# East Midlands Skills Priorities Statement – Annex 3 Evidence Base

# A report prepared by emda

2010

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# **ANNEX 3: Evidence Base for the East Midlands Skills Priorities Statement**

CAVEAT	3
SECTION 1 – REGIONAL OBJECTIVES AND PRIORITIES	
MOVING TOWARDS HIGHER SKILL EMPLOYMENT	
Employment	
Sub-regional variations in employment	
Unemployment	
Sub-regional unemployment	
Sectoral composition of employment	
Occupational structure of employment	
Upper tier occupations	
Intermediate occupations	
Lower tier occupations	
Earnings	
Earnings by occupation	14
Earnings by industrial sector	
LOCAL PROFILES	
Derby City	
Derbyshire	
Leicester City	
Leicestershire	
Lincolnshire	
Northamptonshire	
Nottingham City	
Nottinghamshire	
Rutland	21
SECTION 2 – CURRENT AND FUTURE EMPLOYER DEMAND	
CURRENT EMPLOYER DEMAND	22
Industrial structure	22
Key sectors in the East Midlands economy	26
Transport equipment	26
Food & drink	
Construction	28
Health & bioscience	
DEMAND FOR LABOUR	
Vacancies	31
Vacancies by sought occupation	
Vacancies by sector	32
Establishments with vacancies	33
Skills Shortage Vacancies	
DEMAND FOR SKILLS	37
Skills gaps within the existing workforce	
Training activity	38
Training plans and budgets	39
Type of training provision	39
· · · · · · · · · · · · · · · · · · ·	
FUTURE EMPLOYER DEMAND	

East Midlands employment forecast	
Recent employment performance 1997-2007	41
Employment forecast for the next decade	
Future prospects for 2010-2013  Future prospects for occupational change	
Expansion demand	45 46
Replacement demand	
SECTION 3 – DISTRIBUTION OF CURRENT INVESTMENT	
Supply of skillsQualifications of the workforce	
Sub-regional variations in qualifications	
Urban and rural variations in qualifications	
Qualifications by sector (Sector Skills Councils-SSCs)	
Profile of the long-term unemployed	
Qualifications and employability in the East Midlands	
Educational achievement of pupils	
Participation in education and Work Based Learning of 16 and 17 year old	
Young people not in education, employment or training (NEET)	
Achievement by ethnicity	
Achievement by Special Educational Need (SEN)	
Young labour market entrants	
CAPACITY OF THE SUPPLY SYSTEM	
Further Education Provision for Young People (16-18)	
Equality groupsGCSE and GCE A/AS/A2 levels	
Higher Education	
Further Education Provision for Adults (19+)	
Equality groups	
Apprenticeships	
Apprenticeships by qualification level	
Apprenticeship starts by the Sector Subject Area (SSA) sectoral classificat	
Apprenticeship starts by SSC/SSB sectors	
Employers engaged with Apprenticeships	
Impact of the recession	
Likelihood of employing apprentices in the next 12 months	
Learners in Apprenticeships	
Equality groups Train to Gain (16+)	
Sectoral pattern of Train to Gain—Sector Skills Council/Standard Setting Boo	
ownership	
Equality groups	
SECTION 4 – INVESTMENT SHIFTS	84

#### Caveat

The East Midlands Skills Priorities Statement (EMSPS) is based on a detailed set of data and information on the take up of skills training by industry sector (by both the sector qualification and SIC footprints) in the East Midlands. This information was provided by the Data Service from Skills Funding Agency learner data set. The sectoral analysis underpinning the EMSPS is not currently available as part of the Government's published Statistical First Release, and therefore cannot be referenced or included within the Statement or its supporting Annexes. For further regional information from the Statistical First Release, please visit: http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/

# Section 1 – Regional Objectives and Priorities

#### Moving towards higher skill employment

Although there has been significant progress in recent years, the key challenge for the region is to move away from the 'the low pay, low skill equilibrium'. This term, widely established in academic and policy literature<sup>1</sup>, can be used to describe much of the UK. It refers to a state in which a comparatively high proportion of businesses operate in sectors which have a relatively low skills requirement. Due to the sectoral composition of the business population and a number of long-term factors, this concept is particularly applicable to the East Midlands. Even though there are many businesses in the region that require high skills and are encountering recruitment difficulties, the East Midlands has a large proportion of employers who are relatively reliant on low skilled workers. The consequence of this is that many workers have a limited incentive to improve their skills. It also results in the loss of highly skilled workers to neighbouring regions. Key indicators are:

- Higher than average rates of employment, despite the recession, coupled with lower than average pay.
- Lower proportions of employment in highly skilled occupations and lower proportions of the workforce with higher level qualifications, especially compared to high performing regions such as the South East and East of England.
- Low workforce skills and businesses engaged in activities that have a limited skills requirement are concentrated in areas such as coastal Lincolnshire, North Nottinghamshire and North Derbyshire<sup>2</sup>.

The outcomes of this for the East Midlands' economy are:

- Lower than average productivity of firms and organisations.
- Lower than average earnings across the region and a reliance on casual labour and a significant incidence of in-work poverty in some sectors and local areas.<sup>3</sup>

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<sup>&</sup>lt;sup>1</sup> For an introduction to the literature on this subject, please see: Rob Wilson, Terence Hogarth et al, the Warwick Institute for Employment Research (IER), on behalf of the DTI Skills Research Programme, 'Tackling the Low Skills Equilibrium: A Review of Issues and Some New Evidence', November 2003.

<sup>&</sup>lt;sup>2</sup> emda, 'The East Midlands in 2010', June 2010.

- Poor retention of graduates and skilled people and high-levels of outcommuting.
- Vulnerability to international competition.

Addressing this situation it is necessary to improve business productivity, competitiveness and the resilience of local communities through better development and utilisation of the current and future workforce.

This section provides a snapshot of employment, unemployment, the sectoral and occupational composition of the workforce and earnings in the East Midlands. The relative position of the East Midlands compared to other regions and the UK will confirm that regardless of the significant improvements in the skills base of the regional workforce, low employer demand for skills remains and issue.

#### **Employment**

The employment rate is the most common measure of employment and is based on the number of people with jobs as a proportion of the resident working age population.

Despite a decrease in the rate of employment due to the recession, the East Midlands remains the only region out of the five northern and midlands regions to exceed the national average. The East Midlands employment rate was the fourth highest of the English regions at 75.9% in 2008, compared to 74.0%<sup>4</sup> in the UK. The employment rate was highest in the South East, at 78.5%, followed by the South West, at 78.3%. The employment rate was the lowest in London, at 70.4%, followed by the North East at 70.8%.

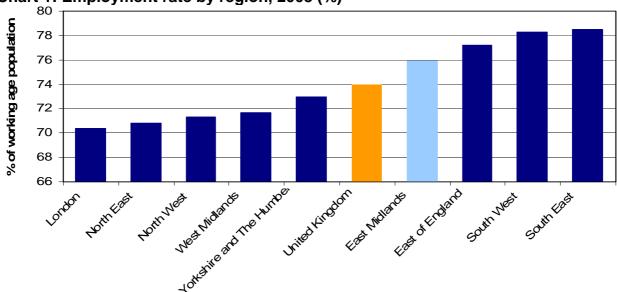


Chart 1: Employment rate by region, 2008 (%)

Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

<sup>3</sup> More detail on these issues can be found: Warwick Institute for Employment Research (IER), on behalf of *emda*, 'Migrant workers in the East Midlands' and 'In-work poverty in the East Midlands' – forthcoming, 2010.

<sup>&</sup>lt;sup>4</sup> Because of different source used here, please note that this figure is slightly different than the previous figure used in the international comparison section.

Chart 2 shows how the labour market has responded to the impacts of recession. The data show that the employment rate in the East Midlands was 71.4% in May-July 2010<sup>6</sup>, which is up slightly from the previous quarter. However, as the chart shows, this recent increase follows a long period of falling employment, in both the East Midlands and the UK as a whole. In the East Midlands, the monthly estimate of employment fell from a high point in September-November 2008 of 74.1% to its lowest point of 71.0% in February-April 2010. Throughout this period, the East Midlands' employment rate has remained above the UK average, which was 70.7% in May-July 2010.

75.0 8.0 74.0 7.0 73.0 **Employment (%)** 5.0 4.0 **Quemployment (** 72.0 71.0 70.0 2.0 69.0 1.0 JK Employment EM Unemployment UK Unemployment

Chart 2: Monthly change in employment and unemployment rates, 2008-2010 (%)

Source: ONS Crown Copyright, 'Labour Market Statistics - First Releases', September 2010.

#### Sub-regional variations in employment

The overall relatively high level of regional employment masks substantial local differences. Leicestershire has the highest employment rate at 80.3%. On the other hand, Leicester City has the lowest employment rate at 62.7% followed by Nottingham at 64.8%. In both cases this is related to the high proportion of students in the population but also indicate inner-city deprivation and concentrations of worklessness. Apart from Leicestershire, the second highest employment rate is in Northamptonshire at 79.5%. The high employment rates in Leicestershire and Northamptonshire are related to commuting flows to London and its surrounding areas.

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<sup>&</sup>lt;sup>5</sup> Please note; the monthly labour market statistics published by the ONS are now calculated on a new definition of working age population, 16-64 for both men and women, instead of 59 for women and 64 for men as previously. This means that the latest monthly data is not comparable to quarterly and annual data cited elsewhere in this document, which is based on the old 16-59/64 definition.

<sup>&</sup>lt;sup>6</sup> Source: Office for National Statistics, 'Labour Market Statistics – First Releases'. September 2010.

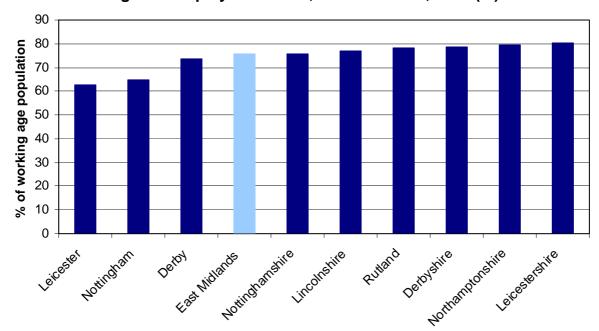


Chart 3: Sub-regional employment rates, East Midlands, 2008 (%)

Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

The employment rate is generally higher in rural districts and lower in urban districts. The employment rate in 2008 for the East Midlands' Rural 80 districts is 79.3%, 3.4 percentage points above the regional average. The employment rate for Large Urban districts is 70.6%, 5.3 percentage points below the regional average.

The employment rate in 2008 was the lowest in Nottingham (64.8%), Leicester (62.7%) and Lincoln (67.3%). In contrast, it was the highest in Derbyshire Dales (82.7%), Blaby (86.2%) and South Northamptonshire (83.1%).

#### Unemployment

Unemployed people are the second category of the economically active population i.e. those who are available for work. Chart 4 shows the unemployment rate for the English regions and the UK average in 2008.

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Chart 4: Unemployment rate by region, 2008 (%)

Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

The East Midlands unemployment rate was slightly above the national average at 6.0% compared to 5.9% in the UK in 2008, although the 0.1 percentage point difference is not significant. The unemployment rate in the East Midlands is lower than in the North West, Yorkshire and the Humber, London, the West Midlands and the North East. The unemployment rate in the East Midlands has increased by 0.9 percentage points between 2007 and 2008. This is 0.3 percentage points higher than the UK average. Between 2007 and 2008 the unemployment increased the most in the West Midlands and the North East at 1.1 and 1.4 percentage points respectively. The North East and the West Midlands have been the hardest hit by the recession.

In terms of more recent monthly estimates, Chart 2 shows that the unemployment rate increased towards the end of 2008 and through 2009 both in the East Midlands and nationally, but has since levelled off. The regional <u>working age</u> unemployment rate in May-July 2010<sup>7</sup> was 7.5%, below the UK average of 8.0%. This is down on its highest point in the East Midlands, which was 7.9% in December 2009-February 2010 (compared to 8.1% in the UK).<sup>8</sup>

Claimant count rate – In August 2010, there were about 97,000 people claiming Jobseeker's Allowance (JSA) in the East Midlands. Regionally the JSA count decreased by about 15,600 compared to the same period in 2009. The claimant count rate in the East Midlands was 3.4% in August 2010, which is level with the previous month but down 0.5 percentage points on the same month a year earlier. The claimant count rate in the UK was 3.6%, level with last month's estimate but down 0.4 percentage points on the same month a year earlier.

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<sup>&</sup>lt;sup>7</sup> Source: Office for National Statistics, '*Labour Market Statistics – First Releases*'. September 2010. <sup>8</sup> Please note: as is the case with the monthly estimates of employment rate, these estimates are based on the new 16-64 definition of working age for both men and women, and thus cannot be compared to annual or quarterly estimates elsewhere in this document.

# **Sub-regional unemployment**

The unemployment rate increased in most sub-regions between 2007 and 2008 but it decreased slightly in Derby and in Derbyshire from 6.1% to 5.6% and from 5.3% to 5.0 respectively. Unemployment<sup>9</sup> is lowest in Rutland and Leicestershire, at rates of 4.0% and 4.8% respectively. Unemployment is concentrated in the region's larger cities such as Leicester (13.2%) and Nottingham (8.9%). Other unemployment hotspots can be identified in smaller cities and towns across the region and in the former coalfield areas of North Nottinghamshire and North Derbyshire, including the following districts: Lincoln at 8.3%, Corby at 6.6%, Ashfield at 6.6%, Mansfield, Bolsover and Wellingborough at 6.2% each.

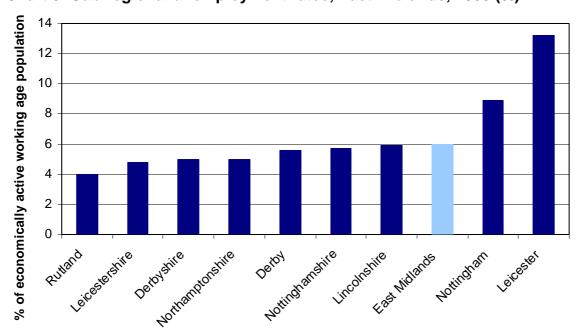


Chart 5: Sub-regional unemployment rates, East Midlands, 2008 (%)

Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

At local level, the claimant count rate is the most up to date measure of unemployment.

• The claimant count rate in August 2010<sup>10</sup> was the highest in Leicester at 5.7%. The claimant count rate was also relatively high in Nottingham (5.3%), Lincoln (4.8%), Corby (4.6%), and Derby (4.5%).

The claimant count has fallen in every local authority district in both percentage and absolute terms compared to the same period a year earlier.

<sup>&</sup>lt;sup>9</sup> Local authority analysis is based on the model-based estimates of unemployment for local authorities. Local authority data refers to January-December 2008. Please note that the model-based estimate of the unemployment rate refers to the percentage of resident population aged 16+, while sub-regional and regional unemployment data (APS) refers to the economically active working age population (Office for National Statistics, 'Labour Market Statistics, East Midlands' footnote for Table 12.).

<sup>&</sup>lt;sup>10</sup> Source: Office for National Statistics, *'Labour Market Statistics – First Releases'*. Published: September 2010.

#### **Key Points: Employment and unemployment**

- The East Midlands is the only region of the five northern and midlands regions to exceed the national average employment rate.
- The monthly estimate of the employment rate in the East Midlands was 71.4% in May-July 2010, which is up slightly on the previous quarter. Recent improvements in labour market conditions follow a long period of falling employment rates due to the recession. Although employment in both the East Midlands and the UK fell through the final months of 2008 and throughout 2009 before stabilising in 2010, the East Midlands' employment rate has remained consistently above the UK figure, which was 70.7% in May-July 2010.
- The regional working age unemployment rate in May-July 2010 was 7.5%.
   The working age unemployment rate in the region has decreased by 0.1 percentage points compared to the previous quarter and is 0.5 percentage points lower than the UK average of 8.0%.
- The claimant count rate in the East Midlands was 3.4% in July 2010, level
  with the previous month by down by 0.4 percentage points on the same
  month a year earlier. The claimant count rate in the UK was 3.6%, also
  level with the previous month but down 0.3 percentage points on the same
  month a year earlier.
- Unemployment is concentrated in the region's larger cities and around the former coalfields.

#### Sectoral composition of employment

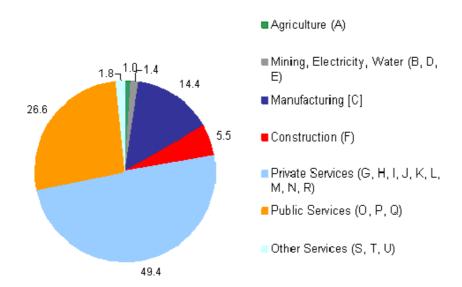
Chart 6 shows that the East Midlands has a large proportion of employment in Manufacturing, the largest of any English region and also has high employment in Construction. Although Private Sector Services<sup>11</sup> provide the largest share of employment in the region, almost 50%, this is a significantly lower share than the national average (55%). The share of employment in Public Sector Services<sup>12</sup> is largely in line with the national average at 26%.

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<sup>&</sup>lt;sup>11</sup> The following SIC 2007 groups were grouped under the heading of Private Sector Services: G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K: Financial and insurance activities; L: Real estate activities; M: Professional, scientific and technical activities; N: Administrative and support service activities; R: Arts, entertainment and recreation. Source: ONS Crown Copyright Reserved, 'Annual Business Inquiry', 2008 employee analysis (SIC 2007).

The following SIC 2007 groups were grouped under the heading of Public Sector Services: O: Public administration and defence; compulsory social security; P: Education; Q: Human health and social work activities. Source: Ibid.

Chart 6: Structure of Employment in the East Midlands (%), 2008



Source: ONS Crown Copyright Reserved [from Nomis on 8 July 2010], 'Annual Business Inquiry', 2008 employee analysis (SIC 2007).

#### Occupational structure of employment

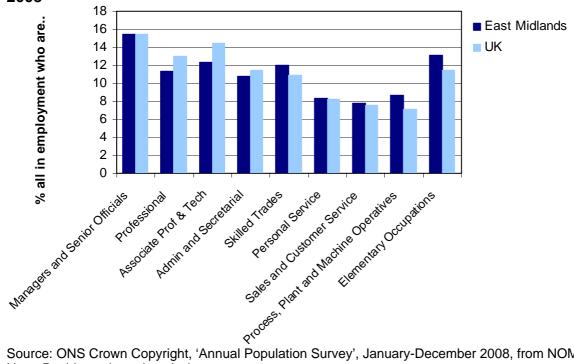
The term 'occupation' describes what individuals do in their work place. The two main concepts on which major occupational groups are defined are the type of job and the skills required by the given job.

Recent changes in the occupational structure of developed economies can be related to the decline of primary and manufacturing industries and a shift of the workforce towards services and an increase in management activities. This latter point is related to the fundamental changes in the way the production of goods and services are organised in developed economies.

These changes obviously have an impact on the skill requirements across occupations. There are different opinions about whether technological changes have increased or decreased the required skills level of different occupations. However, it can be concluded that the way goods and services are produced in developed economies overall has pushed the demand for skills upwards.

Chart 7 shows the occupational structure of employment in the East Midlands. It is useful to think in terms of three broad groups: upper tier occupations, intermediate occupations and lower tier occupations.

Chart 7: Percentage of those in employment by broad occupational groups. 2008



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS. Note: Residence based analysis.

#### Upper tier occupations

'Upper tier occupations' includes Managers and senior officials<sup>13</sup>, Professional occupations<sup>14</sup> and Associate professional and technical occupations<sup>15</sup>. proportion of those in employment who work in upper tier occupations was 39.1% in the East Midlands, 3.9 percentage points below the UK figure of 43.0% in 2008.

- Managers and senior officials account for 15.5% of both regional and national employment.
- Professional occupations are under-represented in the East Midlands labour market compared to the UK, accounting for 11.3% and 13.0% of employment respectively.
- The difference between the East Midlands and the UK is more significant for Associate professional occupations, which make up 12.3% of regional employment, 2.2 percentage points less than in the UK.

<sup>&</sup>lt;sup>13</sup> Managers and senior officials describes jobs with greater responsibilities and management skills to co-ordinate an organisation or business such as senior officials, directors. Office for National 'Standard Occupational http://www.ons.gov.uk/about-Statistics, Classification 2000', statistics/classifications/current/SOC2000/

Professional occupations describes jobs requiring a degree or equivalent, such as physiotherapists, laboratory technicians, engineering technicians. Office for National Statistics, 'Standard Occupational Classification 2000'.

Associate professionals describes jobs often requiring a high level of vocational qualification, such as legal associate professionals, brokers, graphic designers. Office for National Statistics, 'Standard Occupational Classification 2000'.

#### Intermediate occupations

Intermediate occupations are Administrative and secretarial<sup>16</sup>, Skilled trades<sup>17</sup>, Personal service and Sales and Customer service occupations<sup>18</sup>. The proportion of those in employment who work in intermediate tier occupations was similar in the East Midlands and the UK at 38.9% and 38.1% respectively in 2008.

- Personal service occupations account for 8.3% of regional and 8.2% of national employment. Sales and Customer service occupations make up 7.8% of the regional and 7.6% of the national employment.
- Due to the greater relative importance of manufacturing in the regional economy, the proportion of Skilled trades occupations is slightly higher in the East Midlands than in the UK, at 12.0% and 10.9% respectively. On the other hand, Administrative and secretarial occupations contributes a slightly lower share of employment in the East Midlands at 10.8%, compared to 11.4% in the UK.

#### Lower tier occupations

Lower tier occupations are Machine and Transport operatives<sup>19</sup> and Elementary occupations<sup>20</sup>. These positions have lower associated skill requirements and lower earnings. The proportion of those in employment who work in lower tier occupations was 21.8% in the East Midlands, 3.3 percentage points above the UK figure (18.5%).

- More than 13.0 % of employment in the region was in Elementary occupations in 2008 compared to 11.4% in the UK.
- The proportion of Process, plant and machine operatives in the East Midlands was also above the UK figure at 8.7% compared to 7.1%.

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<sup>&</sup>lt;sup>16</sup> Administrative and secretarial occupations include jobs in administrative work, generally requiring a good standard of general education, such as administrative officers and assistants. Office for National Statistics, 'Standard Occupational Classification 2000'.

<sup>17</sup> Skilled trades assuration in the least the state of the least trades.

Skilled trades occupation include goldsmith, butchers and TV engineers, where the individual performs often complex manual tasks, requiring a level of experience and sometimes formal vocational training. Office for National Statistics, 'Standard Occupational Classification 2000'.
 Sales and customer services occupations covers jobs such as cashiers, market and street traders and call centre agents, whilst personal service occupations describes jobs such as nurses, hairdressers or home carers. Office for National Statistics, 'Standard Occupational Classification 2000'.

<sup>&</sup>lt;sup>19</sup> Process, plant and machine operatives describes occupations where knowledge is required to operate and monitor machines or tools such as textile machine operatives, construction operatives. These occupations include transport and mobile machine drivers and operatives such as taxi drivers. Office for National Statistics, 'Standard Occupational Classification 2000'.

<sup>&</sup>lt;sup>20</sup> Elementary occupations describe jobs predominated by routine tasks, usually requiring no formal educational qualifications, such as shelf fillers and window cleaners Office for National Statistics, 'Standard Occupational Classification 2000'.

#### **Key Points: Occupational structure**

- The East Midlands has significantly more people in 'lower tier' occupations, requiring limited skill levels compared to the UK average.
- 'Intermediate occupations' account for a similar share of the workforce in the East Midlands as in the UK. However, due to the relatively greater importance of manufacturing in the regional economy, the proportion of employment in the skilled trades is slightly higher in the East Midlands than in the UK.
- The difference between the East Midlands and the UK is more significant for 'upper tier' occupations, requiring high levels skills, which make up a lower share of the regional workforce.

#### **Earnings**

This section analyses the general pattern of earnings in the East Midlands in 2009<sup>21</sup>. Although earnings reflect factors other than workforce skills, skills are an important determining factor. On the basis of lower levels of qualifications and occupational structure outlined above, it is expected that earnings in the East Midlands would be lower than average.

Chart 8 compares estimates of gross weekly workplace based full-time earnings for men and women in each of the English regions and the UK average.

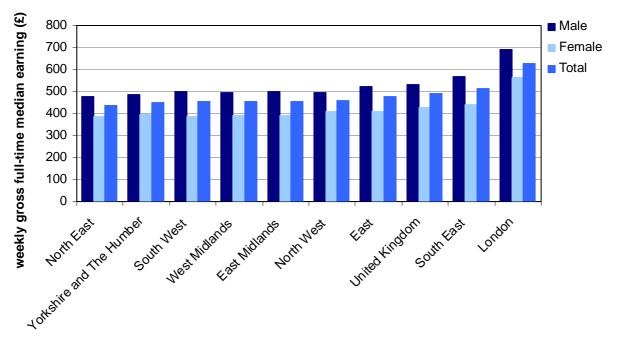
In 2009, median weekly earnings for all full-time workers in the East Midlands were below the UK average by 6.6%, at £456.6 compared to £488.7. Compared to the UK average, earnings are the highest in London (28.4 % above average) and lowest in the North East (lagging behind the national average by 10.8%).

The median of weekly gross full-time earnings for men was £531.1 in the UK in 2009. The difference between male and female earnings in the UK was £104.7 – a 19.7% difference. The median earnings for men working in the East Midlands was £500.0, which is £111.3 a week more than the median for women – a 22.3% difference. The difference between male and female earnings in the East Midlands is greater than in the UK and is the third highest among the English regions after the South West (22.4%) and the South East (22.4%). The smallest differential between male and female earnings was in London (18.1%) and the North West (also 18.1%).

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<sup>&</sup>lt;sup>21</sup> Data from the 2009 Annual Survey of Hours and Earnings (ASHE), produced by the Office for National Statistics is used. The analysis will focus on the median, which is the mid-point of the distribution, if one imagines all results set out in a line. This is preferable to the mean (the arithmetic average) as it is not skewed by a small number of respondents reporting very high earnings.

Chart 8: Regional comparisons of gross weekly workplace based full-time earnings (median), 2009



Source: ONS Crown Copyright, 'Annual Survey of Hours and Earnings - workplace analysis' 2009, from NOMIS.

Due to the recession, the increase in weekly earnings between 2008 and 2009 was less than the increase between 2007 and 2008. Weekly median gross earnings increased by 4.7% in UK between 2007 and 2008 and by 2.0% between 2008 and 2009. The corresponding figures for the East Midlands were 5.6% and 2.6% respectively. Between 2008 and 2009 earnings growth in the East Midlands was the second highest among the English regions after the North East (3.6 %). Between 2008 and 2009, earnings increased the least in the South West at 1.5%.

#### Earnings by occupation

As higher level occupations tend to be associated with higher pay, lower levels of employment in these occupations goes some way to explaining why overall median earnings are lower in the East Midlands. Chart 9 shows comparative earnings for broad occupational groups.

Across all occupational groups, with three exceptions – Sales and customer service occupations, Skilled Trades and Elementary occupations – all other occupations have lower earnings in the East Midlands than in the UK.

The largest pay gap between the East Midlands and the UK is for upper tier occupations and Administrative and Secretarial occupations.

• Among Administrative and Secretarial occupations the median in the East Midlands was £345, £28.7 less than the median in the UK, a 7.7% difference.

- Among Managers and senior officials, the median in the East Midlands was £667.8, £45.1 less than the median in the UK, a 6.3% difference.
- The third largest gap in earnings was for Associate professional and technical occupations, where the median in the East Midlands was £521.3 compared to the national average of £551.1 (a gap of £29.8, equivalent to a 5.4% difference).

The pay gap between the East Midlands and the UK was somewhat lower for intermediate occupations. The median weekly pay of those working in Personal service occupations was £311.5 in the East Midlands, £14.3 less than the median in the UK - a 4.4% difference.

Although the median weekly full-time earnings for Elementary occupations were not significantly different in the East Midlands than in the UK, earnings for Process, plant and machine operatives are slightly lower than the national average by 3.1%.

This reflects the sectoral composition of the East Midlands and the high demand for unskilled employment.

Elementary Occupations
Process, Plant and Machine Operatives
Sales and Customer Service
Personal Service
Skilled Trades
Administrative and Secretarial
Professional and Technical
Professional Occupations
Managers and Senior Officials

0 100 200 300 400 500 600 700 800

Chart 9: Weekly pay – Gross (£) – for full-time employee jobs, 2009

Source: Office for National Statistics, 'The Annual Survey of Hours and Earnings (ASHE) 2009' From Table 3\_1a, Levels, distribution and make-up of earnings and hours paid for employees within industries, occupations and regions.

Weekly gross full-time median earning (£)

Between 2008 and 2009 in the East Midlands median earnings increased the most in Personal service occupations at 5.1%, Associate professional at 3.9% and Sales and customer services at 3.9%. The lowest increase was in Process, plant and machine

operatives and Elementary occupations at 0.3%<sup>22</sup>. This is largely related to the sectoral and occupational characteristics of the recession as the most hard hit jobs were low skilled low paid positions in the Manufacturing and the Construction sectors. The following section provides some more information on the earnings by sectors.

#### Earnings by industrial sector

There are significant pay differences among industrial sectors both in the East Midlands and in the UK.

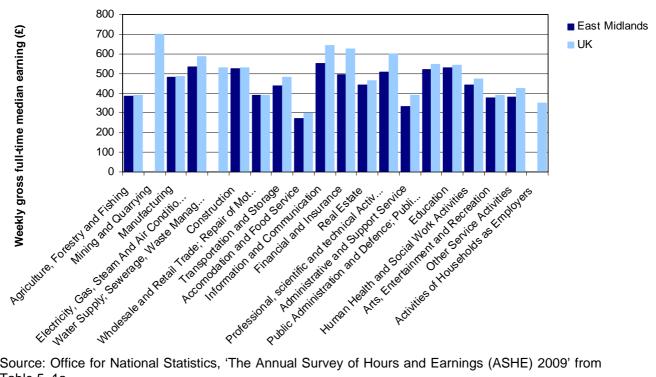
Earnings are lower in the East Midlands compared to the UK average in almost every sector. Chart 10 illustrates the generally lower earnings by sector in the East Midlands compared to the UK.

Differences in earnings between the East Midlands and the UK tend to be greater in those sectors with higher pay. For example, jobs in financial and insurance; professional, scientific and technical activities; information and communication; administrative and support services are clearly associated with significantly higher earnings in the UK than in the East Midlands.

Therefore in 2009 the differences in weekly gross full-time earnings between the East Midlands and the UK were the highest in financial and insurance (21.4%), in professional, scientific and technical activities (15.0%), in administrative and support services (14.9%) and in information and communication (14.6%). The smallest pay differences between the East Midlands and the UK were in arts, entertainment and recreation (2.7%), education (2.4%) and construction (1.2%).

<sup>&</sup>lt;sup>22</sup> Office for National Statistics, 'The Annual Survey of Hours and Earnings (ASHE) 2009' From Table 3\_1a, Levels, distribution and make-up of earnings and hours paid for employees within industries, occupations and regions. <a href="http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15313">http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15313</a>
These tables use the SIC 2007 classification.





Source: Office for National Statistics, 'The Annual Survey of Hours and Earnings (ASHE) 2009' from

Note: The coefficient of variation (CV) is the ratio of the standard error of an estimate to the estimate, expressed as a percentage. The smaller the CV, the higher the quality of the estimate. The lowest CV is <= 5%. The confidence variation of the estimations for Mining and Quarrying and Activities of Households as Employers are between 5% and 10% for the UK. Data on Activities of Extraterritorial Organisations and Bodies is not available for the East Midlands and is left out due to the relatively large confidence variation of the estimation for the UK. The confidence variation of the estimations for Agriculture, Forestry and Fishing; Electricity, Gas, Steam and Air Conditioning Supply; Accommodation and Food Service Activities; Information and Communication; Financial and Insurance Activities; Real Estate Activities; Professional, Scientific and Technical Activities; Arts, Entertainment and Recreation; Other Service Activities; are between 5% and 10% for the East Midlands. Estimations of Mining and Quarrying is not available. Estimations for Water Supply; Sewerage, Waste Management and Remediation Activities is not shown for the East Midlands due to the relatively large confidence interval. Data on Activities of Households as Employers; Undifferentiated Goods and Services Producing Activities of Households for Own Use are not available for the East Midlands.

# **Key Points: Earnings**

- Due to the recession, earnings increased less between 2008 and 2009 than between 2007 and 2008.
- With the exceptions of Sales and customer service occupations, Skilled trades and Elementary occupations all other occupations have lower earnings in the East Midlands than in the UK.
- Earnings are lower in the East Midlands compared to the UK average in almost every sector. Differences in earnings between the East Midlands and the UK tend to be greater in those sectors with higher pay.
- The average earnings of higher skilled occupations is lower in the region than in the UK.
- The earnings profile for the region appears more 'evenly' distributed than in the UK. This is principally due to the highest earnings being relatively depressed compared to the national average.
- The residence based median for the East Midlands was £460.5, higher by £3.9 than the workplace based estimate of £456.6 in 2009. This suggests that many higher paid workers commute to work outside the region.
- Lower overall earnings can be explained by at least two factors. First, the lower levels of employment in the East Midlands in those occupations which tend to be associated with higher pay. Second, the median earnings of the higher level occupations are somewhat lower in the East Midlands than in the UK.

# Local profiles

Skills priorities will differ across local areas depending on their business and employment structure. The following profiles of the East Midlands' nine County and Unitary Local Authorities are based on information from emerging Local Economic Assessments<sup>23</sup> along with consultation responses, including responses from local Employment & Skills Boards.

#### **Derby City**

The economy of Derby has traditionally been based around Manufacturing and Engineering. Much of this has been transformed into high skilled activities which compete on a global scale. This contributes to the highest workplace based pay in the East Midlands and high proportions of employment in Managerial and Professional occupations. This has led the Derby and Derbyshire Employment & Skills Board to suggest that the low demand for skills affecting much of the East Midlands is less of a challenge for Derby. Key sectors are:

- **Manufacturing,** which accounted for 19% of total employment in Derby in 2008, compared to a regional average of 14%. This is heavily influenced by the presence of large companies such as Rolls-Royce and Bombardier.
- For its size, Derby has a relatively strong Banking, Finance and Insurance sector employing 19% of the workforce, largely influenced by the presence of the headquarters of Egg.

<sup>&</sup>lt;sup>23</sup> See the Chapter 9: Sub-Regional Profiles in: *emda, 'The East Midlands in 2010'*, June 2010.

 Public Administration, Education and Health also make up a very significant sector for Derby, accounting for 29% of employment in 2008, compared to the regional average of 27%. This suggests that employment in the city could be relatively vulnerable to the effects of public sector spending cuts.

#### Derbyshire

The county is largely rural and has a lower skills profile than either Derby City or the East Midlands, with lower proportions of residents employed in Professional and Managerial occupations and lower levels of pay. The decline of traditional industries in the north-east of the county has left a concentration of communities where there are high levels of unemployment and deprivation. Key sectors include:

- Agriculture and Distribution, Hotels and Restaurants (associated with tourism), which employ relatively high proportions of the county's workforce. **Tourism** is important due to the Peak District National Park.
- There is also a relatively large proportion of employment in Manufacturing, 20% of employment, which includes automotive engineering with Toyota at Burnaston.

#### **Leicester City**

The city experiences significant challenges in terms of low skills, unemployment and deprivation. Qualification levels in Leicester are below average, with 22% of residents having no qualifications, almost twice as high as the national average. Leicester draws in high skilled workers from the surrounding areas, resulting in large differences in the skills profile of commuters and residents. Leicester has the highest proportion of people in the school age group in the East Midlands and consequently has a much younger age profile. Key sectors are:

- Public Administration, Education and Health, which accounted for 34% of employment in 2008 compared to 27% in the East Midlands.
- Building on its history of traditional manufacturing, the city has concentrations of employment in Clothing and Footwear manufacturing.
- The **Food and Drink manufacturing** sector is important with large employers such as Walkers Crisps based in the city. There are a number of high tech food and drink companies in Leicester, leading to a higher demand for skills in this sector compared to elsewhere in the East Midlands.

#### Leicestershire

The county is closely linked to Leicester City in labour market terms. It has significantly higher qualification levels and higher earnings, suggesting that higher skilled residents commute to work in the better paid jobs in Leicester City and elsewhere. Key employment sectors in the county include:

- Wholesale and Retail, which account for relatively large proportions of business and employment, driven by the presence of out-of-town retail facilities outside Leicester.
- Banking, Finance and Insurance also account for a significant proportion of employment, with a large Alliance and Leicester/Santander centre in Narborough. Employment in this sector was hit particularly hard by a number of high profile closures during the recession.

#### Lincolnshire

The employment structure of the county is heavily influenced by its rural nature. This results in a local economy that, whilst maintaining high employment, has a particularly low aggregate demand for skills. This is characterised by seasonal, casual employment and a heavy reliance on international migrants in low-skilled jobs. School attainment is generally high, however there is evidence of young people leaving the county, meaning that the qualifications profile of residents is low. Key sectors include:

- Agriculture, Food and Drink manufacturing and tourism related industries (Distribution, Hotels and Restaurants, employing 27% compared to 24% in the East Midlands).
- **Residential care**, with increasing demand driven by an ageing population (the pensionable age group in Lincolnshire is projected to increase at one of the fastest rates in the East Midlands over the next decade). Employment in this sector already exceeds the regional average, at 3.2% compared to 2.4% in 2008.
- Employment in the wider **Public Administration**, **Education and Health** sector accounts for 28% of employment. This suggests Lincolnshire could also be vulnerable to cuts in public spending.

#### **Northamptonshire**

The county is relatively rural, with a very different employment structure compared to that of the north of the region. There is less reliance on manufacturing and strong commuting links with London and the South East. In 2008, the employment rate was close to 80%, four percentage points higher than the regional average. Northamptonshire has a high proportion of residents with degree level qualifications, many of whom commute to highly skilled employment elsewhere. Important sectors are:

- Banking, Finance and Insurance, Distribution and Hotels and Restaurants.
- Construction, which historically accounted for a significant proportion of output and employment in Northamptonshire, but has recently been heavily affected by the recession. Due to rapid population growth rates, amongst the highest in England, Construction could provide a local growth opportunity, although this remains difficult to predict due to the sector's vulnerability to cyclical change.

#### **Nottingham City**

The city has a far higher proportion of employment in the service-sector than the East Midlands average, but has pockets of deprivation. There is a significant difference between the profile of residents, with lower skills and earnings, and higher skilled, better paid commuters. Key sectors are:

- Banking, Finance and Insurance, Public Administration, and Education and Health together account for the majority (60%) of employment. These sectors include some of the city's largest employers, such as Capital One, Experian, Nottingham City Council, The University of Nottingham, Nottingham Trent University and the Nottingham University Hospitals NHS Trust. Impacts of expected public sector job cuts may weaken the demand for skilled labour over the next few years.
- Health also includes a growing number of private sector bioscience and healthcare companies, some of which are located at specialist premises, for example BioCity and Nottingham Science Park.

#### **Nottinghamshire**

The county has undergone major sectoral change, with the decline of traditional industries. This had a lasting impact on the former coalfield communities in the north of the county, which continue to experience significant deprivation, high levels of worklessness and poor health. The south of the county is more affluent, with high levels of commuting to fill skilled jobs in Nottingham and Leicester. Key sectors are:

- **Construction**, which employs 7% of the workforce in Nottinghamshire, compared to 5% in the East Midlands.
- Public Administration, Education and Health and Energy and Water supply are also relatively important for employment in the county. Nottinghamshire is a major exporter of energy, with key opportunities for future growth in carbon reduction technologies and renewable energy production.

#### Rutland

Rutland is amongst the smallest of Local Authorities in England, but has experienced significant population growth and a rapidly increasing proportion of older residents. Rutland has the highest proportion of residents qualified to Level 4 within the region. However, as the area is relatively well connected, many high skilled residents commute to work elsewhere, with more limited employment opportunities in the county itself. Key sectors are:

- Public Administration, Education and Health, which accounted for the largest proportion of employment in 2008, at 34%, 7 percentage points higher than the regional average. This sector includes significant employment in the custodial system and in a military base.
- **Distribution, Hotels and Restaurants** is also an important employment sector, related to the leisure facilities and nature reserve at Rutland Water. This sector employs over a quarter of Rutland's workforce.

# Section 2 – Current and Future Employer Demand

This section provides a snapshot of economic demand for skills, both spatially and sectorally. This describes demand inherent in the structure of the regional economy (i.e. skills required to meet growing sectors/replacement demand), demand associated with regional objectives (i.e. strategic skills to support growth sectors and technologies) and specific demand issues identified from the evidence base (such as regional weaknesses in management and leadership skills, regeneration areas).

#### **Current Employer Demand**

#### **Industrial structure**

The industrial structure of a region has a direct impact on its economic competitiveness. The current industrial structure of the East Midlands, and indeed the UK, is a product of its economic history and is in a state of constant adjustment. This section uses an econometric model of the East Midlands, the Scenario Impact Model (SIM)<sup>24</sup>, to analyse key indicators (Output and Full Time Equivalent Employment (FTE)<sup>25</sup>) by industry and to determine the relative importance of each industry using location quotient analysis.<sup>26</sup>

<sup>&</sup>lt;sup>24</sup> emda/Experian Scenario Impact Model (SIM), January 2010.

<sup>&</sup>lt;sup>25</sup> Full Time Equivalent (FTE) employment is the sum of full-time employment, self-employment and 0.4\* part-time employment.

<sup>&</sup>lt;sup>26</sup> A location quotient is a measure of relative concentration and is calculated as: the proportion of a sector in the regional economy/the proportion of a sector in the national economy.

Table 1: Industrial structure of the East Midlands, 2008

Industrial structure of East				East Midlands (EM)		
Midlands	Output (	(%)	employment (%)		location quotients '	
	EM	UK	EM	UK	Output	Employment
Agriculture, forestry & fishing	1.3	0.9	2.2	1.8	1.4	1.3
Oil & gas extraction	0.0	1.3	0.0	0.1	0.0	0.0
Other mining	0.4	0.2	0.3	0.1	2.1	2.0
Primary and extraction industries						
Total	1.6	2.4	2.5	2.0	0.7	1.2
Gas, electricity & water	2.2	1.6	0.7	0.5	1.4	1.5
Fuel refining	0.00	0.2	0.0	0.1	0.0	0.0
Chemicals	1.5	1.6	0.9	0.7	0.9	1.2
Minerals	1.4	0.5	0.8	0.4	2.6	1.9
Metals	2.1	1.4	2.0	1.6	1.5	1.3
Machinery & equipment	1.6	1.3	1.5	1.1	1.2	1.3
Electrical & optical equipment	1.3	1.5	1.1	1.2	0.9	0.9
Transport equipment	3.7	1.6	1.9	1.3	2.4	1.5
Food, drink & tobacco	4.0	1.9	2.7	1.6	2.1	1.7
Textiles & clothing	0.9	0.4	1.0	0.4	2.1	2.3
Wood & wood products	0.3	0.2	0.4	0.3	1.2	1.2
Paper, printing & publishing	1.8	1.8	1.7	1.5	1.0	1.2
Rubber & plastics	1.2	0.7	1.2	0.7	1.7	1.7
Other manufacturing NEC	0.8	0.6	0.9	0.7	1.4	1.3
Manufacturing Total	20.5	13.7	16.1	11.6	1.5	1.4
Construction	6.0	6.0	9.3	8.6	1.0	1.1
Retailing	6.9	6.2	8.2	8.5	1.1	1.0
Wholesaling	8.4	6.4	7.6	6.7	1.3	1.1
Hotels & catering	2.4	3.2	4.4	5.3	0.7	0.8
Transport	5.7	5.1	5.1	4.9	1.1	1.0
Communications	2.8	3.3	1.5	1.8	0.8	0.8
Banking & insurance	4.8	9.0	2.1	3.9	0.5	0.5
Business services	12.8	15.1	13.7	15.9	0.8	0.9
Other financial & business services	4.0	5.1	2.4	2.9	0.8	0.8
Public admin & defence	5.0	4.9	4.7	5.1	1.0	0.9
Education	5.5	5.6	6.8	7.4	1.0	0.9
Health	7.0	7.3	9.7	11.0	1.0	0.9
Other services	4.4	5.1	5.3	4.0	0.9	1.3
Services Total	69.6	76.3	71.4	77.2	0.9	0.9
Industry Total	100.0	100.0	100.0	100.0	1.0	1.0

Source: emda/Experian Scenario Impact Model, autumn 2009.

Table 1 highlights a number of important characteristics of the East Midlands economy including the relative significance of manufacturing:

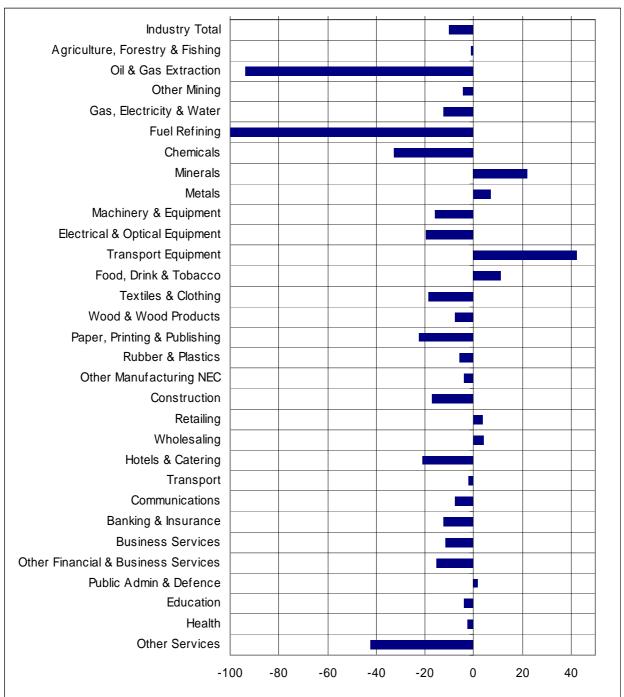
- The manufacturing sector<sup>27</sup> accounts for 20.5% of output and 16.1% of employment. With an output location quotient of 1.5 and an employment location quotient of 1.4, this sector is significantly more important to the East Midlands economy than the UK as a whole. The size and relative importance of manufacturing to the region is of particular note in the recession as manufacturing and construction were severely affected by the fall in activity in 2009.
- Looking in more detail at the manufacturing sub-sectors reveals that the majority are larger in the East Midlands than in the UK in both output and employment terms. In terms of output, only fuel refining, chemicals and electrical and optical equipment are smaller in the East Midlands. Only fuel refining is smaller in terms of employment in the East Midlands than in the UK.
- The largest manufacturing sub-sectors in the East Midlands are food & drink, transport equipment, metals, and paper, printing & publishing. Together, these sectors account for a total of 11.7% of output and 8.3% of employment in the region.
- With output location quotients greater than 2, the manufacturing sub-sectors of minerals, transport equipment, food & drink and textiles & clothing are twice as large in the East Midlands than the UK. These sectors also have location quotients greater than 1.5 in terms of employment.
- The construction sector accounts for a larger proportion of the East Midlands employment than in the UK with a location quotient of 1.1 but the same proportion of output. This sector accounts for 6.0% of output and 9.3% of employment in the region.
- In contrast to the manufacturing sector, the service sector is relatively smaller in the East Midlands than it is nationally. The service sector accounts for 69.6% of output and 71.4% of employment in the region, compared to 76.3% of output and 77.2% of employment nationally.
- The business services sector is the largest services sub-sector, accounting for 12.8% of output and 13.7% of employment in the region. The sub-sector has experienced significant growth in recent years, although it remains relatively smaller in the East Midlands than nationally.
- Other significant services sub-sectors include retailing, wholesaling, transport services, education and health. It should however be noted that many of these sectors remain relatively less important to the East Midlands than they are nationally with location quotients less than 1.

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<sup>&</sup>lt;sup>27</sup> Because of different sources used and definitions applied in SIM model, actual data might be slightly different than in the section of 'Sectoral composition of employment'.

Significant differences between output and employment location quotients suggest that there are differences in output per FTE employee between sub-sectors in the East Midlands and the UK. A further analysis of productivity by sub-sector provides a better understanding of the region's relative strengths and weaknesses. The SIM model has been used to provide estimates of productivity by sub-sector in the East Midlands and UK. The productivity differences are shown in Chart 11.

Chart 11: Productivity differences between the East Midlands and the UK (%) 2008



Source: emda/Experian Scenario Impact Model, Autumn 2009.

The most productive sub-sector in the East Midlands is that of transport equipment. Output per FTE worker in this sector is over 40% higher in the region than in the UK.

This sector includes a number of the region's major companies such as Rolls-Royce, Toyota and Bombardier.

As well as transport equipment (42%) there are a further six sub-sectors in which the East Midlands is more productive than the UK. These are: minerals (22%), food & drink (11%), metals (7%), wholesaling (4%), retailing (3%) and public admin & defence (2%).

This analysis again highlights the East Midlands specialism in production activities, as the top four most productive sub-sectors are all in the production sector. Whilst this shows the region has a degree of comparative advantage in some production sub-sectors, it should be noted that productivity is below average in 23 sub-sectors of the East Midlands economy.

The top seven most productive sub-sectors account for around one quarter of regional employment and one fifth of regional output, greater than the UK average. Conversely, around three quarters of employment and four fifths of output are in sectors which are less productive in the East Midlands than in the UK. It should, however, be noted that this analysis is quite high level and whilst a sector may be less productive in the East Midlands than in the UK there will be both relatively high and low performing firms within each sector.

#### **Key sectors in the East Midlands economy**

A detailed analysis of key sectors in the East Midlands economy was conducted to inform the creation of the last Regional Economic Strategy, 'A Flourishing Region', in 2006. This analysis took account of a wide range of indicators including output, employment and the number of large employers, as well as a range of forecast data to determine the four most economically significant sectors in the region. The analysis highlighted the four sectors of transport equipment, food & drink, construction and healthcare & bioscience. These sectors were collectively termed 'priority sectors'.

It should be noted that the recession is having a differential impact across these sectors. Construction and transport equipment have been particularly hard hit. Construction activity has been affected by falling confidence in the commercial property market and difficulties in the housing market as prices have dropped. Unlike these two sectors, food & drink and healthcare & bioscience are less dependent upon discretionary consumer expenditure and, therefore, less sensitive to the economic cycle.

#### **Transport equipment**

The transport equipment sector comprises of the manufacture of transport equipment and motor vehicles, trailers & semi-trailers sub-sectors. This sector has a long and productive history in the East Midlands. This sector is supported by a number of large multinational companies which have a presence in the region including Toyota, Rolls-Royce and Bombardier, which in turn support a network of smaller companies supplying parts and labour to the industry creating internationally recognised clusters.

**Scale:** The transport equipment sector accounts for 3.8% of regional output and 1.9% of regional employment making it one of the largest manufacturing sub-sectors in the East Midlands. With an output location quotient of 2.4 and an employment location quotient of 1.5, this sub-sector is significantly more important in the East Midlands than nationally.

**Productivity:** Levels of productivity are estimated to be around 42% higher in the East Midlands than nationally. It is estimated that productivity in the manufacture of transport equipment is higher than in any other sub-sector of the East Midlands.

**Growth prospects:** Output and employment in this sector is expected to decrease slightly in the East Midlands between 2008 and 2018, in line with the national trend.

**Employment quality:** Average weekly pay<sup>28</sup> in this sector is 13% higher than the UK average. This sector also has weekly pay almost two thirds higher than the East Midlands economy wide average. This data indicates that this is a high value added sector requiring a highly skilled labour force.

**Strategic significance:** To measure the significance of a sub-sector we look at the number of large employers (+200 employees) in that sector in the region. There are around 30 large employers in this sector in the East Midlands indicating that the sector is strategically significant to the region.

**Skills demanded by employers in Manufacturing**<sup>29</sup>: Apart from general skills such as numeracy, literacy, communication skills and problem solving skills which can be applied in a number of positions and jobs there are distinctive sector specific skills demanded by employers.

Specific skills demands (proposal lines in the RBSIS; see footnote 26.) were concentrated in Manufacturing; Wholesale/Retail/Repair Motor Vehicles/Motorcycles and Personal and Household Goods; and Real Estate and Construction.

From 1<sup>st</sup> April 2009 until March 2010, the most demanded skills are related to the following sectors:

- Manufacture of food and drink products;
- Manufacture of electrical equipments;
- Manufacture of plastic products;
- Manufacture of metal structures; and
- Skills related to general mechanical engineering and manufacture of parts and accessories for motor vehicles and their engines.

It appears that skills identified in Manufacturing can be classified as both low and medium/higher levels of skills. Skills related to food production are not specifically high level skills but are certainly quite sector specific. Mechanical and engineering skills identified by East Midlands' employers are more likely to be at least intermediate level.

<sup>29</sup> Integrated Brokerage Service management information based on the Regional Business Support Information System (RBSIS).

<sup>&</sup>lt;sup>28</sup> Office for National Statistics, 'The Annual Survey of Hours and Earnings (ASHE) 2008', from Table 5 1a, http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15187

#### Food & drink

The food & drink sector comprises of the manufacture of food and beverages, and is a sector which depends on the region's agricultural producers.

**Scale:** The sector accounts for 4.0% of output in the East Midlands and 2.7% of employment, significantly greater than the UK averages of 1.9% and 1.6% respectively. An output location quotient of 2.1 and an employment location quotient of 1.7 indicate that this sector is around twice as important in the East Midlands economy as it is nationally.

**Productivity:** Productivity estimates indicate that this sector is around 11% more productive in the East Midlands than it is nationally.

**Growth prospects:** Forecasts suggest that the food & drink sector will experience growth in output and employment between 2008 and 2018, in contrast to a modest decline forecast nationally.

**Employment quality:** Average weekly pay in the food & drink sector in the East Midlands is around 3% higher than in the UK, and 15% higher than the average weekly pay in the East Midlands for all sectors.

**Strategic significance:** There are over 70 large employers in this sector indicating that it has a high degree of strategic significance.

#### Construction

The construction sector has historically played a significant role in the regional economy. This sector is highly cyclical and it is often amongst the first to be negatively affected by any economic downturn. The latest economic downturn has put pressure on the construction sector, with the majority of new work now being generated from public infrastructure projects. Despite this, the sector still has an important role to play and will support regional and national economic growth in the future.

**Scale:** The construction sector accounts for 6.0% of output and 9.3% of employment in the East Midlands region, similar to the levels experienced in the UK, of 6.0% and 8.6% respectively. The sector is slightly more important in the East Midlands than nationally, with an employment location quotient of 1.1.

**Productivity:** Although the construction sector is more significant in the East Midlands than in the UK there is a small productivity gap. Levels of productivity in the East Midlands are around 92% of the UK level.

**Growth prospects:** Future growth prospects in this sector have been made more difficult to construct due to the prevailing economic conditions. Based on latest available data, this sector is expected to experience a fall in employment in line with the UK average. The sector is, however, expected to experience an increase in output between 2008 and 2018. Infrastructure projects, such as the 2012 Olympics in London and road infrastructure projects (including the widening of the A46 and

improvements to the M1 between junctions 21-25 and 28-30) in the East Midlands are helping to sustain the sector in the region.

**Employment quality:** The construction sector in the East Midlands has average weekly pay around 90% of the UK level. Despite this weekly pay in the sector remains 19% higher than the overall East Midlands average.

**Strategic significance:** There are over 30 large companies in the construction sector in the East Midlands indicating that it is strategically significant to the region. The region's businesses will continue to benefit from opportunities arising from the Milton Keynes South Midlands (MKSM)<sup>30</sup> development as well as the aforementioned infrastructure projects.

**Skills demanded by employers in Construction**<sup>31</sup>: Skills related to the general construction of buildings and other building installations (floor, plumbing, glazing etc.) were the two main groups of skills needed. Within these architectural and engineering activities and installation of electrical wiring and fittings were the most needed skills.

#### Health & bioscience

The health sector has been defined as comprising both the provision of healthcare services and the manufacture of medical instruments and equipment and pharmaceuticals.<sup>32</sup>

**Scale:** In 2007, the health sector accounted for 7.0% of output and 9.7% of the total employment in the East Midlands. Location quotients of 1.0 and 0.9 for output and FTE employment indicate that the sector is broadly in line with the UK level.

**Productivity:** Levels of productivity in the health sector of the East Midlands are around 96% of the UK level. Although productivity remains lower in the East Midlands than in the UK, there has been an improvement of 4 percentage points in the region since 2004, meaning that the gap has closed.

**Growth prospects:** The health sector is expected to be amongst the fastest growing sectors in both the East Midlands and nationally. In the East Midlands output and employment in the sector are expected to grow significantly faster than nationally.

**Employment quality:** Average weekly earnings are around 90% of the UK average in this sector and are also around 10% lower than the overall average in the East Midlands, indicating that this is a relatively low employment quality sector. There are, however, some sub-sectors of health e.g. the manufacture of chemicals, which require highly skilled labour.

**Strategic significance:** There are over 70 large employers in the health sector in the East Midlands. The demographic changes taking place in the region (as well as

<sup>31</sup> Based on the Regional Business Support Information System (RBSIS) Integrated Brokerage Service management information.

<sup>&</sup>lt;sup>30</sup> Further details can be found at <a href="http://www.mksm.org.uk/index.php">http://www.mksm.org.uk/index.php</a>

<sup>&</sup>lt;sup>32</sup> This definition includes a degree of overlap with other sectors but offers the best estimate of the overall size of the sector and its components.

nationally) e.g. the increases in the population of pensionable age, are increasing the demand for products and services from the health sector.

# **Key Points: Industrial structure of the East Midlands economy**

- Over the last two decades there has been a shift away from production activities towards the service sector both regionally and nationally. The service sector has remained smaller in the East Midlands, accounting for 66% of all businesses, than the level experienced nationally, of 74%.
- In terms of business stock, construction is the largest sector in the East Midlands, accounting for around 14.2% of all businesses in the region, slightly higher than the national average, of 13.4%.
- The manufacturing sector accounts for 21% of output and 16% of employment in the East Midlands (larger than the UK), whilst the service sector accounts for 70% of output and 71% of employment (smaller than the UK).
- The sectors of transport equipment, minerals, food & drink, metals, wholesaling, retailing, and public admin & defence are all more productive in the East Midlands than nationally.
- Transport equipment is the most productive sector in the region.

#### Key points: RBSIS – skills demanded by employers

- The sectoral composition of Skills Intensive Assists recorded in the East Midlands largely reflects the sectoral distribution of employees.
- Specific skills demands (proposal lines in the RBSIS) were concentrated in Manufacturing; Wholesale/Retail/Repair Motor Vehicles/Motorcycles and Personal and Household Goods; and Real Estate and Construction.
- It appears that the skills demanded in Manufacturing can be classified as both low and medium/higher level skills.
- The two main groups of skills needed in Construction were related to the general construction of buildings and other building installations (floor, plumbing, glazing etc).

#### **Demand for labour**

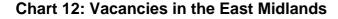
This section provides an analysis of labour demand, as measured by vacancies in the UK and in the East Midlands. Vacancies are those positions which need to be filled and therefore can give an early indication of what is happening in the labour market.

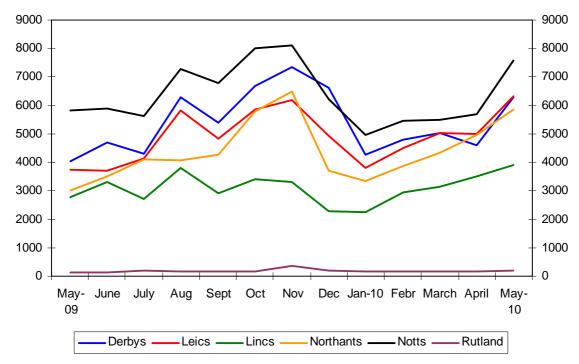
This section is based on the statistics of Jobcentre Plus and the National Employers Skills Survey 2009.

#### **Vacancies**

Jobcentre Plus (JCP) vacancy statistics are the most up to date data on vacancies. It should be noted that it has been estimated that JCP only handles about one third of the available vacancies in the economy <sup>33</sup>:

- Between May 2009 and May 2010, all counties, except Lincolnshire have demonstrated a positive trend in terms of notified vacancy numbers;
- The region and the counties all experienced higher vacancies in May 2010 compared to May 2009; and
- The region reported about 10,650 more notified vacancies in May 2010 compared to May 2009 – an increase of 55%.





Source: Jobcentre Plus Vacancies – summary analysis, notified vacancies accessed from NOMIS. Note: Lincolnshire data excludes armed forces vacancies. Derbyshire includes Derby; Leicestershire includes Leicester; Nottinghamshire includes Nottingham. Data are rounded.

#### Vacancies by sought occupation

The most numerous vacancy opportunities are in Sales and Care assistant occupations.

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<sup>&</sup>lt;sup>33</sup> Labour Market Trends, vol 113, no 06, pp 253-259.

Table 2: Notified vacancies by sought occupation – the top 20 occupations, East Midlands, May 2010

	Number
3542 : Sales representatives	2,100
6115 : Care assistants and home carers	1,690
8211 : Heavy goods vehicle drivers	1,450
7129 : Sales related occupations n.e.c.	1,240
9233 : Cleaners, domestics	1,060
9149: Other goods handling and storage occupations n.e.c.	1,050
7212 : Customer care occupations	1,010
7111 : Sales and retail assistants	880
9235 : Refuse and salvage occupations	810
7113 : Telephone salespersons	810
9211 : Postal workers, mail sorters, messengers, couriers	670
9134 : Packers, bottlers, canners, fillers	650
8111 : Food, drink and tobacco process operatives	600
4150 : General office assistants/clerks	580
3211 : Nurses	570
8222 : Fork-lift truck drivers	560
9241 : Security guards and related occupations	540
9223 : Kitchen and catering assistants	520
5434 : Chefs, cooks	460
8212 : Van drivers	430

Source: ONS Crown Copyright Reserved [from Nomis on 7 July 2010].

Vacancies - notified by occupation. Occupations - SOC 2000. Data are rounded to the nearest 10.

#### **Vacancies by sector**

Vacancies are concentrated in 'Other business activities' (these are those vacancies which were placed with Jobcentre Plus by employment agencies regardless of the type of job being advertised by the agency. This of course, distracts this category<sup>34</sup>), 'Heath and social work' 'Retail', and 'Hotels and restaurants'.

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<sup>&</sup>lt;sup>34</sup> Based on conversations with Jobcentre Plus colleagues.

Table 3: Notified vacancies by sector – the top 20 occupations, East Midlands, May 2010

Sector	Number
74 : Other business activities	16,480
85 : Health and social work	2,300
52 : Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	1,770
55 : Hotels and restaurants	1,320
45 : Construction	1,070
91 : Activities of membership organisations not elsewhere classified	870
75 : Public administration and defence; compulsory social security	730
65 : Financial intermediation, except insurance and pension funding	610
80 : Education	550
51 : Wholesale trade and commission trade, except of motor vehicles and motorcycles	390
92 : Recreational, cultural and sporting activities	380
93 : Other service activities	350
67 : Activities auxiliary to financial intermediation	340
64 : Post and telecommunications	330
15 : Manufacturing of food and beverages	330
40 : Electricity, gas, steam and hot water supply	260
60 : Land transport; transport via pipelines	260
50 : Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	240
25 : Manufacture of rubber and plastic products	210
01 : Agriculture, hunting and related service activities	120

Source: ONS Crown Copyright Reserved [from Nomis on 7 July 2010].

Vacancies - notified by sector. Sectors - SIC 2003. Data are rounded to the nearest 10.

#### **Establishments with vacancies**

The National Employer Skills Survey gathers data from businesses about vacancies and different types of recruitment difficulties.

Hard to fill vacancies (HtFVs) are an indicator of recruitment problems among businesses. They indicate possible mismatches between the supply of labour and the demands of the business. The reasons for HtFVs are diverse: from 'not enough interest in the job' to 'applicants have not got the required attitude'; from 'low number of applicants' to 'poor terms and conditions, such as pay'. HtFVs also include skills shortage vacancies (SSVs), which result from applicants not having the required skills, experience, or qualifications that the employer demands. There are also other HtFVs which are attributed to other causes such as a simple lack of applicants.

Table 4: NESS 2009 headline figures - All Vacancies

Table 4: 14200 2000 floadinio figures 7th vacantolos			
	NESS	NATIONAL	East Midlands
% of establishments with any vacancies		12%	11%
		18%	15%
% of establishments with any hard-to-fill vacancies		3%	3%
		7%	5%
% of establishments with Skills Shortage Vacancies		3%	2%
		5%	3%
% of all vacancies which are Skills Shortage Vacancies		16%	13%
		21%	21%
Number of Skills Shortage Vacancies per 1,000	2009	3	2
employees	2007	6	5

Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

In 2009, 11% of employers in the East Midlands reported having a job vacancy of any kind. This was lower than the proportion reported in NESS 2007 (15%), which reflects the national position and also the potential impact of the recession.

Public and service sectors had the highest proportion of vacancies, with 26% of employers reporting that they had a vacancy. There were also significant proportion of vacancies in Business services (18%); in 'Distribution and retailing' (17%) and in 'Hotels and Catering' (11%).

In total 31,745 vacancies were reported in the region in 2009. Smaller establishments had a higher proportion of vacancies compared to establishments with more than 200 employees, which was the same in 2007. To some extent this is unsurprising given that small to medium sized enterprises (SMEs) account for a higher percentage of employers in the region.

Table 5: Vacancies by business size, East Midlands

Employee	Number of (weighted cas		
size-band	No.	%	Cumulative
2-4	6,288	20%	20%
5-9	4,113	13%	33%
10-24	6,111	19%	52%
25-49	3,263	10%	62%
50-99	3,988	13%	75%
100-199	3,329	10%	85%
200-250	1,060	3%	88%
251-499	1,331	4%	92%
500+	2,261	7%	99%
Total	31,745	100%	100%

Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

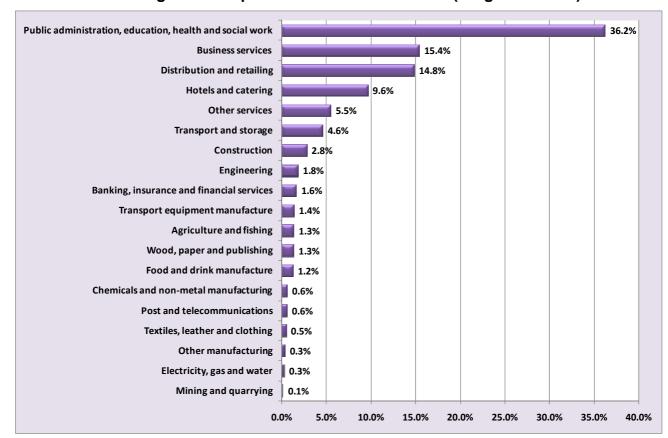


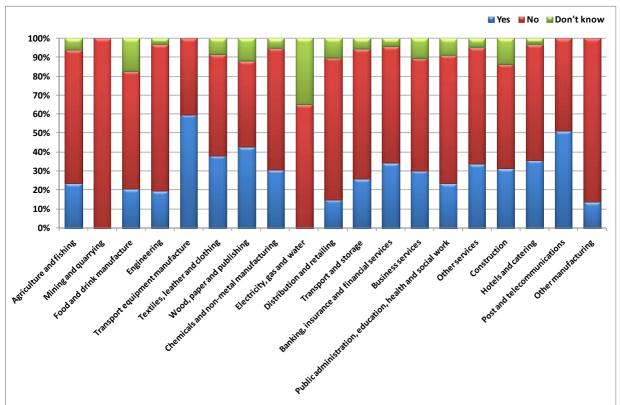
Chart 13: Percentage sector split of number of vacancies (weighted cases)

Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

In 2009, 3% of regional employers reported hard to fill vacancies, compared to 5% in 2007. Nationally, there was a decrease of 4 percentage points during this period.

The proportion of employers with hard to fill vacancies were relatively greater in Transport Equipment Manufacture, Post and Telecommunications, Wood, Paper and Publishing, Textiles, Leather and Clothing and Hotels and Catering.

Chart 14: Whether have any hard to fill vacancies: proportional split by sector areas in the East Midlands



\*NB: Low numbers will result in high percentage differences.

Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

Just below 6,000 vacancies were identified as hard to fill (5,866), and these were primarily in Public administration, education, health and social work (29%), Business services (19%) and Hotels and Catering (12%). When employers were asked about the reason for the hard to fill vacancies they had reported, the main cause stated was a *low number of applicants with the required skills*, which was also the most stated reason in NESS 2007.

## Skills Shortage Vacancies<sup>35</sup>

In 2009, 2% of regional employers reported having a skills shortage vacancy, compared to 3% at national level. Regionally, there was a decrease of 1 percentage point from 2007. Nationally, there was a decrease of 2 percentage points.

Also in 2009, 13% of all vacancies were identified as skills shortage vacancies, which was much lower than the 21% reported in 2007. Regional skills shortage vacancies were proportionately lower than the national figure of 16% in 2009, which had also fallen since 2007. Consequently, the number of skills shortage vacancies per 1,000 employees has also decreased from 5 in 2007 to 2 in 2009, which also follows the national trend.

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<sup>&</sup>lt;sup>35</sup> Source: BMG Research prepared for the YPLA and SFA East Midlands Region, '*The National Employer Skills Survey 2009: report of results for the East Midlands*' – Forthcoming.

#### **Demand for skills**

The demand for skills is a derived demand. It depends upon the nature of the product or service that a business supplies to its customer. This sub-section provides measures of employer demand for skills such as 'knowledge intensity' of employment and the skills gaps among current staff. The provision of and participation in training is also assessed.

Although the scale of the upskilling of the East Midlands workforce is significant, the demand for higher level skills seems to be lagging behind the increased supply. The proportion of those who reported that their highest qualification was above that required for their current job ('over-qualified' individuals) in the East Midlands was 39.1% in 2006<sup>36</sup>. This represents a rise of 7.4 percentage points from the figure reported in 1997 when 31.7% reported being 'over-qualified'. In England, 'over-qualification' also rose by around eight percentage points over the same period from 31.4% to 39.4%.

### Skills gaps within the existing workforce

Skills gaps refer to the extent to which employers perceive their employees as not being fully proficient to undertake their job.

This section is also built on responses to the 2009 National Employers Skills Survey. By using data from the employer's point of view we can complement and in some cases, contrast employees' perceptions on 'over' or 'under qualification'.

The national findings from 2009<sup>37</sup> show that the proportion of establishments reporting skills gaps has risen from 15% in 2007 to 19% in 2009 in England. This can be related to the fact that due to the recession, companies could not address their internal skills problems by recruiting new staff anymore. Therefore, any internal skills gaps have become more visible and the consequence of these skills issues more obvious to employers.

Table 6: Skills gaps

East NATIONAL Skills gaps **NESS Midlands** 2009 18% 19% % of establishments with any staff not fully proficient 2007 15% 15% 7% 7% 2009 Number of staff not fully proficient as a % of employment 2007 6% 6%

Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

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<sup>&</sup>lt;sup>36</sup> Alan Felstead and Francis Green on behalf of *emda*, 'Skills at Work in the East Midlands, 1997 to 2006'. 2007.

http://www.intelligenceeastmidlands.org.uk/index2.php?option=com\_docman&task=doc\_view&gid=38 0&Itemid=99999999

<sup>&</sup>lt;sup>37</sup> UK Commission for Employment and Skills, 'National Employer Skills Survey for England 2009: Key findings report' <a href="http://www.ukces.org.uk/upload/pdf/NESS%20Key%20findings%202009\_2.pdf">http://www.ukces.org.uk/upload/pdf/NESS%20Key%20findings%202009\_2.pdf</a>

Employers identify skills gaps amongst their existing employees and are therefore *internal* to the organisation. Since 2007, skills gaps have increased from 15% to 18% in 2009. This increase was also confirmed nationally.

Some of the most cited reasons for skills gaps by employers were:

- Employees lack of experience or their being recently recruited
- Staff lack of motivation
- Inability of the workforce to keep up with changes
- Failure to develop and train staff

These concerns are in line with the definition of 'employability skills'. This is the set of basic/generic skills and attitudinal/behavioural characteristics that are believed to be essential for individuals to secure and sustain employment, and also to progress in the workplace<sup>38</sup>.

- The distribution of skills gaps confirms previous NESS results. Skills gaps are
  most often cited in terms of technical, job specific skills, customer handling
  skills, problem solving, team working, communication and general IT skills.
- Most of these skills were mentioned across every occupation. However, management skills were overrepresented among Managers and customer handling skills were more prevalent among Sales and Customer service staff. Skills gaps in general IT skills were mentioned the most in terms of Administrative staff. Professional IT and language skills were identified as skills gaps among Professionals and Managers.

# **Training activity**

Table 7: NESS 2009 headline figures - Training

NESS	NATIONAL	East Midlands
2009	68%	67%
2007	67%	68%
2009	51%	52%
2007	46%	45%
2009	43%	40%
2007	48%	48%
2009	36%	32%
2007	35%	34%
	2009 2007 2009 2007 2009 2007 2009	2009 68% 2007 67% 2009 51% 2007 46% 2009 43% 2007 48% 2009 36%

Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

In the East Midlands 67% of employers offered training to their staff in the last 12 months. This proportion has decreased by just 1% compared to NESS 2007. Nationally, this figure has increased by 1%. It is encouraging to see that the number of employers offering training has remained relatively stable during a time of recession.

<sup>&</sup>lt;sup>38</sup> http://www.ukces.org.uk/upload/pdf/Employability%20Skills%20Policy%20Briefing\_Final\_1.pdf

#### Training plans and budgets

- The number of employers with a training plan had decreased in the region in 2009 since 2007 (48% to 40%), and this decline was greater than the national figure.
- The number of employers in the East Midlands with a training budget had also declined from 34% to 32% from 2007 to 2009. Nationally this figure rose by 1%.
- Of those that offered training, 8% said that expenditure on training per employee had increased as a result of the recession, 80% said it had stayed the same and 11% said it had decreased. This is positive as the assumption could be that during an economic downturn, training expenditure would be one of the first areas to suffer cuts.

# Type of training provision

- In the last 12 months, 36% of regional employers had offered both 'on the job' and off the job training.
- More regional employers were offering 'off the job' training in 2009 compared to 2007 (52% compared to 45%), which was also reflected in national findings.
- In 2009, 51% of employers said they funded or arranged 'on the job' training for staff in the last 12 months. Approximately, 53% of employers offered 'on the job' training in 2007.
- Approximately 16.0% of employers felt that due to the recession they had reduced the amount of training they had delivered by external providers. However, the majority said that it had stayed the same (75%), while 7% said it had increased.
- In addition, 7% of employers reported a decrease in the amount of informal training as a result of the recession. More employers also reported an increase (14%), but again the majority said that it had stayed the same (77%).
- Of those employers who said they had offered training in the last 12 months (67%), more than half said they had arranged/funded training leading to a nationally recognised qualification.

## **Key Points: Demand for labour**

- Only 11% of employers in the East Midlands in 2009 reported having a job vacancy (NESS 2007: 15%).
- The highest proportion of vacancies were in 'Public administration, education, health and social care', 'Business services', 'Distribution and retailing' and 'Hotel and Catering'.
- Three percent of regional employers reported 'hard to fill' vacancies in 2009, compared to 5% in 2007.
- In 2009, 13% of all vacancies were identified as skills shortage vacancies (NESS 2007: 21%). Consequently, the number of skills shortage vacancies per 1,000 employees has also decreased from 5 in 2007 to 2 in 2009, which also follows the national trend.
- Since NESS 2007, skills gaps, identified by employers amongst current staff have increased from 15% to 18% in NESS 2009.
- In the East Midlands 67% of employers offered training to their staff in the last 12 months (NESS 2007: 68%).
- The number of employers with a training plan however had decreased in the region in 2009 since 2007 (48% to 40%), and this decline was greater than the national figure.
- The number of employers in the East Midlands with a training budget had also declined from 34% to 32% from 2007 to 2009.
- Of those that offered training, 80% said that expenditure on training per employee had stayed the same and 11% said it had decreased.

#### **Future Employer Demand**

#### Forecast for the next decade

Detailed forecasts for the next decade have been increasingly difficult to create due to impacts of the recession and uncertainty about the likely extent and pace of recovery. Expectations about the future of output in the UK and East Midlands are largely based on the sentiments of businesses and measured by periodic sample surveys<sup>39</sup>. These surveys suggest that businesses are beginning to feel more confident, with many believing that the UK economy has stabilised and will experience modest growth through 2010. We can, however, make more general forecasts, indicating the direction and potential magnitude of change using average annual growth rates over the next decade.

Table 8: Average annual growth rate in output, 2007-2017

Gross Value Added (GVA)	Average annual growth rate (%)
East Midlands	1.2
UK	1.3

Source: Regional Planning Service, Experian, November 2009.

<sup>39</sup> Surveys include: Quarterly Economic Survey, British Chambers of Commerce.

40

Table 8 shows that GVA in the East Midlands is expected to grow at 1.2% per annum between 2007 and 2017. There is no significant difference between the forecast average annual growth rate in the East Midlands and the UK average. There is expected to be a slow economic recovery during 2010 following negative growth in 2009. The growth rate is expected to accelerate between 2010 and 2017. These low average figures reflect the depth of the recession in 2009.

#### **East Midlands employment forecast**

The economic downturn has also had a large and negative effect on employment in the UK and the East Midlands. Unemployment in the UK rose to almost 2.5 million between November 2009 and January 2010. This section focuses on full-time equivalent employment (FTE) demonstrating the growth that has taken place in the English regions over the past decade. For more information on employment in the East Midlands see the Labour Market chapter of The East Midlands in 2010.

#### Recent employment performance 1997-2007

Although there has been a rise in unemployment due to the recession, the decade prior to 2008 experienced positive growth in FTE employment in all English regions. That being said, there has been significant variations in FTE employment growth between regions:

- Regions in the south and east of the UK have experienced average growth in FTE employment significantly greater than midlands or northern regions between 1997 and 2007;
- Regions in the south including the South East, London, East of England and the South West all experienced average annual growth rates in FTE employment of around 1.4%;
- Average growth in FTE employment was 1.1% per annum in the East Midlands in this period, comparable to the UK level; and
- The lowest growth in this period was in the West Midlands where FTE employment grew at 0.4% per annum.

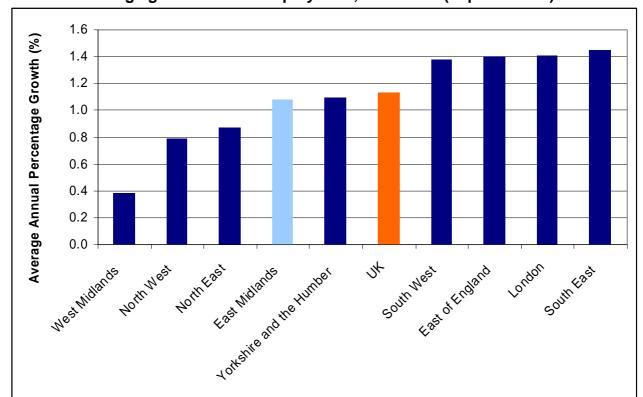


Chart 15: Average growth in FTE employment, 1997-2007 (% per annum)

Source: Regional Planning Service, Experian, November 2009.

## Employment forecast for the next decade

Similar to output forecasts, there is a great deal of uncertainty around employment forecasts over the next decade. Table 9 shows the broad forecasts that are currently possible to make. It shows that there is expected to be no growth in the level of FTE employment between 2007 and 2017. This reflects the minimal forecast growth in the UK as a whole, of 0.1%, in the same period. There is an expectation that employment will take a number of years to return to its pre-recession level, a pattern familiar in the aftermath of previous recessions.

Table 9: Average annual growth rate in FTE employment, 2007-2017

FTE employment	Average annual growth rate (%)
East Midlands	0.0
UK	0.1

Source: Regional Planning Service, Experian, November 2009.

**Future prospects for 2010-2013** 

This section provides short-term occupational forecasts for the period 2010-2013 and 2013-2018 for the East Midlands and its sub-regions.

Table 10: Occupational change estimated for 2010-2013

	UK	EM	Derby and Derbysh ire	Greater Notting ham	Leiceste rshire	Lincol nshire	North Derbys hire - North Nottin ghams hire	Northam ptonshir e	Welland
Managers									
Senior officials	5.2	4.2	3.4	4.4	3.9	4.5	5.0	5.6	4.6
Professionals	2.4	1.4	-0.3	0.5	0.2	0.7	1.0	2.7	0.4
Associate									
professionals	3.7	3.6	3.3	3.6	3.2	4.7	5.0	5.4	4.0
Admin									
Secretariat	-0.9	-1.2	-1.4	-1.5	-1.7	-1.1	-0.1	0.0	-0.9
Skilled Trades	0.6	-0.4	-1.8	-0.6	-2.4	-3.8	1.2	0.4	-1.7
Service									
Occupations	3.9	5.8	5.4	5.2	5.1	5.8	6.4	7.9	5.4
Sales	4.9	5.2	4.4	4.2	5.3	5.5	5.7	5.8	5.9
Process Plant,									
Elementary	1.9	0.1	-0.6	-0.6	-0.7	0.4	0.6	2.0	0.4

Source: SIM - September 2009.

- The number of Managers and Senior Officials is projected to increase at a slower rate in the East Midlands than in the UK between 2010 and 2013.
  - The number of Managers and Senior Officials could increase more than the regional average in North Derbyshire-North Nottinghamshire and Northamptonshire.
- The number of Professionals is projected to increase slightly less in the East Midlands than in the UK between 2010 and 2013.
  - The number of Professionals could increase more than the regional average in Northamptonshire.
- The number employed in the Skilled Trades is projected to decrease in the East Midlands but could increase in the UK between 2010 and 2013.
  - Skilled Trades are projected to decrease more significantly in Derby and Derbyshire, Lincolnshire, Leicestershire and the Welland.

- The number of employees in Service Occupations and Sales positions could increase relatively more in the East Midlands than in the UK between 2010 and 2013.
  - The number of Service Occupations and Sales positions could increase more than the regional average in North Derbyshire-North Nottinghamshire, Northamptonshire and the Welland.
- The number of employees in Process, Plant and Elementary jobs is projected to increase much less in the East Midlands than in the UK between 2010 and 2013.
  - The number of Process, Plant and Elementary jobs will increase more than the regional average in Northamptonshire.

Table 11: Occupational change estimated for 2013-2018

	UK	EM	Derby and Derbyshi re	Great er Notti ngha m	Leicest ershire	Lincol nshire	North Derbyshi re North Nottingh amshire	Northa mpton shire	Welland
Managers Senior									
officials	6.2	5.8	4.6	6.6	5.0	5.7	7.0	7.4	6.4
Professionals	3.0	-0.7	-2.8	-2.0	-3.2	-1.9	-1.1	1.5	-2.5
Associate professionals	5.5	6.5	6.4	6.9	5.7	7.5	8.8	8.8	7.1
Admin Secretariat	-1.2	-1.6	-1.8	-1.4	-2.4	-1.8	0.1	-0.1	-1.4
Skilled Trades	-2.3	-1.8	-4.0	-0.9	-4.2	-8.9	-1.0	-1.3	-4.7
Service									
Occupations	4.9	8.8	8.1	7.8	7.2	8.4	9.6	12.4	7.9
Sales	4.2	3.8	2.5	3.4	4.1	3.7	4.1	4.9	4.8
Process Plant,									
Elementary	1.5	-0.3	-1.4	0.3	-1.1	-0.4	0.4	2.0	0.8

Source: SIM - September 2009.

- The number of Managers and Senior Officials is projected to increase at a slower rate in the East Midlands than in the UK between 2013 and 2018.
  - The number of Managers, Senior Officials could increase more than the regional average in North Derbyshire-North Nottinghamshire, Northamptonshire and to a lesser extent in the Welland.
- The number of Professionals is expected to decline in the East Midlands, whilst it is projected to increase significantly in the UK.
  - o The number of Professionals will decrease more in Derby and Derbyshire, Greater Nottingham, and Leicestershire than the regional average.
- The number employed in the Skilled Trades is projected to fall in the East Midlands and will increase in the UK between 2013 and 2018.
  - Skilled Trades could decrease more significantly in Derby and Derbyshire, Leicestershire, Lincolnshire and the Welland.

- The number of employees in Service Occupations and Sales positions is projected to increase significantly more in the East Midlands than in the UK between 2013 and 2018.
  - The number employed in Service Occupations and Sales positions will increase by more than the regional average in North Derbyshire-North Nottinghamshire and Northamptonshire.

## **Key Points: Future prospects for the East Midlands economy**

- The East Midlands economy has experienced relatively strong growth compared with other English regions, in particular other northern and midlands regions between 1997 and 2007.
- The East Midlands economy is expected to grow at 1.2% per annum between 2007 and 2017.
- Average growth in FTE employment was 1.1% per annum in the East Midlands between 1997 and 2007, comparable to the UK level.
- Forecasts suggest there will be zero growth in FTE employment between 2007 and 2017, as the economy recovers to pre-recession levels of employment. This is in line with the UK average.

#### Future prospects for occupational change

Technological change, globalisation and other factors continuously influence the patterns of demand for goods and services and consequently the demand for skills. Occupations that benefit from such changes will experience employment growth. Conversely some will experience job losses<sup>40</sup>. The following analysis provides an assessment of future prospects for occupational change in the East Midlands.

Working Futures 2007-2017 projections provided by the UK Commission for Employment and Skills and the former Learning and Skills Council, forecast changing employment by sector, occupation, gender and status. However, it is crucial to note that these projections should only be regarded as a broad indication of likely future occupational change 41 given current information.

It is important to note that Working Futures 2007-2017 projections represent a view of what the future might look like assuming that past performance and behaviours continue over time. It is also important to note that the baseline macroeconomic projection that underpins the Working Futures results was developed in the first half of 2008, before the extent of the recession became fully apparent. There is, therefore, a significant degree of uncertainty relating to these projections. However

<sup>41</sup> Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

<sup>&</sup>lt;sup>40</sup> Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008

they still provide a useful assessment of the potential change in occupational structure over the next decade.

Changes in the structure of occupation are driven by two factors, expansion demand and replacement demand. Expansion demand refers to job creation which is generated by sectoral growth. These jobs are genuinely new jobs which did not exist before and which are the result of the changing demand for goods and services. The underlying factors of this change are related to the evolving global, national and regional economic landscape. The second factor is replacement demand which are not new jobs, but jobs that need filling as their current occupants leave the labour market (predominantly into retirement).

#### **Expansion demand**

Working Futures 2007-2017 projects an increase of employment in the East Midlands of 5.9% which is similar to the UK average of 6.2% 42.

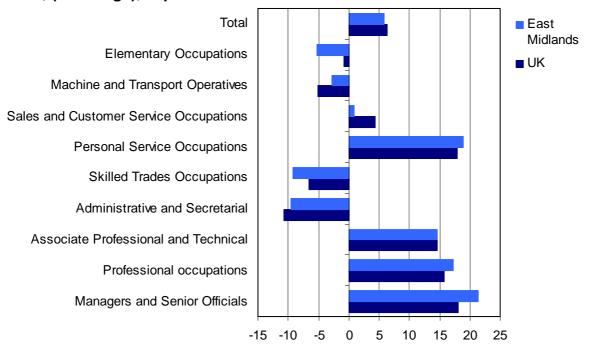
In both the UK and in the East Midlands, employment in Managerial and Professional occupations is expected to increase, whilst the number of employees in Elementary occupations and Machine and Transport Operatives are projected to decline. Skilled trade occupations and Administrative and Secretarial positions are also projected to decline. The East Midlands will continue to employ a relatively small share of its workforce in upper tier occupations. These patterns of expansion demand were highlighted in the previous Working Futures projections. These changes are often referred to as "hollowing out the middle".

- The increase in employment in upper tier occupations is projected to be more significant in region than in the UK between 2007 and 2017. However, by 2017, the proportion of those in upper tier occupations is forecast to be 44.4% in the East Midlands, 2.5 percentage points below the UK figure of 46.9%.
- The proportion of those in employment who work in intermediate occupations in 2017 is forecast to be 36.9% in the East Midlands, around 1 percentage point above the UK figure of 36.0%.
- The decrease of those in lower tier occupations is projected to be more significant in the East Midlands than in the UK. Still, the proportion of those in employment who work in lower tier occupations in 2017 is forecast to be 18.7% in the East Midlands, about 1.5 percentage points above the UK figure of 17.1%.

<sup>42</sup> Quantitatively, these projections are different from that in the Economy chapter which are based on the Scenario Impact Model developed by Experian on behalf of *emda*. However, both suggest that employment growth in the East Midlands will be similar to the national average.

46

Chart 16: Projected change in employment by major occupation groups, 2007-2017, (% change), expansion demand



Source: Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

### Replacement demand

Replacement demand takes into account the need to replace those who leave their jobs because of retirement or other reasons. These are not new jobs but jobs that need filling as their current occupants leave the labour market. These replacement demand jobs therefore need to be added to any projected structural change (or so called expansion demand or decline) in order to obtain an estimate of the total net change in the occupational structure of employment<sup>43</sup>.

The Working Futures 2007-2017 report suggests that all occupations are expected to have a large and positive replacement demand. In addition, replacement demand will considerably exceed the number of jobs created by economic growth. Therefore, replacement demand is likely to be much more significant in terms of education and training requirements than expansion demand.

Chart 17 shows the East Midlands expansion demand, replacement demand and the overall change in the occupational structure of the region's employment by occupation between 2007 and 2017.

Due to structural changes in the economy, some occupations are expected to shrink, such as administrative and secretarial occupations, skilled trades, process plant and elementary occupations. However, there will still be a large number of vacant posts that will need filling as their current occupants retire.

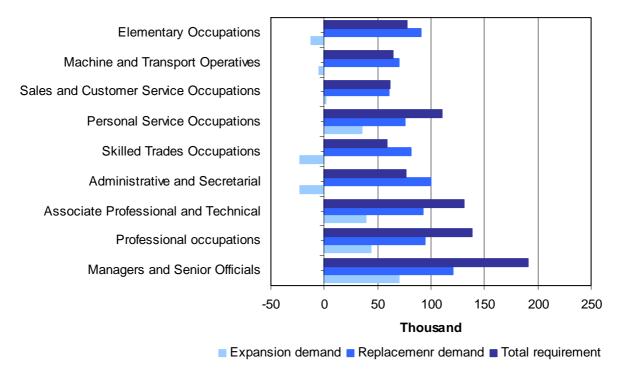
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<sup>&</sup>lt;sup>43</sup> Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

Chart 17 shows that expansion demand of lower tier occupations is often negative or insignificant. However, replacement demand outweighs negative expansion demand and results in positive total requirements in these lower tier occupations.

Replacement demand between 2007 and 2017 in the East Midlands is forecast to be the most significant among Managers and senior officials. There will also be a significant replacement demand for Professionals and Associate professional, Administrative and Secretarial occupations.

Chart 17: Projected change in occupations, East Midlands, 2007-2017, thousands



Source: Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

Note: Replacement Demand = Retirements + Occupational Mobility + Migration.

Total requirement + Expansion demand + Replacement demand.

# **Key Points: Occupational change**

- Expansion demand by occupation shows that, in the East Midlands and UK, the number of Manager and Professional occupations are expected to increase, whilst the number of Elementary occupations, Machine and transport operatives and particularly Skilled trades and Administrative and Secretarial occupations are projected to decline. These patterns of expansion demand are often referred to as "hollowing out the middle".
- Replacement demand between 2007 and 2017 in the East Midlands is forecast to be the most significant among Managers and Senior officials. There will also be a significant replacement demand for Professionals and Associate professional, Administrative and Secretarial, Skilled trades and Elementary occupations.
- As replacement demand will considerably exceed the number of jobs created by economic growth, replacement demand is likely to be much more significant in terms of education and training requirements than expansion demand.

# Section 3 – Distribution of Current Investment

This section draws on an analysis of the skills base of the regional workforce, the skills of the unemployed and the possible up-skilling or re-skilling requirements to enable them to enter into the labour market. It also provides a snapshot based on SFA, YPLA, HESA and other management information on the distribution of training supply to identify how far it is meeting the demand set out above.

## Supply of skills

The level of qualification held by an individual is an imperfect but the most widely used 'proxy' for skills. The National Qualifications Framework (NQF)/National Vocational Qualifications (NVQ) level equivalences define Level 2, 3, and 4 qualifications as follows<sup>44</sup>:

- Level 4 and above: People are counted as being qualified to Level 4 and above if they have achieved a first or higher degree, an NVQ Level 4 or 5, a recognised degree-level professional qualification, an HNC/HND or other higher-level vocational or management qualification, a teaching or nursing qualification, or a diploma in higher education.
- Level 3: People are counted as being qualified to Level 3 and above if they
  have achieved at least two A Level passes, four AS Levels, an Advanced
  GNVQ, an Access to HE qualification or an NVQ Level 3 or equivalent
  vocational qualification.
- Level 2: People are counted as being qualified to Level 2 and above if they
  have achieved at least five GCSEs at grades A\*-C, an Intermediate GNVQ,
  two or three AS Levels or an NVQ Level 2 or equivalent vocational
  qualification.

Apprenticeships are allocated to their equivalent NQF/NVQ level. Those without a reported level are split evenly between Level 2 and Level 3 qualification.

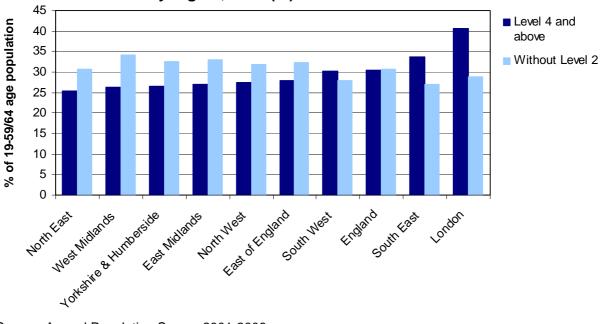
#### **Qualifications of the workforce**

People with higher qualifications have access to a wider range of options in the labour market and higher earnings. Higher qualifications also increase the chances of working in positions which have better working conditions in terms of working environment, working hours, employment contracts etc.

This sub-section provides an assessment of the skills levels of the current workforce of the East Midlands in 2008. Chart 18 presents the proportion of adults qualified to Level 4 and above and without Level 2 in 2008.

<sup>&</sup>lt;sup>44</sup> Department for Education (former Department for Children, Schools and Families), 'Qualifications and Participation in Learning at a local level: England 2007, Population aged 19-59/64'. <a href="http://www.dcsf.gov.uk/rsgateway/DB/STA/t000809/Table1.xls">http://www.dcsf.gov.uk/rsgateway/DB/STA/t000809/Table1.xls</a>

Chart 18: Proportion of working age population qualified to Level 4 and above and without Level 2 by region, 2008 (%)



Source: Annual Population Survey 2001-2008.

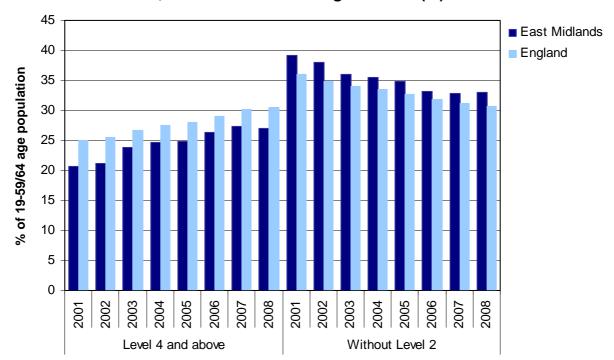
http://www.thedataservice.org.uk/statistics/sfrdec09/sfr\_dec09\_labour\_force\_tables.htm

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no qualification.

The East Midlands is ranked the fourth lowest out of the nine English regions in terms of the proportion of the adult population qualified to Level 4 and above, at 27.0%. This compares to the English average of 30.5%. The regions with the highest proportion of the working age population qualified to Level 4 and above are London (40.6%) and the South East (33.6%).

The proportion of the working age population without a Level 2 qualification (including those without any formal qualification) was 33.0% in the East Midlands in 2008, the second highest among the English regions. This compared to 30.6% in England. The percentage of those without a Level 2 qualification was the highest in the West Midlands (34.2%) and lowest in the South East and the South West, at 26.9% and 27.8% respectively.

Chart 19: Proportion of working age population qualified to Level 4 and above and without Level 2, East Midlands and England 2008 (%)



Source: Annual Population Survey 2001-2008.

http://www.thedataservice.org.uk/statistics/sfrdec09/sfr\_dec09\_labour\_force\_tables.htm

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no qualification.

However, there have been significant improvements in the region. The percentage of the East Midlands workforce qualified to Level 4 and above was 20.6% in 2001 and increased to 27.0% by 2008, a 6.4 percentage point increase. In England there was a 5.5 percentage points increase. The gap in the proportion of the workforce qualified to Level 4 and above between the East Midlands and England has narrowed between 2001 and 2008 from 4.4 percentage points to 3.5 percentage points.

The proportion of the working age population without a Level 2 qualification has decreased more significantly in the East Midlands than in England. Between 2001 and 2008 the proportion of those without Level 2 has decreased by 6.3 percentage points in the East Midlands compared to 5.5 percentage points in England.

Between 2001 and 2008 the fall in the proportion of those without qualifications has also been more significant in the East Midlands than in England. In the East Midlands there was a fall of 5.2 percentage points compared to 3.8 percentage points for England.

The Government '5 drivers' of productivity provides a useful framework to determine the level and growth of productivity. In assessing how skills can be used to foster further productivity gains in the East Midlands it needs to be borne in mind that skills are a derived demand stemming from, amongst other things, the

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<sup>&</sup>lt;sup>45</sup> HM Treasury, DTI, 'Productivity in the UK 5: Benchmarking UK productivity performance', March 2004. The five drivers are: investment, innovation, skills, enterprise and competition.

entrepreneurial and innovative actions of economic agents in the region (employers, individuals, and governmental agencies). In addition, the interaction between skills, enterprise and innovation has both direct and indirect implications for regional (and firm) productivity<sup>46</sup>.

- Enterprise requires many skills including 'entrepreneurial skills', business acumen and numerical ability. In addition, entrepreneurs are necessary to exploit business opportunities presented by innovations.
- Innovation is also largely influenced by skills: academic skills, research skills and creativity are examples of skills that enhance innovation activity and knowledge creation. Innovations in turn present business opportunities for entrepreneurs.
- Management capability at firm level is crucial in order to construct an appropriate product market strategy, being able to identify skill needs to support that strategy, sourcing skills, and ensuring they are effectively deployed. Managerial support and working practices can also promote innovative working and ultimately enhance productivity.

# Sub-regional variations in qualifications

The adult skills profile varies considerably across the East Midlands. Chart 20 shows the proportion of working age adults without a Level 2 qualification and with at least a Level 4 qualification by County and Unitary Authority.

A combination of the low proportion of the workforce qualified to Level 4 and above and a high proportion of the working age population without a Level 2 is concentrated in Lincolnshire, Leicester and Nottingham.

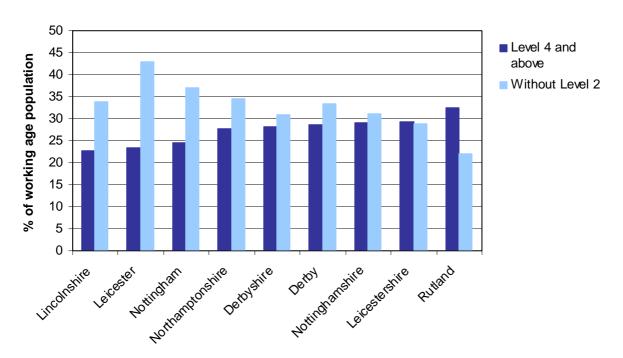
- In 2008, the percentage of the workforce qualified to Level 4 and above was 22.7% in Lincolnshire, 23.4% in Leicester and 24.6% in Nottingham which are lower than the regional average of 27.0%. The proportion of adults qualified to Level 4 and above was the highest Rutland (32.5%), in Leicestershire (29.2%) and Nottinghamshire (29.0%).
- In 2008, the percentage of workforce without a Level 2 qualification was the highest in Leicester (43.0%) and Nottingham (37.2%), which compares to the regional average of 33.0%. The proportion of adults without a Level 2 qualification was the lowest in Rutland and Leicestershire at 22.0% and 28.8% respectively.

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<sup>&</sup>lt;sup>46</sup> Gambin Lynn et al., Warwick Institute for Employment Research, University of Warwick, commissioned on behalf of *emda*, 'Exploring the links between skills and Productivity', 2009. <a href="http://www.intelligenceeastmidlands.org.uk/index.php?option=com\_research&task=showReportA&hidemainmenu=1&id=2239&lead=11&ItemId=29&s=sdate&o=ASC">http://www.intelligenceeastmidlands.org.uk/index.php?option=com\_research&task=showReportA&hidemainmenu=1&id=2239&lead=11&ItemId=29&s=sdate&o=ASC</a>

Chart 20: Sub-regional variation in the qualification level of the workforce, 2008 (%)



Source: Annual Population Survey 2001-2008.

http://www.thedataservice.org.uk/statistics/sfrdec09/sfr\_dec09\_labour\_force\_tables.htm

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no

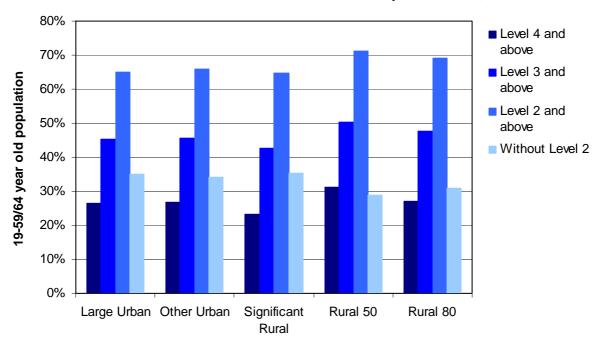
qualification.

### Urban and rural variations in qualifications

Many individuals in higher paid, higher skilled employment live in rural districts and commute to work elsewhere. Chart 21 shows that on average, Rural 50 districts have the highest proportion of the workforce qualified to Level 4 and above at 31.2%, compared to the regional average of 27.0%. On average urban districts perform slightly less well on this measure than rural districts. The proportion of those with a Level 4 and above qualification in the Large Urban districts was 26.4% and the proportion of adults qualified to Level 4 and above in Other Urban districts was 26.7%. However, only 23.2% of the adult population of Significant Rural districts were qualified to Level 4 and above in 2008, which is 3.8 percentage points lower than the regional average.

Rural 50 and Rural 80 districts have a lower proportion of the workforce with a qualification below Level 2 at 28.7% and 31.0% respectively compared to the regional average of 33.0%. Significant Rural, Other Urban and Large Urban districts perform less well on this measure.

Chart 21: Urban and rural variations of workforce qualification, 2008

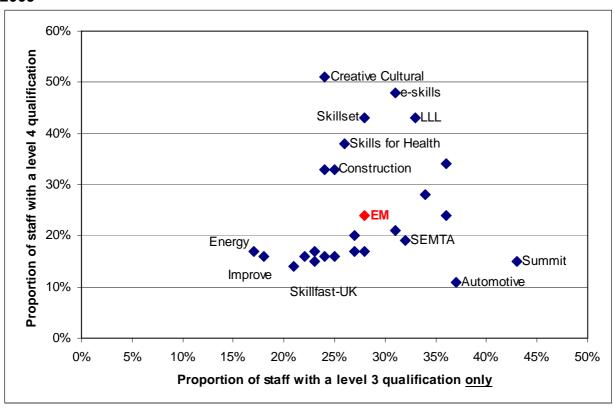


Source: Annual Population Survey 2001-2008.

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no qualification.

Qualifications by sector (Sector Skills Councils-SSCs)

Chart 22: Proportion of staff holding Level 3 and Level 4 highest qualifications, 2009



Source: Based on BMG,' National Employer Skills Survey 2009: report of results for the East Midlands' analysis, page 97, Table 60.

Chart 22 shows the proportion of employment with different highest qualification levels by sector (SSC sectors):

- Employers in the repair, maintenance and sale of vehicles sector (Automotive Skills SSC) and in electrical installation, plumbing, air conditioning etc. (Summit Skills) have a relatively high proportion of employees qualified to Level 3 (but no higher), providing a strong indication of technician-level skill requirements.
- High proportions of workers with both Level 3 and Level 4 are found in noncompulsory education (Lifelong Learning UK) as well as cultural and technology-related sectors (Creative & Cultural Skills and e-Skills UK).
- The proportion of staff qualified to intermediate/high level skills is close to the regional average in engineering (SEMTA related to the priority sector of Transport Equipment). However, this will vary sub-regionally, with higher level qualifications concentrated around **Derby City.**
- The proportion of staff qualified to at least Level 4 is significantly greater than the regional average in health related to the regional priority sector of Health and Bioscience there will also be concentrations of skilled staff around **Nottingham City.**
- The proportion of staff qualified to either an intermediate or higher level is below average in the Food and Drink Manufacturing sector (represented by Improve SSC). However there are significant sub-regional differences between Lincolnshire – with low skilled food processing; and Leicester, with high-tech food manufacturing.

# Profile of the long-term unemployed

People who are currently out of work represent a supply of labour, but also present skills challenges, especially those who have been unemployed for long periods of time. Opportunities for unemployed people to enter the labour market depend on the match between their skills and experience and the current profile of vacancies, which is continuously changing. In May 2010:

- There were approximately 103,000 people claiming unemployment benefit in the East Midlands and there were 30,000 job vacancies notified through Jobcentre Plus. This means that there were approximately 3.4 individuals to every one vacancy (although it must be noted that neither unemployment benefit claimants nor notified vacancies represent the full extent of the jobs market).
- There were 20,000 long-term unemployed (claiming for more than 52 weeks), the majority of them were seeking low skilled, elementary occupations.
- Vacancies in such low skilled jobs made up a lower proportion of all vacancies. Vacancies were concentrated in Sales and Healthcare.
- There are proportionately less vacancy opportunities in Elementary occupations.
- This indicates a mismatch between jobs sought by the unemployed and demand for employment. Therefore those further from the labour market need significant support to up- and re-skill to access labour market opportunities.

Table 12: Top 20 sought occupation by long-term unemployed and top 20

vacancies by occupations, East Midlands, May 2010

	Top 20 Claimant Count			
				Top 20 Vacancies and
	and frequencies			frequencies
914 : Elementary Goods Storage	and requentities			nequenoies
	2,800		3542 : Sales representatives	2,100
913 : Elementary Process Plant	2,000		6115 : Care assistants and	2,100
	2,260		home carers	1,690
711 : Sales Assistants And Retail	_,		8211 : Heavy goods vehicle	.,000
	2,250		drivers	1,450
415 : Administrative	,		7129 : Sales related	,
	1,190		occupations n.e.c.	1,240
912 : Elementary Construction	,			,
	1,160		9233 : Cleaners, domestics	1,060
·	,		9149 : Other goods handling	,
821 : Transport Drivers And			and storage occupations	
Operatives	1,080		n.e.c.	1,050
923 : Elementary Cleaning			7212 : Customer care	
Occupations	780		occupations	1,010
922 : Elementary Personal			7111 : Sales and retail	
Services Occupations	710		assistants	880
531 : Construction Trades			9235 : Refuse and salvage	
551 . Construction Trades	630		occupations	810
822 : Mobile Machine Drivers			7113 : Telephone	
And Operatives	480		salespersons	810
912 - Assemblers And Douting			0211 - Deetal workers, mail	
813 : Assemblers And Routine Operatives			9211 : Postal workers, mail sorters, messengers, couriers	
Operatives	410		Sorters, messengers, counters	670
500 - Deildien Trades	410		9134 : Packers, bottlers,	
532 : Building Trades			canners, fillers	650
E11 - Agricultural Trades			8111 : Food, drink and	
511 : Agricultural Trades	400		tobacco process operatives	600
611 : Healthcare And Related			4150 : General office	
Personal Services	380		assistants/clerks	580
811 : Process Operatives	340		3211 : Nurses	570
721 : Customer Service			0000 - Fords lift two old drives as	
Occupations	290		8222 : Fork-lift truck drivers	560
524 : Electrical Trades			9241 : Security guards and	
524 . Electrical Trades	250		related occupations	540
924 : Elementary Security			9223 : Kitchen and catering	
	230		assistants	520
413 : Administrative			5434 : Chefs, cooks	
	220		UTUT . UTIGIS, CUUKS	460
612 : Childcare And Related			8212 : Van drivers	
Personal Services	200			430

Source: ONS Crown Copyright Reserved [from Nomis on 7 July 2010].

Vacancies - notified by occupations, Claimant Count by sought occupation.

Long-term unemployed are those claiming JSA for mote than 12 months. Data are rounded to the nearest 10.

## **Qualifications and employability in the East Midlands**

The higher the qualification level, the more employable an individual becomes. Labour market engagement shows a clear pattern by qualification level. Chart 23 shows the employment rates by highest qualification level in the East Midlands and in the UK in 2008.

In terms of changes in the employment rate between 2007 and 2008, the following points can be made:

- The employment rate of those with no qualifications is higher in the East Midlands (51.7%) than in the UK (47.4%) confirming that the regional economy has proportionately more jobs in lower value activities than the national average. The employment rate of the least qualified remained largely the same between 2007 and 2008 both regionally and nationally.
- Between 2007 and 2008, the employment rate of those with Level 1 as their highest qualification decreased by 4.7 percentage points in the East Midlands from 77.0% to 72.3%. This is partly related to the job losses concentrated in low skilled occupations and in particular sectors such as manufacturing and construction. These sectors have relatively greater importance in the regional economy.
- Between 2007 and 2008, the employment rate of those with Level 2 and Level 3 as their highest qualification increased slightly in the East Midlands, while the employment rate of those with Level 4 and above largely stayed the same.

Chart 23 also shows that although the overall employment rate in 2008 in the East Midlands is slightly higher than in the UK, a qualification at Level 4 and above seems to have less impact on employability in the region than nationally. The employment rate of those with Level 4 and above qualifications was 11 percentage points higher in the East Midlands than the average of all qualification levels. In the UK, the difference was 12.2 percentage points.

Working age residents with no qualifications had the lowest employment rates, at 51.7% in the East Midlands and 47.4% in the UK. The employment rate of those with no formal qualification was 24.2 percentage points lower than the average of all qualifications levels in the East Midlands. In the UK, the difference was 26.6 percentage points. Those without any formal qualifications are more likely to be employed in the East Midlands than in the UK.

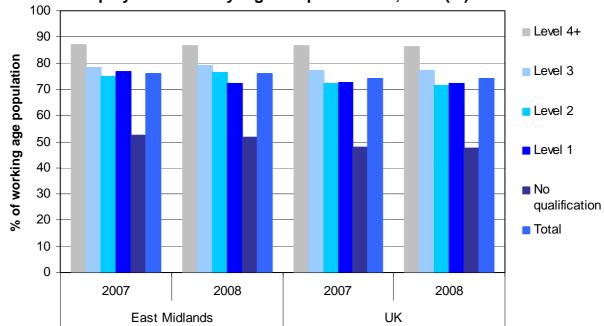


Chart 23: Employment rates by highest qualification, 2008 (%)

Source: Annual Population Survey January-December 2008 Client File, ONS Regional Statistician.

The unemployment rate also shows significant differences by qualification level. As the qualification level of the resident population rises, the proportion of those who are unemployed decreases. In terms of changes in the unemployment rate between 2007 and 2008, the following points can be made:

- Between 2007 and 2008, the unemployment rate increased at every qualification level both in the East Midlands and in the UK, but increased more among those with lower level qualifications;
- Between 2007 and 2008, the increase in the unemployment rate among those without any qualifications was 2.8 percentage points in the East Midlands, from 5.6% to 8.4%. The unemployment rate for this group increased from 6.1% and 6.7% in the UK, an increase of 0.6 percentage points; and
- Between 2007 and 2008, the unemployment rate for those with Level 1 as their highest qualification increased by 1.7 percentage points in the East Midlands from 4.6% to 6.3%. This is compared to the increase of 0.8 percentage points in the UK.

The unemployment rate of those with a Level 4 and above qualification is the lowest both in the UK and in the East Midlands. This confirms that employees with a high level of qualification are more likely to possess and maintain a position in employment. In contrast, however, the risk of those with a Level 4 and above qualification being unemployed is somewhat greater in the East Midlands than the national average. The unemployment rate for those with a Level 4 and above qualification was 3.0% in the East Midlands, compared to 2.6% in the UK in 2008.

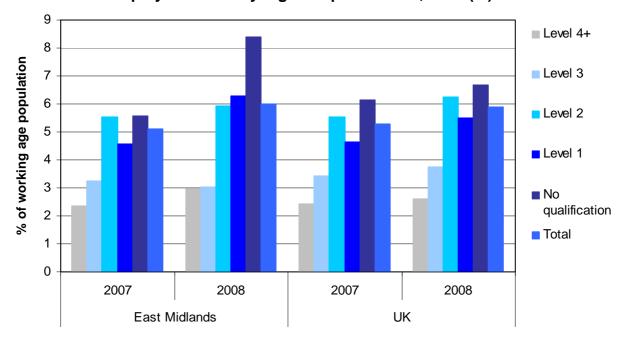


Chart 24: Unemployment rate by highest qualification, 2008 (%)

Source: Annual Population Survey January-December 2008 Client File, ONS Regional Statistician.

## **Educational achievement of pupils**

Level 2 qualifications are generally achieved by the age of 15. This sub section provides an overview of the qualification level of pupils aged 15 in the East Midlands and in England in 2008-2009.

Sixteen years old is the official age when a person can leave compulsory education in the UK. However, with the implementation of the 2008 Education and Skills Act all young people in England will be required to continue in education or training until their 18th birthday<sup>47</sup>.

Generally, between 2007-2008 and 2008-2009 the education attainment of pupils show a significant overall improvement across the UK<sup>48</sup>.

Chart 25 shows that in 2008-2009, the proportion of 15 year old pupils achieving five or more GCSEs graded A\*-C was 68.9% in the East Midlands. This was slightly lower, by 1.1 percentage points, than the English average of 70.0%. This overall picture masks significant sub-regional differences:

<sup>&</sup>lt;sup>47</sup> The increase in the minimum age at which young people can leave school is introduced in two steps. The minimum age will increase to 17 from 2013 and to 18 from 2015. The first cohort to benefit from these changes began Year 7 in September 2009.

http://www.dcsf.gov.uk/14-19/index.cfm?go=site.home&sid=42&pid=344&ctype=TEXT&ptype=Single

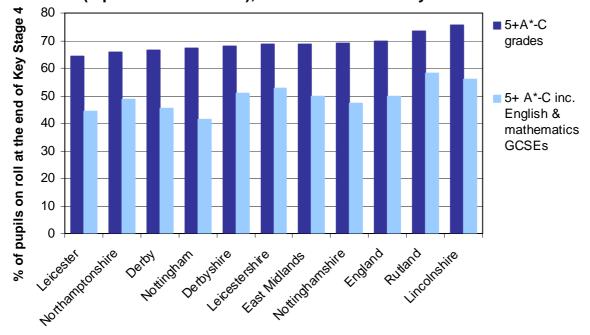
<sup>&</sup>lt;sup>48</sup> Based on Table 17, Department for Children, Schools and Families, 'GCSE and Equivalent Results in England, 2008/09 (Revised)'.

- Achievement is significantly higher in Lincolnshire and in Rutland compared to the regional or national average. In both counties, more than 73% of 14-16 year old pupils enrolled at the end of Key Stage 4 gained 5 or more A\*-C GCSEs during the 2008-2009 academic year; and
- The lowest proportion of 14-16 year old pupils enrolled at the end of Key Stage 4 achieving five or more A\*-C GCSEs was in Leicester (64.5%), Northamptonshire (66.0%) and Derby (66.6%).

When English and Maths are included, the proportion of pupils achieving five or more A\*-C GCSEs drops significantly. In the East Midlands 49.9% of pupils achieved five or more A\*-C GCSEs including English and Maths during the 2008-2009 academic year. This is almost the same as the English average of 49.8%. Subregionally, the following points should be noted:

- 14-16 year old pupils enrolled at the end of Key Stage 4 attending school in Rutland, Lincolnshire and Leicestershire performed the best in the East Midlands, with 58.2%, 56.1% and 52.6% of them achieving five or more A\*-C GCSEs including English and Maths respectively; and
- In Nottingham only 41.4% of pupils gained five or more A\*-C GCSEs including English and Maths in Nottingham, which is 8.5 percentage points lower than the regional average and 8.4 percentage points lower than the national figure.

Chart 25: Percentage of pupils enrolled at the end of Key Stage 4 achieving five GCSE (equivalent to Level 2), 2008-2009 academic year



Source: Department for Children, Schools and Families, 'GCSE and Equivalent Results in England, 2008-2009 (Revised)' Table 16.

Note: Denominators is the number of pupils on roll at the end of Key Stage 4 in the 2008-2009 academic year, 14-16 year olds.

Participation in education and Work Based Learning of 16 and 17 year olds<sup>49</sup>

In 2007, the participation rate in full-time<sup>50</sup> and part-time education, and Work Based Learning (WBL) of 16 and 17 year olds was 80% in the East Midlands. This is 3 percentage points lower than the English average of 83%. However, this overall picture masks significant sub-regional differences. Chart 26 shows that:

- The participation rate was the highest in Leicester at 91%; and
- The participation rate was the lowest in Rutland at 68%.

In 2007, the participation rate of 16 and 17 year olds in full-time education was 68% in the East Midlands, 4 percentage points lower than the national average of 72%. Again, as Chart 26 shows, there are significant sub-regional disparities:

- The participation rate in full-time education was the highest in Leicester at 83%;
- The participation rate in full-time education was the lowest in Derby at 62%.

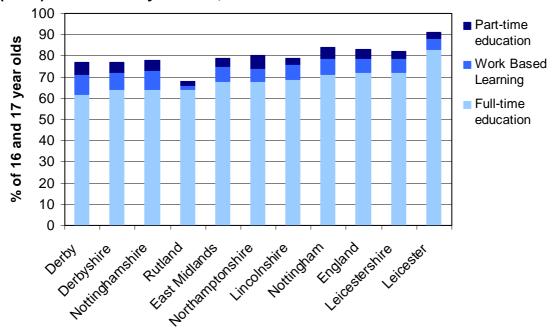
"Work Based Learning" is a generic term used to describe vocationally focused learning completed within the workplace. In 2007, the participation rate of 16 and 17 year olds in workplace-based learning was 7% both in the East Midlands and in England. However, as Chart 25 shows there are significant sub-regional differences:

- The participation rate of 16 and 17 year olds in workplace-based learning was the highest in Derby and Nottinghamshire at 9%; and
- The participation rate was the lowest in Rutland at just 2%.

<sup>&</sup>lt;sup>49</sup> Department for Children, School and Families, 'Participation in education and work based learning (WBL) of 16 and 17 year olds, Local Authority (LA) Tables'. http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000849/index.shtml Published, 16 June, 2009.

<sup>&</sup>lt;sup>50</sup> Full-time education covers maintained schools, independent schools (city technology colleges, academies and pupil referral units), sixth form colleges and Further Education Colleges (general, tertiary and specialist colleges). For both Child Benefit and Child Tax Credit, full-time education means a course where the average time spent during term time is more than 12 hours a week and is not advanced, or linked to employment or any office held. (http://www.hmrc.gov.uk/manuals/ccmmanual/CCM18030.htm)

Chart 26: Participation rate in formal education and Work Based Learning (WBL) of 16 and 17 year olds, 2007



Source: Department for Children, School and Families, 'Participation in education and work based learning (WBL) of 16 and 17 year olds'

http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000849/index.shtml

Note: Bars show the total participation rate which is the sum of participation rate of full-time education, part-time education and WBL. Therefore full-time, part-time and WBL categories are mutually exclusive.

Young people not in education, employment or training (NEET)

The Education and Skills Act 2008 contains the requirement for all young people to participate in education or training until their 18th birthday. The participation age is being raised in two stages, to 17 from 2013 and to 18 from 2015. However, there are young people who are currently not participating in education, employment or training (NEET) between the ages of 16 and 18. This is a missed opportunity both for the individual and for the labour market.

Chart 27 shows a comparison of the proportion of 16-18 year olds not in education, employment or training (NEET) for the period November 2005 to November 2009. Between 2005 and 2008, there has been a general decrease in the proportion of 16-18 year olds who are NEET in the East Midlands and in England. However, due to the recession, the proportion of those young people not in education, employment or training slightly increased in the East Midlands by November 2009.

In the East Midlands 5.7% of 16-18 year olds were NEET compared to the English average of 6.5% in November 2009<sup>51</sup>. Due to the recession, the proportion of young people who were NEET has increased by 0.2 percentage points between November

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<sup>&</sup>lt;sup>51</sup> Data used by this chapter are Connexion data received from the Learning and Skills Council (LSC) (November data each year) for the 16-18 year olds. The statistics published in The Poverty Site are for 16-19 year olds, and based on Labour Force Survey averages for 2006 and 2008. Based on the Poverty Site, in 2008, in the East Midlands 12% of 16-19 year olds were NEET in 2006-2008, which is the same as the UK average of 12%. <a href="http://www.poverty.org.uk/32/index.shtml">http://www.poverty.org.uk/32/index.shtml</a>

2008 and November 2009 in the East Midlands. This is compared to a decrease of 0.2 percentage points in England as a whole.

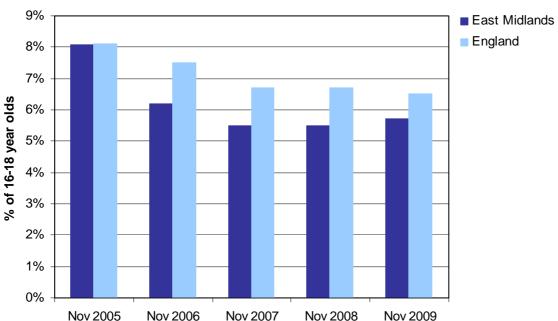


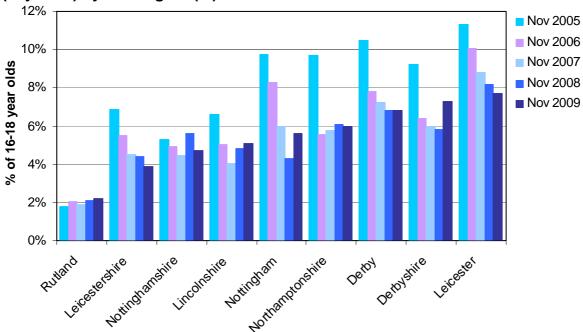
Chart 27: Proportion of 16-18 year olds who are NEET including PDOs (adjusted)

Source: Connexions, provided by regional LSC office. Data refer to the November data each year. Note: The NEET cohort includes those young people undertaking Personal and Social Development Opportunities (PDO) and excludes those in custody, applying for asylum and refugees. Those young people accessing post-16 education are counted within the area of the education provider and not of their residence.

Chart 28 shows that in November 2009 the proportion of 16-18 year olds who were NEET was highest in the cities. In Leicester, 7.7% of 16-18 year olds were not in education or training, compared to 6.8% in Derby and 5.6% in Nottingham. In Rutland, only 2.2% of 16-18 year olds were NEET.

Between November 2008 and November 2009 the proportion of 16-18 year olds who were NEET increased the most in Derbyshire and Nottingham, by 1.5 and 1.3 percentage points respectively. Some decreases were recorded in Nottinghamshire (-0.9 percentage points), Leicester and Leicestershire.

Chart 28: Proportion of 16-18 year olds who are NEET including PDOs (adjusted) by sub-region (%)



Source: Connexions, provided by regional LSC office.

Note: The NEET cohort includes those young people undertaking Personal and Social Development Opportunities (PDO) and excludes those in custody, applying for asylum and refugees. Those young people accessing post-16 education are counted within the area of the education provider and not of their residence.

The Regional 14-19 Strategic Analysis 2008-2010 produced by the Learning and Skills Council emphasises that there is a higher proportion of learners with learning difficulties and/or disabilities within the NEET population than the total 16-18 cohort. Within this group those with emotional and behavioural difficulties were represented twice as frequently as they were in the 16-18 population as a whole <sup>52</sup>.

#### Achievement by ethnicity

The Department for Education (formerly Department for Education, Children, School and Families (DCSF) publishes data on pupil achievement by ethnic group (identified as White, Mixed, Asian, Black and Chinese). At least five GCSEs at grades A\*-C is equivalent to the Level 2 qualification, which is considered as the basic platform for employability and progression by the Government<sup>53</sup>.

Provisional achievement data shows that in 2009 there were some significant differences in achievement by pupils from different ethnic groups. Educational attainment success of pupils of Mixed and Black ethnic minority groups are lower

<sup>52</sup> Learning and Skills Council, 'Regional 14-19 Strategic Analysis 2008/2010', August 2008.

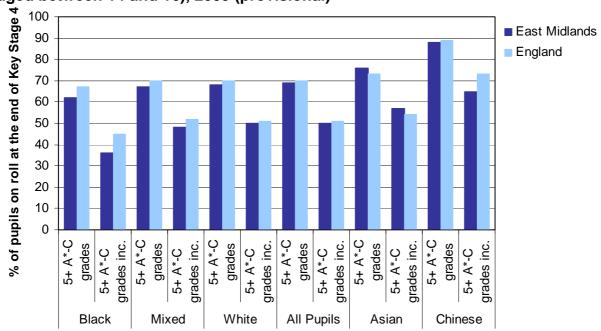
<sup>&</sup>lt;sup>53</sup> Department for Children, Schools and Families (DCSF), 'Level 2 National Vocational Qualification: The Characteristics of those who obtain them, and their impact on Employment and Earnings Growth – Brief'.

 $<sup>\</sup>underline{http://publications.dcsf.gov.uk/default.aspx?PageFunction=productdetails\&PageMode=publications\&PageFunction=productdetails\&PageMode=publications\&PageFunction=productdetails\&PageMode=publications\&PageFunction=productdetails\&PageMode=publications\&PageFunction=productdetails\&PageF$ 

than average. In contrast, pupils from Chinese and Asian ethnic groups perform better than the average:

- The proportion of pupils from Black ethnic groups gaining five or more A\*-C GCSEs was 62% in the East Midlands compared to 67% in England. The attainment gap between pupils from Black ethnic groups and all pupils was 7 percentage points in the East Midlands compared to 3 percentage points in England.
- The proportion of students from Mixed ethnic groups gaining five or more A\*C GCSEs was 67% in the East Midlands, 3 percentage points lower than the
  national average of 70%. This achievement rate of pupils from Mixed groups
  was 2 percentage points lower than the average for all pupils in the East
  Midlands.
- The proportion of pupils from White ethnic groups gaining five or more A\*-C GCSEs was 68% in the East Midlands, 2 percentage points lower than the national average of 70%. This achievement rate of pupils from White groups was largely similar to the average for all pupils both in the East Midlands and in England.
- The proportion of students from Asian and Chinese ethnic groups gaining five or more A\*-C GCSEs was 76% and 88% in the East Midlands. Pupils from Asian and Chinese ethnic groups perform significantly better than the average for all pupils both in the East Midlands and in England.

Chart 29: Achievements at GCSE by ethnicity at the end of Key Stage 4, (pupils aged between 14 and 16), 2009 (provisional)



Source: Department for Children, School and Families, 'GCSE Attainment by Pupil Characteristics in England 2008/09', <a href="http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000900/index.shtml">http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000900/index.shtml</a>

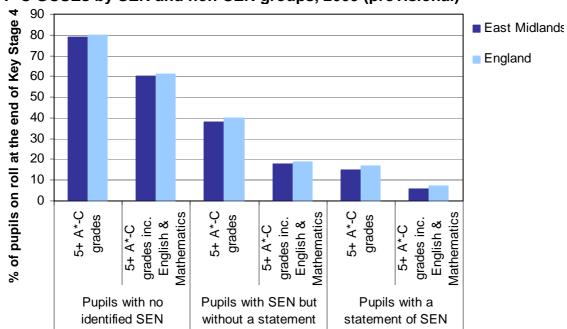
Note: Schools include academies and CTCs, primary, secondary and maintained special schools. Excludes non maintained special schools, independent schools and pupil referral units. Data refer to the pupils at the end of Key Stage 4 in the 2008-2009 academic year, 14-16 year olds.

## **Achievement by Special Educational Need (SEN)**

The Education Act 1996 defines children with Special Educational Need (SEN) as children who have a considerably greater difficulty in learning than others the same age. It includes children who cannot use the educational facilities which other children of a similar age use because of their disability<sup>54</sup>. Attainment is significantly lower among this group.

In 2009 there were 1,550 pupils with a statement of SEN and additional 10,370 pupils with SEN but without a statement in the East Midlands<sup>55</sup>. The proportion of non SEN pupils at the end of Key Stage 4 achieving five or more A\*-C GCSEs was 79% in the East Midlands and 80% in England. However, only 15% of pupils with SEN gained five or more A\*-C GCSEs in the region, 2 percentage points lower than the national figure of 17%. The gap between the achievement of pupils with no SEN and pupils with statement of SEN stood at 64 percentage points in the East Midlands and at 63 percentage points in England in 2009.

Chart 30: Percentage of pupils on roll at the end of Key Stage 4 achieving 5+ A\*-C GCSEs by SEN and non-SEN groups, 2009 (provisional)



Source: Department for Children, School and Families, 'GCSE Attainment by Pupil Characteristics in England 2008/09', <a href="http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000900/index.shtml">http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000900/index.shtml</a>
Note: SEN without a statement comprised of pupils at School Action and School Action Plus. Schools include academies and CTCs, primary, secondary and maintained special schools. Excludes non maintained special schools, independent schools and pupil referral units. Data refer to the pupils at the end of Key Stage 4 in the 2008-2009 academic year; 14-16 year olds.

England 2008/09'. http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000900/index.shtml

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Penny Roper, 'Special Education Need – England' <a href="http://www.cafamily.org.uk/pdfs/educatio.pdf">http://www.cafamily.org.uk/pdfs/educatio.pdf</a>
 Department for Children, School and Families: 'GCSE Attainment by Pupil Characteristics, in

At sub-regional level the following points can be made<sup>56</sup>:

- In 2009 the proportion of pupils at the end of Key Stage 4 with a statement of SEN gaining five or more A\*-C GCSEs is highest in Leicestershire (19%) and in Lincolnshire (18%); and
- The proportion of pupils at the end of Key Stage 4 with a statement of SEN gaining five or more A\*-C GCSEs was lowest in Rutland (7%) and in Derby (10%).

#### Young labour market entrants

The skills level, competence and personal attributes, such as motivation and work ethic, are essential factors for doing a job well and performing effectively in a working environment. These attributes are also important for later career progression.

The National Employers Skills Survey 2007 interviewed employers about their recruitment of young people entering the labour market. Young labour market entrants are 16 year old school leavers, 17-18 year old college leavers and university leavers aged between 21 and 23. These questions cover issues around whether employers recruit anyone from these three groups and the extent to which these young people were seen as prepared for work<sup>57</sup>.

The pattern of recruitment practices of young people seems to be similar both regionally and nationally. In addition, the recruitment level has stayed broadly stable over the two years prior to the survey both in the East Midlands and in England.

In general, in 2007 employers who recruited young people in the East Midlands were more satisfied with their preparedness for work<sup>58</sup> than in England. The proportion of those employers who think that the preparedness of young labour market entrants aged 16 was poor or very poor was 23% in the East Midlands and 28% in England. The corresponding figure for 17 and 18 year olds are 16% and 21%, and for graduate labour market entrants, 9% and 11%<sup>59</sup>.

There is little variation in the recruitment of young people sub-regionally. However, there are some differences by sector:

 Graduate recruitment tends to be higher in financial services and in the public sector; and

<sup>&</sup>lt;sup>56</sup> Source: Department for Children, School and Families, 'GCSE Attainment by Pupil Characteristics in England 2008/09', <a href="http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000900/index.shtml">http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000900/index.shtml</a>

<sup>&</sup>lt;sup>57</sup> BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

<sup>&</sup>lt;sup>58</sup> Preparedness covers not just tangible attributes of general and specific skills and knowledge but more intangible personal features such as motivation or discipline.

<sup>&</sup>lt;sup>59</sup> BMG Research on behalf of the Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

Recruitment of 16 year olds and 17-18 year olds is high in retail and hospitality which suggests that employers in these sectors tend to hire young labour market entrants for casual and part-time positions.

In terms of recruitment by size of establishment, very small businesses, with 2-4 employees, are less likely to hire young people. This suggests that young labour market entrants are not seen by small businesses as a solution to recruitment problems<sup>60</sup>.

Data from Students in Higher Education Institutions 2007-2008<sup>61</sup> reports that there was a total of 149,000 students in the East Midlands in 2007-2008. Of these 33,600 were postgraduates 62, 93,200 undergraduates and 22,200 other undergraduates.

Only 45.6% of those students who obtained their qualification in the East Midlands stay in the region and enter the regional labour market. This proportion is the lowest among the English regions. The retention rate is the highest in London and in the North West at 71.6% and 73.6% respectively.

80 % students studied in the given region 70 60 50 40 30 20 10 0 East East of South Yorkshire West South North London North Midlands England East and The Midlands West East West Humber

Chart 31: Proportion of students by regions who took up employment in the same region where they studied, 2007-2008 (%)

Source: Higher Education Statistics Agency, 'Destination of Leavers from Higher Education Institutions 2007/2008'. Table 7b.

<sup>61</sup> Higher Education Statistics Agency, 'Students in Higher Education Institutions 2007-2008'. 2009,

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<sup>&</sup>lt;sup>60</sup> BMG Research on behalf of the Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

Table 8. <sup>62</sup> Students cover postgraduates, first degree students and other undergraduates. Postgraduate qualifications are those courses which leading to higher degrees, diplomas and certificates which usually requires a first degree as an entry qualification. First degrees are qualifications with degree. Other undergraduate qualifications are those qualifications which aim equivalent to and below first degree level, such as foundation degrees and all other higher education qualifications not included above. Open University is excluded. For more details see Higher Education Statistics Agency, 'Students in Higher Education Institutions 2007-2008', 2009.

Just over 62.0% of East Midlands residents find a job in the East Midlands after graduation, regardless of the region where they gained their qualification. This proportion is the third lowest among English regions.

Chart 32: Proportion of students by residency who took up employment in their resident region, 2007-2008 (%)

Source: Higher Education Statistics Agency, 'Destination of Leavers from Higher Education Institutions 2007/08'. Table 7a.

Although, graduate retention is relatively low in the region, some graduates may return to the region at a later stage in their career and therefore, the challenge is to make the East Midlands attractive for them to do so.

## **Key Points: Supply of skills**

- The East Midlands was ranked the fourth lowest of the nine English regions in terms of the proportion of adult population qualified to Level 4 and above in 2008.
- There has been a greater than average increase of the proportion of the East Midlands population with a Level 4 and above qualification between 2001 and 2008.
- Although the proportion of those without Level 2 qualifications was higher in the East Midlands than in England, the decrease in this group was more significant than the national average between 2001 and 2008.
- Individuals living in rural areas are more likely to have a Level 4 and above qualification. Urban residents tend to have lower qualifications.
- Due to wider access to education in the last decade the general qualification level of younger people tends to be higher than in older age groups.
- The proportion of 15 year old pupils achieving five or more GCSEs graded A\*-C was only slightly lower in the region than the national average. When English and Maths is included, the region performs similar to the national average.
- Although, the overall employment rate in the East Midlands is higher than
  in the UK, higher qualifications seem to have less impact on employability
  in the region than nationally. Those without any formal qualifications are
  more likely to be employed in the East Midlands than in the UK.
- Very small businesses with 2-4 employees are less likely to hire young labour market entrants in the East Midlands than nationally.
- Less than half of those students who obtained their qualification in the East Midlands stay in the region and enter the labour market. This proportion is the lowest among the English regions.
- The overall participation rate in education and workplace-based learning of 16 and 17 year olds in the East Midlands is lower than the English average.
- In the East Midlands 5.7% of 16-18 year olds were NEET compared to the English average of 6.5% in November 2009. Due to the recession, the proportion of young people who were NEET has increased by 0.2 percentage points between November 2008 and November 2009 in the East Midlands.
- Between November 2008 and November 2009 the proportion of 16-18 year olds who were NEET increased the most in Derbyshire and Nottingham.
- Although the overall regional achievement of pupils aged 14 and 16 is largely similar to the English average, performance of students from an ethnic minority background is weaker in the East Midlands than in England, with an exception of pupils with an Asian background.

### **Capacity of the Supply System**

This section presents analysis of a detailed set of data and information on the take up of skills training by industry sector (by both the sector qualification and SIC footprints) in the East Midlands, produced and shared by the Data Service from Skills Funding Agency learner data. This sectoral analysis is not currently available as part of the Government's published Statistical First Release, and therefore cannot be referenced or included within the Statement. For further regional information from the Statistical First Release, please visit:

http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/

This section (except higher education statistics) discusses 'enrolments' in terms of Learner responsive delivery and 'starts' in terms of Train to Gain and Apprenticeships – in line with the reporting of the BIS/SFA Statistical First Release. An individual learner can have multiple starts/enrolments within an academic year. This is because a learner can do different qualifications, either at the same time or at different points across the academic year.

# Further Education Provision for Young People (16-18)<sup>63</sup>

More than a fifth of young people enrolling in 2008/09 have undertaken Skills for Life courses such as Language; Numeracy and Literacy.

In terms of subject areas, data are available for Sector Skills Councils/Sector Skills Bodies (SSC/SSB) sector qualification footprints which is a 'map' of accredited qualifications agreed with SSCs and SSBs.

Of those qualification footprints that are known, subject areas are fragmented and heterogenic. The most popular sector subjects were the following Sector Qualification Footprints: creative and arts (Creative and Cultural Skills); fitness and sport (Skills Active); beauty and hairdressing (HABIA); ICT (e-skills); construction; and hospitality (People 1<sup>st</sup>).

### **Equality groups**

- The proportion of male students was largely in line with the overall structure of the population by gender<sup>64</sup>.
- The ethnic composition of enrolments of pupils aged 16-18 is largely in line with the overall population and reflects the younger age profile of those from BME<sup>65</sup> groups.
- The proportion of enrolments of pupils aged 16-18 with learning difficulties or a disability was also largely in line with the proportion of the population with a disability <sup>66</sup>.

<sup>&</sup>lt;sup>63</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat

<sup>&</sup>lt;sup>64</sup> Ibid. and *emda*, *'The East Midlands in 2010'*, June 2010, Demography chapter.

<sup>65 &#</sup>x27;Black and Minority Ethnic' groups, or 'BME groups' refer to the four non-White groups such as 'Mixed', 'Asian or Asian British', 'Black or Black British', and 'Chinese or Other Ethnic Group'.

<sup>&</sup>lt;sup>66</sup> Annual Population Survey 2009, ONS Crown Copyright Reserved [from Nomis on 25 August 2010]. The proportion of the population aged 16-64 with disability is 19.2% in the East Midlands. Therefore the proportion of those without learning difficulties or disability is 80.8%.

### GCSE and GCE A/AS/A2 levels<sup>67</sup>

The **top five most popular GCSE subject areas** were: Science and Maths; Language and Literature; Business Admin and Law; Social Science; and Arts and Media Studies. These subjects accounted for the vast majority of total GCSEs in 2008/09.

Engineering, Manufacturing Technologies was the 6<sup>th</sup> most popular GCSE subject area and ICT was the 8<sup>th</sup> most popular out of the 13 subjects. At GCE A/AS/A2 level, the Top 5 most popular subject areas were: Science and Maths; Language and Literature; Business Admin and Law; Arts and Media studies; and Social Sciences. These account for more than four-fifths of subjects at this level in 2008/09. Engineering and Manufacturing Technologies represented the 11<sup>th</sup> most popular A/AS/A2 subject area whilst ICT was the 8<sup>th</sup> most popular out of the 13.

# Higher Education<sup>68</sup>

In 2008/09 there were 154,755 individuals studying in one of the East Midlands' ten HE institutions. This accounts for 8% of the total number of students in England.

- The number of students in 2008/09 was 5,700 more than in 2007/08.
- In 2008/09, 63,570 students studied STEM subjects<sup>69</sup> in the region which accounts for more than 41% of the student population (first degree, postgraduate and other undergraduate students together). This is in line with the average for England.
- The number of STEM students in the East Midlands increased by 2,815 between 2007/2008 and 2008/09.
- The most popular subject area was Business and Admin, which accounted for approximately 15.8% of students in 2008/09. This was followed by subjects allied to Medicine (12%), Social Studies (10%), Creative Art and Design (9%) and Engineering and Technologies (8%).
- Between 2006 and 2009, there was a rise of more than 30% in the number of university applicants in the East Midlands<sup>70</sup>. At the same time the Government has capped HE places to curb spending. Rising demand combined with a cap on HE places will increase competition and could result in large numbers of applicants unable to access HE.

<sup>68</sup> HESA, 'Students in Higher Education Institutions', 2008/09. Students include postgraduates, first degree and other graduates.

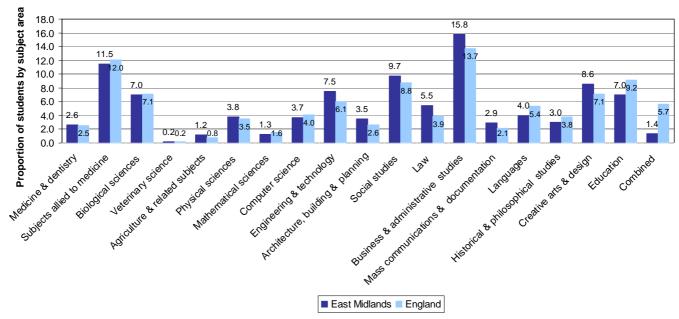
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<sup>&</sup>lt;sup>67</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

<sup>&</sup>lt;sup>69</sup> HESA, 'Students in Higher Education Institutions' 2008/09. In HE, STEM is identified as Medicine & dentistry; Subjects allied to medicine; Biological science; Veterinary science; Physical science; Mathematical sciences; Computer sciences; Engineering & technology; Architecture, building & planning.

<sup>&</sup>lt;sup>0</sup> UCAS, statistical service: http://www.ucas.com/about\_us/stat\_services/

Chart 33: The proportion of students (first degree, postgraduate and other undergraduate students together) by main subject areas, 2008/09, East Midlands



Source: HESA, 'Students in Higher Education Institutions' 2008/09.

# Further Education Provision for Adults (19+)<sup>71</sup>

In 2008/09 approximately one-fourth of adult learners undertook Skills for Life courses, such as Language, Numeracy and Literacy.

The **top five** most popular subjects covered almost a fifth of all enrolments. By Sector Qualification Footprint, these were: ICT (e-Skills); Health; general professional development (ENTO); non-compulsory education (Lifelong Learning UK); electrical installation, plumbing, air conditioning etc. (Summit Skills) and hospitality (People 1<sup>st</sup>).

**ICT** is one of the most popular subjects amongst East Midlands students. This is important because IT skills are important to all sectors and occupations and will enable the regional workforce to better adapt to technological change.

#### **Equality groups**

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- When adult enrolments were considered, female students appeared to be somewhat overrepresented.
- The ethnic composition of FE adult enrolments aged 19+ shows that learners from BME groups were significantly greater than their corresponding proportion of the working age population. BME groups constituted almost a third of total adult FE enrolments in 2008/09.
- The proportion of adults with learning difficulties or a disability enrolled in FE institutions appeared to be slightly lower than the corresponding population share.

<sup>71</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat

# Apprenticeships 72

There was a gradual increase of Apprenticeship starts in the East Midlands between 2006/07 and 2008/09. In 2008/09, there were 22,200<sup>73</sup> Apprenticeship starts in the region which was 2.2% higher than the previous year.

Apprenticeships by qualification level

Apprenticeships offer three qualification levels<sup>74</sup>:

# 1 - Apprenticeships (equivalent to five good GCSE passes)

- Apprentices work towards work-based learning qualifications such as an NVQ Level 2, Key Skills and, in some cases, a relevant knowledge-based qualification such as a BTEC.
- These provide the skills apprentices need for their chosen career and allow entry to an Advanced Apprenticeship.

## **2 - Advanced Apprenticeships** (equivalent to two A-level passes)

- To start this programme, apprentices should ideally have five GCSEs (grade C or above) or have completed a Level 2 Apprenticeship.
- Advanced apprentices work towards work-based learning qualifications such as NVQ Level 3, Key Skills and, in most cases, a relevant knowledge based certificate such as a BTEC.

## 3 - Higher Apprenticeships

 Higher Apprenticeships work towards work-based learning qualifications such as NVQ Level 4 and, in some cases, a knowledge-based qualification such as a Foundation degree.

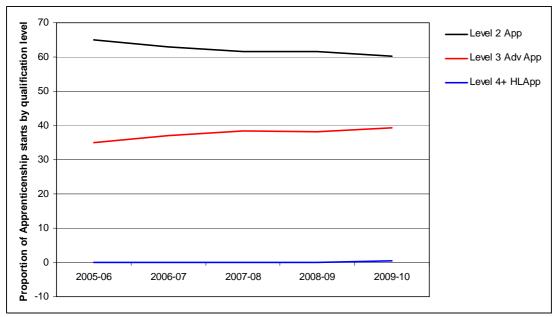
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<sup>&</sup>lt;sup>72</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

<sup>&</sup>lt;sup>73</sup> Table S6.1: Apprenticeship Programme Starts by Region, Level and Age (2005/06 to 2008/09); http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/sfr\_supplementary\_tables/

<sup>74</sup> http://www.apprenticeships.org.uk/Parents/Levels-of-Apprenticeships.aspx

Chart 34: New Apprenticeship starts by qualification levels in the East Midlands



Source: Data provided by the National Apprenticeship Service, 24 March 2010.

As Chart 34 shows, from 2005/06 the proportion of Apprenticeships:

- Slowly decreased at Level 2;
- Slowly increased at Level3; and
- Increased at Level 4+.

This convergence towards higher qualification level should be maintained. This is because firstly, in the East Midlands the skills base of the workforce is lower. Secondly, the projected replacement demand is significant across every occupation. Thirdly, these factors are coupled with a continuously changing demand for skills due to technological change, globalisation and other factors.

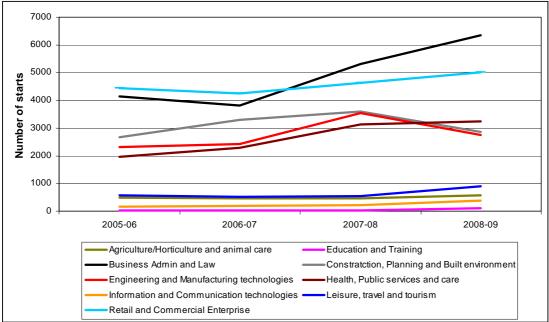
Apprenticeship starts by the Sector Subject Area (SSA) sectoral classification 75

The following section identifies the current state of Apprenticeship starts in 2008/09 by sector in the East Midlands. 'Sector' means the Sector Subject Area (SSA) sectoral classification of the given Apprenticeship framework rather than the sector of the employer.

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 $<sup>^{75}</sup>$  Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

Chart 35: New Apprenticeship starts by Sector Subject Area (SSA) sector in the East Midlands



Source: Data provided by the National Apprenticeship Service, 24 March 2010.

Apprenticeship starts by SSC/SSB sectors<sup>76</sup>

SSCs and other partner organisations such as SSBs (Sector Skills Bodies), employers, awarding organisations and training providers developed and issued the apprenticeship frameworks.

SFA data are therefore aggregated by the frameworks 'owned' by the SSC/SSBs.

Data on Sector Subject Area (NAS data) can be cross-examined by the SSC/SSB classifications, but it is important to note that these are different classifications and only provide a headline. However, the two data sources should give similar results in terms of the sectoral composition of the Apprenticeship starts delivery.

SFA data show that in 2008/09, the sectoral ownership (SSC/SSBs) of the most popular Apprenticeship frameworks are as follows:

- Institute of Customer Service;
- People 1<sup>st</sup>;
- Children Workforce Development Council;
- Council for Administration;
- HABIA;
- Construction Skills:
- SEMTA;
- Summit Skills
- Management Standard centre;
- Skills for Health; and
- Skillsmart Retail.

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<sup>&</sup>lt;sup>76</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

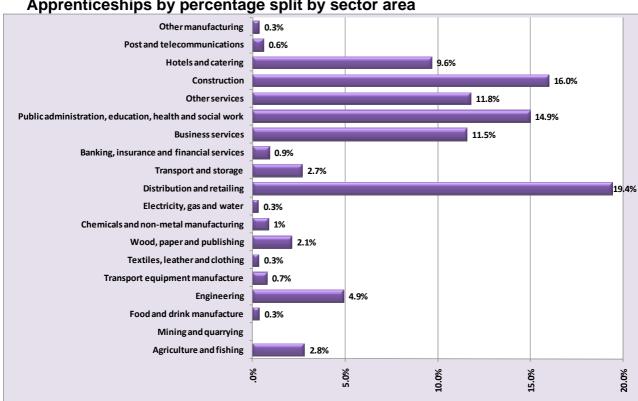
The most popular Apprenticeship areas were related to the following broad sectors:

- Public and private services (such as Childcare, Health and Social care/Children Workforce Development Council, Skills for Health; Hospitality and catering/People 1<sup>st</sup>; Hairdressing, beauty/HABIA etc.);
- Business administration and Accountancy;
- Construction;
- Engineering, such as SEMTA, Construction and Summit Skills are strongly related to the regional priority sectors; and
- Retail (Skillsmart Retail) includes employment opportunities for labour market entry for low-skilled individuals.

## **Employers engaged with Apprenticeships**<sup>77</sup>

- In summary, 8% of regional employers currently have or offer Apprenticeships, which is in line with the overall national figure.
- In the East Midlands, sectors with the highest proportion of employers who currently have or offer Apprenticeships were 'Distribution and retailing' (19%), 'Construction' (16%) and 'Public administration, education, health and social work' (15%).

Chart 36: East Midlands employers who currently have or offer Apprenticeships by percentage split by sector area



Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

<sup>77</sup> Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

# Impact of the recession<sup>78</sup>

Almost a fifth of employers (19%) who currently have staff undertaking Apprenticeships or offer Apprenticeships (8%) reported that the recession had negatively impacted on the number of apprentices and new trainees that had been recruited. However, the proportion of employers, actually supplying training has not changed since 2005.

# Likelihood of employing apprentices in the next 12 months<sup>79</sup>

All employers surveyed were asked how likely they were to have someone taking an Apprenticeship in the next 12 months.

- Five percent said they were *very likely* and 7% *quite likely* to have a 16-18 year old apprentice in the next 12 months (the national figures are 4% and 7% respectively).
- Four percent said they were *very likely* and 10% *quite likely* to have a 19-24 year old apprentice in the next 12 months (the national figures are 4% and 10% respectively).
- Three percent said they were *very likely* and 9% *quite likely* to have an apprentice aged 25+ in the next 12 months (the national figures are 3% and 9% respectively).
- Approximately 83%-86% said that they were *not very likely* or *not at all likely* to employ Apprenticeships of any age in the next 12 months.

#### **Learners in Apprenticeships**

In 2008/09, there were 22,200<sup>80</sup> Apprenticeship starts in the region which was 2.2% higher than the previous year. However, it is important to note that this trend was influenced by a significant increase in the provision of Apprenticeship places as a result of Government policy at the time.

• In 2008, the rate of participation in work based learning<sup>81</sup> amongst 16 and 17 year olds was 7% in the East Midlands, accounting for 8,600 pupils<sup>82</sup>. The participation rate was highest in **Derby** and **Nottinghamshire**, at 11% and 9% respectively, and lowest in Rutland at just 2%.

<sup>80</sup> Table S6.1: Apprenticeship Programme Starts by Region, Level and Age (2005/06 to 2008/09); <a href="http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/sfr\_supplementary\_tables/">http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/sfr\_supplementary\_tables/</a>

<sup>&</sup>lt;sup>78</sup> Source: BMG Research prepared for the YPLA and SFA East Midlands Region, '*The National Employer Skills Survey 2009: report of results for the East Midlands*' – Forthcoming.

<sup>&</sup>lt;sup>81</sup> 'Work Based Learning' is a generic term used to describe vocationally focused learning completed within the workplace.

<sup>&</sup>lt;sup>82</sup> DfE: 'Participation in Education, Training and Employment by 16-18 Year Olds in England'. http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000938/index.shtml

- The number of Apprentices has increased in every local area in the East Midlands from 2005/06 onwards. However, in the short term (2007/08 to 2008/09) learner numbers decreased slightly in Leicestershire and in Northamptonshire<sup>83</sup>.
- Over half of all Apprenticeships in 2008/09 were resident in Derbyshire and Nottinghamshire, with less than one-fifth in Northamptonshire. This is broadly in line with the distribution of the regional population<sup>84</sup>.
- From 2005/06 the proportion of Apprenticeships has slowly decreased at Level 2; slowly increased at Level 3 and slightly increased at Level 4. However, the vast majority of Apprenticeships continue to be delivered at Level 2.

The top five most popular Apprenticeships by SSC/SSB Qualification Footprint were: customer service (Institute of Customer Service); hospitality (People 1<sup>st</sup>); childcare and adult services (Children and Workforce Development Council); business and administration (Council for Administration), and; beauty and hairdressing (HABIA)<sup>85</sup>.

The ten most popular Apprenticeships can be grouped into the following broad sectoral areas:

- Public and private services (including Childcare, Health and Social Care/Children and Workforce Development Council, Skills for Health; Hospitality/People 1<sup>st</sup>; Hairdressing, beauty/HABIA etc.);
- Business administration and Accountancy;
- Construction;
- Engineering (including SEMTA, Construction and Summit Skills, strongly related to the regional Priority Sectors of Transport Equipment and Sustainable Construction). In Derbyshire, Apprenticeships in these areas are more likely to be at Level 3 than elsewhere; and
- Retail (Skillsmart Retail) which can provide the skills required to access employment for low skilled individuals and those who are not currently close to the labour market.

However, between 2007/08 and 2008/09, the number of new Apprenticeships in Engineering and Construction decreased by over one-fifth in each case This represents a significant challenge for technician level skills relevant to the Priority Sectors and may be an outcome of the fall in demand related to the recession<sup>86</sup>.

Conversely, new Apprenticeships increased in Agriculture and Leisure, travel and tourism. However, these sectors employ relatively small numbers, and overall employment in Agriculture is declining. It will be important to ensure that where provision in these sectors is increasing, it is in local areas where there is sufficient demand, such as Derbyshire and Lincolnshire.

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<sup>&</sup>lt;sup>83</sup> National Apprenticeship Service (NAS), data provided by East Midlands regional office.

<sup>84</sup> Ibid

<sup>&</sup>lt;sup>85</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

<sup>&</sup>lt;sup>86</sup> National Apprenticeship Service (NAS), data provided by East Midlands regional office.

When surveyed in 2009, 8% of employers<sup>87</sup> in the East Midlands stated that they currently had or offered Apprenticeships. This was in line with the national average. The highest proportions were in Distribution and Retailing (19% of all employers offering Apprenticeships), Construction (16%) and Public Administration, education, health and social work (15%). This is in line with the distribution of Apprenticeships by subject area.

## **Equality groups**

- The proportion of female Apprentices was somewhat greater than their overall
  population share and it has risen over the last 3 years. This might be related
  to the fact that those sectors engaged with Apprenticeships are often those
  sectors where women are somewhat over-represented such as Health Care
  and Services, Public Administration.
- However, the proportion of Apprentices from ethnic minority groups is slightly lower compared to their overall population share. Consequently, the proportion of the 'White' ethnic group was somewhat greater among apprentices who started their framework in 2008/09 than in the overall population.
- A considerably lower proportion of learners starting an Apprenticeship in 2008/09 considered him or herself to have a learning difficulty or disability or health problem than the proportion of those with disability in the overall working age population.

# Train to Gain $(16+)^{88}$

The East Midlands was one of 20 areas in which Train to Gain was piloted back in April 2006. The programme was rolled out nationally from the 1<sup>st</sup> August 2006. The subsequent increase in awareness highlights the success of the region in promoting awareness of Train to Gain by actively engaging with employers.

There were  $81,400^{89}$  Train to Gain learners resident in the East Midlands in the academic year of 2008/09:

- The bulk of the delivery is at Level 2 and around one fifth of courses deliver Skills for Life qualifications; and
- Employers in agriculture (LANTRA) in non-compulsory education (Life Long Learning UK) and in hospitality (People 1<sup>st</sup>) appear to be more engaged with Skills for Life courses<sup>91</sup>.

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<sup>&</sup>lt;sup>87</sup> Source: BMG Research prepared for the YPLA and SFA East Midlands Region, 'The National Employer Skills Survey 2009: report of results for the East Midlands' – Forthcoming.

<sup>88</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

<sup>&</sup>lt;sup>89</sup> Table S7.1: Train to Gain Starts by Government Office Region (2005/06 to 2009/10 in-year estimates); <a href="http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/sfr\_supplementary\_tables/">http://www.thedataservice.org.uk/statistics/statisticalfirstrelease/sfr\_supplementary\_tables/</a>
<sup>90</sup> About a third of these were captured by RBSIS proposal lines, which record LSF funded learner numbers through Business Link. The differences in the numbers are due to the following issues:

<sup>•</sup> RBSIS data are for financial year, SFA data are for academic year; and

RBSIS captures only one of the routes (i.e. Business Link brokerage service) by which businesses can have access to skills and training advice: Business Link Advisers; colleges and training providers.

<sup>&</sup>lt;sup>91</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

The most popular Train to Gain course areas were 92:

- Care and social care (Skills for Care and Development);
- Engineering and manufacturing (SEMTA);
- Construction:
- Freight logistics industries (Skills for Logistics);
- Generic skills customer services (Institute of Customer Service);
- Passenger transport (Go Skills);
- Hospitality (People 1<sup>st</sup>); and
- Management skills (Management Standard Centre).

Small businesses (1-49 employees) are under represented in terms of Train to Gain take-up. Larger businesses (50+ employees) appear to be overrepresented:

- More than two-fifths of Train to Gain learners work in businesses with 1-49 employees (98%<sup>93</sup> of employees in the region work in a business of this size);
- Approximately one-fourth of learners work in establishments with 50-249 people (1.6%<sup>94</sup> of employees in the region work in a business of this size); and
- Approximately one-third of learners work in businesses with 250-4,999 people and in establishments with over 5,000 employees. 95

Sectoral pattern of Train to Gain-Sector Skills Council/Standard Setting Body ownership<sup>96</sup>

The most popular Train to Gain course areas were:

- Care and social care (Skills for Care and Development);
- Engineering and manufacturing (SEMTA);
- Construction skills;
- Freight logistics industries (Skills for Logistics):
- Generic skills customer services (Institute of Customer service)
- Passenger transport (Go Skills);
- Hospitality (People 1<sup>st</sup>); and
- Management skills (Management Standard Centre).

#### **Equality groups**

- In 2008/09, the gender division of Train to Gain starts were largely in line with the gender composition of regional working age employment<sup>97</sup>.
- In 2008/09, the proportion of Train to Gain learners from an ethnic minority background is higher than the corresponding population share.

<sup>92</sup> Ibid.

<sup>&</sup>lt;sup>93</sup> ONS: 'UK Business: Activity, Size and Location – 2009'. Table B1.2.

<sup>&</sup>lt;sup>95</sup> Skills Funding Agency Learner & Sector Analysis. Also see Caveat.

<sup>&</sup>lt;sup>97</sup> ONS Crown Copyright Reserved [from Nomis on 28 April 2010], 'Annual Population Survey', 2008.

• In 2008/09, the proportion of Train to Gain learners with self identified disabilities is lower than the corresponding proportion of those of working age in employment in the East Midlands.

## **Key Points: Capacity of the Supply System**

- FE provision for young people by sector-subject area is fragmented and very mixed, mirroring individual choices rather than employment opportunities.
- FE provision for adults was more in line with the structure of the regional economy and regional priority sectors.
- STEM subjects are well represented in HE provision.
- A rising number of university applicants combined with a cap on HE places will increase competition and result in large numbers of applicants unable to access HE.
- Apprenticeship provision is a route for both labour market entry for young people in the Not in Employment, Education or Training (NEET) group and progression in the workplace for those currently in work.
- The majority of long-term unemployed were seeking low skilled elementary jobs, whilst vacancies were concentrated in Sales and Healthcare. This demonstrates that there is a need to re- and up-skill the long-term unemployed to enable them to take new labour market opportunities.
- It is crucial to maintain the recent trend towards higher level Apprenticeships. The majority of Apprenticeships result in qualifications at Level 2. Although proportions at Level 3 and 4 are increasing, total numbers remain small.

# Section 4 - Investment Shifts

This section identifies five key themes outlining possible shifts in skills provision and underpinning policy asks. Where possible, details on key locations, sectors and occupations are provided.

Funding shifts should be prioritised in Further Education for young people and Apprenticeships. Compulsory education (i.e. GCSEs), A-levels, Higher Education and FE for adults are currently well-aligned to labour market need.

### 4.1 Skills for Manufacturing

As noted in Section 2, the East Midlands has a number of comparative advantages in Manufacturing, notably in Transport Equipment and Food and Drink sectors, with particular local strengths around Derby, Leicester City and Lincolnshire respectively. At GCSE and A-level and in Higher Education, relevant courses in STEM subjects are well represented.

However, there is a notable lack of relevant FE capacity for courses that support manufacturing, especially for young people.

FE and Information, Advice and Guidance (IAG) providers should be more responsive to opportunities in manufacturing-related provision. Key messages are:

- More technician-level training provision is needed related to manufacturing.
   This is necessary to meet replacement demand, which is producing year-on-year requirements for new entrants.
- Technological change, including the introduction of low carbon and resource efficient technologies, means that Apprenticeships should increasingly move towards Level 3 and 4.
- Provision should increasingly support manufacturing companies in adopting new technologies and moving towards more efficient, low carbon processes. Required skills include: electrical and electronic equipment; plastic products; metal fabrication; and engineering skills relevant to aerospace and automotive sub-sectors, as well as communication and management and leadership skills across all sub-sectors.
- **ICT skills** are essential to all job roles in manufacturing in order to deploy new technologies. ICT should therefore be embedded across the curriculum.
- Skills development should be a joint enterprise with employers and learning should reflect employer need. FE providers should further collaborate with large, high value manufacturing employers, such as Rolls-Royce, Toyota, and Bombardier, who already have highly developed training infrastructure and invest heavily in R&D. Their significant SME supply chains provide a market for new course content and delivery methods developed collaboratively. These large, globally competitive firms are best placed to support FE develop cutting-edge curricula to support new technician level jobs.

 To reduce duplication of employer engagement by providers, local provider networks could be established. However, there is currently limited incentive for providers to collaborate in a local area, due to competition for learners. SFA funding needs to incentivise collaboration, to improve the employer experience of engagement and achieve economies of scale in curriculum development and delivery.

### 4.2 Skills for Construction

Evidence on supply suggests that young people and adults are well engaged in skills provision relevant to Construction through FE, Apprenticeships, and Train to Gain. However, new technologies, environmental concerns and a changing regulatory environment pose challenges for providers to shape curricula to meet future skills needs. Key messages are:

- The increasing use of Offsite Manufacturing in the Construction industry provides opportunities to link skills provision relevant to manufacturing technologies with courses aimed at job roles in Construction. It also provides opportunities for employees, supported by the right skills provision, to progress and move between the two sectors.
- The impact of changing regulation will contribute to the demand for courses within the Summit Skills Qualification Footprint (e.g. plumbing, electrical engineering, air conditioning, energy efficiency in buildings). This will require the SFA and SSCs to work closely with Regulatory Agencies to identify emerging skills needs.
- Low carbon technologies are unlikely to result in large numbers of new jobs, rather they will require a re-skilling of existing jobs. Providers will need to update course content to reflect emerging 'green skills'.
- To achieve the necessary changes in curricula, providers should engage with employers who are pioneering low carbon and resource efficient technologies in areas of regional strength, such as power generation, water treatment and waste recycling. Courses should support specific skills required both for installation, retro-fitting and maintenance in building services and engineering (including electrical trades, heating, ventilation and air conditioning fitters) and for skills enabling the efficient use of fuel and the reduction of waste.
- The mobile nature of the workforce in this sector requires training provision that is flexible and accessible (e.g. e-learning).
- Reductions in public investment will reduce the extent of procurement opportunities in publicly funded infrastructure. Where opportunities do exist, there will be increased competition between Construction firms, which will raise demand for skills to enable them to offer value for money and sustainable solutions (such as technologies and materials that are resilient to more extreme weather conditions).
- Labour market opportunities in Sustainable Construction will be particularly important in Lincolnshire, with the presence of several large engineering construction employers and because of changing housing needs (including an ageing population, inward migration and flood risk). There will also be opportunities in Northamptonshire, because of high population growth and significant planned housing development (e.g. within the Milton Keynes South Midlands Growth Area).

### 4.3 Skills for Health and Bioscience

Healthcare is forecast to be the fastest growing sector in the East Midlands whilst the manufacturing of medical equipment and pharmaceuticals requires highly skilled qualifications in biosciences and other technologies (such as nanotechnologies, polymers, etc.). The ageing population poses increasing demands on healthcare whilst also creating new markets for products and services.

The healthcare sector is well provided by Apprenticeships and adult FE, particularly around care-related skills. However, there appears to be fewer people studying non-care related courses at technician-level. A shift in focus towards technician-level skills that support medical equipment manufacturing and R&D would enable the region to take advantage of key assets in HE and in the private sector. Key messages are:

- The growth and diversification of the sector will require the provision of Skills for Life and qualifications at Level 2 and Level 3, especially for care assistants.
- FE in some local areas will need to specialise to meet demands related to population change. In more remote rural areas (such as **coastal Lincolnshire**) a mix of skills and occupations are needed in caring for the elderly in both residential and more bespoke personal care in the home. In **Leicester City**, rising birth rates will place higher demands for healthcare for children requiring different skill sets. The shortage occupation list for Tier 2 of the Points Based System recommended by the Migration Advisory Committee (MAC)<sup>98</sup> includes nurses working in operating theatres and in neonatal intensive care units.
- There is a need for further progression routes for the unemployed from Skills for Life towards more specific healthcare-related provision. This is because low skilled jobs in healthcare provide entry-level opportunities for the long-term unemployed and young people who are in the NEET group. However, analysis suggests that people in these groups may lack the required skills to be able to fill such jobs.
- There is a requirement for more bespoke provision for work-based learning to support supervisors and managers across the sector. Employers in the Skills for Health footprint have identified skills gaps in management and leadership. These skills will be particularly important with the changes expected across the health service. Additionally, staff moving from the NHS to a private service provider will need to develop entrepreneurial skills to adapt to working in a competitive business environment.
- Excellence in East Midlands R&D (both in the private sector and HE) provides opportunities for FE to develop technician-level provision that will support continued innovative activity. Current local assets include private sector clustering around Loughborough and NHS and university spin-offs in Nottingham.

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<sup>&</sup>lt;sup>98</sup> Migration Advisory Committee (MAC), '*UK Boarder Agency shortage occupation list*' (accessed 7 July 2010), <a href="http://www.ukba.homeoffice.gov.uk/aboutus/workingwithus/indbodies/mac/">http://www.ukba.homeoffice.gov.uk/aboutus/workingwithus/indbodies/mac/</a>

# 4.4 Apprenticeships

It is increasingly recognised that Apprenticeships represent the primary work-based learning route<sup>99</sup> to meet demand for technician-level skills. They provide a structured programme for young people and adults leading to recognised qualifications at Level 2, 3 and 4 delivered to meet real labour market requirements.

### Key messages are:

- The Apprenticeship offer to employers needs to be strengthened for learners over 25. In a changing labour market, Apprenticeships should enable individuals to re-skill at any point in their career. Apprenticeships should be an integral aspect of work-based learning for all ages.
- The ageing workforce in the East Midlands provides both challenges and opportunities for the delivery of work-based learning. More responsive delivery could include bite-sized, modular provision of adult FE, allowing older workers to re-skill or update and re-accredit existing skills. Older workers could also be further engaged in the Apprenticeship offer, both through increased provision of Adult Apprenticeships for the over 25s and as mentors for younger learners.
- It is important to mitigate the impact of a recent decrease, due to the recession, in Manufacturing and Construction Apprenticeships, especially around **Derby City** (where the proportion of NEET is relatively high compared to the regional average) and across **Lincolnshire**.
- The trend towards higher level Apprenticeships at Levels 3 and 4 should be maintained to address the comparatively low skills base in the East Midlands and forecast demand for higher skilled jobs. At present, only five Level 4 Apprenticeship Frameworks have been accredited. Accreditation of Higher Apprenticeship Frameworks needs to be accelerated.
- The provision of Level 2 Apprenticeships will remain important to meet replacement demand in technician-level occupations. However, Apprenticeships at Level 2 should equip learners to take advantage of further vocational progression routes, including higher level Apprenticeships. Therefore it is important that Level 2 Apprenticeships continue to include elements of generic, transferable and functional skills.
- To enable greater SME take up of Apprenticeships more support for Apprenticeship Training Agencies (ATAs) should be considered in the light of current pilots. ATAs could also contribute to improved penetration in sectors where Apprenticeships are under-represented.
- There is a need to increase awareness amongst pre-16 learners of the benefits and opportunities of Apprenticeships as a respected, credible vocational learning route into employment. IAG provision will need to strengthen its advocacy of Apprenticeships as a viable alternative to the academic route (e.g. A-levels). This should operate alongside increased provision of Young Apprenticeships and work experience placements. This will increase the pool of pre-16 learners ready to take Level 3 Apprenticeships, to meet the demand for new technician level skills.

<sup>99</sup> The Department for Business, Innovation & Skills, 'Skills for Sustainable Growth – Consultation on the future direction of skills policy', July 2010.

## 4.5 Flexible Skills for a Changing Labour Market

The evidence presented in Sections 2 and 3 demonstrates that the labour market is changing rapidly. Individuals will have to be increasingly prepared to re-skill during their careers and need a sound base of transferable, generic skills. Part-time working and self-employment have increased recently, requiring individuals to become more enterprising, both in order to manage small businesses and to be more entrepreneurial in their current jobs.

To meet these challenges, the Government will empower providers to be free to offer training that responds directly to the needs of informed individual learners and employers. <sup>100</sup>

### Key messages are:

- Young people continue to favour courses that reflect their individual interests.
   To provide a sound basis for employment and future learning, all 16-19 provision needs to support transferable and employability skills. For example, the curricula of popular FE courses in creative, media, sport and beauty subjects should equip young people with transferable skills in customer services, ICT, enterprise, design and project management etc.
- Providers need to be held to account by employers, ensuring that their offer changes over time to meet demand. This could include the establishment of panels of employers, working within or alongside Local Enterprise Parnerships (LEPs), to enable the skills system to meet locally identified employer need.
- To increase employer engagement and investment in education and training, provision needs to be tailored to need. The best features of Train to Gain need to be retained. This would include modular and flexible training provision, developed through a diagnostic discussion with employers, in order to enhance and complement business planning.
- Union Learning Representatives are important advocates of the value of training and can identify workforce skill needs. They are potential key contacts for providers in their diagnostic discussion with employers.
- In a rural region such as the East Midlands, learning delivery needs to respond to poor accessibility and infrastructure as well as individual barriers to access. Providers should consider a range of delivery options, such as postal and e-learning to meet the needs of rural learners. Providers will also need to take into consideration the availability, affordability and quality of broadband provision in rural areas.
- To keep pace with technological change, re-accreditation of modules within courses needs to be fast tracked. Capital investment within FE should be prioritised around skills delivery to support new technologies.

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<sup>&</sup>lt;sup>100</sup> Ibid: BIS, 'Skills for Sustainable Growth', July 2010.

- There needs to be greater clarity and consistency around funding of work-based learning, enabling employers to fully understand the extent and outcomes of their contributions. From an employer perspective, funding needs to reflect the modular nature of course delivery and skills development which does not necessarily lead to qualifications. The public purse should prioritise the funding of developmental learning and should not necessarily contribute to employers' statutary training obligations.
- Many of those who are currently unemployed, especially the long-term unemployed, also require support in developing employability skills, such as communication, time management, and team-working. These skills should be embedded across the forthcoming DWP Work Programme.
- Increasing competition for university places presents opportunities for FE providers, including tailoring their provision to meet the needs of students who would previously have applied directly to a university. FE could be supported to deliver cost-efficient HE. Government should consider awarding FE providers with HE numbers in their own right, to reduce dependency on university allocations. Government could also consider empowering high performing colleges to develop and award their own HE-level qualifications.
- It is important to recognise that Further Education is not just delivered by colleges, but also by private and voluntary sector providers. To widen access and to increase the involvement of individuals and communities, it will be important to build the capacity of the voluntary sector. This should include advice and support on access to funding and information on local labour market conditions. The voluntary and community sector also has a role in providing work experience for unsuccessful HE applicants to help them improve their employability.
- To navigate a changing labour market, it is crucial to provide enterprise skills for technicians and trades. There should be a distinction in provision between business skills required for the self-employed and broader skills required for inviduals to be entrepreneurial in their current jobs or in undertaking multiple part-time jobs.
- The **Qualify with a Business** initiative should be more widely available as an option for adult learners to be able to access a coherent package of business support whilst undertaking Level 3 vocational courses.
- The East Midlands has a strong partnership track record in rapid response to major closures and other economic shocks. It will therefore be important to maintain some level of discretionary funding to enable agile local responses, redeploying and retaining existing skills in the event of future large-scale redundancies. This will also be needed to take advantage of skills and employment opportunities stemming from new inward investments.
- The system will only work if it is underpinned by an impartial and all-age IAG service.