

# **LLEP Skills Advisory Panel**

**Skills Evidence Base Summary January 2020** 

## Introduction

Skills Advisory Panels (SAPs) aim to bring together local employers and skills providers to pool knowledge on skills and labour market needs, and to work together to understand and address key local challenges. This includes both immediate needs and challenges and looking at what is required to help local areas adapt to future labour market changes and to grasp future opportunities. This will help colleges, universities and other providers deliver the skills required by employers, now and in the future.<sup>1</sup>

To support the work of the SAPs, each Local Enterprise Partnership (LEP) is expected to produce an evidence base to understand the local skills and labour market. This will allow SAPs to:

- understand local skills and labour markets to understand the local position
- discuss and agree local skills needs priorities in the short-term and more longer-term
- consider how these will be met through local provision over time

The following report contains a wide range of information and data including but not restricted to: published government data from the Department for Education and Office for National Statistics (e.g. Education outcomes and participation; Business Register and Employment Survey); third party analysis (e.g. work by consultants to apply statistical modelling to published data); Local Authority datasets (e.g. detailed apprenticeship and Further Education data); literature review of current and future trends; local knowledge of stakeholders.

The report had been structured according to the guidance provided to include:

- Local Landscape
- Skills Demand
- Skills Supply
- Analysis of Supply and Demand

<sup>&</sup>lt;sup>1</sup> Department for Education Skills Advisory Panel guidance

## **Local Landscape**

## **Population**

#### **Exceeds national averages for:**

- Working age population<sup>2</sup>
  - 63.6% (compared to 62.8% nationally)
- Rate of growth
  - 1.2% (compared to 0.3% nationally)
- Population not born in the UK (migrants)

23.1% which is 3.2% above the national average.



**1,043,800** people live in the LLEP area Leicester: **34%** Leicestershire: **66%** 



**Life expectancy**Males: **80** years
Females: **84** years

In 2018 those **over 65** made up **17.3% of the total population** (184,000 residents)

By **2030** the numbers of residents aged over 65 will **increase by 55,000 or 30%** 



The LLEP area has a **larger** than average **working age population** of 664,200 or **63.6%** of total population

This share is expected to fall in line with the national average by 2030

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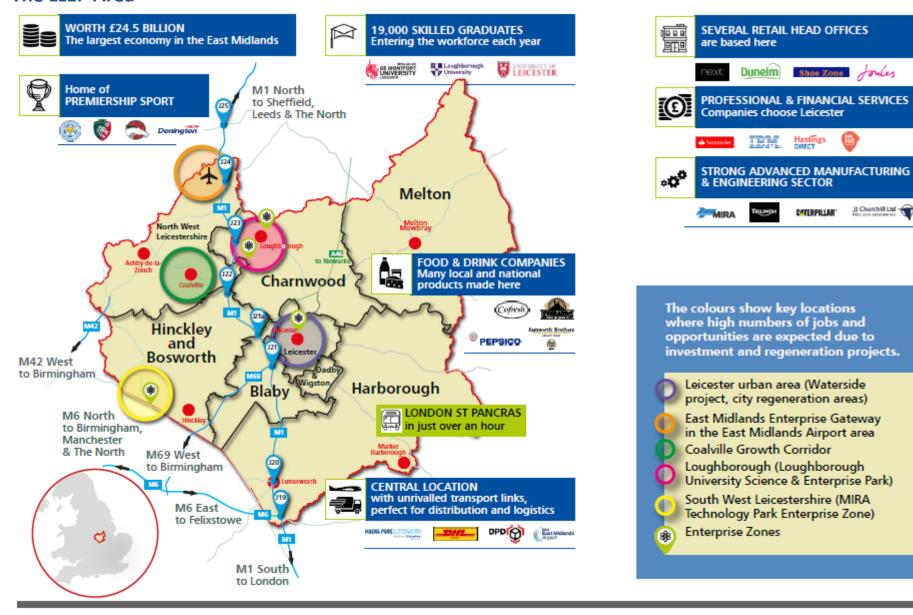
The population of **Leicester** is younger than average **9.1%** are aged 15-19 (England average 5.6%) **14.6%** are aged 18-24 (England average 8.7%)



Population growth is expected to slow in between 2018 and 2030, largely as a result of a slowdown in migration

<sup>&</sup>lt;sup>2</sup> All population data sourced from ONS

#### The LLEP Area



## **Employment rates**

**0.2%** JSA claimant rate across LLEP area<sup>3</sup>

Half national rate of 0.4%

(both City and County are individually below national rate)

### **Economic Inactivity**

**21%** - same as both England and East Midlands

#### **Average Earnings of LLEP residents:**



**£28,702** - below national levels but slightly higher than the East Midlands average<sup>4</sup>

**But** big difference between City and County



Wages in the city have risen in 2019 after several years of being static and are around £1,500 p.a. higher than in 2014, whilst wages in England have increased by around £3k and wages in Leicestershire by almost £4k during the same 5 year period.

## **Employment sectors**

The largest employment sector is **Manufacturing** employing **59,000**. This is a higher proportion than nationally (12.4% LLEP, 9.8% England).<sup>7</sup>

Other large employment sectors include:

- Health (53,000, 11.2%);
- **Education** (47,000, 9.9%);
- Business Admin and Support (41,000, 8.6%)
- **Retail** (40,000, 8.4%)

(Further detail is available in the Demand chapter)

## **Occupations**

**Professional occupations** account for 18% (241,000) of jobs in the LLEP area, the highest proportion.

**Associate Professional** and **Technical occupations** are next at 14% (184,000)

## Job growth

Managerial and Professional jobs have seen the largest growth between 2014-2019, a 13% rise from 240,000 to 280,000 jobs

Operative and Elementary; and Administration and Skilled Trades have shown very little growth in LLEP workplaces – between 1%-7% although all are still significant sectors for employment, employing a combined total of 269,000 people.

<sup>&</sup>lt;sup>3</sup> Unemployment data - JSA claimant data ONS

<sup>&</sup>lt;sup>4</sup> Average Annual Earnings by area ONS

<sup>&</sup>lt;sup>7</sup> All occupational data - Business Register and Employment survey 2018 ONS

#### **Business Growth**

There are **42,000** Businesses in the LLEP area<sup>5</sup>

New business growth is **higher** than the national rate, the East Midlands and Midlands Engine area.

0.4% are Large businesses (250+

Of the businesses employees)

in the LLEP area: **1.7%** are Medium (50 to 249)

**9%** are Small (10 to 49)

89% are Micro Businesses (0-9)

## **Enterprise Zones**

An Enterprise Zone is an area where policies are in place to encourage economic growth and development. The LLEP area has 2 EZs:

Loughborough and Leicester Science and Innovation Enterprise Zone:

- **Charnwood Campus** offers world-class laboratories and office space for the bio-medical and pharmaceutical sectors. The site is also the first UK Life Science Opportunity Zone.
- Leicester Waterside is a central city location
- Loughborough University Science and Enterprise Park is one of the UK's largest science parks

**MIRA Technology Park:** is a world leading automotive research and development park.

## **Productivity**

Lower than England average Nominal Gross Value Added by sector8:

£30.91 per hour in Leicestershire compared to £33.99 nationally



#### **Midlands Engine**



The Leicester and Leicestershire Economic Partnership is one of 9 LEP partners in the Midlands Engine, alongside 20 Universities, all top tier Local Authorities in the region, and 1000s of businesses.

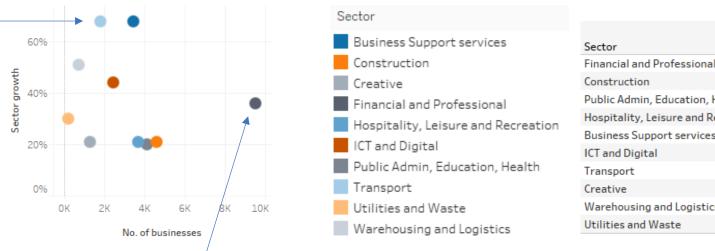
The Midlands Engine has five main themes:

- Midlands Connect long term transport strategy for the region
- Innovation and Enterprise to drive business innovation and improve productivity and competitiveness
- Skills to provide skills training tailored to employer demand
- International Trade and Investment increase employment, diversify the business base, develop local supply chains that support global brands
- Shape Great Places develop regional branding and strengthen the area's reputation across global markets

<sup>&</sup>lt;sup>5</sup> Number of businesses and type - UK Business Counts, ONS 2010-19

<sup>&</sup>lt;sup>8</sup> Subregional Productivity, ONS, 2017, Nominal Gross Value Added, ONS 2016, Annual Survey of Hours and Earnings ONS 2013-18

#### **Growth in Business Sectors 2013 – 2018**



Sector	<u>A</u> +	No. of businesses	Sector growth
Financial and Professional		9,515	36%
Construction		4,585	21%
Public Admin, Education, Healt	h	4,135	20%
Hospitality, Leisure and Recrea	tion	3,660	21%
Business Support services		3,420	68%
ICT and Digital		2,440	44%
Transport		1,785	68%
Creative		1,290	21%
Warehousing and Logistics		730	51%
Utilities and Waste		195	30%

The **Financial and Professional** sector is the largest sector in the LLEP by number of businesses, twice as high as any other sector<sup>6</sup>. However, this could include many micro businesses e.g. Independent Financial advisors.

**Business Support** services and **Transport** are the sectors with the largest growth, both showing sector growth of 68%.

#### **Number of businesses**

It is important to note that 9 out of 10 businesses in the LLEP area are micro businesses, employing less than 10 people, therefore a high number of businesses and high growth does not necessarily equate to high employment demand.

For example, using two sectors from the top and bottom of the list, a new Warehouse (one business) could comfortably employ more people than several independent financial advisors (i.e. the Financial and Professional sector).

<sup>&</sup>lt;sup>6</sup> UK Business Counts, ONS 2010-18

## **Education landscape**

#### 3 Universities

- University of Leicester
- De Montfort University
- Loughborough University



## 9 Colleges

- Stephenson College
- Loughborough College
- Brooksby Melton College
- Gateway Sixth Form College
- WQE and Regent College Group

Plus 19 school sixth forms

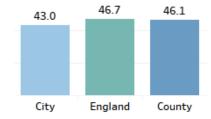
- Leicester College
- North Warwickshire and South Leicestershire college
- Homefield College (special college)
- RNIB College Loughborough (special college)

## **67 State funded Secondary schools**

77.3% were rated as Good or Outstanding with the following split9...



2019 GCSE attainment varied across the region with both areas below national levels<sup>10</sup> (Average Attainment 8 score – new DfE GCSE benchmark):



**22 Independent schools** which vary in size from 100 to 1000+ pupils. These schools include traditional Grammar and High schools as well as several faith based schools.

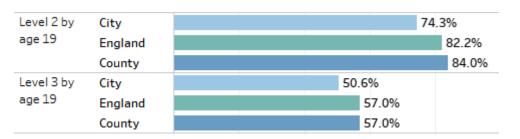
## Qualifications

**33%** of residents in the LLEP Area are qualified to Degree level The same as the East Midlands and Midlands Engine area but lower than the England level of **39%**. <sup>11</sup>

12% of residents in the LLEP Area have No Qualifications

This is higher than East Midlands and Midlands Engine area and 4% higher than the England average.

#### Post 16



<sup>&</sup>lt;sup>9</sup> Ofsted Management information – state funded school inspections September 2019

<sup>&</sup>lt;sup>10</sup> Attainment data – Local Authority Interactive Tool from Department for Education

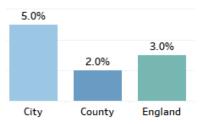
<sup>&</sup>lt;sup>11</sup> Qualifications information from Annual Population Survey, ONS, 2018

## **Deprivation**

The LLEP ranks 23 out of 38 LEPs for deprivation (38 being the least deprived). However, there is a stark contrast between city and county with 20.3% of city neighbourhoods in the most deprived 10% nationally. In contrast, the 7 Leicestershire Districts rank between 216 and 308 (out of 317 Districts where high is least deprived), although pockets of deprivation do exist in North West Leicestershire and Charnwood<sup>12</sup>.

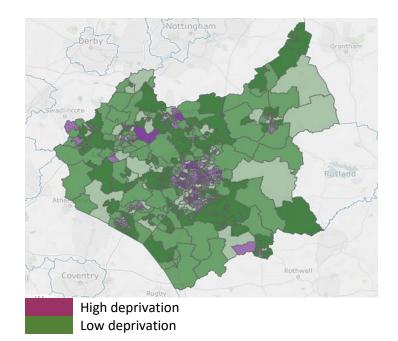
## NEET (16-17 year olds)

NEET over the past 2 years has been around<sup>13</sup>:



Although Leicester City NEET is generally lower than Derby or Nottingham. The table below shows how NEET differs between cities and counties in the East Midlands:

Derby	8.0%
Nottingham	7.0%
Leicester City	4.5%
EAST MIDLANDS	3.4%
Lincolnshire	3.3%
ENGLAND	3.2%
Northamptonshire	2.9%
Derbyshire	2.8%
Leicestershire	2.2%
Nottinghamshire	1.9%
Rutland	0.5%



The chart below shows the proportion of neighbourhoods in the most deprived 10% in the country and demonstrates the contrast between city and county

Leicester	20.3%
Leicester	20.3%
North West Leicestershire	3.5%
Hinckley and Bosworth	0.0%
Charnwood	2.0%
Melton	0.0%
Oadby and Wigston	0.0%
Blaby	0.0%
Rutland	0.0%
Harborough	0.0%

<sup>&</sup>lt;sup>12</sup> Deprivation data from Ministry of Housing, Communities and Local Government, 2019

<sup>&</sup>lt;sup>13</sup> NCCIS data released to Local Authorities August 2019

## **Skills Demand**

LLEP Area Job Replacement and Expansion Demand 2017-2023

**499,200** estimated jobs in the LLEP area.

Forecast to rise to **518,670** by 2023



This includes an 'expansion demand'\* of **3.9%** - higher than the national forecast of 2.9%.

Over the same period, the working age (age 16-64) population of Leicester and Leicestershire is forecast to increase by 1.9%, or 12,300 people, although this figure does not include any net inward migration, plus more people are working into later life.<sup>14</sup>

In addition, developments at the East Midlands Gateway and the Enderby Logistics Point could see a further 6,700 new jobs created in the logistics sector over the period to 2023.<sup>15</sup>

\*Expansion demand is new jobs required due to economic growth rather than replacing the existing workforce

There will also be a requirement in all sectors to fill vacancies arising through 'replacement demand', i.e. people leaving the workforce due to retirement or mortality. It is estimated that replacement demand will equate to 146,150 vacancies in the LLEP area between 2017 and 2023.<sup>16</sup>

The total requirement (expansion and replacement demand combined) for the LLEP area between 2017 and 2023 is therefore estimated at 165,620 jobs, or 172,320 if the additional 6,700 new jobs in logistics are also included.<sup>17</sup>

## **Summary of forecast:**

- More jobs in the future
- Increased working age population (plus possible inward migration)
- Up to 172,320 extra workers required by 2023

<sup>&</sup>lt;sup>14</sup> York Consulting, Skills for the Future, 2018-2030

<sup>15</sup> Ibid

<sup>16</sup> Ibid

<sup>17</sup> Ibid

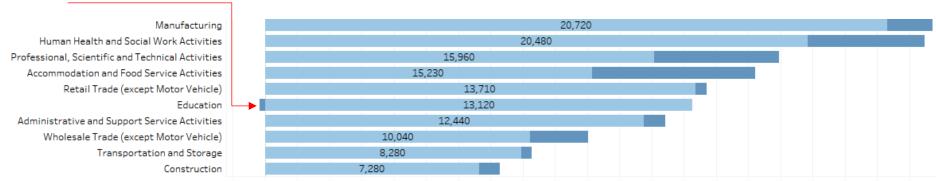
## **Expansion and Replacement demand by Sector to 2022**

Expansion Demand to 2022

Replacement Demand to 2022

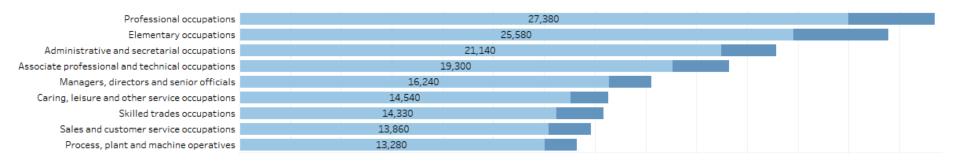
Manufacturing and Human Health and Social Work Activities have the largest demand<sup>18</sup>

Education has replacement demand only and negative expansion



#### **Expansion and Replacement demand by Occupation to 2022**

Professional and Elementary occupations have the largest demand and largest expansion

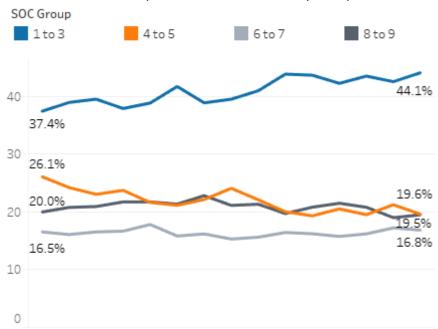


<sup>&</sup>lt;sup>18</sup> York Consulting, Skills for the Future, 2018-2030

## **Demand changes over time**

Data from 2013 to 2019 shows the changes in demand by the main Standard Occupational Classification (SOC) groups. In summary, the groups are in a hierarchy of high to low skilled occupations<sup>19</sup>:

- 1-3 Managers, Professional, Technical
- 4-5 Administrative and Skilled Trades
- 6-7 Service Occupations (inc. caring, sales, customer service)
- 8-9 Machine operatives and elementary occupations

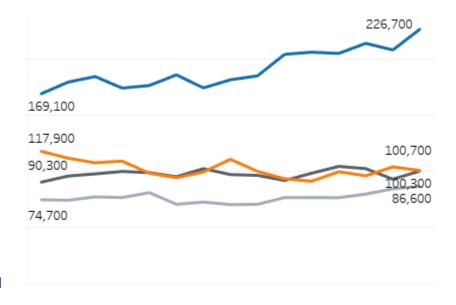


The graph above shows that high skilled occupations have increased as a proportion of LLEP jobs since 2013 and mid skilled occupations such as administrative and skilled trades have seen the largest fall.

The change in the actual numbers of workers emphasises this change as the population growth in this period means percentage changes translate to higher numbers in recent years

#### **Changes since 2013**

- Managers, Professional, Technical +57,600
- Administrative and Skilled Trades -17,200
- Service Occupations (inc. caring, sales, customer service)
   +10,000
- Machine operatives and elementary occupations +11,900



<sup>&</sup>lt;sup>19</sup> SOC data from NOMIS provided by ONS

# Leicestershire Business Survey 2017 findings:

The Leicester and Leicestershire Business Survey has been conducted since 1994, providing a robust source of intelligence about the local economy<sup>20</sup>.

The survey focuses on private sector employers. A sample of over 1,000 businesses was designed based on the local economy's sectors and its distribution of workplaces of different sizes.

#### Recruitment

**52%** of respondents had recruited staff in the past 12 months.

**71%** of all respondents said they had no difficulties recruiting in this time.

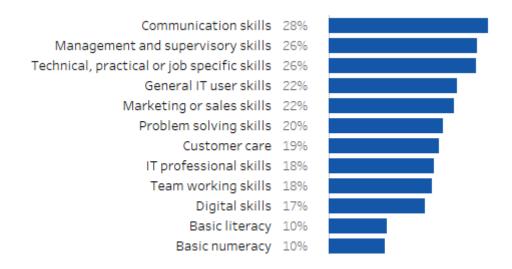
...of those that did have difficulties, the most common problem was...

# '...a low number of applicants with the required skills (12%)'

**10%** of those surveyed had employed recent graduates in the past 12 months

#### Skills shortages in work

The table below shows the skills employers felt needed improving amongst current employees



**Job specific skills** data suggests a shortage of several specialist skills with 'other' (i.e. no existing category) the highest at 22% The next highest were:

- IT Skills (10%)
- General training (non specified) 9%
- Managers/Supervisors 8%

<sup>&</sup>lt;sup>20</sup> Leicestershire and Leicester Business survey 2017

## **Training**

**41%** of respondents had not arranged any training or development for employees over the past 12 months (including informal on-the-job training).<sup>21</sup>

By far the most common reason for this was that 'All our staff are fully proficient / no need for training' (70%).

**77%** of employees found training to be 'Very Easy' or 'Quite Easy' to arrange.

The most common problems experienced were 'Lack of local providers of relevant courses' (44%) and the 'Cost of training and courses' (22%)

#### Planned training for the next 12 months

57% of respondents said they planned to train or upskill staff in the next 12 months.

The most popular categories for planned training were...

Technical, practical or job specific skills
Customer care
Marketing or sales skills
Management and supervisory skills
Digital skills
Communication skills
General IT user skills

	35%	
14%		
13%		
12%		
12%		
12%		
11%		

#### Importance of training



Training and re-training will continue to be of high importance for two main reasons:

- Technological advances
- Longer working lives

Training can also help address issues of today and in the future, three of which are:

- Low productivity (a local and national problem)
- Future need for high skilled workers. Many of these workers will already be in the workforce
- The impact of climate change which could lead to fundamental changes in many industries

<sup>&</sup>lt;sup>21</sup> All training data Leicestershire and Leicester Business survey 2017

## Skills gaps and shortages

A skills gap is the gap between the skills required for a job and the skills employers have available in their workforce.

**Employment Sectors** with the largest skills gaps in the LLEP area were<sup>22</sup>:

Education	18.0%
Information and communications	17.0%
Construction	17.0%
Primary sector and utilities	16.0%
Wholesale and retail	15.0%
Manufacturing	15.0%
Financial services	15.0%
Hotels and restaurants	14.0%
Transport and storage	12.0%
Health and social work	9.0%

Shortages are at a similar level across many sectors in the LLEP with the majority within the 14% to 17% band.

#### **LLEP skills gaps compared to national levels**

The LLEP has a larger skills gap than the national figure for 'Hotels and Restaurants', 'Health and Social work', 'Manufacturing' and 'Transport and storage'

Hotels and restaurants Health and social work Manufacturing Transport and storage Wholesale and retail	gap 5.0% 4.0% 3.0%
Health and social work Manufacturing Transport and storage	4.0% 3.0%
Manufacturing Transport and storage	3.0%
Transport and storage	2.0.0
	1.00/
Wholesale and retail	1.0%
	0.0%
Financial services	0.0%
Education	0.0%
Primary sector and utilities	-7.0%
Information and communications	-7.0%
Construction	-7.0%

Despite the skills gaps being relatively high for 'Primary sector and utilities', 'Information and Communications' and 'Construction' (Employment sector chart), there is a smaller skills gap in Leicestershire than nationwide.

<sup>&</sup>lt;sup>22</sup>All skills gaps and shortages data from DfE Employer Skills survey 2017

## Skills needs by type:

Skills needs are the skills required by an employer

The top skills needs identified in the Employer Skills survey were:

Self-management	44.4%
Operational	43.9%
Digital	43.5%
Management/leadership	42.1%
Sales & Customer	37.1%
Complex Analyticial	36.5%

#### Skills needs gap to national picture:

Despite skills needs being reported in many areas, the skills needs are lower in the LLEP area when compared to the national picture.

	LLEP to = England gap =
Management/leadership	-10.5%
Operational	-8.6%
Sales & Customer	-7.2%
Complex Analyticial	-6.9%
Digital	-4.5%
Self-management	0.0%

#### Cause of skills needs

The main causes of existing skills needs identified by employers were:

Training only partially completed		63%
New to the role		52%
Have not received appropriate training	23%	
Unable to recruit staff with required skills	20%	
Been on training, but performance not improved sufficiently	20%	
Staff lack motivation	18%	
Introduction of new working practices	17%	
Introduction of new technology	15%	

### Issues causing the skills gap – LLEP compared to national

Businesses in the LLEP area report lower instances of issues causing the skills gap in almost every case

,	LLEP to England = gap
New to the role	-9%
Staff lack motivation	-8%
Been on training, but performance not improved sufficiently	-6%
Introduction of new working practices	-5%
Unable to recruit staff with required skills	-5%
Introduction of new technology	-3%
Have not received appropriate training	-2%
Training only partially completed	1%

#### Job growth by Occupation 2014 – 2019

Admin and Skilled Trades	England LLEP	2% 1%		
Caring, Leisure and Sales	England LLEP	4% 7%		
Managerial and Professional	England LLEP		15% 13%	
Operative and Elementary	England LLEP	6% 5%		

The growth in jobs by occupation is similar in the LLEP to the national picture. The largest difference is the extra growth locally in Caring, Leisure and Sales<sup>23</sup>.

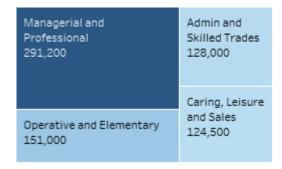


Managerial and Professional is the category with the highest number of jobs in the LLEP area: **291,200...** 

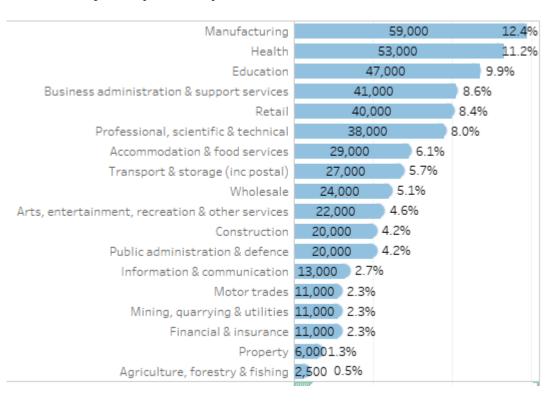
...and also the area with the highest job growth **13%** 

This growth reflects the national picture and is not unique to the LLEP area

#### Jobs by occupation in the LLEP area



#### Number of jobs by industry in the LLEP area



<sup>&</sup>lt;sup>23</sup> Job growth an occupation structure from Annual Population Survey, ONS 2014-19

## **Vacancy Information**<sup>24</sup>

Vacancy information is only a guide and will not capture the many vacancies never advertised e.g. those filled by 'word of mouth'

# The top 5 Skills in demand by employers in Leicester and Leicestershire are:

- Marketing and Strategy Branding
- Manufacturing Methods
- Business Management
- Social Work and Caregiving
- Automotive Engineering

Each category has small percentages due to the number of categories. However, **Marketing and Strategy Branding** is by far the highest at 9.1% with the others being between 3% and 3.9%.

#### **Difference to national**

Skills with a higher demand in Leicestershire than other LEPs in England:

- Manufacturing Methods
- Automotive Engineering
- Electrical Engineering
- Procurement
- Design and Process Engineering

Although small percentage points are involved in both the demand and the differences, it is notable that **Engineering** appears three times in the top 5

- Lorry Driver
- Warehouse Worker
- Social Care Worker
- Customer Service Adviser
- General Nurse

Due to the large number of specific roles, each role above only accounts for a small proportion of the total, ranging from 2.5% for Lorry Drivers to 1.3% for General Nurse.

#### Difference to national

Job roles with a higher demand in Leicestershire than other LLEPs in England:

- Lorry Driver
- Warehouse Worker
- Maintenance Engineer
- Customer Service Adviser
- Driver

It is interesting to note that Lorry Driver has a high demand in the area after previously noting that Transport was the joint largest sector for growth.

The top 5 roles in demand by LLEP employers are:

 $<sup>^{\</sup>rm 24}$  Information based on job advertisements. Source DWP tool Examine a Place

## Logistics

Logistics is an area of job growth that may not be recognised by data analysis alone. Local infrastructure developments – for example, around the **East Midlands airport transport hub** – suggest that there could be a Logistics boom in the LLEP area . However, local knowledge needs to be applied to complement the hard data.

Logistics is also rarely used as a sector category but cuts across many sectors. For example:

- Warehouse work e.g. unloading and unpacking, inventory control
- I.T. professionals for tracking and monitoring movement of goods
- Technical engineers robotics and automation will increasingly play a part in these processes
- Customer Service
- Variety of management jobs (e.g. purchasing, supply chain management)

A strong driver of the logistics sector is e-commerce, which is predicted to grow by 30% by 2024 according to retail analysts<sup>25</sup>, in part driven by a rise in on-line shopping via smartphones.



#### **Logistics by sector**

The closest sector to Logistics is **Transport and Storage**. The number of jobs has not grown in recent years although the number of business has grown. This may indicate planning for future opportunities.

Number of **Transport and Storage** jobs and businesses<sup>26</sup>:

	Jobs	Businesses
2015	25,000	5185
2016	27,000	6080
2017	28,000	7225
2018	27,000	6855
2019	Not yet available	6990

The previous page noted that the top roles in demand by LLEP employers were **Lorry Driver and Warehouse worker** which also have the highest demand locally compared to the rest of England. Both are core logistics roles.



<sup>&</sup>lt;sup>25</sup> https://www.retail-insight-network.com/features/uk-online-shopping-growth/

<sup>&</sup>lt;sup>26</sup> Nomis data from the Office for National Statistics

## **Skills Supply**

#### **Education Leaver Preparedness**

The Government Skills Strategy published in December 2017 highlighted the need for young people and adults to be better prepared for the world of work and to understand the opportunities available.

#### **Education**

Skills supply considers young people leaving schools, colleges and University as well as those taking Apprenticeships.

It also includes some data about adult learners who may be learning basic skills (English, Mathematics, Language) or taking an Apprenticeship as part of their usual employment.

#### **Current workforce requirements**

After considering demand, we know that:

- There is a forecast increase in jobs in the LLEP area which coupled with replacement demand mean up 172,320 extra workers will be required by 2023.
- The largest demand areas are 'high skill' (Professional Occupations) and 'low skill' (Elementary occupations).

#### Migration

Inwards migration has been another source of skills supply, especially during the previous 15 years when more migrants have arrived from European Union countries.<sup>27</sup>

It is estimated that 122,000 migrants from EU countries came to the East Midlands for work and are more likely to be employed in low-paid occupations.

As a proportion, the East Midlands has a higher EU born migrant population than any region outside of London\*

# The future impact of migration on the labour market is unknown

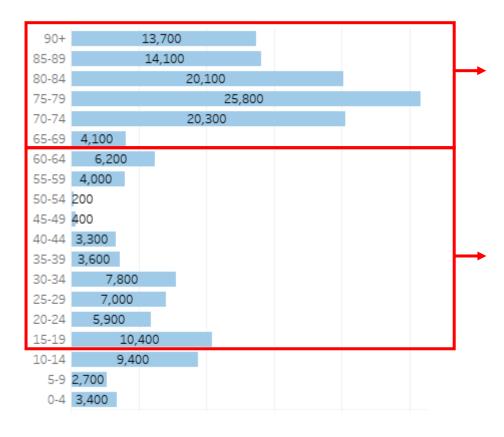
Brexit could reduce the low-skilled labour supply whilst a proposed points system could increase the supply of highly skilled workers.



 $<sup>^{\</sup>rm 27}$  Migration information from the Migration Observatory migration observatory.ox.ac.uk

## **Population**

Predicted population growth in the LLEP area 2016 to 2041



The over 65 population is predicted to **grow by 98,100** by  $2041^{28}$ .

This may create additional workers as workers are increasingly encouraged to work longer and people remain healthier for longer. Over 10% of over 65s are currently thought to be in paid employment.<sup>29</sup>

This rise may also have an impact on 'demand' as the growing group will also be consumers.

The **working age population** is set to rise by the smaller amount of **48,800**, which also includes many who will still be studying (up to a quarter of the figure).

This gives a predicted working age population of 716,500 in 2041.

Although more factors will need to be considered, it is useful to note that the number of jobs in the LLEP area is predicted to be around 520,000 by 2023.

<sup>&</sup>lt;sup>28</sup> ONS population forecast 2018

<sup>&</sup>lt;sup>29</sup> www.health.org.uk

## **Qualification Levels**

The LLEP has fewer people qualified at Level 4+ than nationally<sup>30</sup>:

**34.5%** LLEP

**39.3%** England

...and more people with no qualifications:

**12%** LLEP

8% England

Considering the Level 4+ group: **33**% of residents in the LLEP Area are qualified to Degree level (Level 6) This is the same as the East Midlands and Midlands Engine area but lower than the England level of **39**%.

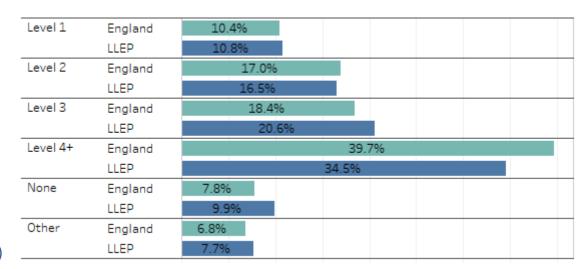
## **Difference in City and County**

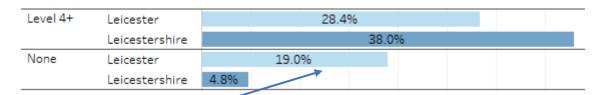
The differences to national look different when considering variations between City and County:

**County 9.6% higher than City** for people qualified to Level 4+ and close to the national figure

Almost 1 in 5 of working age population in the City have no qualifications, whilst the County figure is lower than national

#### Qualifications of working age population 2018





<sup>&</sup>lt;sup>30</sup> Qualification data from ONS Annual Population survey 2018

## **Higher Level Technical Qualifications**

Level 4-5 qualifications sit between level 3 (e.g. A Levels and T-Levels) and Level 6 (Bachelor's degrees). They are typically, but not exclusively, technical in nature.

National research<sup>31</sup> has found that most students at this level (around 88%) are studying subjects aligned to technical routes, the remainder are studying qualifications whose main purpose is academic progression, e.g. Access Courses.

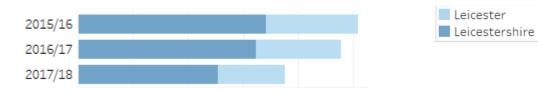
Uptake of Level 4-5 is low in England compared to other countries. Only 10% of all adults aged 18-65 hold a level 4-5 qualification as their highest compared to around 20% of adults in Germany and as much as 34% in Canada. Based on current patterns, this is likely to worsen.

## **Apprenticeships**

Exact numbers are not shown on the following pages due to restrictions attached to the data source

The overall number of apprenticeship starts<sup>32</sup> in the LLEP area had plateaued up to 2016/17. In 2017/18 the number of starts in the LLEP area declined by almost a third compared to the previous academic year. This is consistent with a national decline in apprenticeship starts following the introduction of the Apprenticeship Levy in April 2017.

The chart below shows the fall in Apprenticeships by location of delivery:



## Apprentices starts by age



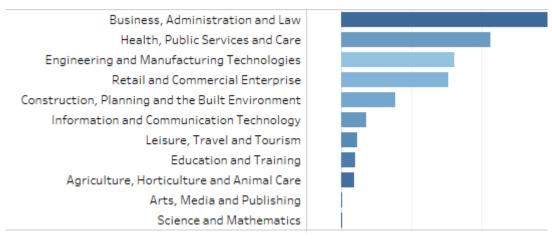
Despite falling in the past year, the 25+ age group has always been the largest for Apprenticeship starts. However, the age span does significantly differ between age categories

(i.e. 16-18 covers 2 years, 19-24 5 years but 25+ is open ended)

<sup>&</sup>lt;sup>31</sup> RCU, Mapping the Higher technical landscape, 2018

<sup>&</sup>lt;sup>32</sup> LLEP data cube. Start data is defined by learner postcode

## Apprenticeships by type



**Business, Administration and Law** was the highest Sector Subject Area is 2017/18 for learners starting an Apprenticeship in the LLEP area<sup>33</sup>

## **Apprenticeship starts by Level**



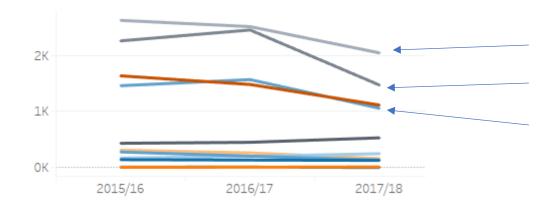
Level 2 has seen a huge fall in the past year and is now only slightly ahead of the numbers undertaking a Level 3.

**Level 3 Apprenticeships have also fallen** but at a far smaller rate than Level 2

Those taking **Level 4+ Apprenticeships has risen** significantly since 2015/16

<sup>&</sup>lt;sup>33</sup> All apprenticeship data sourced from LLEP Learner data cube

## **Apprenticeship change by subject**



Most subject areas have seen a fall since 2015/16 but some areas have seen large decreases

**Business, Administration and Law** 

**Health, Public Service and Care** 

Engineering and Manufacturing and Retail

Start Academic Year
2015/16 2016/17 2017/18

Construction, Planning and the Built
Environment

Information and Communication
Technology

It is interesting to note that two areas have bucked the trend and shown growth, although with smaller numbers involved.

**Construction, Planning and the Built Environment** has risen by 22%.

**Information and Communication Technology** has risen by 46%.

## **Apprenticeship change by Level**

**Level Two** Apprenticeships have fallen by over 40% since 2015/16. There have been large falls in four main areas since 2015/16:

- Business, Admin and Law
- Engineering and Manufacturing
- Health, Public Service and Care
- Retail and Commercial Enterprise

#### **Level Three**

Apprenticeships have fallen by around 13% overall. **Education** and **Tourism** have shown the largest proportional falls, at least halving in both cases.

#### **Level Four**

The rise in Level Four apprenticeships since 2015/16 is strongly driven by increases in **Business**, **Administration and Law** which has tripled, albeit from a small base.

## Apprenticeships by age

The proportion of Apprenticeships by age has moved a little towards the younger age group in the past 3 years as overall numbers have fallen. The breakdown in 2017/18 was:

34%	16-18	The rise in 16-18 apprenticeships as a
28%	19-24	proportion since 2015/16 is similar to the
38%	25+	fall in the 25+ age group with 19-24
3070	25.	almost unchanged.

Generally, changes by subject and age have been proportionate. However, a **large reduction** in numbers can be seen in the **25+ age** group in the following areas:

- Engineering and Manufacturing
- Health, Public Service and Care

Data suggests that these falls are mainly at Level 2 for the 25+ age group

Nationally the number of starts by apprentices aged 45 or over almost halved, while the number of starts by apprentices aged between 35 and 44 fell by a third.

#### **ESFA Funded students**

There are 35 institutions in Leicestershire providing ESFA (Education and Skills Funding Agency) funded courses, mainly a combination of Further Education colleges and sixth form colleges educating students predominantly aged 16-18<sup>34</sup>.

Students also travel to neighbouring counties such as Warwickshire, Staffordshire and Derbyshire. This is dictated by geography in most cases rather than to attend specialist courses.

The three largest providers by number of students are:

- Leicester College
- Wyggeston and Queen Elizabeth and Regent College
- Loughborough College

The City offer is characterised by fewer, large colleges, whereas county provision is dominated by many smaller school sixth forms.

The number of school pupils is far higher in the county\* yet the number of post 16 students in schools and colleges is far closer, suggesting inward movement to the city.

Approx **9,000** students studying in city establishments
Approx **10,000** students studying in county establishments

#### **ESFA funded Institutions with over 100 LLEP resident students**

Leicester College

**WQE** and Regent College Group

Loughborough College

North Warwickshire and South Leicestershire College

Gateway Sixth Form College

Beauchamp College

**Brooksby Melton College** 

Ashby School

Stephenson College

Hinckley Academy and Jon Cleveland Sixth form centre

**Rawlins Academy** 

The City of Leicester College

Lutterworth College

Melton Vale Sixth Form College

Bosworth Academy

**Groby Community College** 

The Robert Smyth Academy

King Edward VI College Nuneaton

Juniper Training Ltd

Wigston College

De Lisle College Loughborough Leicestershire

English Martyrs' Catholic School, A Voluntary Academy

NCG

King Edward VII Science and Sport College

St Paul's Catholic School, Voluntary Academy

Burton and South Derbyshire College

Wreake Valley Academy

Warwickshire College

Loughborough University

**Iveshead School** 

Charnwood College

<sup>\*(</sup>approx. 96k in the county and 56k in the city)

<sup>&</sup>lt;sup>34</sup> ESFA 16 -19 Data - based on student residency.

## **ESFA funded courses being taken**

Of the top 20 funded post 16 courses studied in the LLEP area, more than half are A Levels.

GCSE Mathematics and England both feature very high on the list, as do functional skills for English and Maths. However, this is overwhelmingly as part of a vocational course rather than the primary reason for attending college.



The overall number of courses taken is split between vocational and academic courses, with slightly more academic courses:



#### Top 20 ESFA funded courses taken in the LLEP area<sup>35</sup>

Learning Aim Title
GCSE (9-1) in English Language
GCE A Level in Psychology
GCE A Level in Mathematics
GCSE (9-1) in Mathematics
GCE A Level in Sociology
GCE A Level in Art and Design
GCE A Level in Chemistry
Functional Skills qualification in Mathematics
GCE A Level in Biology
GCE A Level in Business
Extended Project
Functional Skills qualification in English
GCE A Level in Geography
GCE A Level in History
GCE A Level in Physics
GCE A Level in English Language
GCE A Level in Economics
GCE A Level in Media Studies
Non regulated provision, Entry Level, Foundations for Learning and Life
GCE A Level in Law

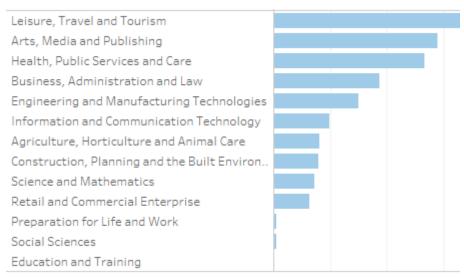
<sup>&</sup>lt;sup>35</sup> ESFA 16-19 data based on course delivery from LLEP based establishments

## Course Level and subjects<sup>36</sup>

**Level 3 courses** (A Level and equivalent) were by far the **most popular** ESFA funded courses taken by young people in 2018/19, accounting for around 75% of all courses.

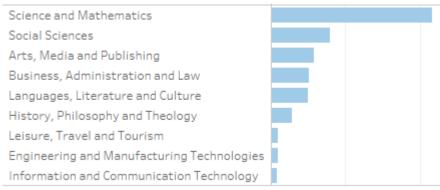
The most popular courses are A Levels and Diplomas

The most popular **Diplomas** are Leisure; Travel and Tourism; Arts, Media and Publishing; and Health, Public Services and Care as shown in the table below:



#### **A Levels**

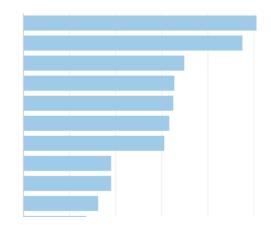
The most popular category for A Levels is Science and Mathematics, almost three times larger than the next largest categories.



#### The largest individual subjects are:

GCE A Level in Psychology
GCE A Level in Mathematics
GCE A Level in Sociology
GCE A Level in Art and Design
GCE A Level in Chemistry
GCE A Level in Biology
GCE A Level in Business
GCE A Level in Geography
GCE A Level in History

GCE A Level in Physics



<sup>&</sup>lt;sup>36</sup> ESFA 16-19 Data - based on delivery from LLEP based establishments.

## **Adult and Community Education**

In addition to the 16-18 age group thousands of courses were started by LLEP residents aged 19+ in 2017/18.

Theses courses can vary in length from a few weeks to a year and a single learner may take several courses.

**90%** of these courses were below Level 3 or without a classified level.

**Over 1/3** were classed as Preparation for Life and Work with Basic Skills and ESOL\* the most popular courses

Around 2% of the courses were at Level 4 or 5

**Leicester College** is by far the largest provider of adult education in the LLEP area

The other main providers are a mixture of local Colleges and private providers, with the two local authorities also having large numbers of learners.

Community Learning is almost exclusively provided by the two local authorities and the Workers' Educational Association.

#### Course starts by provider for learners aged 19+ (top 20 providers)

LEICESTER COLLEGE

LEICESTER CITY COUNCIL

INTERSERVE LEARNING & EMPLOYMENT (SERVICES) LIMITED

LEICESTERSHIRE COUNTY COUNCIL

WORKERS' EDUCATIONAL ASSOCIATION

NORTH WARWICKSHIRE AND SOUTH LEICESTERSHIRE COLLEGE

MILTON KEYNES COLLEGE

LOUGHBOROUGH COLLEGE

STEPHENSON COLLEGE

BUSINESS 2 BUSINESS (U.K.) LIMITED

BMC (BROOKSBY MELTON COLLEGE)

LIFETIME TRAINING GROUP LIMITED

BABINGTON BUSINESS COLLEGE LIMITED

CALDERDALE COLLEGE

LINCOLN COLLEGE

NOTTINGHAM COLLEGE

LEARNDIRECT LIMITED

HIT TRAINING LTD

CQM TRAINING AND CONSULTANCY LIMITED

DERBY COLLEGE

<sup>\*</sup>ESOL – English for speakers of Other Languages

## **Demographic Profile of learners**

Within the 16-18 category, **3.9%** of learners have an Education, Health and Care Plan (EHCP). This is a level of special education needs that provides extra support to the learner.

The number of learners eligible for Free School Meals (FSM - a common proxy for deprivation) is similar to national levels overall but when broken down is **over twice as high in the City** compared to county.

Special Educational Needs and Deprivation are both potential barriers to education attainment. This is reflected in the Level of courses taken:

Around **three quarters** of all courses are at Level 3.

However, this falls to **less than half for** FSM eligible pupils, with the group twice as likely to be taking a course at Level Two or below than the 'all' group.

For those with an EHCP, **8.5%** of courses are at Level 3 with the highest proportion, **39%**, taking an Entry Level course.

#### **Adult Learning**

An EHCP does not apply to adult learners, where a broader, self identified category of 'Learning difficulty/disability or health problem' is used.

Learners identified themselves as having a 'learning difficulty...' for a **fifth** of adult courses. This is consistent with the high volume of Preparation for Life and Work courses in the sector.

#### **Ethnic Breakdown**

Across the LLEP area **62%** of learners are classed as 'White', with Asian / Asian British the second highest group at **24.5%**.

However, the City and County have very different breakdowns:

Student Local Authority	Asian / Asian British	Black / African / Caribbean / Black British	Mixed / Multiple group	Other group	White	Total
Leicester	47.6%	11.4%	6.4%	4.0%	30.6%	100%
Leicestershire	8.8%	1.3%	3.4%	2.0%	84.5%	100%
LLEP total	24.5%	5.4%	4.6%	2.9%	62.6%	100%

The ethnic breakdown of Adult Learners is very similar at LLEP level with one notable difference in the geographical breakdown: 40.6% of learners in the City are 'white' (10% more than at the younger group) and the Asian/ Asian British group is 10% smaller (37.6%)

This may be due to changing demographics but may also be due to the higher academic achievement of Asian and British Asian students at school age. This would lead to a lower proportion of this group requiring the basic skills courses that constitute the bulk of Adult Learning.



#### **Graduate Destinations and retention**

The three universities in the LLEP area have a total student population of around 60,000.

Overall, in 2017, an average of 28% of graduates from Leicester's two universities stayed to live and work locally. This compares to a national average of 48.4%.

It should be noted that the three universities attract a high percentage of overseas students who are less likely to remain in the area following graduation. Analysis by the Midlands Engine shows that a much greater proportion of LLEP residents stay in the area for both study and employment than the Midlands Engine average.

Over half of students originating from Leicester and Leicestershire will then be employed in the area - **57.6%** compared to 50.6% across the Midlands Engine area

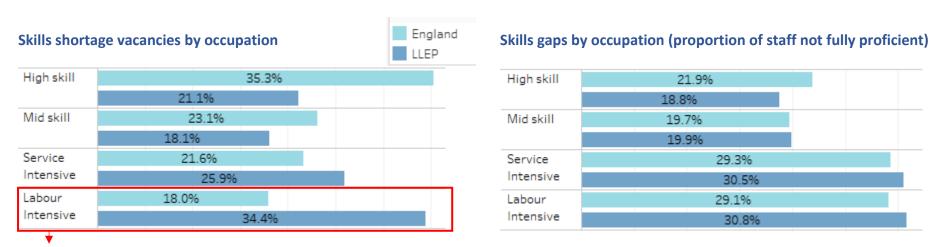
(i.e. 30.4% leave but return, 27.2% remain to study and work)

Leave for Study, do not	LLEP		35.39	6
return	Midlands Engine		4	3.5%
Leave for study, return	LLEP		30.4%	
for employment	Midlands Engine		30.6%	
Stay for study and	LLEP		27.2%	
employment	Midlands Engine	20.	0%	
Stay for study, leave	LLEP	7.1%		
for employment	Midlands Engine	6.0%		

## **Supply and Demand mismatch**

In the LLEP area 34% of employers reported having under-utilised staff, that is staff with qualifications and skills beyond those required for the role<sup>37</sup>. This is consistent with the high volume of jobs at entry level within the LLEP area and suggests that many individuals are overqualified for the occupations they work in. This appears to be an issue for the LLEP, suggesting an underutilisation of the human capital available, which may link to the productivity gap.<sup>38</sup>

Skills gaps are a form of skills mismatch within an organisation where employees are not fully proficient and therefore not able to make the required contribution to the business objectives.



Demand in Labour Intensive occupations is almost double national level in the LLEP area

Both charts above show that the LLEP area has the largest skills shortages and largest skills gaps in Service Intensive and Labour Intensive occupations

However, although this may currently be the case, the less skilled occupations are also those most at risk of automation (this is discussed in subsequent pages).

<sup>&</sup>lt;sup>37</sup> Department for Employment, Employer Skills Survey 2017, Table 73

<sup>&</sup>lt;sup>38</sup> Oxford Economics, Local Industrial Strategy Economic Review, p. 81

# **Education Skills Supply and Job Market Demand analysis**

Analysis has been conducted<sup>39</sup> to compare courses being taken in the LLEP area with demand for jobs in the area. Along with apprenticeship information and local knowledge, this helps to build a picture of the supply and demand match.

#### The data tells us:

- STEM<sup>40</sup> subjects are the most popular academic subjects in the LLEP. This is an important foundation for high skilled technical jobs (without always matching directly to a named occupation).
- The most popular apprenticeship subjects: Business,
   Administration and Law, Engineering, Health, Construction and Retail are all areas of high job demand.
- However, job demand is growing in all these areas whilst apprenticeship starts are falling.
- This is especially the case in Health. Several job areas are related to health including Care, Health and Social Care, Nursing. All areas have strong demand and growth. However. Health related apprenticeships have almost halved between 2016/17 and 2017/18.

 Unlike other apprenticeship areas, Construction has not fallen in recent years. This is an area of strong demand and job growth.

**ICT** is also a sought after skill. Although course numbers were relatively high, demand was higher and showing growth.

The **demand for 'labour'** which does not always map to college courses was clear in the analysis with high demand for roles such as:

- Packer
- Security
- Manufacturing
- Wholesale
- Warehousing and Distribution
- Hospitality and Catering

Jobs in these areas can be both a career and a gateway into the labour market and will be supported by the high number of functional Level 1 and 2 courses in English and Mathematics and more general courses such as Preparation for Work and Foundations for Learning and Life.

Additional ONS data<sup>41</sup> also tells us that the majority of the Trade Apprenticeships in the LLEP area are held by over 40s (61%) and particularly over 50s (45%). This may create additional replacement demand for skills in specific trades in the future.

Caveats to the data include that academic courses, which often form the basis for higher qualifications, do not always match directly to occupations. The data also excludes degree level courses so occupations such as teaching, medicine, specialist engineering, dentistry will rarely match to college data. For demand, areas with the highest demand such as Sales and Marketing rarely match easily to college courses.

<sup>&</sup>lt;sup>39</sup> Emsi – Economic Modelling software

<sup>&</sup>lt;sup>40</sup> STEM – science, technology, engineering, mathematics)

<sup>&</sup>lt;sup>41</sup> Nomis population survey

## **Aspirations Mismatch**

A recent study<sup>42</sup> revealed the disconnect between young people's aspirations and jobs in the UK – both current vacancies and projected demand.

#### Key findings:

- The sectors that young people aspire to work in differ greatly from the jobs available.
- For instance, five times as many young people want to work in art, culture, entertainment and sport as there are jobs available.
- Many young people report only limited careers support from their schools and colleges.
- Effective careers support reduces the disconnection between aspirations and jobs.

The issue is not that young people have high aspirations and ambitions but a lack of knowledge and information about alternative paths. Over half of respondents did not report an interest in any other sector.

The report makes several recommendations to improve this disconnect, including:

- The role of employers explaining opportunities and ensuring they are attractive and fulfilling.
- A significant expansion of careers related learning in primary schools.
- Meeting a range of people from different backgrounds with different jobs. Not formal 'careers advice' but broadening horizons and raising aspirations.

Careers Guidance in schools can be measured and benchmarked nationally<sup>43</sup>. In July 2019 the LLEP area had less schools than the national average meeting the two key benchmarks for ,**Encounters with employers and employees'** and '**Experiences of workplaces'** 

Recent data shows that more schools are now reaching the benchmark and over 90% have at least partially achieved the required standard.

 $<sup>^{42}\,</sup>https://www.education and employers.org/wp-content/uploads/2020/01/Disconnected-Career-aspirations-and-jobs-in-the-UK-1.pdf$ 

<sup>&</sup>lt;sup>43</sup> Internal report from the Careers and Enterprise Company

## **Impact of Automation**

As the economy readjusts to a more technologically advanced future, many 'traditional' occupations (within manufacturing for instance) will be replaced by emerging jobs in other sectors. Lower-skilled jobs are far more likely to be automated, and in Leicester, where manufacturing makes up an eighth of employment and half of that is low-skilled, the impact of automation and the need for the working population to gain digital skills will be more keenly felt.<sup>44</sup>

The following jobs are seen as being at the highest risk from automation and could all be described as Service Intensive:

- Waiters and waitresses
- Shelf fillers
- Elementary sales staff

**70.2%** of roles at risk of automation are held by women

People aged **20 to 24 years** are most likely to be at risk of having their job automated

Research by the Office for National Statistics shows that the low skilled jobs making up around a third of LLEP jobs that are most at risk of automation, slightly higher than the national rate<sup>45</sup>. This is concerning for the LLEP area, as it could lead to future unemployment.<sup>46</sup>

Area	% risk of automation (2017)
Melton	51.4%
Oadby & Wigston	49.9%
North West Leicestershire	48.4%
Blaby	47.1%
Harborough	46.6%
Leicester	45.9%
Hinckley & Bosworth	45.4%
Charnwood	44.7%

However, other research suggests the impact of automation may affect a far lower proportion of existing jobs (14% globally)<sup>47</sup>

#### **Implications for Supply and Demand**

Demand for low skilled jobs will decrease in the medium to long term and supply for skilled employees will increase.

<sup>&</sup>lt;sup>44</sup> The Automation Impact, Localis, 2018

<sup>&</sup>lt;sup>45</sup> Nomis Labour Force data – using SOC codes 6-9

<sup>&</sup>lt;sup>46</sup> Source: ONS, Which occupations are at highest risk of being automated, March 2019

<sup>&</sup>lt;sup>47</sup> OECD paper The Future of Work 2019

# **Digital Skills in the Workplace**

Digital skills within the workforce will become more important as we see the impact of automation on jobs and increased use of digital skills within the workplace.

The skills fall into two main categories:

- Specialist IT skills (such as programming, data storage and security, understanding increasingly complex IT architecture)
- Functional skills (e.g. email, internet, accessing information, completing on-line documentation)

The prevalence of SMEs and micro businesses within the LLEP economy represents a significant challenge for the area in terms of the development of digital skills for individuals within the workforce due to smaller training budgets and skills transference. The forecast decline in the working age population and the impact of automation means that it will be increasingly important for businesses to incorporate new digital technologies if they are to maintain and improve their competitive advantage.



60%

Proportion of East Midlands SMEs with all Basic Digital Skills\*

UK Average: 58% 2015: 39%



**74%** 

Of East Midlands SMEs are investing **nothing** to build digital skills

UK Average: 74%



66%

Of UK employees **do not** receive digital skills support in the workplace

Source: Lloyds Bank, UK Business & Charity Digital Index 2018 / Lloyds Bank Consumer Digital Index 2019

# **Digital Skills in the Workforce**

Of the emerging new jobs, **almost 90**% will require digital skills to some degree<sup>48</sup>. Alongside this are changes in working profiles: people are working longer and are more likely to have 'portfolio' careers. Therefore, it is important for those over 50 and in insecure employment, with part time or zero hours contracts, to have the opportunity to increase their level of digital skills. Women are less likely to have essential digital workplace skills and research indicates that this may be linked to higher numbers of women in part time work.<sup>49</sup>







Women are **7%** less likely to have digital skills at work

Those with workplace digital skills earn on average £12,500 more per year

**35%** of part-time workers have essential workplace digital skills compared with **50%** of full-time workers

Nationally, nearly two thirds (63%) of working people have not received any digital skills training from their employers.<sup>50</sup>

**Two-fifths** of LLEP businesses surveyed<sup>51</sup> said they had plans to introduce or extend their use of technologies over the next two years.

However, around half of all respondents did not feel fully prepared for the challenges posed by increased digitisation and automation.

According to Lloyds UK Consumer Digital Index 2019, the proportion of consumers with full Essential Digital Skills for Work in the East Midlands was 41%, six percentage points lower than the national average of 47%. The 2018 Tech Nation Report found that at least 28,121 jobs in the LLEP area require the use of digital technology<sup>52</sup>, this suggests a mismatch between the needs of employers and the skills of the working age population due to the lower prevalence of digital skills.

<sup>&</sup>lt;sup>48</sup> House of commons science and technology committee, Digital Skills Crisis, second report of session 2016-17.

<sup>&</sup>lt;sup>49</sup> Lloyds Bank Consumer Digital Index, 2019

<sup>&</sup>lt;sup>50</sup> Lloyds Bank Consumer Digital Index, 2019

<sup>&</sup>lt;sup>51</sup> Leicester and Leicestershire Business Survey 2017

<sup>52</sup> Tech Nation Report 2018 https://technation.io/insights/report-2018/

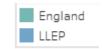
# Digital Skills in the LLEP area

The LLEP has a lower percentage of employers identifying IT skills as a development need than nationally but a significant proportion of employers still have digital requirements.

This may be a reflection of LLEP area businesses not effectively maximising the potential of new technologies or the talents of their employees. This has the potential to hamper the future growth of the LLEP economy; significant value can be added to the economy and society through better investment in digital skills, not only in terms of job creation but also through increased productivity.

However, Apprenticeships data earlier in the report showed that ICT apprenticeships are rising, albeit from a low base.

Percentage of employers identifying skills development need





The Business survey also supports this with the following skills all featuring in the top 10 of Skills shortages at work:

- General IT user skills
- IT Professional skills
- Digital skills

# **Population and workforce changes**

The demand for workers in the LLEP area is **predicted to rise** by around **20,000**, even in the relatively short period up to 2023.<sup>53</sup>

This is a combination of replacement demand and expansion demand, the latter being higher in Leicestershire than nationally and brings the total number of **predicted jobs in the area** to **518,670** by 2023.

By 2023, the working age resident population in Leicestershire is predicted to be **684,900** 

This number is by age only so will include those not available for work e.g. students, full-time carers and those economically inactive.

However, it does exclude those over 65, over 10% of which are thought to be in paid work, equating to around 16,000 potential workers.



Larger changes to the population are expected to happen in the longer term.

By 2041, the **65+ population** is predicted to have risen by **98,100** in the LLEP area (to around 275,000), whilst the **working age population** will rise by around half that amount: **48,800** (to 716,500)

The growth in population over 65 could have longer term impacts in several ways including:

- A large consumer group for services in the future.
- Possible impact on demand for health and care workers as required by an ageing population.
- A large pool of potential workers as more people work beyond traditional retirement ages.
- Implications for retraining and training providers in the area to maintain the skills supply.

<sup>53</sup> Population data ONS

# **Longer term factors Locally and Globally**

Both locally and globally, many commentators are predicting unprecedented changes to the workforce in the coming decades, influenced by several factors:

### Locally:

- The £81bn<sup>54</sup> HS2 scheme could create a huge skills and labour demand across the East Midlands.
- Brexit UK leaving the European Union could have large implications with the East Midlands home to 273,000 non-UK EU born citizens in 2017<sup>55</sup>, with a quarter working in Manufacturing or Transport (both areas of high employment in the LLEP area).
- Growth of Enterprise Zones.

### **Nationally:**

- Consumer moves to on-line retail continue to gather pace and the East Midlands is a key hub for the movement of goods for both national and global consumer commerce.
- Logistics capacity will also support the import and movement of materials and goods on a commercial level. For example, to support proposed UK infrastructure projects.



# Globally - the 'megatrends' transforming the labour market<sup>56</sup>

- Impact of automation and Artificial Intelligence. Less jobs or just different jobs?
- Climate change (the opportunity and threat of: the circular economy; 'Green New Deals'; reduced travel and consumer consumption).
- More high skilled jobs, impact on middle and low skilled jobs less clear.
- Ageing population working longer or more retirees than labour market entrants? Changes in consumption, changed demand for products and services.
- Globalisation industrial production is increasingly integrated with different processes distributed across countries.

<sup>&</sup>lt;sup>54</sup> BBC news 3/09/19

<sup>&</sup>lt;sup>55</sup> Oxford Migration observatory

<sup>&</sup>lt;sup>56</sup> OECD library



# **Climate Change**

The impact of climate change on future work is unknown. This is partly due to how quickly changes will happen. However, it is certain to cut across all sectors to some extent.

The examples below are not all encompassing but give a taste of how broad the impact will be on four common job sectors:



### **Manufacturing**

- The goods being manufactured (e.g. green technologies such as solar panels or wind turbines as well as energy efficient consumer goods).
- The machinery used to make greener products.
- How the machines and factories are powered and adaptions needed.
- The materials used (e.g. sustainable clothing, reduced plastic, recycled and reclaimed materials).



#### **Transport**

- Increase in Electric Vehicles will fundamentally change a mechanics job. Mass retraining required.
- Petrol stations reduce or change?
- Improved public transport more bus drivers required, more buses.
- Changed landscape of cities smart cites and car free zones
- Impact on rail (increase?) and air travel (reduce?).

# **Agriculture**



- Questions of land use flood plains, increased local and seasonal produce.
- Decrease in meat consumption and increase in plant based diets.
- Rise in food-tech for efficient food production and new sources of protein.
- Threats to biodiversity and rewilding or reforestation of land.



#### Construction

- New greener house building programmes involving different materials and designs.
- Retrofitting of existing properties to improve insulation
- New technologies such air pumps to replace traditional boilers.
- Modern architects, building inspectors, surveyors and planners.

#### **Conclusions**

Short term demand for low-skilled labour – for example in Manufacturing, could intensify post-Brexit if there is a decrease in migrant workers working in low skilled jobs.

However, in the longer term low-skilled jobs could be at the highest risk of automation.

**Digital skills** are a key area for skills and development. This falls into two categories **Specialist IT skills** and **Functional skills** 

Digital skills frequently appear in skills shortage and gaps data, sometimes explicitly: 'General IT Skills', sometimes partially hidden 'Professional...Technical activities' and sometimes as the tools of the job 'Administrative and Support Service Activities'.

## **Climate change**

Climate change is likely to be a thread running through all sectors. This may mean areas of great change – for example energy, transport and manufacturing – leading to new opportunities and new ways of working.

Manufacturing is the area with the highest labour demand

**Transport**; and **Warehousing and Logistics** are the two largest growth areas in the LLEP area with Lorry Driver and Warehouse worker the two roles in highest demand (by job advert) and higher demand compared to other LLEPs.

**Managerial and Professional** occupations currently account for over a third of occupations in the area.

**Health and Social Work** is the second largest area for demand, driven by a large expansion (possibly due to an ageing population which suggests this will be ongoing).

Therefore, it is worth noting the large fall in Health apprenticeships since 2015/16. Will this be a future area of great demand?

#### Challenge

Providing a skilled population, filling 'low skilled' occupations but minimising skills underutilisation.

# **Appendix A – District Profiles**

The following pages show a short summary of the main occupational groups in each District. This aims to show how demand may vary across the LLEP area and how this has changed over the previous ten years to 2018.

The information used is taken from the Business Register and Employment Survey (BRES) which is published by the Office for National Statistics.

The profiles also contain data to show the number of Apprenticeships being delivered in each District area. This uses data published by the Department for Education.

#### Data by Industry - Blaby **District overview – Blaby** 12,000 Blaby is home to **63,000** jobs<sup>57</sup> Professional, scientific and technical roles are the most 10,000 popular. This has more than doubled since 2011 from 5,000 to 12,000 8,000 Other growth areas include: 6,000 **Public administration and defence** - up from 5,000 to 7,000 in the previous year 4,000 Mining, quarrying and utilities – this has been volatile over recent years and was 3,500 in 2018 after 2,000 peaking at 5,000 the previous year The table of the right shows many areas have grown over the past decade. 2010 2012 2014 2016 Industry Areas that employ fewer people in Professional, sci... Manufacturing Education

Accommodation ..

Agriculture, fore..

Business admini...

Construction

Financial & insur..

Health

Arts, entertainm.. Information & co.. Retail

Motor trades

Property

Wholesale

Mining, quarryin.. Transport & stor..

Public administr..

Change since 2009	2009	2018
Professional, scientific & technical	5,000	12,000
Retail	6,300	7,000
Public administration & defence	4,800	7,000
Manufacturing	3,900	4,500
Construction	3,800	3,500
Health	3,600	3,500
Financial & insurance	2,900	3,500
Business administration & support services	2,500	3,500
Mining, quarrying & utilities	2,100	3,500
Accommodation & food services	2,600	3,000
Transport & storage (inc postal)	3,200	2,300
Wholesale	2,600	2,300
Education	2,300	2,000
Arts, entertainment, recreation & other services	1,600	2,000
Information & communication	900	1,300
Motor trades	600	1,300
Property	900	500
Agriculture, forestry & fishing	0	400

2018

Change since 2000

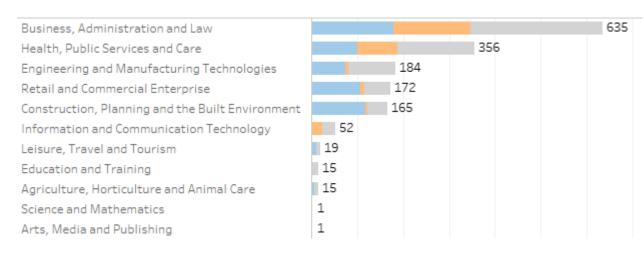
Blaby than in 2009 include:

- **Transport and Storage**
- Education
- **Property**
- Wholesale
- Construction

<sup>&</sup>lt;sup>57</sup> All Industry data taken from the Office for National Statistics www.nomis.gov.uk

# **Apprenticeship data by delivery District - Blaby**

Apprenticeship participation by Subject 2018-19<sup>58</sup>

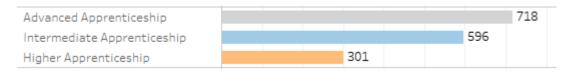




Blaby differs from the county picture by having proportionally more Business Administration and Law; and Health Public Services and Care apprenticeships...

...and less in Engineering and Manufacturing Technologies

## Apprenticeships by Level



Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above Blaby has a greater proportion of Higher Apprenticeships than across the County – 18.6% compared to 13.5% countywide.

<sup>&</sup>lt;sup>58</sup> Department for Education data. Individuals may be counted twice if taking more than one subject or moving levels during the year

#### **District overview – Charnwood**

Charnwood is home to **67,000** jobs

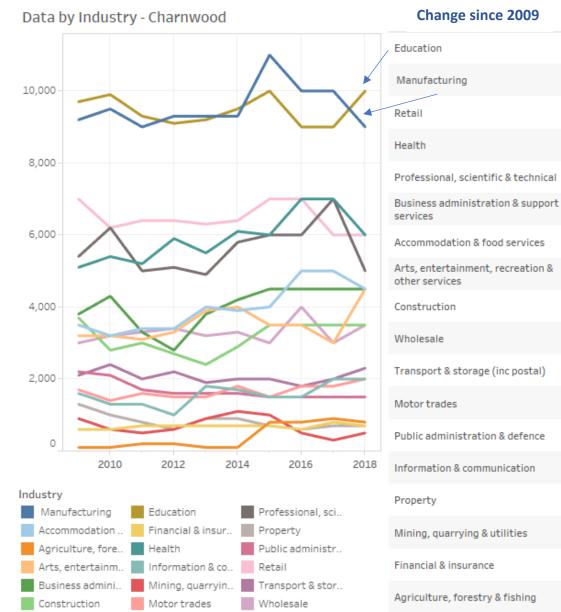
The most popular sectors are **Education** and **Manufacturing**. This has been the case for the past decade although manufacturing has recently seen a slight dip whilst Education has risen.

**Growth** areas in recent years have Included:

- Health (despite a recent fall)
- Business Administration & support
- Arts, entertainment, recreation
- Wholesale
- Information and Communication

Despite a rise of 3,000 in the overall number of jobs since 2010, three areas in particular have seen a fall:

- Manufacturing
- Professional, Scientific and technical
- Public administration and defence



2018

2009

9,700 10,000

9,200 9,000

7,000 6,000

5,100 6,000

5,400 5,000

3,800 4,500

3,200 4,500

3,700 3,500

3,000 3,500

2,100 2,300

1,700 2,000

1,600 2,000

1,500

700

500

700

800

2,200

1,300

900

600

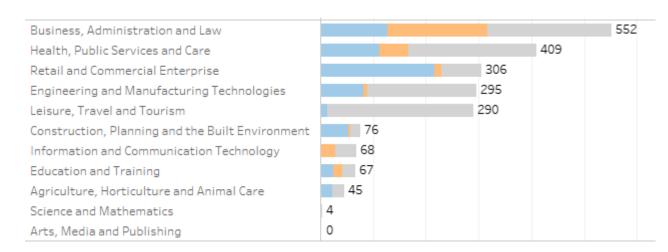
100

4,500

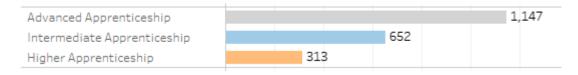
3,500

## Apprenticeship data by delivery District - Charnwood

#### Apprenticeship participation by Subject 2018-19



#### Apprenticeships by Level



Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above



Charnwood differs from the LLEP averages by having far less Engineering and Manufacturing Technologies 14% of apprenticeships compared to 22% across the area.

There are also far less Construction apprenticeships in the area. 3.6% compared to 10.3% across the area.

**Leisure, Travel and Tourism** is an area where Charnwood has a higher proportion – 13.8% compared to 3.4% in the LLEP area. Retail is also higher in Charnwood than the area as a whole.

Charnwood has more Advanced
Apprenticeships as a proportion than the
LLEP area and less at Intermediate level –
7% to 8% difference in both cases.

## **District overview – Harborough**

Harborough is home to 41,900 jobs

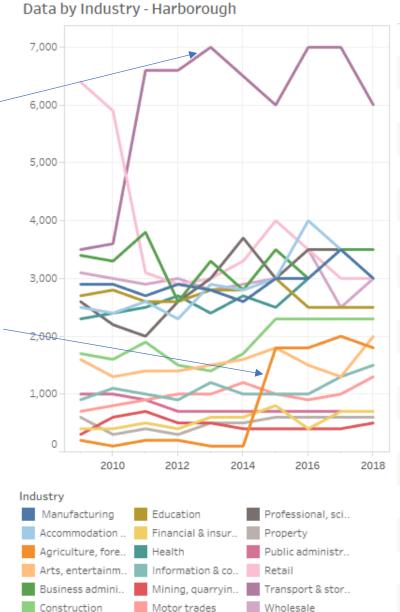
**Transport and storage** is the largest sector after seeing large growth since 2009, particularly in 2013. The sector doubled in size between 2009 and its peak in 2013

There have been several growth areas in the past decade as the **number of jobs has increased by 5,000** despite the large fall in retail.

The most significant rise has been in **Agriculture, forestry and fishing** which rose from 200 to 1,800 during the period

Motor Trades and Information and Communication both almost doubled

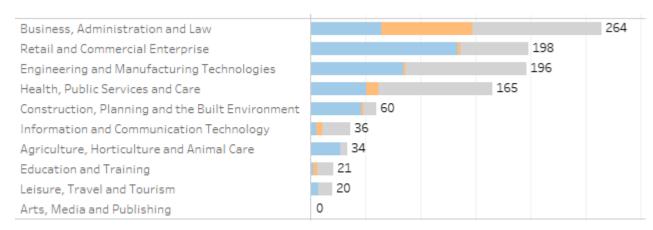
The only area with a significant fall is **Retail**, which more than halved since 2009. The majority of this sharp fall was seen between 2010 and 2011.



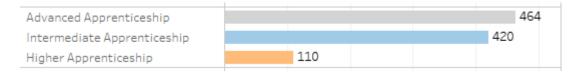
Change since 2009	2009	2018
Transport & storage (inc postal)	3,500	6,000
Retail	6,400	3,000
Business administration & support services	3,400	3,500
Wholesale	3,100	3,000
Professional, scientific & technical	2,600	3,500
Manufacturing	2,900	3,000
Accommodation & food services	2,500	3,000
Health	2,300	3,000
Education	2,700	2,500
Construction	1,700	2,300
Arts, entertainment, recreation & other services	1,600	2,000
Information & communication	900	1,500
Motor trades	700	1,300
Agriculture, forestry & fishing	200	1,800
Public administration & defence	1,000	700
Property	600	600
Financial & insurance	400	700
Mining, quarrying & utilities	300	500

## **Apprenticeship data by delivery District - Harborough**

#### Apprenticeship participation by Subject 2018-19



#### Apprenticeships by Level



Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above



Harborough differs from the LLEP overall figures by having a **greater proportion of Retail and Commerce** apprenticeships – 20% compared to 12%.

There are several areas where there are less apprenticeships in Harborough compared to the LLEP: Engineering and Manufacturing; Construction; and Health, Public Services and Care. However, no single area has a large difference.

The breakdown of levels is similar to the wider LLEP area with Harborough having slightly less Intermediate Apprenticeships and fewer Higher Apprenticeships.

# District overview – Hinckley and Bosworth

Hinckley and Bosworth is home to **44,000** jobs

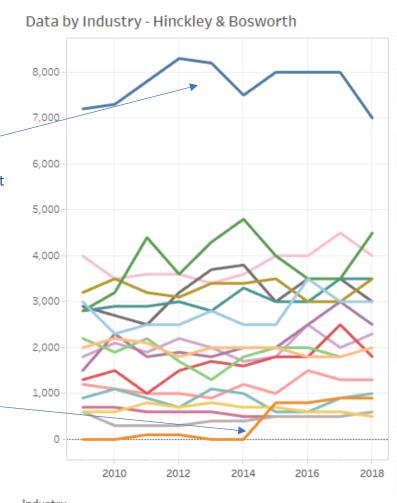
Manufacturing is by far the largest area for employment and has seen a rise followed by a similar fall in the past decade

Although the overall number of jobs has been stable, some areas have seen growth, such as:

- Health
- Business Administration and Support
- Wholesale
- Transport and Storage
- Mining, quarrying and utilities

# Agriculture, forestry and fishing moved from 0 to 900

Although no areas saw a significant fall over the whole period, **Manufacturing** fell from a peak of 8,300 to 7,000 within the previous six years and looks to be on a **downwards trajectory**.



Manufacturing	7,200	7,000
Retail	4,000	4,000
Business administration & support services	2,800	4,500
Education	3,200	3,500
Health	2,800	3,500
Accommodation & food services	3,000	3,000
Professional, scientific & technical	2,900	3,000
Construction	2,200	2,000
Wholesale	1,800	2,300
Transport & storage (inc postal)	1,500	2,500
Arts, entertainment, recreation & other services	2,000	2,000
Mining, quarrying & utilities	1,300	1,800
Motor trades	1,200	1,300
Information & communication	900	1,000
Public administration & defence	700	600
Property	600	600
Financial & insurance	600	500
Agriculture, forestry & fishing	0	900

**Change since 2009** 

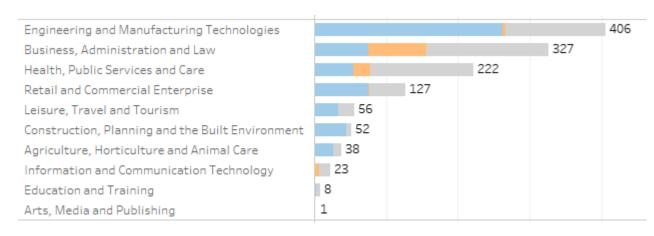
2009

2018

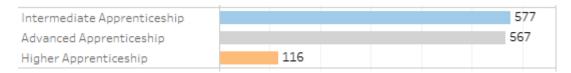
Industry		
Manufacturing	Education	Professional, sci
Accommodation	Financial & insur	Property
Agriculture, fore	Health	Public administr
Arts, entertainm	Information & co	Retail
Business admini	Mining, quarryin	Transport & stor
Construction	Motor trades	Wholesale

## Apprenticeship data by delivery District – Hinckley and Bosworth

#### Apprenticeship participation by Subject 2018-19



#### Apprenticeships by Level



Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above



Hinckley and Bosworth has a **greater proportion of Engineering and Manufacturing** apprenticeships than the LLEP area as a whole – 32% compared to 22%.

Many other subjects are slightly lower in Hinckley and Bosworth with Construction having the biggest gap – only 4% compared to a LLEP average of 10.3%.

There are a greater proportion of Advanced Apprenticeships in the area (6% more) but 4% less Higher Apprenticeships.

#### Leicester city overview

The city of Leicester is home to **166,800** jobs

Although this is 5,000 higher than 2009, it is **10,000 lower** than a 2016 peak of 177,000

**Health** is the highest area for employment and in a similar pattern, is higher than 2009, is 4,000 lower than the 2009 peak

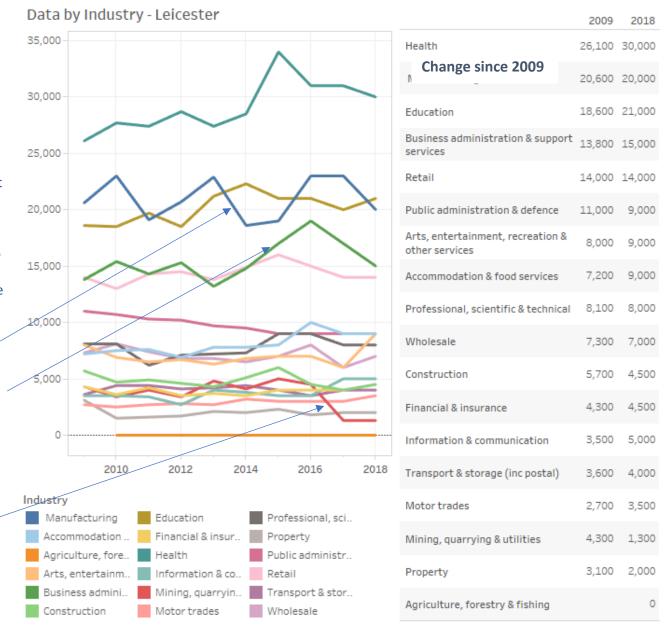
Many areas have been volatile during the period which is masked by similar or slightly higher figures when comparing the whole time period.

**Manufacturing** has fallen slightly but has seen several rise and falls

**Business administration and support** also saw a large swing from 2013 to 2016 before falling again

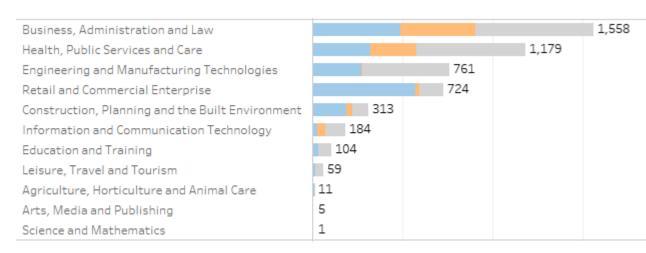
The table on the right shows several areas have changed by over a thousand.

Mining, quarrying and utilities has the largest numerical fall, by 3,000 jobs

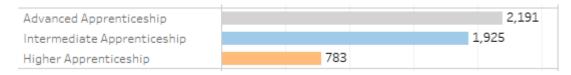


# **Apprenticeship data – Leicester City**

#### Apprenticeship participation by Subject 2018-19



#### Apprenticeships by Level



Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above



Almost a third of Apprenticeships in Leicester City are in **Business**, **Administration and Law**. Although this is the higher proportion for the whole LLEP area, it is still higher in the city.

There are also more **Health**, **Public Services and Care**; and **Retail** apprenticeships.

The proportion of **Engineering and Manufacturing**; and **Construction** are both lower in the city.

The proportion of levels in the city is not too different to the LLEP but there are slightly more Higher Apprenticeships (2.5% higher)

#### **District overview - Melton**

Melton is home to 23,000 jobs

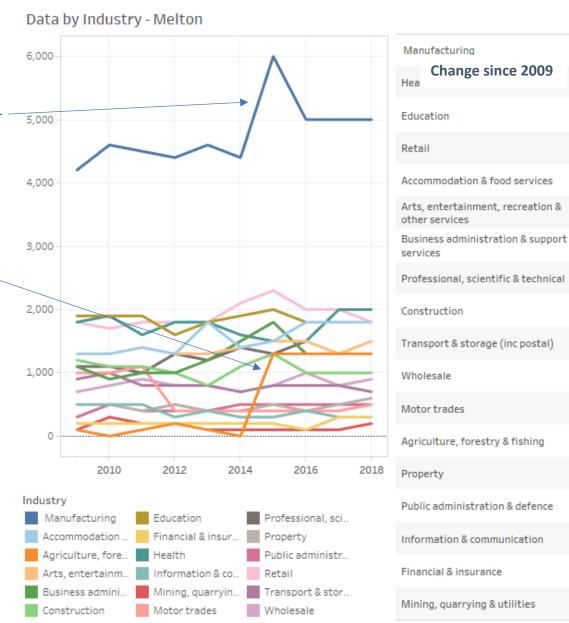
**Manufacturing** is the largest area for jobs in Melton. Although this is higher than 2009, recent years have seen a small fall.

The most significant growth area has been **Agriculture**, **forestry and fishing**, growing from 100 in 2009 to 1,300 in 2018. This actually moved from 0 in 2014 to its 1,300 in 2015

Other areas that have seen growth include:

- Accommodation and food services
- Business administration and support services

Very few areas have seen a fall although it is interesting to note that three that have – **Transport and Storage, Motor Trades and Information & Communication** – have often been growth areas in other districts.



2009

4,200

1,800

1,900

1,800

1,300

1,300

1.100

1,100

1,200

900

700

1,000

100

500

300

500

200

100

2018

5.000

2,000

1,800

1,800

1,800

1,500

1,500

1,300

1,000

700

900

500

1.300

600

500

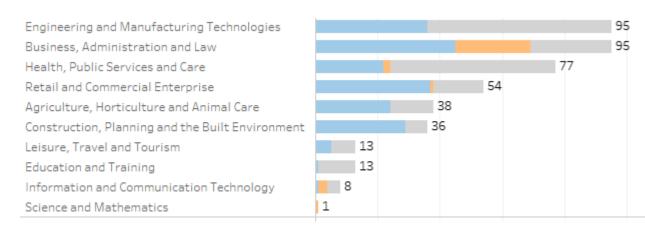
300

300

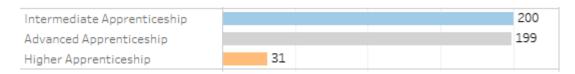
200

## **Apprenticeship data by delivery District – Melton**

#### Apprenticeship participation by Subject 2018-19



Apprenticeships by Level



Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above The joint **highest** proportion of apprenticeships in Melton is **Engineering and Manufacturing**. The actual proportion is similar to the LLEP area whereas Business, Administration and Law, the highest across the area, is 5.5% lower in Melton.

Most categories are similar but the main difference is the **higher proportion of Agriculture, Horticulture and Animal Care** in Melton. However, this does involve small numbers.

Melton has a greater proportion of Advanced Apprenticeships but fewer Higher Apprenticeships – 7% to 8% difference in each case.

# District overview – North West Leicestershire

North West Leicestershire is home to **63,400** jobs, this has risen from 51,000 in 2009

**Transport and Storage** is the largest area

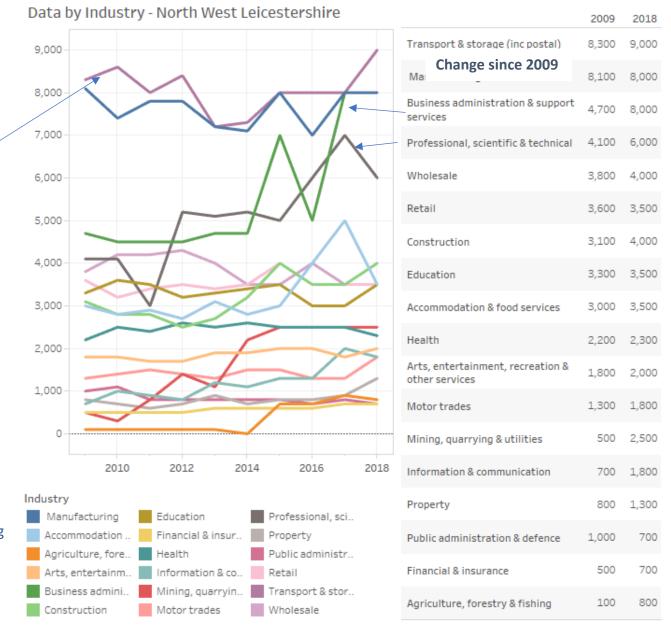
The two areas of **large growth** have been:

- Business, administration and support services
- Professional, scientific and technical

Other areas with **significant growth** include:

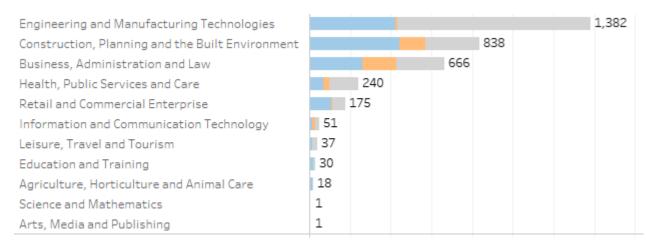
- Motor Trades
- Property
- Mining, quarrying and utilities
- Information and communications
- Agriculture, forestry and fishing

The only area to see a fall is **Public** administration & defence



## Apprenticeship data by delivery District – North West Leicestershire

#### Apprenticeship participation by Subject 2018-19

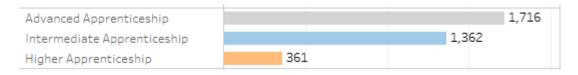


North West Leicestershire has a very different pattern compared to the LLEP overall.

A **combined 64.6%** of apprenticeships in the area as either in **Engineering and Manufacturing or Construction**. This is more than double the combined proportion across the area.

Business, Administration and Law; Health, Public Services and Care; and Retail are the three areas with a lower proportion in North West Leicestershire.

#### Apprenticeships by Level



The proportion of apprenticeships is with slightly less Higher Apprenticeships

Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above

# District overview – Oadby and Wigston

Oadby and Wigston is home to **19,400 jobs** 

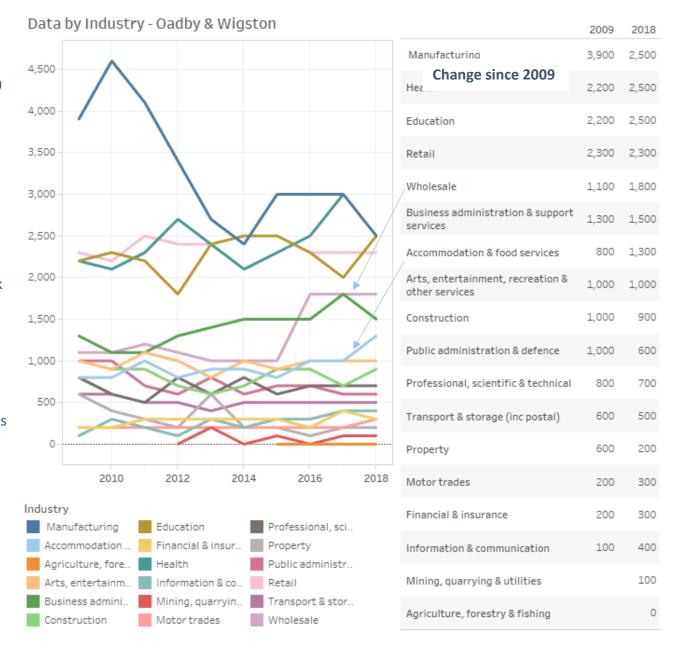
The four largest sectors are:

- Manufacturing
- Health
- Education
- Retail

**Manufacturing** has seen a **large decrease** over the period, from a peak of 4,600 in 2010 to 2,500

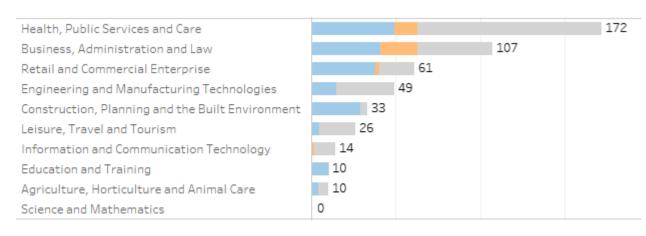
Wholesale and Accommodation and food services have both seen large proportional rises

**Public administration and defence** has seen a large proportional fall, 40% since 2009



## **District overview – Oadby and Wigston**

#### Apprenticeship participation by Subject 2018-19

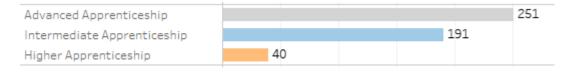


Oadby and Wigston shows a large difference to the LLEP area in the proportion of **Health, Public Services and Care** apprenticeships – 35.7% compared to 18.5%.

The area has a lower rate of **Engineering** and **Manufacturing** apprenticeships - half the LLEP area rate.

**Construction** also has a lower proportion with smaller numbers involved.

#### Apprenticeships by Level



Oadby and Wigston has 5% more Advanced Apprenticeships than the LLEP average and 5% less Higher Apprenticeships.

Intermediate – Level 2 GCSE equivalent Advanced – Level 3 A Level equivalent Higher – Level 4 and above. Foundation degree and above