp; Decorators</b>                 | 1,310         | 1,470         | 50                         |
| <b>Plasterers</b>                                | 460           | 520           | 20                         |
| <b>Roofers</b>                                   | 400           | 470           | 30                         |
| <b>Floorers</b>                                  | 280           | 320           | <10                        |
| <b>Glaziers</b>                                  | 320           | 350           | 10                         |
| <b>Other Specialist Building Operatives</b>      | 510           | 590           | 30                         |
| <b>Scaffolders</b>                               | 250           | 290           | 20                         |
| <b>Plant Operatives</b>                          | 520           | 600           | 30                         |
| <b>Plant Mechanics/Fitters</b>                   | 130           | 150           | 10                         |
| <b>Steel Erectors/Structural</b>                 | 90            | 110           | <10                        |
| <b>General Operatives</b>                        | 1,010         | 1,150         | 50                         |
| <b>Maintenance Workers</b>                       | 70            | 100           | <10                        |
| <b>Electricians</b>                              | 2,550         | 2,940         | 190                        |
| <b>Plumbers</b>                                  | 1,170         | 1,350         | 50                         |
| <b>Logistics</b>                                 | 160           | 180           | <10                        |
| <b>Other Civil Engineering Operatives</b>        | 340           | 410           | <10                        |
| <b>Non Construction Operatives</b>               | 2,740         | 3,410         | <10                        |
| <b>Total (SIC 45)</b>                            | <b>21,790</b> | <b>25,370</b> | <b>1,190</b>               |
| <b>Architects &amp; Technical Engineers</b>      | 2,930         | 2,940         | 60                         |
| <b>Total (SIC 45 &amp; 74.2)</b>                 | <b>24,720</b> | <b>28,310</b> | <b>1,250</b>               |

Source: Construction Skills Network Employment Model, 2006; Experian.  
Note: Numbers are rounded to the nearest ten and may not sum to the total.

**Table 9**  
**Cambridgeshire**  
**Total employment and annual requirement by occupation: 2006–2010**

|  | Employment    |               | Average Annual Requirement |
|--|---------------|---------------|----------------------------|
|  | 2006          | 2010          | 2006-2010                  |
| <b>Managers</b>                                  | 2,520         | 3,020         | 190                        |
| <b>Clerical</b>                                  | 2,760         | 3,220         | 200                        |
| <b>Engineering, IT &amp; other Professionals</b> | 1,850         | 2,210         | 120                        |
| <b>Technical Staff</b>                           | 670           | 790           | 60                         |
| <b>Wood Trades</b>                               | 2,130         | 2,650         | 170                        |
| <b>Bricklayers</b>                               | 1,040         | 1,310         | 100                        |
| <b>Painters &amp; Decorators</b>                 | 1,510         | 1,770         | 60                         |
| <b>Plasterers</b>                                | 530           | 630           | 30                         |
| <b>Roofers</b>                                   | 460           | 570           | 40                         |
| <b>Floorers</b>                                  | 320           | 390           | <10                        |
| <b>Glaziers</b>                                  | 370           | 420           | 20                         |
| <b>Other Specialist Building Operatives</b>      | 590           | 710           | 40                         |
| <b>Scaffolders</b>                               | 280           | 350           | 30                         |
| <b>Plant Operatives</b>                          | 600           | 730           | 40                         |
| <b>Plant Mechanics/Fitters</b>                   | 150           | 180           | 20                         |
| <b>Steel Erectors/Structural</b>                 | 110           | 130           | 10                         |
| <b>General Operatives</b>                        | 1,160         | 1,380         | 60                         |
| <b>Maintenance Workers</b>                       | 80            | 130           | <10                        |
| <b>Electricians</b>                              | 2,950         | 3,540         | 230                        |
| <b>Plumbers</b>                                  | 1,350         | 1,630         | 70                         |
| <b>Logistics</b>                                 | 180           | 220           | <10                        |
| <b>Other Civil Engineering Operatives</b>        | 400           | 490           | <10                        |
| <b>Non Construction Operatives</b>               | 3,160         | 4,110         | <10                        |
| <b>Total (SIC 45)</b>                            | <b>25,170</b> | <b>30,580</b> | <b>1,490</b>               |
| <b>Architects &amp; Technical Engineers</b>      | 3,380         | 3,540         | 80                         |
| <b>Total (SIC 45 &amp; 74.2)</b>                 | <b>28,550</b> | <b>34,120</b> | <b>1,570</b>               |

Source: Construction Skills Network Employment Model, 2006; Experian.  
 Note: Numbers are rounded to the nearest ten and may not sum to the total.

**Table 10**  
**Essex**  
**Total employment and annual requirement by occupation: 2006–2010**

|  | Employment    |                | Average Annual Requirement |
|--|---------------|----------------|----------------------------|
|  | 2006          | 2010           | 2006-2010                  |
| <b>Managers</b>                                  | 8,510         | 10,350         | 660                        |
| <b>Clerical</b>                                  | 9,290         | 11,030         | 690                        |
| <b>Engineering, IT &amp; other Professionals</b> | 6,230         | 7,560          | 420                        |
| <b>Technical Staff</b>                           | 2,260         | 2,720          | 210                        |
| <b>Wood Trades</b>                               | 7,180         | 9,070          | 600                        |
| <b>Bricklayers</b>                               | 3,500         | 4,500          | 340                        |
| <b>Painters &amp; Decorators</b>                 | 5,090         | 6,060          | 200                        |
| <b>Plasterers</b>                                | 1,800         | 2,160          | 100                        |
| <b>Roofers</b>                                   | 1,550         | 1,940          | 120                        |
| <b>Floorers</b>                                  | 1,090         | 1,330          | <10                        |
| <b>Glaziers</b>                                  | 1,250         | 1,440          | 50                         |
| <b>Other Specialist Building Operatives</b>      | 1,990         | 2,450          | 120                        |
| <b>Scaffolders</b>                               | 960           | 1,200          | 90                         |
| <b>Plant Operatives</b>                          | 2,040         | 2,490          | 120                        |
| <b>Plant Mechanics/Fitters</b>                   | 510           | 600            | 60                         |
| <b>Steel Erectors/Structural</b>                 | 360           | 450            | 40                         |
| <b>General Operatives</b>                        | 3,920         | 4,730          | 200                        |
| <b>Maintenance Workers</b>                       | 280           | 430            | <10                        |
| <b>Electricians</b>                              | 9,930         | 12,140         | 770                        |
| <b>Plumbers</b>                                  | 4,550         | 5,590          | 220                        |
| <b>Logistics</b>                                 | 610           | 760            | <10                        |
| <b>Other Civil Engineering Operatives</b>        | 1,330         | 1,680          | <10                        |
| <b>Non Construction Operatives</b>               | 10,670        | 14,080         | <10                        |
| <b>Total (SIC 45)</b>                            | <b>84,900</b> | <b>104,760</b> | <b>5,010</b>               |
| <b>Architects &amp; Technical Engineers</b>      | 11,400        | 12,140         | 260                        |
| <b>Total (SIC 45 &amp; 74.2)</b>                 | <b>96,300</b> | <b>116,900</b> | <b>5,270</b>               |

Source: Construction Skills Network Employment Model, 2006; Experian.  
 Note: Numbers are rounded to the nearest ten and may not sum to the total.

**Table 11**  
**Bedfordshire & Luton**  
**Total employment and annual requirement by occupation: 2006–2010**

|                                       | Employment    |               | Average Annual Requirement |
|---------------------------------------|---------------|---------------|----------------------------|
|                                       | 2006          | 2010          | 2006-2010                  |
| Managers                              | 2,300         | 2,680         | 170                        |
| Clerical                              | 2,510         | 2,850         | 180                        |
| Engineering, IT & other Professionals | 1,680         | 1,960         | 110                        |
| Technical Staff                       | 610           | 700           | 60                         |
| Wood Trades                           | 1,940         | 2,350         | 150                        |
| Bricklayers                           | 940           | 1,160         | 90                         |
| Painters & Decorators                 | 1,370         | 1,570         | 50                         |
| Plasterers                            | 490           | 560           | 30                         |
| Roofers                               | 420           | 500           | 30                         |
| Floorers                              | 290           | 340           | <10                        |
| Glaziers                              | 340           | 370           | 10                         |
| Other Specialist Building Operatives  | 540           | 630           | 30                         |
| Scaffolders                           | 260           | 310           | 20                         |
| Plant Operatives                      | 550           | 640           | 30                         |
| Plant Mechanics/Fitters               | 140           | 160           | 10                         |
| Steel Erectors/Structural             | 100           | 120           | <10                        |
| General Operatives                    | 1,060         | 1,220         | 50                         |
| Maintenance Workers                   | 80            | 110           | <10                        |
| Electricians                          | 2,680         | 3,140         | 200                        |
| Plumbers                              | 1,230         | 1,450         | 60                         |
| Logistics                             | 160           | 200           | <10                        |
| Other Civil Engineering Operatives    | 360           | 430           | <10                        |
| Non Construction Operatives           | 2,880         | 3,640         | <10                        |
| <b>Total (SIC 45)</b>                 | <b>22,930</b> | <b>27,090</b> | <b>1,280</b>               |
| Architects & Technical Engineers      | 3,080         | 3,140         | 70                         |
| <b>Total (SIC 45 &amp; 74.2)</b>      | <b>26,010</b> | <b>30,230</b> | <b>1,350</b>               |

Source: Construction Skills Network Employment Model, 2006; Experian.  
 Note: Numbers are rounded to the nearest ten and may not sum to the total.

**Table 12**  
**Hertfordshire**  
**Total employment and annual requirement by occupation: 2006–2010**

|                                       | Employment    |               | Average Annual Requirement |
|---------------------------------------|---------------|---------------|----------------------------|
|                                       | 2006          | 2010          | 2006-2010                  |
| Managers                              | 4,870         | 5,810         | 370                        |
| Clerical                              | 5,320         | 6,190         | 390                        |
| Engineering, IT & other Professionals | 3,570         | 4,240         | 240                        |
| Technical Staff                       | 1,290         | 1,530         | 120                        |
| Wood Trades                           | 4,110         | 5,090         | 340                        |
| Bricklayers                           | 2,000         | 2,530         | 190                        |
| Painters & Decorators                 | 2,920         | 3,400         | 110                        |
| Plasterers                            | 1,030         | 1,210         | 60                         |
| Roofers                               | 890           | 1,090         | 70                         |
| Floorers                              | 620           | 750           | <10                        |
| Glaziers                              | 720           | 810           | 30                         |
| Other Specialist Building Operatives  | 1,140         | 1,370         | 70                         |
| Scaffolders                           | 550           | 670           | 50                         |
| Plant Operatives                      | 1,170         | 1,390         | 70                         |
| Plant Mechanics/Fitters               | 290           | 340           | 30                         |
| Steel Erectors/Structural             | 210           | 250           | 20                         |
| General Operatives                    | 2,250         | 2,650         | 110                        |
| Maintenance Workers                   | 160           | 240           | <10                        |
| Electricians                          | 5,690         | 6,810         | 430                        |
| Plumbers                              | 2,600         | 3,140         | 130                        |
| Logistics                             | 350           | 430           | <10                        |
| Other Civil Engineering Operatives    | 760           | 940           | <10                        |
| Non Construction Operatives           | 6,110         | 7,900         | <10                        |
| <b>Total (SIC 45)</b>                 | <b>48,620</b> | <b>58,780</b> | <b>2,830</b>               |
| Architects & Technical Engineers      | 6,530         | 6,810         | 150                        |
| <b>Total (SIC 45 &amp; 74.2)</b>      | <b>55,150</b> | <b>65,590</b> | <b>2,980</b>               |

Source: Construction Skills Network Employment Model, 2006; Experian.  
 Note: Numbers are rounded to the nearest ten and may not sum to the total.

## Appendix I – Glossary of terms

**Demand** – construction **output**, vacancies, and a set of **labour coefficients** to translate demand for workers to labour requirements by trade. Demand is calculated using DTI and DFP output data. Vacancy data are usually taken from the National Employers Skills Survey (NESS) from the Department for Education and Skills (DfES).

**GDP** – Gross Domestic Product – total market value of all final goods and services produced. A measure of national income.  $GDP = GVA + \text{taxes on products} - \text{subsidies on products}$

**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.

**Labour coefficients** – the labour inputs required for various types of construction activity. The number of workers of each occupation/trade to produce £1m of output in 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 Information – data that are quantitative (numerical) or qualitative (insights and perceptions) on workers, employers, wages, conditions of work, etc.

**LMI** – Labour Market Intelligence – labour market information analysed.

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

**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**.

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

ConstructionSkills shares an interest with SummitSkills in SIC 45.31 Installation of wiring and fittings and SIC 45.33 Plumbing. AssetSkills has a peripheral interest in SIC 74.2.

**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.

## **Appendix II – Note on Logistics and Other Civil Engineering Operatives**

In this initial run of the Construction Skills Network Model, the categories Logistics and Other Civil Engineering Operatives are derived from the category Other Civil Engineering Operatives to take account of the different employment requirements within each category.

Logistics consists of labour within construction that deals with transportation, handling and storage.

Other Civil Engineering Operatives consists of workers within construction that deals directly with construction work itself, for instance labourers and operatives in road and rail construction. This is a part of ongoing research.

### **Appendix III – Data sources – Construction Skills Network Model**

- Accession Monitoring Report – Home Office
- Analysis of Construction Industry Employment using the British Household Panel Survey – CITB-ConstructionSkills
- British Household Panel Survey – Institute for Social and Economic Research (University of Essex)
- Building the Future: Skills Training in Construction and Building Services Engineering
- Construction Apprentices' Survey – CITB-ConstructionSkills
- Construction Forecasts – Experian
- Construction Skills Foresight Report – CITB-ConstructionSkills
- Construction Skills Report – Learning & Skills Councils (England)
- Construction Statistics Annual – DTI
- Employer Panel Consultation – CITB-ConstructionSkills
- Employers' Skills Needs Survey – CITB-ConstructionSkills
- Foresight, Regional construction forecasts – Experian
- Investment Strategy for Northern Ireland – Strategic Investment Board
- Labour Force Survey – ONS
- International Passenger Survey – ONS
- Measuring the Competitiveness of UK Construction – DTI
- National Employer Skills Survey – LSC, SSDA, & DfES
- Northern Ireland Census of Employment
- Northern Ireland Construction Bulletin – DFPNI
- Occupational Skills Survey 2003 – CITB-ConstructionSkills
- Quarterly output and New orders bulletin – DTI
- Skills Needs Analysis – ConstructionSkills
- Trainee Numbers Survey 2004/05 – CITB-ConstructionSkills
- Travel Trends – ONS
- Workforce Mobility and Skills in the UK Construction Sector – ConstructionSkills, ECITB, SEEDA, DTI



## Appendix IV – Footprints for Built Environment SSCs

The table summarises the SIC codes covered by ConstructionSkills.

|                           | SIC Code | Description   |
|---------------------------|----------|---|
| <b>ConstructionSkills</b> | 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.

#### **AssetSkills**

Footprint – Property Services, Housing, Facilities Management, Cleaning

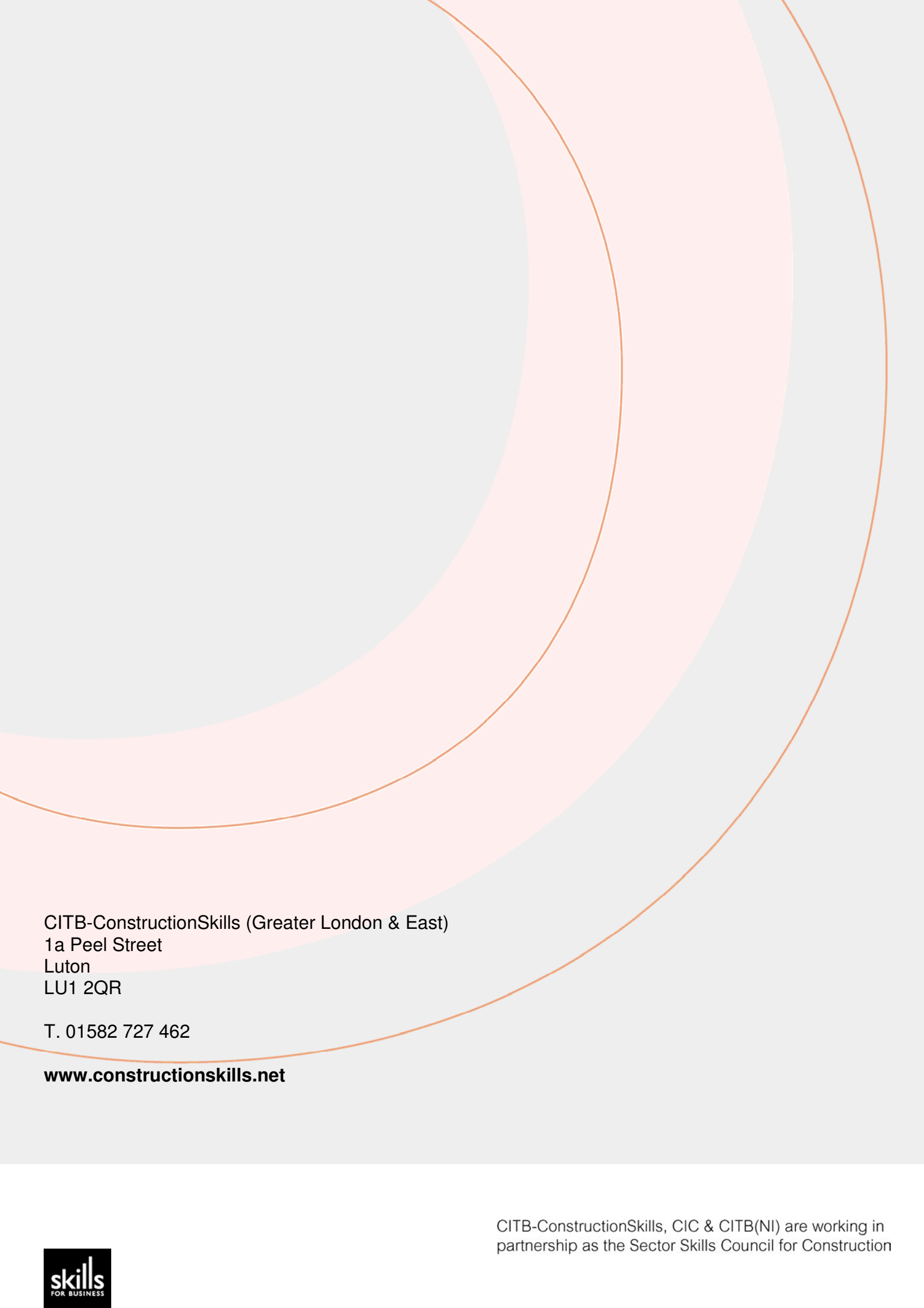
Coverage – Property, Housing and Land Managers, Chartered Surveyors, Estimators, Valuers, Home Inspectors, Estate Agents and Auctioneers (property and chattels), Caretakers, Mobile and Machine Operatives, Window Cleaners, Road Sweepers, Cleaners, Domestic, Facilities Managers.

#### **Energy & 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.

At national level, ConstructionSkills and SummitSkills are in discussions to determine the most appropriate way of working together on forecasting employment requirements for trades/occupations where there is overlap between the two SSCs.



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CITB-ConstructionSkills, CIC & CITB(NI) are working in partnership as the Sector Skills Council for Construction