
West Midlands Local Skills Report

Annex B - Evidence Base

2022



West Midlands
Combined Authority

Table of Contents

- 1. Intro
- 5. Funding
- 10. Methodology
- 12. Local Labour Market Context
- 21. Supply Analysis
- 32. Demand Analysis
- 47. Supply-Demand Comparison
- 56. Conclusion: Key Findings

Introduction

This evidence base aims to understand in detail how the supply of skills in the West Midlands Region matches up to current and future demands. This analysis will support the West Midlands Skills Advisory Panel, which is intended to provide valuable insight to the Government's Skills and Productivity Board.

It will look at the skills system at each level, from secondary school to further education, apprenticeships, and graduate outcomes. It will form an evidence base to understand the reach of the skills system, both to different parts of the region and to different population groups, as well as how the system can be improved to meet the goals of the Local Industrial Strategy and other regional priorities. This will be essential to:

- Develop policy to respond to the current economic headwinds and move the growing number of young claimants towards suitable training and work opportunities.
- Anticipate long-term trends and future challenges in delivering skills.
- Identify bottlenecks in skills provision to all ages, informing future strategic plans and requests for new funding or powers.

It aims to assess the supply and demand for skills at all levels across the West Midlands (3LEP) region, and to meet the Department for Education's requirement of providing a full analytical toolkit to the new Skills and Productivity Board, where it can support their analysis at the national level. The evidence base includes publicly available data, labour market information from economic insight firm Emsi, and insights from the Individualised Learner Record (ILR), a collection of records of students' participation in the further education system. In terms of structure, it considers first supply, then demand, and finally the

interrelations between the two. Given the rapidly evolving nature of the jobs market in the current pandemic, data on current and future economic impacts stemming from the pandemic will be considered alongside skills supply and demand for each stage of education.

WMCA Productivity & Skills aims to tackle the challenges we face in skills provision in the region, through collaboration with the further education sector to develop high quality tailored support to young people entering the workforce and retraining workers alike.

The WMCA aims to:

- Prepare our young people for future life and work
- Create regional networks of specialist, technical education and training
- Accelerate the take-up of good quality apprenticeships, across the region
- Deliver inclusive growth by giving more people the skills to get and sustain good jobs and careers
- Strengthen collaboration between partners to support achieving more collectively

It aims to achieve these goals by:

- Moving more people into employment
- Moving more people into higher skilled jobs
- Making more skilled employees available to support business growth and productivity
- Ensuring all communities benefit from the region's economic growth
- Developing an agile and responsive skills system that is more aligned to the needs of business and individuals

Indicator	Theme	Where we are now	Change over the last year	Direction of Travel (Five year trend)	Relative to Peer Group																														
KS5 Destinations	Destinations	80.2% of state-funded mainstream schools and colleges went on to a sustained education, apprenticeship, or employment destination as of 2019/2020 cohort.	This is a slight worsening on last year where the corresponding figure was 80.4%	Last available data is 2017/18, during which the figure was higher at 81.1%	The Corresponding UK figure for the same year was 80.7% . It has also worsened and was 81.2% in 2017/18																														
NEET and Unknown 16- and 17-year-olds	Destinations	5.7% of Proportion NEET or not known in West Midlands (NUTS1) Region. Highest in Shropshire (10.3%) followed by Birmingham (8.5%)	Remains unchanged	Significantly decreased compared to 7.3% seen in 2016.	Slightly higher than the England average of 5.5%. Higher than London(4.0%), East(4.3%) and North West(5.3%) and on par with North East(5.7%) and lower than South West(6.0%), East Midlands (6.2%) and Yorkshire and Humber (6.3%)																														
Early Years Foundation Stage Profiles	Destinations	70.1% of children reach a good level of development at age five across personal, social, and emotional development, as of 2018/19.	This is up on 69.8% in 2017/18.	And significantly up on 58.4% in 2013/14	The England average is higher, at 71.8%																														
Qualifications - % Working Age Population at each NVQ Level	Destinations	<table border="1"> <thead> <tr> <th colspan="5">Jan 2020 - Dec 2020</th> </tr> <tr> <th>AREA</th> <th>NVQ3</th> <th>NVQ2</th> <th>NVQ1</th> <th>No Quals</th> </tr> </thead> <tbody> <tr> <td>BCLEP</td> <td>17.8%</td> <td>18.9%</td> <td>11.5%</td> <td>12.6%</td> </tr> <tr> <td>CWLEP</td> <td>19.2%</td> <td>15.6%</td> <td>10.1%</td> <td>5.5%</td> </tr> <tr> <td>GBSLEP</td> <td>19.8%</td> <td>19.1%</td> <td>9.8%</td> <td>8.1%</td> </tr> <tr> <td>UK</td> <td>18.2%</td> <td>16.8%</td> <td>9.6%</td> <td>6.6%</td> </tr> </tbody> </table>	Jan 2020 - Dec 2020					AREA	NVQ3	NVQ2	NVQ1	No Quals	BCLEP	17.8%	18.9%	11.5%	12.6%	CWLEP	19.2%	15.6%	10.1%	5.5%	GBSLEP	19.8%	19.1%	9.8%	8.1%	UK	18.2%	16.8%	9.6%	6.6%	Improvement across the 3LEP – with BCLEP being the most improved (-4.1pp) less proportion vs last year's figures followed by GBSLEP(-1.9pp) and CWLEP(-1.8pp)	This is a great improvement on 2016, which recorded 19.5% for BCLEP, 8.1% for CWLEP, and 11.5% for GBSLEP.	BCLEP had the highest proportion of no quals followed by GBSLEP(5 th) and CWLEP(22 nd) out of 38 LEPS.
Jan 2020 - Dec 2020																																			
AREA	NVQ3	NVQ2	NVQ1	No Quals																															
BCLEP	17.8%	18.9%	11.5%	12.6%																															
CWLEP	19.2%	15.6%	10.1%	5.5%																															
GBSLEP	19.8%	19.1%	9.8%	8.1%																															
UK	18.2%	16.8%	9.6%	6.6%																															
Mid-year population estimates	Demographics	The West Midlands (3-LEP) 5-year band estimate population stands at 4,215,900 in 2020.	This is a 0.49% increase compared to 2019.	Compared to 2016, the population has risen by 2.66%	This is faster than the UK's 5-year population growth of 2.18%																														
House Price to Income Ratio	Demographics	West Midlands (3-LEP) house price to median earnings ratio was at 7.15 for 2020.	The ratio has slightly decreased from 7.22 for 2019 to 7.15 this year.	Housing in the continues to become less and less affordable with the ratio increasing from 6.5 in 2015.	The England average is still performing worse at 7.84 whereas West Midlands as a region was performing better at 6.78.																														

Indicator	Theme	Where we are now	Change over the last year	Direction of Travel (Five year trend)	Relative to Peer Group
Gender Pay Gap	Workforce	<p>The Black Country has the best gender pay ratio, with women earning 92.5% as much as men as measured by median gross hourly pay for full time workers. The corresponding proportions for CWLEP and GBSLEP were 76.1% and 87.2% respectively.</p> <p>Overall, the region's gender pay gap is similar to the UK average, but the ratio is notably poor in Coventry and Warwickshire.</p>	<p>The equivalent figures for 2020 were considerably better, with proportions of 95.8%, 80.2%, and 85.7%, indicating a concerning deterioration in pay ratios since the pandemic.</p>	<p>Compared to 2016 we have a mixed picture, with BCLEP having improved on 90.0%, GBSLEP having improved on 84.4%, but CWLEP worse than the 82.2% it recorded in 2016. The overall picture is similar.</p>	<p>The UK is in the middle at 88.1%</p>
Employment rate	Workforce	<p>West Midlands (3-LEP) employment rate of working-age population stood at 72.6% in 2020.</p>	<p>Employment rate remained the same only slightly increasing by (0.04 pp)</p>	<p>Improvement from the 2015 figure of 68.3%</p>	<p>UK average was at 75.1%- closing the gap only slightly when compared to last year.</p>
WMCA Average Annual Earnings (Workplace-based)	Workforce	<p>The mean workplace-based earnings for West Midlands(3-LEP) was at £37,122 in 2021.</p>	<p>This is a slight increase of 1.4%</p>	<p>This is an improvement from the Annual Workplace based earnings figure of £32,027 in 2016.</p>	<p>England Average is at £38,876 which has seen a 1.3% decrease compared to the figure last year.</p>
Claimant Count (16-24, 16-64)	Workforce	<p>There were 174,645 total claimants between West Midlands(3-LEP) for October 2021, 31,440 of these claimants were 16-24 years old.</p>	<p>This represents a 15.9% decrease vs October 2020 for the overall claimants. Similarly, 16-24 Claimants has decreased by 26.6% vs last year.</p>	<p>Claimant (16-64) has increased by 148.4% vs October 2016. Claimants 16-64 also increased by 94.6%.</p>	<p>A year-on-year decrease of 22.16% in claimants for the UK. 16-24 claimants group saw a bigger decrease of 33.66%</p>
GVA per hour worked	Growth & Productivity	<p>Coventry and Warwickshire recorded a £37 hourly GVA, followed by GBSLEP on £32.5 and BCLEP on £27.8.</p>	<p>These are all increases on last year, where respective figures were £36.6, £32.2, and £27.5</p>	<p>Much higher than 2014 figures of £31.7, £28.9, and £25.8.</p>	<p>The UK GVA is higher, at £35.2, than GBSLEP and BCLEP, but lower than CWLEP.</p>
GVA Per Employee	Growth & Productivity	<p>Coventry and Warwickshire recorded a £59K hourly GVA, followed by GBSLEP on £52K and BCLEP on £46K.</p>	<p>These are all increases on last year, where respective figures were £59, £51, and £45</p>	<p>Much higher than 2014 figures of £52, £47, and £41.</p>	<p>The UK GVA is higher, at £57K, than GBSLEP and BCLEP, but lower than CWLEP.</p>
R&D Expenditure by Businesses	Growth & Productivity	<p>West Midlands(NUTS1) Region had a total expenditure of £2,258 million) for 2020.</p>	<p>4.65% decrease</p>	<p>17.4% increase in comparison to the 2014 figure.</p>	<p>West Midlands(NUTS1) Region is the 4th largest contributor at 8.4% of 2020's Businesses' R&D expenditure after London(12.5%), South East (20.4%) and East of England (21.7%)</p>

Indicator	Theme	Where we are now	Change over the last year	Direction of Travel (Five year trend)	Relative to Peer Group
Productivity by Region and Industry	Growth & Productivity	Nominal(smoothed) GVA(B) per hour worked for the West Midlands(ITL1) was at £31.30	A 1.20% increase in Nominal GVA(B) versus the 2018 figure.	2014 figure stood at £27.80, same as East Midlands.	Amongst the ITL1 Regions, West Midlands remained 7 th whereas South West has overtaken North West for 5 th place at £31.9
Further Education and Apprenticeship Provision - ESFA datacube	Provision	Combined FE and apprenticeship achievements were 158,230 in the West Midlands in 2018/19	This is down on 167,960 in 2017/18	And down further on 212,160 in 2014/15	The totals for England have followed the same downward trajectory for combined FE and apprenticeships.
HE graduating students	Provision	45,300 undergraduates and 25780 postgraduates completed courses in the West Midlands in 2019/2020.	This is a fall on the 2018/19 figures of 46,685 for undergraduates, but a rise on the postgraduate figure of 25,535 . However the overall trend is a decrease.	Compared to 2014/15 figures of 40,735 undergraduates and 21,290 , there has been a significant increase.	When compared to population, the West Midlands produces almost exactly the same number of university graduates as the UK, at 1.19 graduates per 100 population for both.

The Skills Funding System

The Adult Education Budget (AEB)

The Adult Education Budget is the primary means by which the West Midlands Combined Authority funds adult education courses. It is available to fund course fees for adults aged 19+, and from August 2019 was devolved to the West Midlands, having previously been managed by the Education and Skills Funding Agency (ESFA).

In the long term, this gives the region flexibility to tweak funding rules to suit local requirements. For instance, this may include pilot schemes, shifting the way we think about the effectiveness of FE provision to focus more on impact, co-locating provision with other public services, and making use of risk-sharing to support new courses and new methods of teaching.

With the funding comes the responsibility to secure provision of appropriate facilities and education and training suitable to people aged 19+, except those under 25 who have an educational, health, and care plan. As well as meeting the age requirement, people in receipt of the funding must also not already have a comparable or higher-level qualification than the one they are applying to study. For study to be free, the applicant should be aged under 24 on commencing the course. Those earning less than £17,004 also have co-funding support for access to levels 1 and 2.

The WMCA's function is to determine worthy courses of study and providers, for which it can pay tuition fees on behalf of the student. According to the statutory instrument which devolved this power to the region, the WMCA must also 'encourage' uptake of this education

and training and 'encourage employers to participate in the provision' and 'contribute to the costs' of it.

The WMCA can also work concurrently with the Secretary of State to provide funding directly to providers, people proposing to receive education or training, for encouraging provision, for supporting student costs (such as transport, childcare.)

In total, the WMCA is responsible for AEB funding of around £130million per annum. It aims to rapidly prototype, test, and mainstream new and improved provision across further and higher education estates, targeted at new emerging sectors and supporting those currently with low/no qualifications.

T-levels

T-levels are new certifications aimed at pupils aged 16+ and intended to provide a rigorous vocational alternative to three A Levels, including work placements and guaranteeing a basic level of English and Maths competency. They are a framework which can include existing vocational qualifications within it. 24 subjects will ultimately be covered, with the first three having been launched in September 2020 and the first ten now available for new starters.

These will use the existing funding arrangements, with new bands based on the hours spent on the T Levels. There will be a flat rate of Industry Placement funding, and funding for students who need to retake level 2 in maths and English to meet the exit requirements of the T Level.

16-19 Funding

A national funding formula is used by the ESFA to provide funding to sixth form colleges, FE, and special schools/academies as well as some specialist institutions. This formula considers the number of students, depth of study, a ‘retention funding’ component based on how many students stay on the course, level 3 maths/English, and ‘disadvantage funding’.

Disadvantage funding is aimed at students from areas of high IMD (Index of Multiple

Deprivation). A second block supports students with moderate learning difficulties and other additional needs, based on low prior attainment in maths and English. The WMCA has some discretion about how disadvantage funding is allocated.

This 16-19 funding also supports a few other bonus funding elements for particular course content, placements, or student costs.

The funding is calculated using the Individualized Learner Record for FE, plus the school Census conducted each autumn.

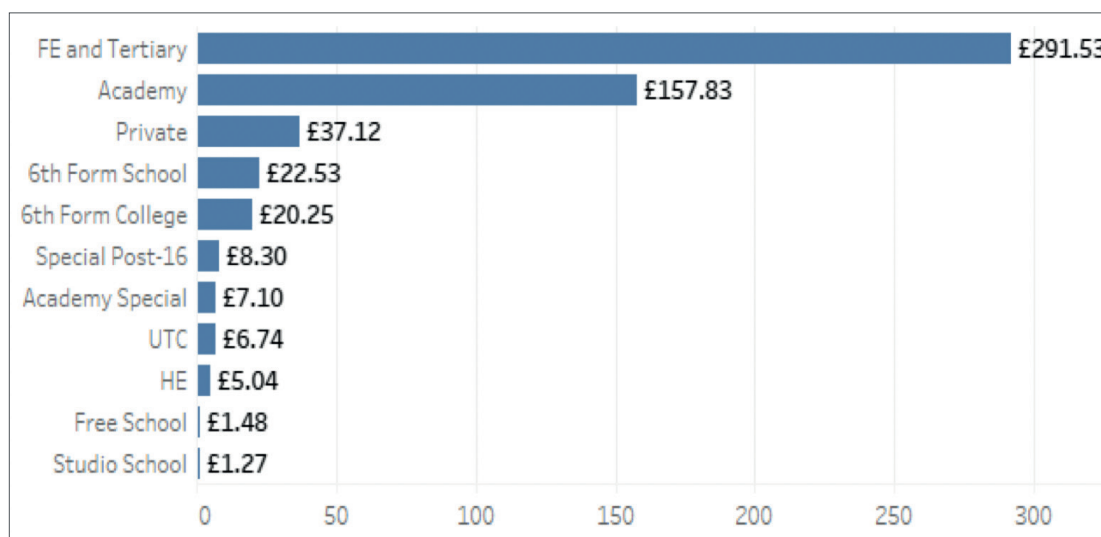


Figure 1: Total funding for 16-19 year-old provision in the West Midlands (3LEP) area, 2018/19 academic year.

Local Authority	Total (£millions)
Birmingham	£134.76
Coventry	£33.00
Dudley	£57.52
Sandwell	£38.42
Solihull	£41.92
Staffordshire	£78.36
Walsall	£46.55
Warwickshire	£63.79
Wolverhampton	£29.83
Worcestershire	£36.31
Grand Total	£560.46

Table 1: Total 16-19 funding by Local Authority, 2018/19 academic year

Apprenticeships and Traineeships

Apprenticeships and traineeships are not devolved.

Apprenticeships are funded by the Apprenticeship Levy, in which employers with an annual wage bill of over £3m are required to pay into an Education and Skills Funding Agency (ESFA) fund. This can then be recouped by employers for up to two years to fund training of apprentices.

Traineeships are still funded by the ESFA (they are unpaid but expenses can be paid) and put young people qualified below Level 3 through a course of up to 6 months, during which they have work experience to prepare them for work or an apprenticeship. This may be coupled with English and maths support if needed.

Work and Health Programme

This programme is intended to support those out of work. It is voluntary unless an individual has been unemployed and claiming benefits for more than 24 months. People who are disabled, carers or former carers, former members of the armed forces, refugees, victims of domestic violence, are considered a priority group and also may receive support.

In the West Midlands (cases processed at the Shaw Trust charity and covering the WMCA metropolitan area), there has been a sharp decline in the total number of people admitted to the scheme over the last nine months for which data is available.

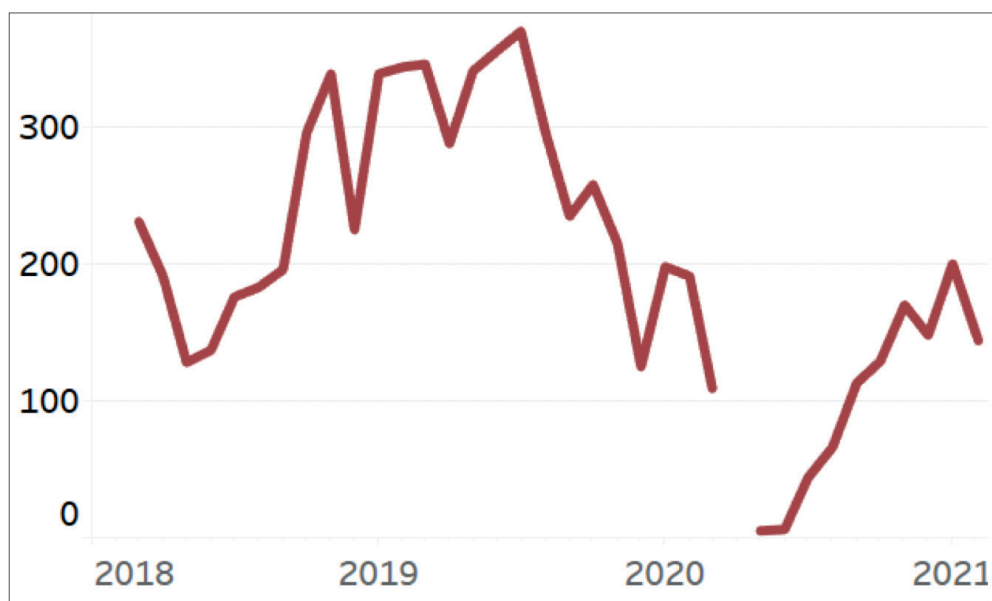


Figure 2: Trend in places funded by the Work and Health Programme, funded by the Shaw Trust in the West Midlands Metropolitan area.

Since the scheme was first available in the region, it has enrolled **14,328** people with disabilities, and **3,004** long-term unemployed.

Outcome figures for the West Midlands from March 2018 (when the scheme was rolled out nationally) to February 2021 indicate that **3000** of those enrolled found employment within 12 months, of a total **19,134**, a rate of **15.7%**.

Age breakdown: while the age of those on the scheme skews young, there are still a significant number of people enrolled in each age group:

Age Range	Percentage Provision
18 - 24	15.4%
25 – 34	11.0%
35 – 44	9.5%
45 – 49	10.9%
50 – 54	12.1%
55 – 59	12.5%
60+	10.2%
Total recipients (average)	14,932

Table 2: Proportion of Work and Health Programme provision (2018-2019) by age range, West Midlands Metropolitan area.

High value course premium:

Additional funding has been made available by the government from September 2020, to support Level 3 provision for 18-19-year-olds during the pandemic. This provision derived from a 2019 announcement of an additional £120m of 16-19 funding reserved for key subjects, including level 3 qualifications in:

Engineering: Including fabrication and welding, engineering technologies, and other specific and general engineering skills.

Manufacturing: particularly fashion and textiles, and product design.

Mathematics and Statistics

Construction: including digital skills and building information modelling.

ICT: for practitioners, including coding, cyber security, and computer science including scripting and app programming.

Transport operations and maintenance:

Including aviation, bus and coach, rail engineering and specific qualifications of maintenance by vehicle type.

As well as A levels in biology, chemistry, computer science, design and technology, electricity, mathematics, further mathematics, and physics.

Future funding arrangements and asks

- The winding down of the **European Structural and Investment Fund**, which includes the Social Fund and the Regional Development Fund, will make it important for the region to obtain funding via the new **UK Shared Prosperity Fund** to make up the shortfall.
- National Skills Fund: The Conservative Government's 2019 election pledge to make £3bn available over the parliament, starting 2021, is intended as a first step towards a 'Right to Retrain.' £2.5bn was put forward in the 2020 budget for this purpose to bolster further education.
- The WMCA aims to support high quality skills provision using a 'single pot', targeting skills challenges in the region with AEB, the UK Shared Prosperity Fund, the Work and Health Programme, the National Retraining Scheme, and the National Skills Fund in tandem.

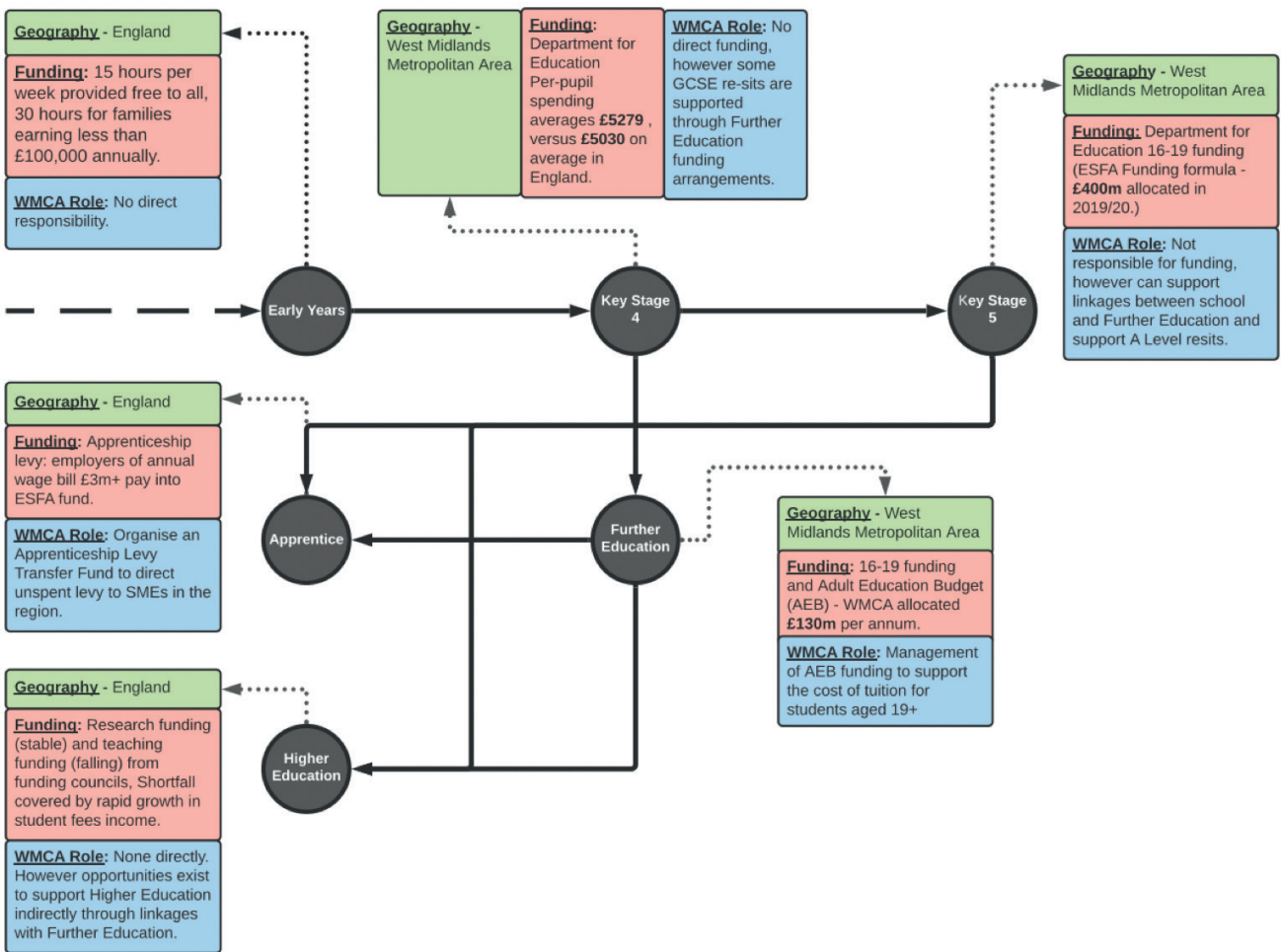


Figure 3: Summary diagram of the West Midlands Skills System in terms of geography, funding, and WMCA responsibilities.

Methodology

Scope: Most analysis in this report relates to the three Local Enterprise Partnerships: The Black Country LEP, Coventry & Warwickshire LEP, and the Greater Birmingham and Solihull LEP, and the local authorities that make them up. Unless otherwise specified, 'West Midlands' refers to this 3-LEP geography. 'West Midlands Region' refers to the wider region of 30 local authorities, including Worcester, Shropshire, and Staffordshire. Analysis of the status quo for skills is based on the most recent data available, and the 2027 date analysed in the Department for Education's Working Futures report is used as an end-point for considering future developments.

Central to skills and education strategy is the prospect for young people in entering the workforce. Consequently, many of the education statistics highlighted here refer to 18 to 24 year-olds.

For further education, primary data on further education course provision, sourced from the Individualised Learner Record (ILR), is available only for the West Midlands metropolitan area, consisting of WMCA constituent members Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall, and Wolverhampton. It includes those who commute into this area to study (i.e. it is based on place of study). However, data on qualification levels, apprenticeships, and Higher Education provision are all discussed at the 3-LEP geography.

Supply data is sourced from ILR, which comprises a list of students registered to further education courses in the WMCA metropolitan area, as well as a pivot dataset made available by the Education and Skills Funding Agency. This dataset provides detailed background criteria for each student in the further education system, including age, ethnicity, and area- and district-level postcodes. These data permit us to understand how effectively the skills system is reaching different groups and locations. Apprenticeship figures are derived from the same learner records data, but available for the full West Midlands Region.

Course title, duration, and qualification type are available for each student, making it possible to analyse the skills supply in detail. For analysis of the age, ethnicity, and level of study in further education data for the last full year available (February 2019 to January 2020 inclusive) is used. In comparing course completions and apprenticeships to job postings, the focus is on the last six months for which data is available (August 2019 to January 2020 inclusive). University graduation rates form the most recent academic year available (2019/19) are also contrasted with current job postings.

Demand data is derived primarily from three sources:

- Business sentiment regarding skills from the most recent (2019) Employer Skills Survey. This consists of responses to a questionnaire about how skills shortages affect productivity and opportunities for businesses.
- The Department for Education's Working Futures report (Published February 2020), which projects total jobs growth and changes in qualification levels in the broad sectors of the economy both for the UK and for each English region. Given the extent of the economic impact of Covid-19 in 2020 it should be kept in mind that the projections were made before the pandemic. In this report use is made of the Working Futures forecasts alongside risk factors arising from the pandemic.
- Job postings data sourced from economic analysis firm Emsi. These data run up to the latest complete month. Emsi produce the unique job postings figures by collecting data from multiple online job platforms before removing any duplicate entries. It is important to be aware for this data that:
 - Job adverts may not be immediately removed once the position is filled.
 - A large proportion of jobs are likely not posted online, particularly for technical jobs in fields such as construction and manufacturing, and casual customer services work.
 - Some positions may be advertised only internally]
 - The same job may also be posted on and removed from multiple jobsites at different times.
 - With these limitations in mind, the data provides a useful profile of change throughout the period of pandemic lockdown, and lets us compare job posting numbers to the supply of qualified entrants from further education courses.

Local Labour Market Context

Key Findings

- A rapid improvement in qualifications in the working-age population, with a rising proportion with advanced qualifications and a declining proportion with no qualifications, suggests a strong improvement in the region's skill profile.
- The steep rise in claimant count through the pandemic has, as a proportion, been greatest in more rural areas, and in the Coventry and Warwickshire LEP in general. On the other hand, the largest absolute increase in claimant numbers has been in the urban core.

- While the region as a whole is more resilient than the UK average to an ageing population, the projected population changes are very uneven across the region in terms of both young and retirement-age people.

Qualifications and Deprivation

By overlaying the share of residents with no qualifications over a map of deprivation in the region, the strong correlation between the two is made clear:

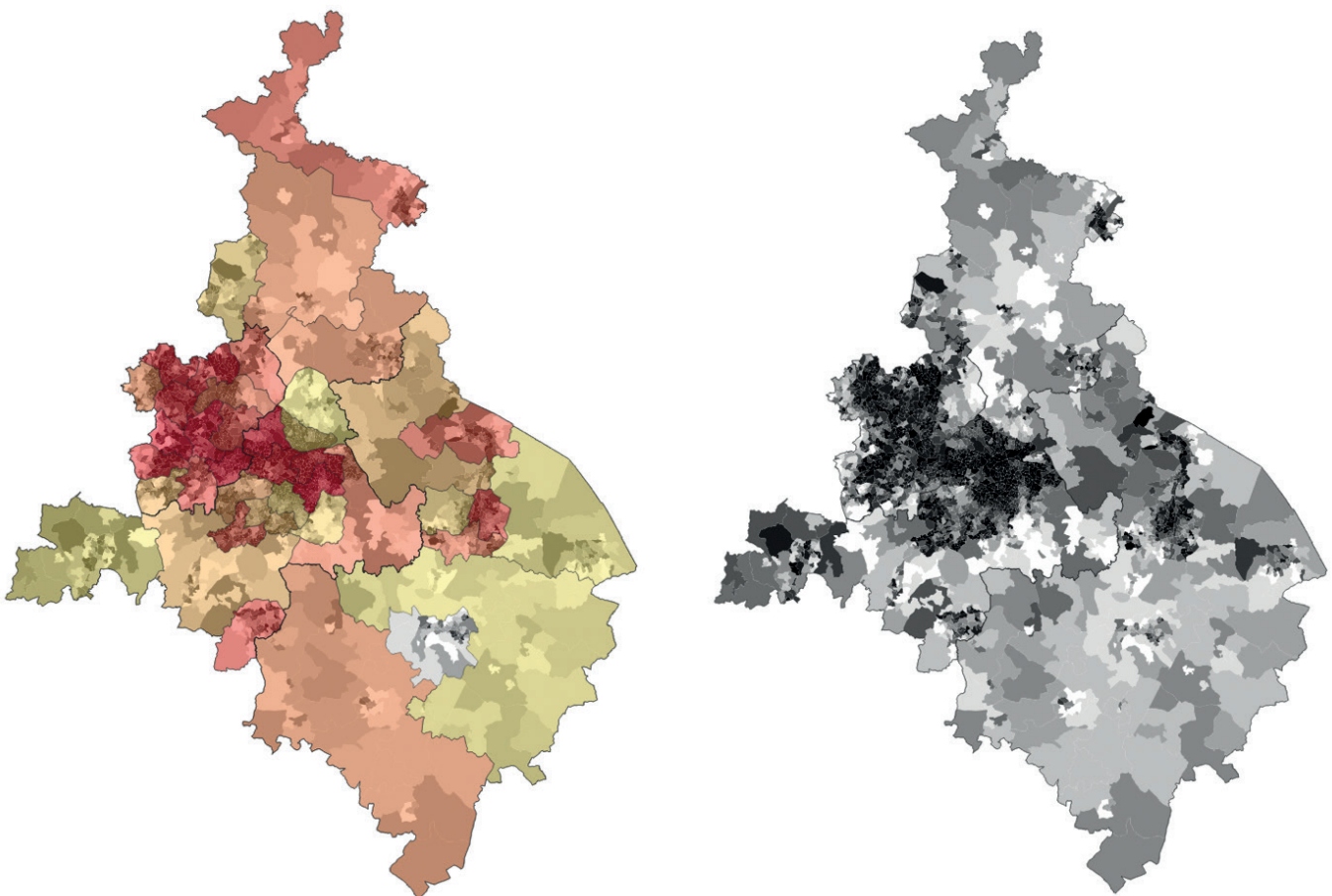


Figure 4: Proportion of residents with no qualifications (red: greater proportion, yellow: lesser), overlaid on 2019 Index of Multiple Deprivation, showing areas left behind. Left: Both layers, Right: just deprivation. Note that data is missing for Warwick.

Qualifications by Local Enterprise Partnership

Summarising the profile of qualifications across different NVQ levels shows that the trend in qualification levels in the West Midlands workforce has continued its optimistic

trajectory in the last year, with steep declines expected in the proportion of the population with no qualifications, and a corresponding rise in higher qualification levels:

Qualification Level	Black Country	Coventry and Warwickshire	Greater Birmingham and Solihull	UK
% with NVQ4+ - aged 16-64	29.3	43.8	37.6	43.0
% with NVQ3 - aged 16-64	17.8	19.2	19.8	18.2
% with NVQ2 - aged 16-64	18.9	15.6	19.1	16.8
% with NVQ1 - aged 16-64	11.5	10.1	9.8	9.6
% with other qualifications (NVQ) - aged 16-64	9.9	5.7	5.6	5.8
% with no qualifications (NVQ) - aged 16-64	12.6	5.5	8.1	6.6

Table 3: Summary of the percentage of West Midlands working-age population at each qualification level, by NVQ equivalent. 2020 data, with UK comparison.

There has been a slight drop at NVQ2 as more young people stay in education for longer, while levels 1, 3, and 4 have seen increases and the proportion with no qualifications has dropped significantly. For comparison, 2019 figures had a full 16.7% of Black Country

working-age residents, and 7.3% and 10.0% of CWLEP and GBSLEP, with no qualifications. The large decrease is encouraging, but should be taken with caution until more data on post-covid mobility is available, for example from the upcoming 2021 Census.

Growth in Claimant Count during COVID-19 Pandemic:

Between January 2020 and October 2021, the steep rise in the number of people out of work and claiming benefits has been proportionally greater in areas not normally accustomed to high unemployment, particularly areas outside the region’s urban core.

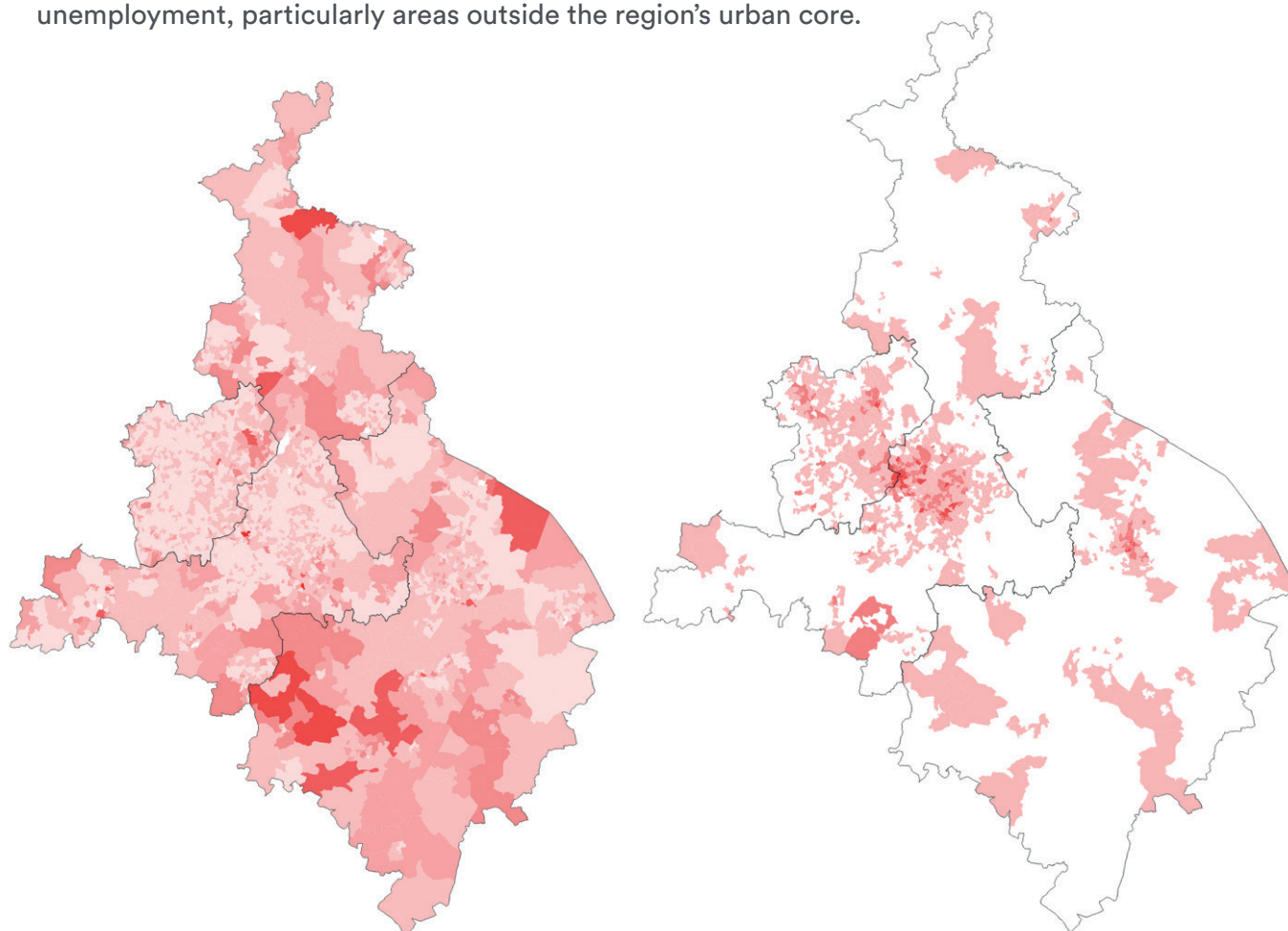


Figure 5: The increase in claimant count by Census Lower Super Output Area, January 2020 – October 2021. Left: percentage change, Right: absolute increase in claimant numbers.

The greatest absolute increase, however, has been in central Birmingham, Coventry, Wolverhampton, and the Black Country.

Claimant Count by Local Enterprise Partnership

This greater growth in less urban areas is

reflected in the LEP-level totals, in which Coventry and Warwickshire has seen the largest increase since the beginning of the pandemic, with smaller and similar increases seen in Greater Birmingham and Solihull and the Black Country.

Local Enterprise Partnership	Jan-20	Nov-21	Increase
Black Country	35,780	52,255	46.00%
Coventry and Warwickshire	14,900	25,260	69.50%
Greater Birmingham and Solihull	61,490	91,245	48.40%
West Midlands 3LEP	112,175	168,760	50.40%

Table 4: Increase in claimant count since before the pandemic, by LEP area.

Trends in employments furloughed, through pandemic

The decline in employments furloughed in the West Midlands has closely followed the national trajectory, with the final count at the termination of the scheme in September 2021 a fraction of the peak. This suggests a successful re-absorption of furloughed employees back into the workforce.

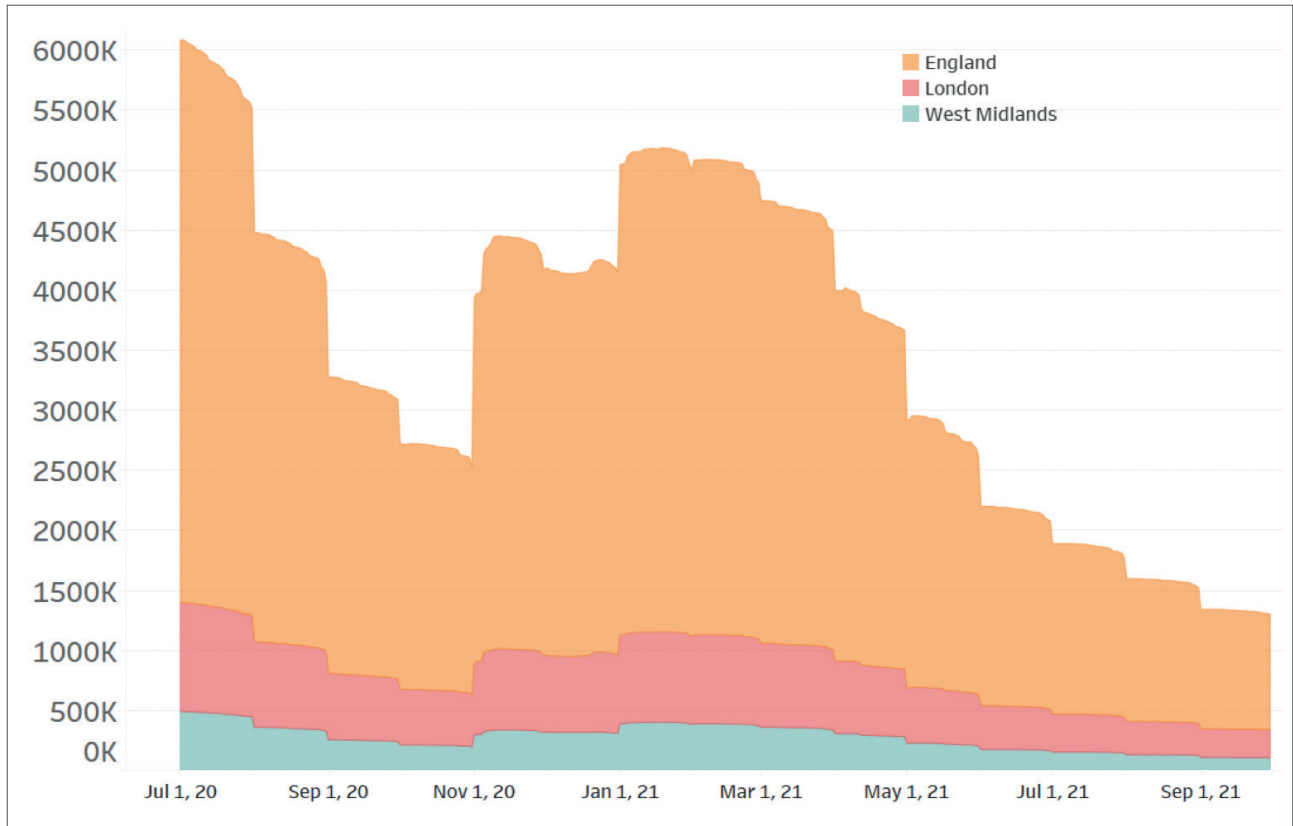


Figure 6: Trend in total furloughed employments, for England, West Midlands, and London.

Not in Employment, Education, or Training (NEET), and unknown status:

In the West Midlands Region, 5.7% of 16 and 17-year-olds recorded by Local Authorities as NEET. This was highest in Shropshire (10.3%) followed by Birmingham (8.5%). This represents a significant decrease on the 7.3% rate observed in 2016, though it is above the England average of 5.5% and well above the London (4.0%) and East of England (4.3%) rates.

Travel to Work

2011 Census travel-to-work data indicate commuting patterns in the region (shown in **Figure 5** for jobs in Birmingham and Coventry respectively) that are largely within each individual LEP area. For instance, commuters to Birmingham are overwhelmingly travelling from within the GBSLEP area. Travel to work distance is more restricted in BCLEP, in part likely as a result of more limited transport infrastructure, as well as the structure of employment.

Comparison of income to house prices by the ONS shows that housing affordability has worsened most rapidly in areas where a significant number of people commute into the conurbation, notably Nuneaton & Bedworth (**32.5%**) and Rugby (**23.4%**), and Bromsgrove (**29.0%**). This may become a long-term constraint on attracting the necessary skills to the region.

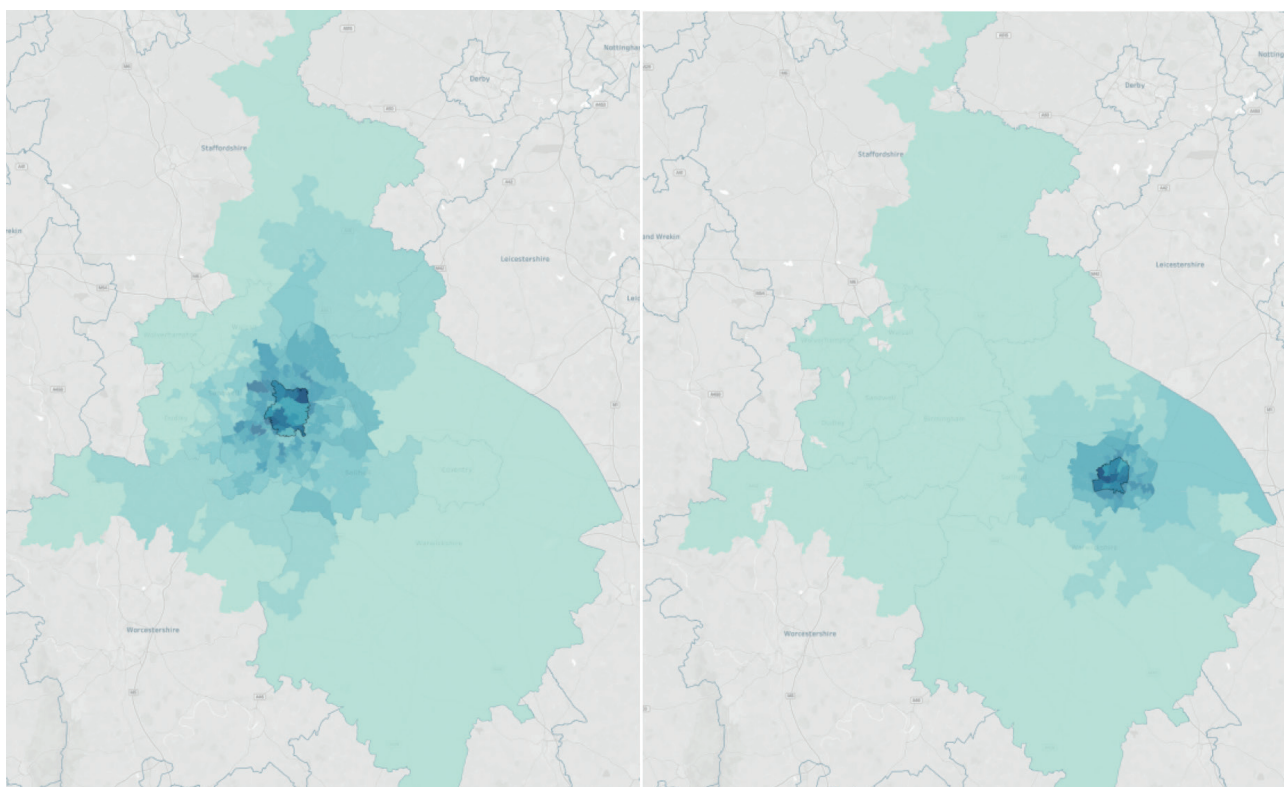


Figure 7: Map of number of people travelling to work by 2011 Census Middle Super Output Area. Darker shading corresponds to Left: travel to Birmingham City Centre, Right: travel to Coventry

Occupations

Estimates by Emsi (shown in Figure 4) indicate the most common industries for people to be employed in in the West Midlands. The grey markers indicate the UK average for a population of the same size.

This chart showcases the region’s comparative advantage in motor vehicle trade and manufacturing as well as its jobs deficit in professional, technical, IT, and construction skills, all sectors identified in the Local Industrial Strategy as transformational sectors:

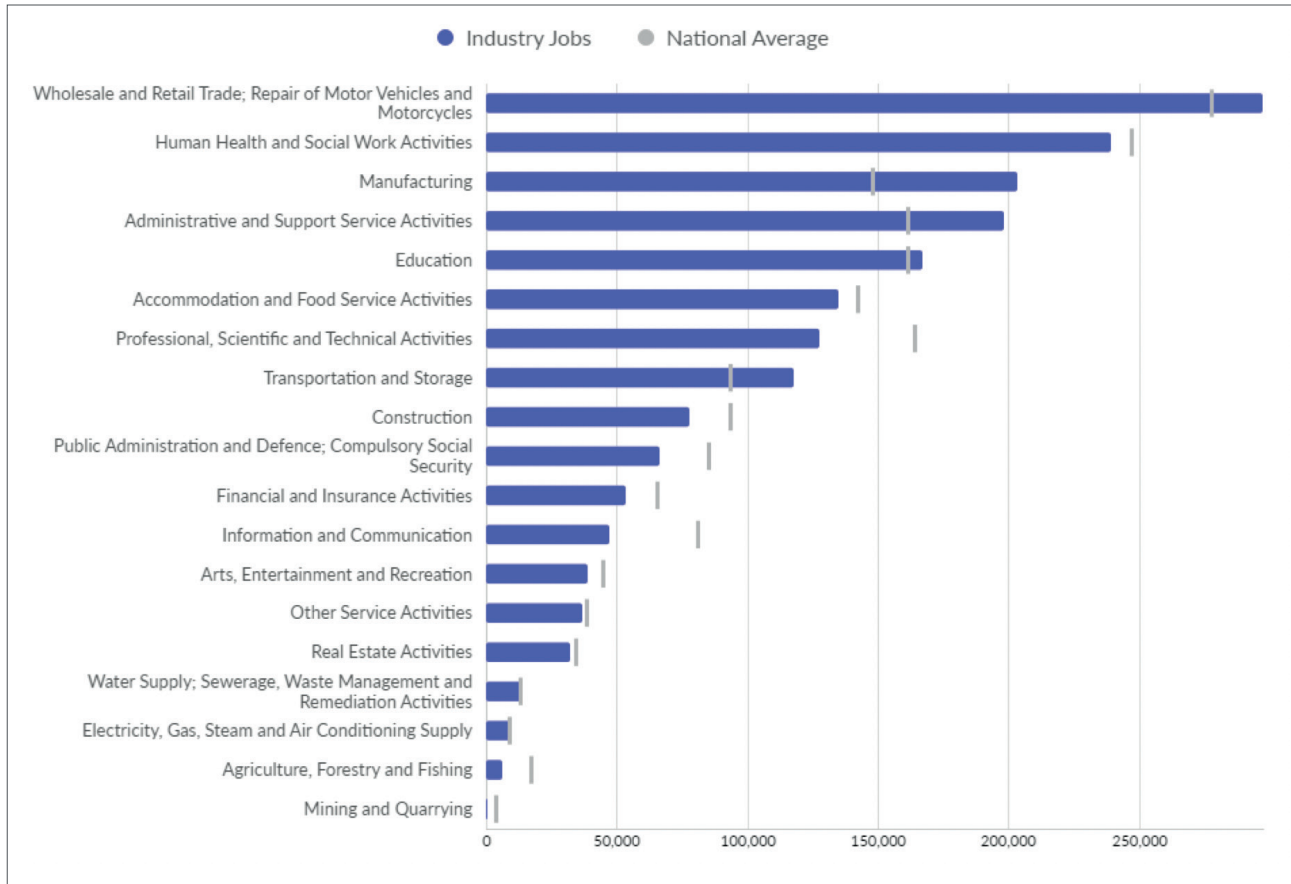


Figure 8: Emsi data on 2021 jobs by industry (bars), versus the national average (marks).City Centre

Key Sectors and Industrial Strategy

Several of these sectors were identified in the West Midlands Local Industrial Strategy and Strategic Economic plan as key in responding to technological change, and being major drivers of increased productivity and new employment:

Transformational Sectors	Enabling Sectors
<ul style="list-style-type: none"> Advanced manufacturing Business, professional and financial services Construction (building technologies) Digital and Creative Lifesciences and social care Logistics and transport technologies Low carbon and environmental technologies 	<ul style="list-style-type: none"> Cultural economy including sport Public sector including education Retail

Source: WMCA SEP, 2016, Technical Appendix - Sectors

New product and process innovations are likely to change both the composition of the regional economy in terms of sector breakdown, but also how work is performed within existing sectors. The following considerations will be important in linking the overall skills strategy to key sectors:

- A confluence of factors coming together in the construction sector that will make support for radical innovation essential, in a sector which has been historically slow to innovate. The rising cost of housing, the need for a zero-carbon model of development, and current disruptions to international trade and commuting patterns, point to the need for a new model. It will be essential to create a tight connection between the region's young people, knowledge infrastructure, and product and process innovation in the sector. Infrastructure for research and development and community-led testing, perhaps on the model of Boston's Housing Innovation Lab, could go some way towards reconciling greater density, affordability, and liveability, as well as the pairing of local distinctiveness and technical resilience identified in the West Midlands Design Charter. The Charter sets out priorities for housing in the region including character, connectivity and mobility, future-readiness, health and wellbeing, engagement and stewardship, and delivery of social value. Determining whether the skills system supports the innovation system behind these goals would be a valuable exercise.

- While manufacturing employment in the region outstrips the UK average, and is an area of comparative advantage, advances in automation and manufacturing techniques are likely to reduce employment and tilt the skills profile in favour of the higher skill levels which are currently in short supply. The need to develop and upskill existing manufacturing workers, and create alternate pathways which are compatible with their skills, will be essential in avoiding semi-skilled workers being left behind in the coming years.
- Similar analysis will be essential in understanding the changes technology is driving in the services sector. There is growing interest in and use of data science and machine learning applications to improve business processes that do not fit cleanly into current occupational categories; it is essential that policy and funding are in place to bolster work-based training in these methods. University-industry linkages will be invaluable in leveraging these fields in broader systems innovation to improve service delivery in the region as well as radical innovation, entrepreneurship and the development of new products.

In the infrastructure sector, major projects in the region including HS2 are boosting demand and drawing on supply chains in the region; institutions such as the Advanced Transport and Infrastructure National College (NCATI) that give young people access to foundation and degree-level qualifications and future jobs in this sector will be essential to ensure there are viable pathways to good jobs via vocational education.

Projected Population Trends by Local Authority:

ONS forecasts of population increase across the West Midlands (3LEP) area below show distinct contrasts in how growth rates across local authorities will vary by age group.

Particularly notable are:

- Tamworth is the only Local Authority which can expect to see a decline in the total number of young people, while in other areas this age group is expected to grow, albeit slower than for the over-65s.
- In East Staffordshire and Cannock Chase, huge discrepancies exist between the slow growth rate in the young and rapid growth rate expected for over-65s, a demographic crunch more representative of England in general than the urban core of the West Midlands, which is more insulated from these problems.
- The best-placed Local Authorities in coping with these trends are Coventry, Bromsgrove, and Nuneaton and Bedworth, each of which has a smaller gap between the projected growth rate of the young and of retirees.
- Recent uncertainty in terms of birth rates and post-covid fluctuations should give us caution in interpreting these trends.

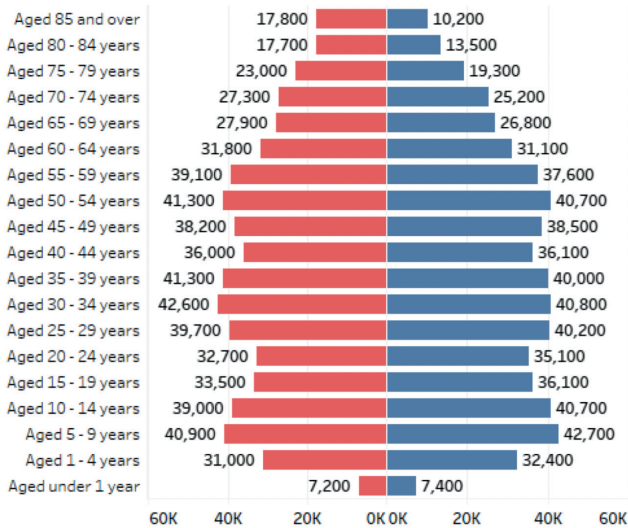
Local Authority	% Change (All Ages)	% Change (16-24)	% Change (65+)
Birmingham	7.4%	4.2%	28.1%
Bromsgrove	13.7%	13.3%	28.8%
Cannock Chase	11.3%	3.1%	37.0%
Coventry	16.9%	12.4%	24.6%
Dudley	8.2%	6.9%	22.3%
East Staffordshire	9.9%	5.3%	39.8%
Lichfield	6.7%	2.3%	20.8%
North Warwickshire	15.8%	15.3%	35.2%
Nuneaton and Bedworth	11.8%	13.4%	24.2%
Redditch	1.1%	1.0%	14.9%
Rugby	13.2%	13.4%	31.9%
Sandwell	9.5%	7.9%	32.9%
Solihull	10.7%	11.7%	22.1%
Stratford-on-Avon	20.9%	15.4%	39.5%
Tamworth	0.1%	-4.9%	22.4%
Walsall	11.1%	12.5%	24.8%
Warwick	13.0%	9.9%	31.3%
Wolverhampton	9.5%	13.1%	32.4%
Wyre Forest	8.6%	8.1%	27.0%

Table 5: Summary of projected population growth between 2022 and 2042, by Local Authority.

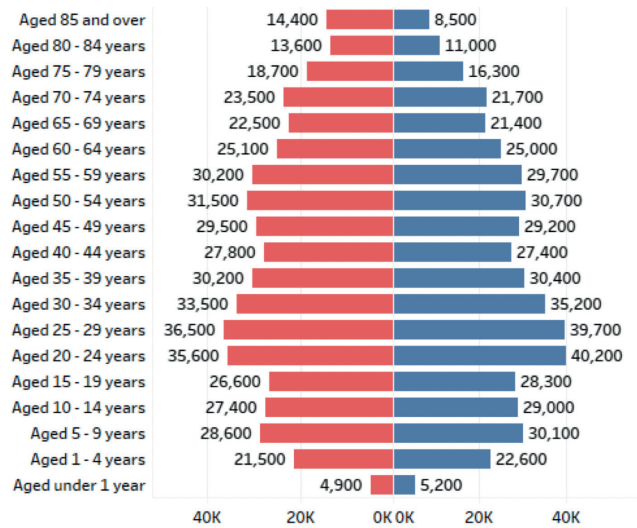
Population Pyramids by Local Enterprise Partnership:

A more detailed summary of the current population breakdown is shown below in three population pyramids constructed for each of the Local Enterprise Partnerships:

Black Country LEP



Coventry & Warwickshire LEP



Greater Birmingham & Solihull LEP

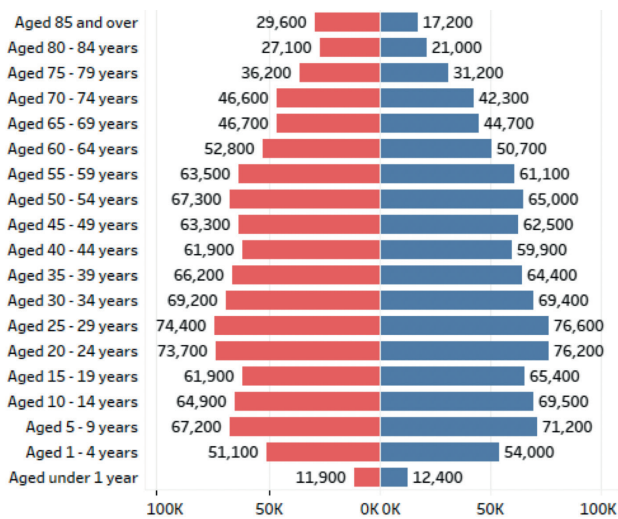


Figure 9: Population pyramids for each West Midlands LEP area, based on ONS mid-year population estimates.

Local Skills Report Evidence Base – Skills Supply Analysis

Jobs by Industry, Emsi

Emsi employment data contrast the proportion of employment in different industries in the West Midlands to the UK average. The figures are based on the Location Quotient, which simply takes the former and divides it by the latter as a ratio:

Description	United Kingdom	Black Country LEP	GBSLEP	CWLEP
Administrative and Support Service Activities	1	0.79	1.59	1.01
Transportation and Storage	1	1.32	1.18	1.40
Manufacturing	1	1.82	1.16	1.43
Accommodation and Food Service Activities	1	0.80	1.01	1.06
Financial and Insurance Activities	1	0.64	0.99	0.67
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	1	1.25	0.99	1.07
Education	1	1.11	0.98	1.09
Real Estate Activities	1	1.19	0.96	0.71
Human Health and Social Work Activities	1	1.18	0.95	0.81
Other Service Activities	1	0.90	0.94	1.03
Professional, Scientific and Technical Activities	1	0.42	0.84	0.95
Public Administration and Defence; Compulsory Social Security	1	0.73	0.84	0.70
Arts, Entertainment and Recreation	1	0.90	0.83	1.05
Construction	1	0.94	0.83	0.71
Water Supply; Sewerage, Waste Management and Remediation Activities	1	1.32	0.80	1.47
Information and Communication	1	0.34	0.64	0.66
Electricity, Gas, Steam and Air Conditioning Supply	1	0.78	0.38	3.32
Agriculture, Forestry and Fishing	1	0.10	0.36	0.61
Mining and Quarrying	1	0.03	0.25	0.46

Table 6: Comparison of each Local Enterprise Partnership to the UK in terms of concentration of employment by industry. Sourced from Emsi, 2021.

By this measure the Black Country is as different to the rest of the region as it is from the UK average as a whole, being considerably ahead in retail trade and motor vehicles, real estate activities, transportation and storage, but most of all manufacturing, which as an 82% larger share of employment than the UK average. CWLEP and GBSLEP also outperform the UK mean by 43% and 16% respectively.

The region as a whole considerably outstrips the UK average on administrative and support services owing to the strength of GBSLEP. Within the region, CWLEP is greatly over-represented in electricity, gas, steam, and air conditioning supply (332% of UK) and water and waste management (47%).

Early Years Education

Comparison of early years education in regions on the basis of the IDACI (Income Deprivation Affecting Children, an metric which forms part of the Index of Multiple Deprivation) makes clear the extent of the disparity between the advantaged and disadvantaged. In the West Midlands, in the most disadvantaged decile

62% of young pupils reach the 'expected level of development' (a metric which includes written and verbal communication and numeracy), while 79% in the least deprived decile reach this level. This gap is wider than in London and the East of England, but narrower than in all other regions.

Row Labels	0-10%	90-100%	Attainment Gap
North East	62	83	21
North West	59	80	21
Yorkshire and the Humber	59	80	21
East Midlands	60	78	18
West Midlands	62	79	17
East of England	63	78	15
London	69	82	13
South East	62	81	19
South West	61	79	18

Table 7: English regions are compared by the gap in the number of young pupils reaching 'an expected level of development' by age five, between the lowest and highest deciles on the metric of Income Deprivation Affecting Children (IDACI.) DfE, 2018/19

A Level Attainment

Looking at the proportion of level 3 students who attain at least two A Level qualifications, West Midlands slightly underperforms (at 78.2%) the England mean of 79.5%. There is a very high degree of variance between Local Authorities in the region, with only 69.7% of students in Wolverhampton reaching this level, but 88.3% in Solihull.

There is also a significant disparity within Local Authorities between students eligible for Free School Meals and ineligible. This gap is biggest in Coventry, where 88.3% of non-FSM eligible pupils attain two A Level qualifications, but only 73.6% of those eligible.

Row Labels	% Two A Levels (FSM)	% Two A Levels (average)	Disparity	Average Score (FSM)
Birmingham	83.9%	88.5%	4.6%	B-
Coventry	73.6%	88.3%	14.7%	C+
Dudley	92.0%	96.2%	4.2%	B-
Sandwell	66.8%	75.7%	8.8%	C+
Solihull	86.5%	92.5%	6.0%	C+
Walsall	75.2%	84.0%	8.8%	C+
Wolverhampton	74.1%	82.9%	8.7%	B-

Table 8: Comparison between West Midlands Local Authorities by the proportion of pupils who attain at least two A Levels, by Free School Meal eligibility, and average scores. DfE, 2020/21.

Dudley is by far the best-performing Local Authority by this measure, with the equivalent figures being 92% and 96.2%. Note that FSM-eligible students in Dudley have higher attainment by this metric than even the student average in the other Local Authorities. However, the average grade of B- in Dudley is lower than the B reported for all Local Authorities other than Dudley and Sandwell. This suggests that grades awarded in Dudley were more tightly clustered around the middle than in other Local Authorities. Future years of data will reveal how much of this difference can be attributed to the unique situation for assessment during the pandemic.

Trends in FE and Apprenticeship Supply

As a result of the pandemic, recruitment into apprenticeships and Further Education in 2020 was significantly below 2019 levels, with August-October, the busiest period for new starts, seeing **171,269** new FE course enrolments and **20,329** apprenticeship starts, declines of **17.5%** and **21.1%** respectively on 2019. These declines would likely have been more severe if the busiest period of recruitment had not, fortunately, been between the two periods of winter lockdown.

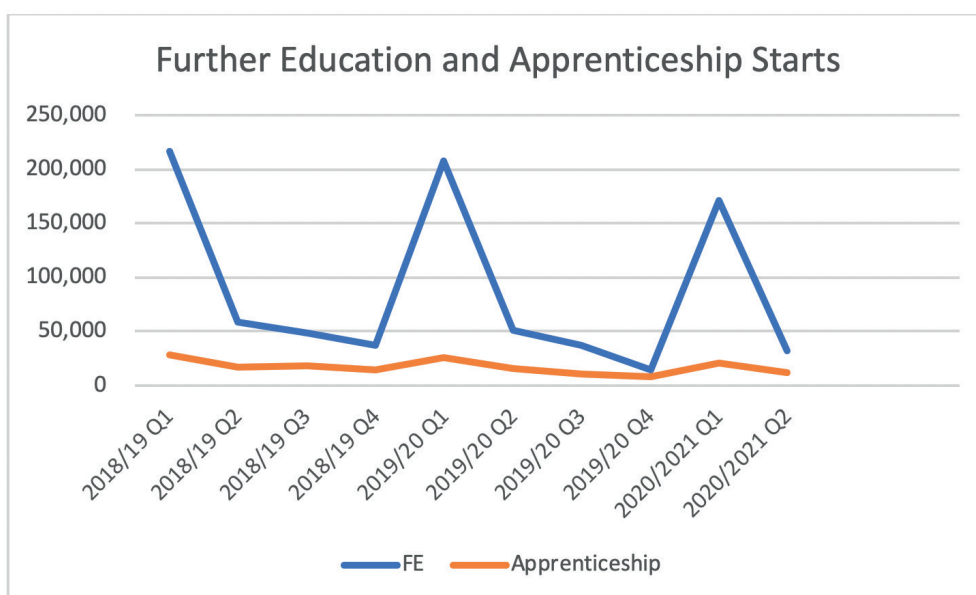


Figure 10: Long term trend in Further Education and apprenticeship courses started in the years following introduction of the Apprenticeship Levy. Note the sharp seasonality, as recruitment is highest in the first quarter which begins in August.

Analysis by Prior Attainment

By comparing the level of study of our new FE students and apprentices to the level of qualification they held before, we can get a sense of the value added to individual students' prospects, and who is reached or not reached by provision.

The grid below compares the qualification being completed by an FE student to their previous level of study. As one might expect, most students had a prior attainment which was either one level below their current course, or at the same level:

Prior Attainment	Entry level	Level 1	Level 2	Level 3	Level 4	Level 5	Total
a. No Qualifications	12,524	5,593	8,765	2,191	209	30	29,312
b. Entry Level	6,689	3,102	3,402	763	38		13,994
c. Other Qualifications Below Level 1	2,096	706	984	140	7	1	3,934
d Level 1	2,902	7,314	21,115	4,788	206	11	36,336
e. Full Level 2	1,288	5,109	19,313	23,987	970	68	50,735
f. Full Level 3	491	1,395	4,909	3,551	2,247	182	12,775
g. Level 4	105	324	903	269	332	41	1,974
h. Level 5	86	222	775	271	251	84	1,689
i. Level 6	261	481	1,477	720	597	590	4,126
j. Level 7 And Above	99	184	535	332	202	272	1,624

Table 9: Before-and-after analysis of prior attainment in the FE system, where rows correspond to the prior attainment and columns to the level of the course they are not enrolled in. Note the diagonal trend implying most students are studying at an equivalent or higher level, except at Level 5.

However, there is one notable point of departure: The limited amount of Level 5 provision is almost entirely taken up by students who have already studied to a higher level (6 or 7.) This discontinuity suggests an area in which further work is needed to ensure that there are no rungs of improvement missing in the Further Education ladder, and that high-level courses are deployed to full effect.

For FE students in general, the most common prior skill levels are Level 2, Level 1, and No Qualifications, with there being a low number of highly skilled students first because they are less likely to require training, and second because little capacity for advanced vocational training currently exists in the FE system.

The situation for apprenticeships is not greatly different, however it should be noted that there are more students educated to Level 6 starting apprenticeships (1539) than No Qualifications and Entry Level put together (1105) or Level 1 alone (1201).

This indicates that while the system does a relatively good job of reaching people currently educated to levels 2 and 3, people below this

level have relatively little prospect of getting on an apprenticeship, especially when overall numbers are down this year. Meanwhile, a significant number of highly educated students are making use of higher apprenticeships. This fact may be part of the puzzle of why apprenticeships do fairly well at reaching different ethnic groups but are less effective at reaching low income and low skill groups.

Prior Attainment	Intermediate	Advanced	Higher	Total
a. No Qualifications	428	386	138	952
b. Entry Level	42	104	7	153
c. Level 1	672	453	76	1201
d. Full Level 2	786	1822	592	3200
e. Full Level 3	317	997	1629	2943
f. Level 4	15	63	284	362
g. Level 5	23	57	237	317
h. Level 6	48	238	1253	1539
i. Level 7 And Above	10	52	473	535

Table 10: Prior attainment grid for apprenticeships, showing a somewhat weaker relation between the level of prior attainment and the level of the course now studied. Note the large number of Higher Apprenticeship starts by people already educated to Level 6. Note that intermediate, advanced, and higher apprenticeships are equivalent to NVQ levels 2, 3, and 4.

Detailed Ethnic Groups and Further Education Attainment by Level

The detailed crosstab Figure shows the breakdown of age and ethnicity by level of study, averaged over the last three years and suggesting that both factors have a significant effect on level of study:

Row Labels	Entry	1	2	3	4
Female					
Asian/ Asian British					
Any other Asian Background	45.5%	16.7%	18.5%	9.0%	0.5%
Bangladeshi	41.7%	13.2%	16.5%	16.8%	1.3%
Chinese	38.6%	13.9%	16.7%	13.2%	0.5%
Indian	23.6%	15.7%	26.3%	15.0%	0.6%
Pakistani	25.3%	14.5%	25.8%	19.9%	0.4%
Black/African/Caribbean/Black British					
African	39.3%	17.1%	22.8%	11.8%	0.8%
Any other Black/African/Caribbean Background	21.5%	19.1%	30.0%	16.0%	1.2%
Caribbean	10.1%	19.4%	34.9%	18.6%	1.3%
Mixed/ Multiple Ethnic Group	13.9%	17.5%	33.1%	21.2%	0.8%
Not App/Unknown	27.6%	16.7%	24.0%	15.1%	0.6%
Other / Unclassified					
Other Ethnic Group	45.8%	15.5%	18.6%	9.9%	0.4%
White					
Any Other White Background	30.3%	16.3%	26.4%	12.5%	1.6%
English / Welsh / Scottish / Northern Irish / British	8.0%	16.0%	33.7%	20.3%	1.0%
Gypsy or Irish Traveller	23.6%	23.9%	26.2%	10.0%	0.5%
Irish	6.4%	14.1%	33.5%	13.4%	1.7%
Male					
Asian/ Asian British					
Any other Asian Background	39.4%	16.6%	23.4%	10.8%	0.7%
Bangladeshi	23.0%	15.5%	27.0%	21.4%	2.8%
Chinese	28.7%	12.9%	17.9%	23.9%	1.3%
Indian	16.1%	17.2%	32.6%	18.5%	0.8%
Pakistani	12.4%	17.2%	34.5%	23.2%	0.8%
Black/African/Caribbean/Black British					
African	30.7%	18.1%	27.2%	13.8%	0.9%
Any other Black/African/Caribbean Background	18.9%	20.9%	32.4%	13.7%	1.0%
Caribbean	11.2%	24.6%	36.8%	12.7%	1.1%
Mixed/ Multiple Ethnic Group	13.6%	21.7%	34.3%	15.6%	0.8%
Not App/Unknown	23.5%	15.9%	24.2%	24.7%	1.5%
Other / Unclassified					
Other Ethnic Group	41.2%	15.8%	22.8%	10.8%	0.5%
White					
Any Other White Background	23.2%	16.8%	30.1%	13.5%	2.4%
English / Welsh / Scottish / Northern Irish / British	10.1%	20.8%	34.3%	14.8%	1.0%
Gypsy or Irish Traveller	23.7%	25.1%	32.8%	3.6%	0.2%
Irish	8.8%	23.0%	33.9%	10.8%	0.5%

Table 11: Summary of gender, ethnicity, and level of FE course the student has started. Note the dividing line between female and male students. Percentages are totalled by row, and do not reach 100% due to a small proportion of unclassified and missing data. Data references the first half of the 2020/2021 academic year, running from August 2020 through 2021. Most FE students enrol during this period..

For female students, **45.5%** of students registered as 'any other Asian Background' (which includes those who are Asian but not Bangladeshi, Chinese, Indian, or Pakistani) and **45.8%** 'Other Ethnic Group' (which includes students of Arab descent and others not classified) were studying at Entry Level, these two intersections of gender and ethnicity being the most concentrated at the lowest level of study of all groups. For men, the same two ethnicities were concentrated at the lowest level of provision, but the share of each was lower (**39.4%** and **41.2%** respectively.)

In general, women are more likely to be studying at entry level than men, with the gap particularly large for students of Asian descent (for instance, **25.3%** of female Pakistani students were at entry level, versus **12.4%** of male Pakistani students.) The gap is also observed for students of Any Other White Background (**30.3%** and **23.1%**) and Black African students (**39.3%** and **30.7%**) but not other white and black ethnicities.

This gender gap at the top levels of provision is also marked. Male Bangladeshi students are the most concentrated of all groups in Level 4 provision (**2.8%**). Female Bangladeshi students were well behind their male counterparts at Level 4 (**1.2%**) but still ahead of most other groups. Students of Any Other White Background were the next most concentrated in Level 4, with **1.6%** of women in this group at Level 4 and **2.4%** of men. The gap between female and male students of Irish background at Level 4 was very pronounced (**1.7%** and **0.5%**, suggesting women in this group do a lot better.) The groups least represented at this highest level of study were those from Pakistani, Gypsy or Irish Traveller, or other unclassified ethnicity.

Students of Black/African/Caribbean/Black British ethnicities are the most represented in Level 2 provision, known to be in greater demand in the region than Levels 1 and 3, indicating that the FE system is making a significant contribution to employability for this group.

In summary, Female students of Asian descent, and Black African, Arab, and Gypsy or Irish Traveller groups in general, were the most concentrated at the lowest end of provision, and in this sense the most disadvantaged. Male Asian students, particularly Male Bangladeshi students, are more likely to study at higher levels, and this gender gap within Asian students is perhaps the most salient fact observed in the data. Both white and black students are generally more likely to be on Level 2 courses, while Asian students as mentioned are more dispersed across levels based on their gender. However, within all these general statements is a great deal of variability.

Enrolment by Age Group

The age distribution is notably different between FE and apprenticeships, with under-25s comprising **73.4%** of new FE students but only **44.8%** of apprentice starts:

Age	Apprenticeships	Further Education
Under 16	0	1,256
16	1,334	61,432
17	1,895	41,215
18	2,830	21,284
19-23	7,327	22,097
24	972	2,167
25-30	4,944	12,300
31-49	10,804	33,518
50-64	1,926	7,508
65+	10	931
Grand Total	32,042	203,708

Table 12: Age distribution of new starts on Further Education and Apprenticeship courses.

Row Labels	<16	16	17	18	19-23	24	25-30	31-49	50-64	65+	Tot
Agriculture, Horticulture and Animal Care	1.3%	0.7%	0.8%	0.8%	0.5%	1.0%	0.5%	0.4%	1.0%	1.0%	0.7%
Arts, Media and Publishing	4.9%	5.3%	3.9%	3.8%	2.8%	2.1%	1.7%	2.5%	5.6%	21.5%	4.0%
Business, Administration and Law	0.2%	6.8%	5.2%	3.9%	6.4%	8.3%	7.0%	6.1%	7.9%	1.5%	6.0%
Construction, Planning and the Built Environment	1.2%	3.1%	3.2%	3.3%	4.4%	7.0%	8.0%	5.4%	4.0%	1.2%	4.0%
Education and Training	0.0%	0.2%	0.2%	0.3%	1.0%	1.9%	2.1%	2.2%	1.9%	0.8%	0.8%
Engineering and Manufacturing Technologies	4.5%	3.3%	3.3%	3.4%	3.6%	3.6%	3.5%	2.2%	3.7%	1.1%	3.2%
Health, Public Services and Care	2.1%	8.2%	8.7%	8.5%	7.0%	8.1%	9.1%	9.3%	9.8%	2.3%	8.4%
History, Philosophy and Theology	0.1%	1.8%	0.9%	0.3%	0.2%	0.1%	0.2%	0.3%	0.5%	1.4%	0.9%
Information and Communication Technology	6.2%	4.2%	3.6%	3.1%	4.5%	5.9%	5.5%	6.9%	9.4%	10.2%	4.8%
Languages, Literature and Culture	12.1%	8.7%	8.7%	9.0%	5.2%	3.0%	3.5%	2.7%	4.3%	23.5%	6.9%
Leisure, Travel and Tourism	3.7%	2.9%	2.7%	2.3%	1.7%	1.8%	1.1%	0.8%	1.9%	13.5%	2.2%
Preparation for Life and Work	38.5%	28.6%	38.0%	41.5%	45.8%	43.1%	45.5%	50.3%	39.1%	17.6%	38.9%
Retail and Commercial Enterprise	0.1%	2.7%	3.0%	3.1%	4.1%	5.2%	5.0%	4.3%	4.6%	1.1%	3.4%
Science and Mathematics	22.5%	18.2%	14.8%	14.6%	8.3%	4.3%	3.7%	2.8%	0.9%	0.3%	11.8%
Social Sciences	2.5%	4.8%	2.9%	1.3%	1.6%	1.1%	1.5%	1.1%	1.2%	0.2%	2.7%

Table 13: Further Education and apprenticeship courses are shown together in this table, which gives the proportion of each age group which study each course. August 2020 to January 2021.

There are some significant differences by subject of study:

Preparation for Life and Work, including language and employability skills, is by far the most common course taken within all age groups except the over-65s. Arts, - Media, and Publishing as well as Languages, Literature, and Culture follow a bimodal distribution, where students aged either 16-23 or 65+ are the most likely to be taking these courses. The high concentration of over-65s taking these subjects are likely doing so more for general enrichment and interest rather than for employability reasons.

The greater concentration of science and mathematics in younger age groups reflects the fact that this subject area is dominated by GCSE retakes.

ICT provision is more concentrated in 50+ age groups, and is likely to benefit these groups

in terms of general quality of life and access to services as well as improving employability, where the industry the student has previously worked in is becoming more digitised.

Engineering, Construction, and Business and Administration provision is split fairly evenly across age groups without any real notable differences.

FE Subject by Gender

Within FE, the discrepancies between female and male students are in some cases very large. An almost negligible (**0.3%**) proportion of female students study Construction, while **8.2%** of men do. The gap is almost as large in Engineering and Manufacturing at **0.9%** and **5.7%** respectively. A larger proportion of male students are in travel and tourism also (**3.1%** vs **1.4%**.) Female students are much more concentrated than men in health, public services and care (**12.4%** vs **4.0%**) and retail (**4.4%** vs **2.3%**) courses.

Row Labels	Female	Male	Difference
Agriculture, Horticulture and Animal Care	0.9%	0.4%	0.6%
Arts, Media and Publishing	4.6%	3.2%	1.4%
Business, Administration and Law	5.8%	6.3%	-0.5%
Construction, Planning and the Built Environment	0.3%	8.2%	-7.9%
Education and Training	1.2%	0.3%	0.9%
Engineering and Manufacturing Technologies	0.9%	5.7%	-4.7%
Health, Public Services and Care	12.4%	4.0%	8.4%
History, Philosophy and Theology	1.0%	0.7%	0.3%
Information and Communication Technology	4.0%	5.6%	-1.6%
Languages, Literature and Culture	6.4%	7.4%	-1.0%
Leisure, Travel and Tourism	1.4%	3.1%	-1.6%
Not Applicable	1.3%	1.4%	0.0%
Preparation for Life and Work	39.5%	38.1%	1.4%
Retail and Commercial Enterprise	4.4%	2.3%	2.1%
Science and Mathematics	12.2%	11.3%	0.9%
Social Sciences	3.3%	2.0%	1.3%

Table 14: Percentage of students of each gender studying each subject area, with differences. August 2020 – January 2021.

Graduate Retention

There are marked differences in the attraction and retention of both students and recent graduates between UK regions. In the typology set out below, the West Midlands fits into the mild brain drain category, due to its successful attraction of students to its university system but subsequent loss of many young graduates to other parts of the UK:

Typology	Regions	Description
1	North East, Yorkshire & the Humber	Regions that attract and retain students but export new graduate workers – brain drain
2	East Midlands, West Midlands	Attractors of students but exporters of new graduate workers – brain drain
3	London	Regions that retain and attract new graduate workers – brain gain
4	East of England , South East, South West	Regions with low retention and high attraction of both students and new graduate workers – high mobility
5	North West, Wales, Scotland, Northern Ireland	Regions with high retention and lower attraction of both students and new graduate workers – low mobility

Table 15: Summary of the five situations for graduate retention and attraction. Note that only London truly gains.

The centralisation of opportunity in the UK is reflected in the fact that only London is truly a brain gain region, and in this sense the West Midlands is doing no worse than most other regions, and better than some (the North East, Yorkshire and the Humber.) The pathway to brain gain for the West Midlands would be to continue to attract the large number of students it does, but hang on to more of them, particularly graduates in STEM.

Findings of Graduate Retention Analysis

- Inter-regional mobility is higher for students than for new graduate workers, as regions retain, on average, more new graduate workers after their studies (**61.1%**) than residents making the transition to becoming university students (**56.3%**).
- There are remarkable regional differences in terms of both student attraction and graduate employment. For instance, there is a clear North-South divide in the graduate attraction figures. In particular, of the total 2018/19 university graduates who moved to a different region for work, **65.3%** moved to London, the East of England, the South East and the South West, whereas only **15.9%** migrated to the northern English regions.
- Graduate retention rates are higher for women than for men. Specifically, the rates for women in the English regions range from **44.1%** in the East Midlands to **75.3%** in London, while the corresponding rates for men vary between **34.6%** and **72.8%** in the same regions (based on the 2018/19 cohort of graduates who were interviewed fifteen months after finishing their studies).
- Similarly, the likelihood of staying local is higher for new graduate workers who attended a postgraduate taught course (standing at **63.4%** on average in the UK) than those who hold only a first degree (**54.4%**), whereas the attraction rates are more potent among the first-degree graduates (**45.6%**).
- Graduates with a qualification in Arts, Humanities, and Education are, by far, more likely than STEM and LEM graduates to stay in the same region of study for work. Conversely, regional attraction rates are generally higher among STEM graduates (standing at **46.6%** on average in the UK) than those with higher education qualifications in other subject areas. This picture is partially associated with the increasing demand for particular high-level skills across regions.

Local Skills Report Evidence Base – Demand Analysis

Key Findings

- ‘Replacement demand’, the need to replace retiring workers, will drive significant recruitment even in occupations with declining employment, such as machine operatives, skilled trades, and secretarial work. On the other hand, professional occupations are projected to grow strongly through the decade, with **26%** of positions coming from expansion and **74%** from replacement.
- There has been a rapid decrease in the percentage of the working-age population with no qualifications, and growth at most higher qualification levels. However, the West Midlands still is projected to see the slowest growth in residents educated to postgraduate level through 2027, and slowest decrease in those with no qualifications, in the country.
- A rapid recovery has been observed in job postings since the winter 2020/2021 lockdown, surpassing past trends. This can be attributed to the phenomenon of the ‘great resignation’, i.e. an unusual level of labour market mobility as people re-evaluate their careers in the aftermath of the pandemic.
- Lack of needed skills is cited by employers as the top cause of vacancies being hard to fill.
- There is a continuing lack of awareness amongst smaller employers of how the apprenticeship system works and how to take advantage of it.

2020-2027 Projections by Broad Sectors: Working Futures

The current economic disruption from COVID-19 will strike at many of the assumptions made in recent projections and analyses of the regional economy. Macroeconomic forecasts are always subject to a high degree of uncertainty in any case, but this is uncertainty is greatly amplified by the fact that we do not know when the COVID-19 restrictions will be fully eased or what the ultimate state of our future trading relationship with the European Union and other countries will be.

Consequently, the employment projections on which our analysis is based likely will be less accurate. Projections will, however, indicate some of the long-term technological changes and challenges sectors of the economy will face, some of which may be accelerated by the present crisis. Department for Education economic analysis indicated that across the broad sectors of the UK economy we could expect the following annual employment trends through to 2027:

- **Business and other services** employment to expand by 0.6% annually, driven by growth in financial and professional services, science and tech work, and IT. These increases are ascribed to the UK’s comparative advantage in these sectors (noting however its dependence on future trading arrangements), and a rate of venture capital investment in tech start-ups which continues to outstrip other European countries.

- **Non-marketed services** to grow by **0.5%** annually, with growth concentrated in healthcare provision in response to an ageing population. Shortage of teachers and dependence on the influx of university students from China and India are cited as risks to this part of the sector.
- **Trade, accommodation, and transport** expected to grow by 0.1% annually, with technological change having markedly different effects on different components of this sector.
- **Construction** to expand by **0.2%** annually, with a significant skills shortage and dependence on labour from the EU cited as challenges for the sector.
- **Manufacturing** employment is projected to **fall by 1%** annually, partly a continuation of past trends and partly impact to trade resulting from the altered UK-EU relationship. The 60% of UK food exports currently destined for the EU and £1.8 billion estimated cost of EU tariffs to UK motor vehicle exports are cited as determinants.

In the **West Midlands**, broadly similar sectoral changes are expected to the UK as a whole. However, some of the risks cited above, particularly in manufacturing, may yet have a disproportionate impact on the region's major employers.

Working Futures projections show a growth in white collar and highly skilled jobs. A 'polarisation' or 'hollowing out' may lead to greater employment in both low and high-skilled employment and a loss of intermediate roles such as administration/secretarial roles and skilled manual trades. Future growth is expected to be more concentrated in part-time positions versus full-time.

The main conclusion drawn on the effect of technological change was that changes to the pattern of employment within, rather than between sectors will have the decisive effect. For instance, retail workers will doubtless be affected by expansion of self-service and other technologies, and may not recover fully from the current economic disruptions. Other, less easily automated, services (such as waiting tables) are likely to be more resilient to automation in the long term. Similarly, we can expect growth in management, directors, and highly skilled professions while admin and secretarial work will be more vulnerable to automation.

Future Projections by Local Enterprise Partnership

Industry Projections

The sharpest decline in manufacturing employment (percentage of projected employment in 2027 versus 2017) is expected in the Black Country, a concern given that the sector makes up more than a tenth of its employment. The Black Country is, however, expected to see more rapid growth in construction.

Industry	BCLEP	CWLEP	GBSLEP
Primary sector and utilities	-2.4%	-2.5%	-4.7%
Manufacturing	-13.2%	-11.2%	-11.5%
Construction	1.3%	-0.5%	0.3%
Trade, accomod. and transport	-0.8%	-0.6%	-0.3%
Business and other services	2.9%	4.1%	2.4%
Non-marketed services	3.9%	1.2%	1.5%

Table 16: Forecast total change in employment by sector and Local Enterprise Partnership, 2020-2027.

Nature of Work

While the proportion of men and women within any individual industry is expected to essentially remain constant between 2017 and 2027, Working Futures projects certain broad trends coming from the change in the relative size of industries (percentages here refer to percentage of the working age population in 2017 versus 2017):

- A modest decline in self-employment across both genders and all three LEP areas, and declining twice as fast in men (**0.4 to 0.5%** decline as a share of the working-age population) than women (decline of **0.2%**). This decline should be a concern if it stems from increasing risk-aversion as a result of declining prospects for young people, as this may blunt entrepreneurship.
- Full-time employment is expected to decline as a proportion of employment. This decline is entirely due to less men working full time, with the proportion of women working full time actually increasing slightly (around **0.5%** increase as a share of working-age population across all three LEP areas.) This is almost certainly a result of increasing employment in professional services and a decrease in manufacturing employment.

- Unsurprisingly, part-time employment is projected to increase steeply over the reference period, around **0.8%** for women and **1%** for men.

Replacement Demand by Occupation

The demand for new employees coming from the need to replace the existing workforce dwarfs the demand coming from industrial change, across all three Local Enterprise Partnership areas. The tables below set out the total demand for jobs as a proportion of the existing (2017 base year) workforce, and how change to the overall size of the industries (2017-2027) and

In the Black Country this difference is starkest, with a lower projection for employment growth in industries (**1.5%**) than in GBSLEP (**2.0%**) and Coventry and Warwickshire (**2.1%**) reflecting differences in the age breakdown of each population. This forecasting suggests, therefore, that for each job generated by new growth in an industry, more than 16 jobs will be generated by the need to replace workers who retire or move to other occupations:

Occupation	Change	Replacement	Total Demand
Managers, directors and senior officials	11.9	38.7	50.7
Professional occupations	12.1	34.6	46.7
Associate professional and technical	9.0	32.9	41.9
Administrative and secretarial	-14.9	31.8	16.9
Skilled trades occupations	-11.9	25.9	13.9
Caring, leisure and other service	13.5	40.5	54.0
Sales and customer service	-4.0	30.3	26.3
Process, plant and machine operatives	-10.6	29.6	18.9
Elementary occupations	-1.2	31.8	30.6
All occupations	1.5	33.1	34.5

Black Country

Table 17: Replacement component of demand by occupation level, BCLEP, 2017-2027

Occupation	Change	Replacement	Total Demand
Managers, directors and senior officials	13.2	39.0	52.2
Professional occupations	11.8	34.0	45.8
Associate professional and technical	9.7	32.8	42.4
Administrative and secretarial	-13.9	32.0	18.1
Skilled trades occupations	-11.7	26.1	14.4
Caring, leisure and other service	12.6	40.2	52.8
Sales and customer service	-2.6	30.6	28.0
Process, plant and machine operatives	-9.1	30.0	20.9
Elementary occupations	-0.3	32.3	32.0
All occupations	2.1	33.1	35.2

Coventry and Warwickshire

Table 18: Replacement component of demand by occupation level, CWLEP. 2017-2027

Occupation	Change	Replacement	Total Demand
Managers, directors and senior officials	12.9	39.0	51.8
Professional occupations	11.4	34.3	45.6
Associate professional and technical	8.8	32.7	41.6
Administrative and secretarial	-14.7	31.8	17.1
Skilled trades occupations	-11.3	26.1	14.8
Caring, leisure and other service	12.5	40.2	52.7
Sales and customer service	-2.6	30.6	28.0
Process, plant and machine operatives	-8.9	30.3	21.5
Elementary occupations	0.0	32.2	32.2
All occupations	2.0	33.2	35.2

Greater Birmingham and Solihull

Table 19: Replacement component of demand by occupation level, GBSLEP.

Sector Highlights:

To put these projections in context, the table below shows a breakdown by industry of how much each industry contributes to the West Midlands economy at the moment, and its total employment footprint, as well as trajectory

over the last ten years (2021 vs 2011.) Industries such as manufacturing are projected to follow a very different and more negative trajectory in the future than we observed in the last ten years.

Industry	GVA (£m)	% GVA	Jobs	Employment vs 2011
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	10,600	13.6%	297,819	10.0%
Manufacturing	10,560	13.5%	205,169	7.8%
Human Health and Social Work Activities	7,127	9.1%	239,428	7.1%
Professional, Scientific and Technical Activities	6,364	8.2%	127,973	27.4%
Construction	5,922	7.6%	77,974	-0.3%
Administrative and Support Service Activities	5,768	7.4%	204,169	46.1%
Education	5,744	7.4%	166,650	0.1%
Financial and Insurance Activities	4,162	5.3%	53,959	-6.3%
Transportation and Storage	3,573	4.6%	119,933	42.6%
Information and Communication	3,361	4.3%	47,037	10.1%
Public Administration and Defence; Compulsory Social Security	2,764	3.5%	66,522	-15.8%
Accommodation and Food Service Activities	2,750	3.5%	139,287	43.2%
Real Estate Activities	2,443	3.1%	32,601	42.1%
Other Service Activities	1,927	2.5%	36,300	-4.0%
Electricity, Gas, Steam and Air Conditioning Supply	1,837	2.4%	9,971	8.9%
Water Supply; Sewerage, Waste Management and Remediation Activities	1,192	1.5%	13,553	13.9%
Arts, Entertainment and Recreation	1,160	1.5%	39,746	17.6%
Agriculture, Forestry and Fishing	465	0.6%	6,078	1.8%
Mining and Quarrying	237	0.3%	827	-36.1%

Table 20: Industry summary showing, across the West Midlands Local Enterprise Partnerships, how much of the region's economy is comprised of each industry, along with ten-year employment trajectories.

2020-2027 Projections by Qualification

The trend for this region is more sobering in the comparison in **Table 6**. The West Midlands is projected to have both the second lowest increase in employees qualified to

Postgraduate level by 2027 at **0.8%** annually, and the slowest decrease in those without any qualifications at all at **2.9%** annually, less than half the UK average (6.0%).

UK Nation or region of England	Annual average rate of change, 2017-2027 (%)				
	Postgraduate degree	First degree	RQF 3 & 4	RQF 1 & 2	None
London	2.7	2.5	0.2	-4.7	-9.2
South East	3.1	2.8	-0.7	-2.7	-7.2
East of England	3.2	3.4	0.3	-2.3	-6.2
South West	3.5	2.5	0.3	-2.9	-8.1
West Midlands	0.8	3.1	0.5	-1.9	-2.9
East Midlands	2.9	2.2	0.6	-1.5	-7.3
Yorkshire and the Humber	0.7	2.6	0.7	-1.8	-3.8
North West	4.0	2.5	0.3	-2.6	-6.2
North East	1.3	3.0	0.9	-2.1	-6.1
England	2.7	2.7	0.2	-2.6	-6.2
Wales	3.4	2.3	0.4	-1.9	-5.9
Scotland	3.9	3.1	-1.3	-2.9	-4.9
Northern Ireland	2.3	2.0	0.1	-0.4	-4.9
United Kingdom	2.8	2.7	0.1	-2.5	-6.0

Table 21: Annual rate of change as a proportion of the workforce by qualification level and region

2020-2017 Projections by Industry:

Given the conclusion in the Working Futures report that the 'replacement demand' needed to fill the employment gaps left in industries by an ageing workforce comprise the vast majority of new job postings, it is not surprising that the sectors of the West Midlands economy posting the most jobs are for the most part already the largest.

Service sector job positions predominate in growth with catering (1,327), waiting and bar staff (1,030 and 738), care work (811), and book-keeping and payroll (676) the fastest-growing

sectors. The fact that front-line service jobs underpin so much current and future economic output is concerning given the current pandemic, and will be considered further below.

Skills demanded by employers

The most recent (2019) Employer Skills Survey (ESS) gathers information on skills needs and training from employers via telephone survey. It asks questions about which skills are in short supply in job applicants for different roles, as well as any training the firm is delivering.

Summary

- Lack of the necessary skills is the single greatest obstacle to recruitment in BCLEP and CWLEP, while in GBSLEP it is second after poor terms and conditions on offer. Far more vacancies in GBSLEP have been affected by Brexit uncertainty, unsociable hours, and lack of career progression opportunities than the other LEP areas or the England average.
- In both CWLEP and GBSLEP, recruitment is made more difficult by a lack of advanced IT, statistics, and data science skills. In advanced IT in particular, both LEP areas considerably outstrip the England average of **20%** in terms of the proportion of skills-shortage vacancies that are difficult to fill for this reason (**25%** in CWLEP, **22%** in GBSLEP.)
- BCLEP still has a very high demand for manual and machinery operating skills, driven by the need to replace its ageing workforce. This will continue to create vacancies even while the sector is shrinking.
- A large proportion of skills-shortage vacancies prove difficult to fill due to the lack of necessary social skills, such as teamwork and presentation skills. While the West Midlands does not differ greatly from the England average in this area, in both areas social skills of one form or another are a constraint on recruitment for around half of positions.
- There is a fairly low level of awareness amongst West Midlands employers of the apprenticeship system and how it can support them. Only **41%** of employers in the Black Country, **37%** in CWLEP, and **40%** in GBSLEP were aware of the introduction of the apprenticeship levy. Of these, **58%**, **60%**, and **60%** were aware that this levy applies to employers with an annual wage bill of more than £3million. Fewer still were aware of the premium available for recruiting apprentices from deprived areas, with **21%** in the Black Country and **22%** in CWLEP and GBSLEP being aware of this. Small businesses between 10 and 49 employees are more common in the West Midlands, and may be missing out through financial pressure and the administrative time it takes to arrange apprenticeships.

Reasons for Vacancies

The contribution that skills shortages make to vacancies is similar in the West Midlands to the England average. Shortage of the necessary qualifications is likewise considered neither better nor worse. However, there are some marked differences in other questions about how the labour market affects recruitment. GBSLEP has far more of a problem with

shift work and unsociable hours deterring applicants (likely stemming from the city centre’s strength in retail, restaurants, and leisure.) The concentration of professional services may also have contributed to the much higher concern about Brexit impacts (due to greater inter-connectedness) and career progression.

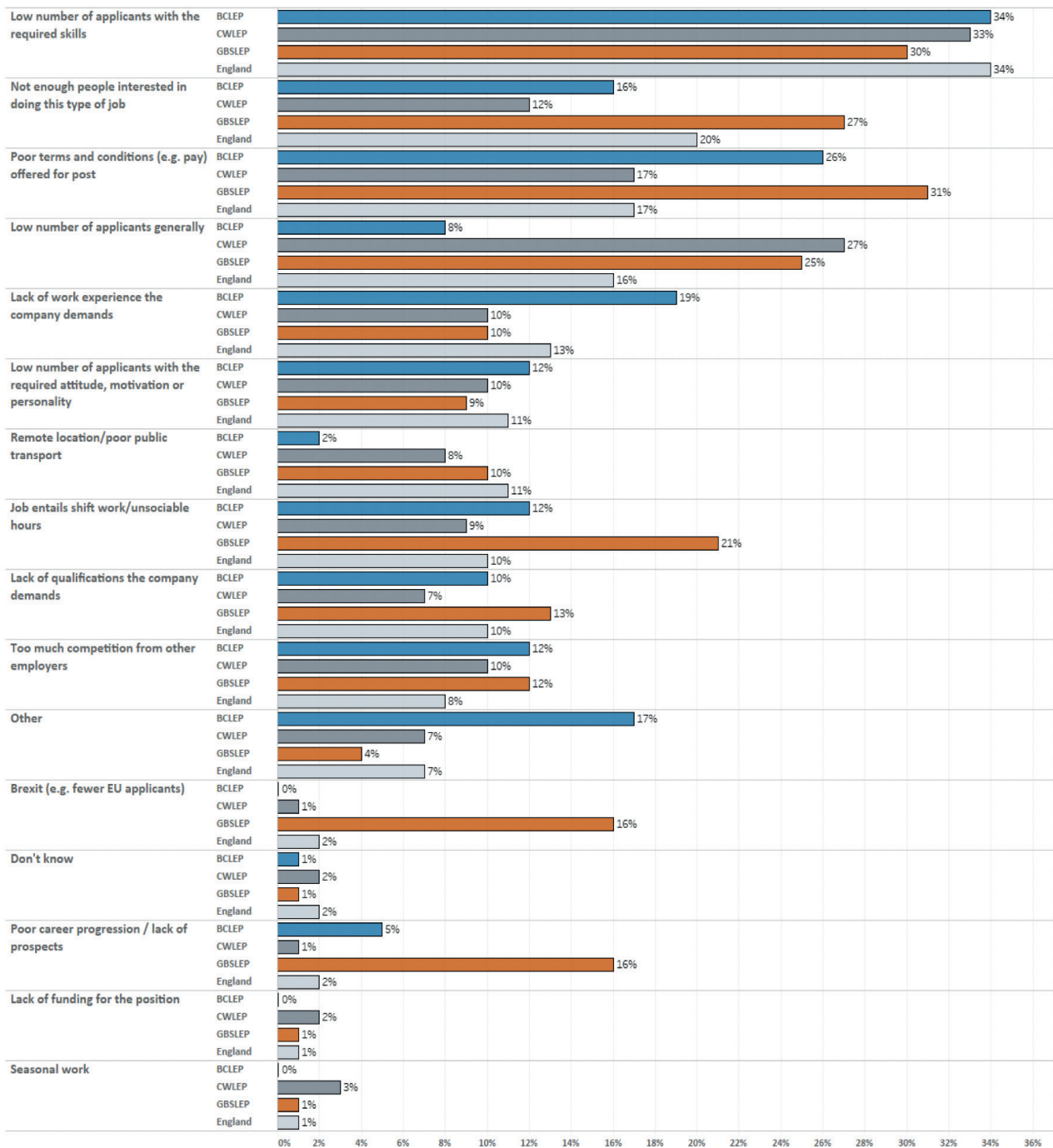


Figure 11: Breakdown of hard-to-fill vacancies by type, showing that lack of requisite skills is the prime cause in all LEP areas but GBSLEP, in which poor terms and conditions were the main obstacle.

Skill Shortage Vacancies by Type

Skilled trades occupations are frequently in short supply in the Black Country, with lack of skills cited for **35%** of firms as constricting their ability to hire, versus **24%** in England. This likely reflects significant replacement demand for existing workers in these lines of work rather than growth in total employment. BCLEP also lacks sufficient skilled workers in care, leisure and other services (**24%**) compared

to the England average (**14%**). In this case the sector is both large and growing. Lack of the necessary skills is also strongly affecting professional-level recruitment in GBSLEP (**20%** of vacancies affected). These figures are presented below against the England average, with each percentage figure representing the proportion of firms which had skills shortage vacancies of the given type.

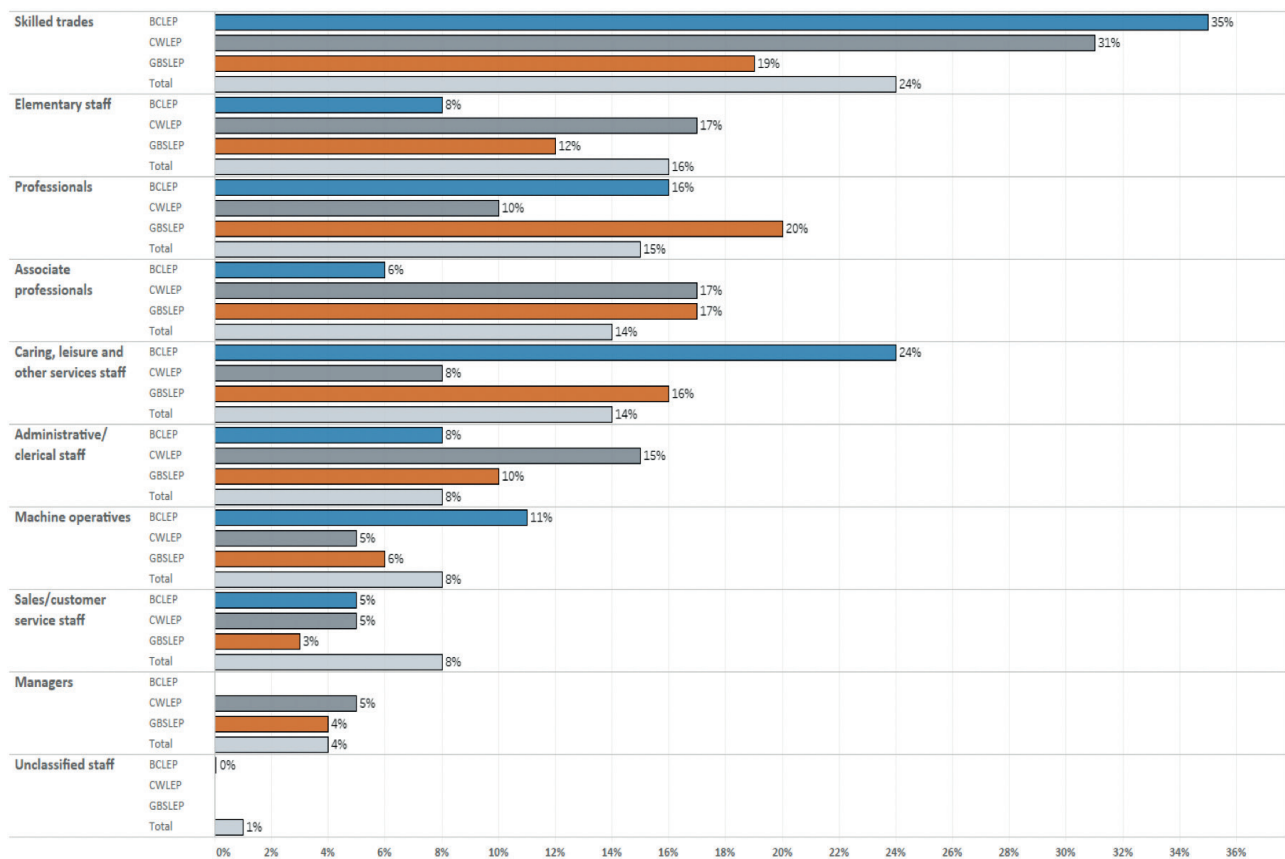


Figure 11: Skills shortage vacancies are here broken down by occupation, showing the significance of the problem in skilled trades in particular.

IT Skills

The chart below displays the proportion of skills-shortage vacancies which are made difficult to recruit due to a lack of specific IT skills. Basic IT skills such as Microsoft office are still cited as a major constraint in the Black Country (39% of posts), less so in CWLEP (20%) and similar to the England average in GBSLEP (30% in GBSLEP versus 33% in England).

GBSLEP has a notable shortage of data analysis and data science skills, likely reflecting its concentration of professional services firms. The density of game development firms in Leamington Spa in CWLEP appears to have been picked up in the sample, with a far greater shortage of skills in online transactions, data science, and social media/marketing in CWLEP than the other two LEPS or England average.

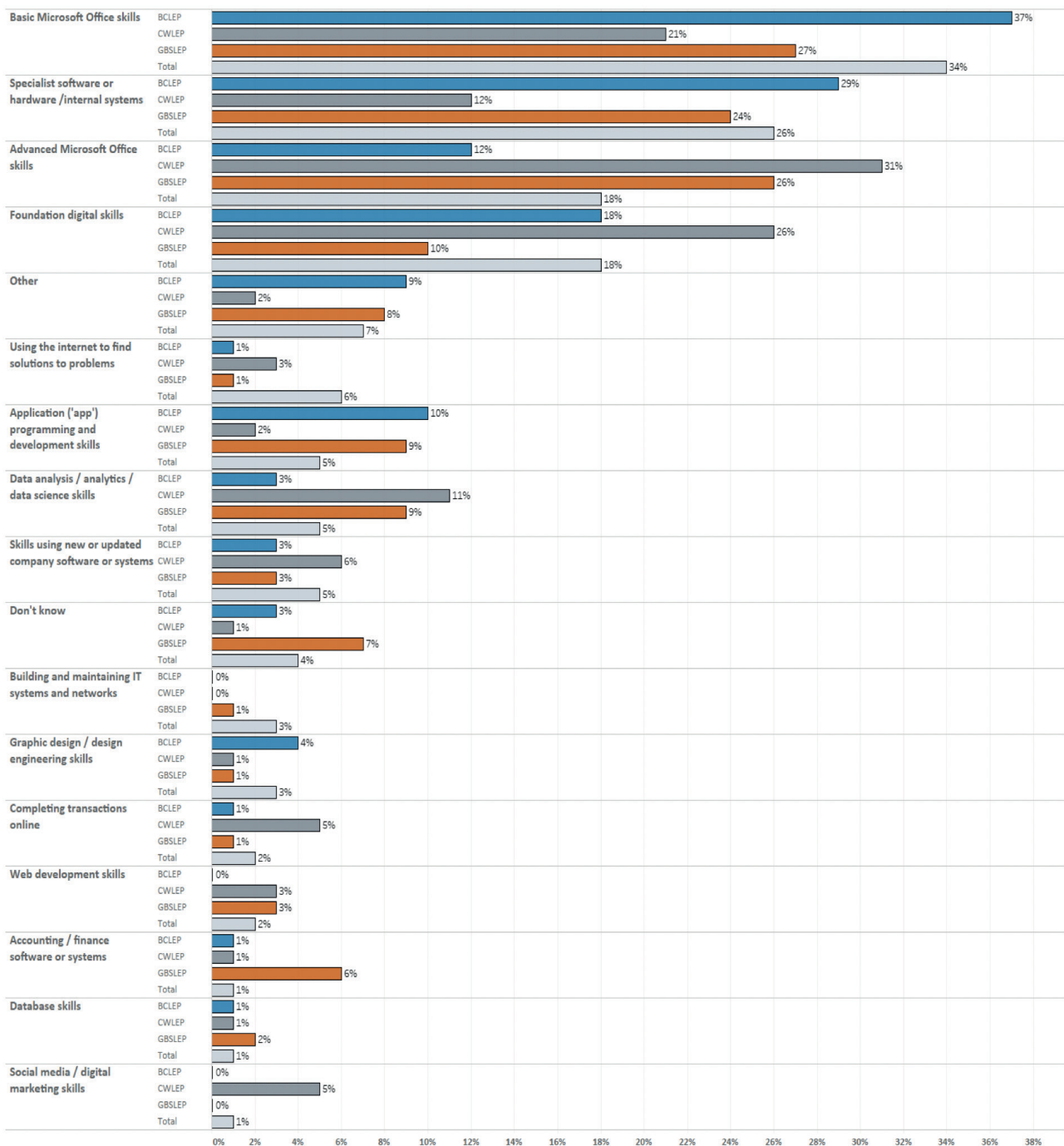


Figure 13: Breakdown of IT-specific skills-shortage vacancies by the specific IT skills required, showing that more basic and foundational skills are the typical obstacle, as well as specialised software used in that area of work. However, more advanced skills in data analysis and programming are also cited, and jobs requiring these are typically more highly paid.

Practical Skills

The survey also assessed the proportion of skills-shortage vacancies for which key technical and practical skills were making them difficult to fill. Comparison of LEP areas based on general practical skills is revealing:

	<i>Total</i>	<i>BCLEP</i>	<i>CWLEP</i>	<i>GBSLEP</i>
<i>Reading and understanding instructions, guidelines, manuals or reports</i>	30%	23%	27%	40%
<i>Basic numerical skills and understanding</i>	23%	23%	19%	30%
<i>More complex numerical or statistical skills and understanding</i>	23%	20%	22%	36%
<i>Adapting to new equipment or materials</i>	21%	32%	15%	17%
<i>Computer literacy / basic IT skills</i>	20%	14%	17%	29%
<i>Manual dexterity - for example, to mend, repair, assemble, construct or adjust things</i>	18%	35%	18%	11%
<i>Advanced or specialist IT skills</i>	17%	11%	25%	22%
<i>Communicating in a foreign language</i>	17%	6%	12%	9%
<i>None of the above</i>	8%	4%	5%	12%
<i>Don't know</i>	9%	9%	9%	8%

Table 22 Key practical skills cited as obstacles to filling vacancies are set out here, with the shortage of numerical and statistical skills in GBSLEP particularly striking.

The greater prevalence of professional services and concentration of research activity in the GBSLEP is readily apparent in the much greater demand (relative to supply in the labour market) for mathematics and IT skills. That **36%** of skills-shortage vacancies in GBSLEP are affected by difficulty in obtaining complex numerical or statistical skills is very striking. This is much higher than the England average (**23%**) and implies that this shortage is a major impediment to growth and recruitment. High demand for advanced/specialist IT skills are also constraining recruitment, particularly in CWLEP.

Equally pronounced is the demand in BCLEP for manual dexterity and equipment skills, likely to be 'replacement demand' for new staff to replace an ageing workforce in the manufacturing sector, rather than the creation of new jobs. The lower demand for numerical and IT skills in BCLEP is likely due to weaker growth in sectors such as professional services, rather than a greater availability of these skills in the workforce.

Social Skills

The summary below presents the proportion of skills-shortage vacancies which are difficult to recruit for owing to lack of particular social skills in applicants:

	Total	BCLEP	CWLEP	GBSLEP
<i>Reading and understanding instructions, guidelines, manuals or reports</i>	30%	23%	27%	40%
<i>Basic numerical skills and understanding</i>	23%	23%	19%	30%
<i>More complex numerical or statistical skills and understanding</i>	23%	20%	22%	36%
<i>Adapting to new equipment or materials</i>	21%	32%	15%	17%
<i>Computer literacy / basic IT skills</i>	20%	14%	17%	29%
<i>Manual dexterity - for example, to mend, repair, assemble, construct or adjust things</i>	18%	35%	18%	11%
<i>Advanced or specialist IT skills</i>	17%	11%	25%	22%
<i>Communicating in a foreign language</i>	17%	6%	12%	9%
<i>None of the above</i>	8%	4%	5%	12%
<i>Don't know</i>	9%	9%	9%	8%

Table 23 Key social skills causing hard-to-fill vacancies.

Shortfalls in social skills are not greatly different in the three LEP areas versus the England; it is notable how high a proportion of skills-shortage vacancies are difficult to fill due to lack of team working, polish, and general social skills. In light of the shortage of IT and mathematical skills identified

above, it is likely that supporting training courses that inculcate high-level technical skills combined with strong team working and presentation skills would be a winning combination in the current job market.

Apprenticeships and Traineeships

A significant impediment to the delivery of higher number of apprenticeships in the region is a lack of employer awareness of how the apprenticeship system works. As of the survey date in 2019, only **41%** of employers in the Black Country, **37%** in CWLEP, and **40%** in GBSLEP were aware of the introduction of the apprenticeship levy. Of these, **58%**, **60%**, and **60%** were aware that this levy applies to employers with an annual wage bill of more than £3million.

While none of the figures depart markedly from the England averages, they do indicate a lack of awareness amongst employers of the financial setup of apprenticeships which would allow them to make decisions about whether it would benefit them to take an apprentice on. For instance, only **27%** of employers in the Black Country and CWLEP and **30%** in GBSLEP were aware of the **5%** co-investment payment

employers provide to support apprenticeship costs. Fewer still were aware of the premium available for recruiting apprentices from deprived areas, with **21%** in the Black Country and **22%** in CWLEP and GBSLEP being aware of this.

You would not expect all employers to be aware of the details of the apprenticeship system, particularly if the recruitment of apprenticeships is not directly applicable to their business - for instance if they are a very small firm. Financial constraints and the administrative overhead of organising an apprenticeship are also major contributors to lower take up, particularly in the current circumstances. However, the West Midlands has a significant share of small firms relative to the England average which might benefit from greater access to apprenticeships. The table below shows the distribution of different sizes of firm as a proportion of the total number of firms in a given area:

Employees	England	BCLEP	CWLEP	GBSLEP
2-4	55%	49%	53%	52%
5-9	21%	19%	16%	18%
10-24	15%	20%	20%	19%
25-49	5%	7%	6%	6%
50-99	3%	3%	3%	3%
100-249	1%	2%	1%	2%
250 or more	1%	*%	1%	1%

Table 24 Proportion of employers by size and LEP area who are aware of how the apprenticeship system works.

Notes on Methodology

Unlike all other regions, in the West Midlands the ESS did not conform to a strict quota of business sizes and sectors. This will have affected the accuracy of the work. However, many metrics for the West Midlands match closely to the England average, implying that this bias is not uniform.

In some instances, the data for a given category for a given LEP is missing due to insufficient sample size. Significant overlap between categories and responses mean percentages will not sum to 100% for each LEP area. For instance, a vacancy may exist for more than one reason.

Impact of COVID-19 on skills demand

The current pandemic and its mitigation efforts are having a sweeping impact on both current and future economic activity in the region, with every level of the skills system likely to be affected for an as-yet unknown period of time. We saw significant economic recovery since the full lockdown of winter 2020/2021, and a successful drawdown of the job retention scheme in September 2021, though these gains are as yet imperilled by the rising caseload at the time of writing.

Jobs postings

Emsi analysis of unique job postings (sourced from online jobsites, general and industry-specific) throughout the West Midlands (3LEP) area in the six months to September 2020 saw a steep decline in total unique job postings through the pandemic period. Considered at the Local Authority level, Birmingham generated by far the most jobs, **124,205**, with Coventry second at **29,953**. This discrepancy remains when controlling for population size, with the 2011 Census putting Birmingham’s population at **1.086** million and Coventry’s at **325,949**. No other local authorities are close, with Warwick producing more jobs (**15,472**) than Wolverhampton (**14,848**).

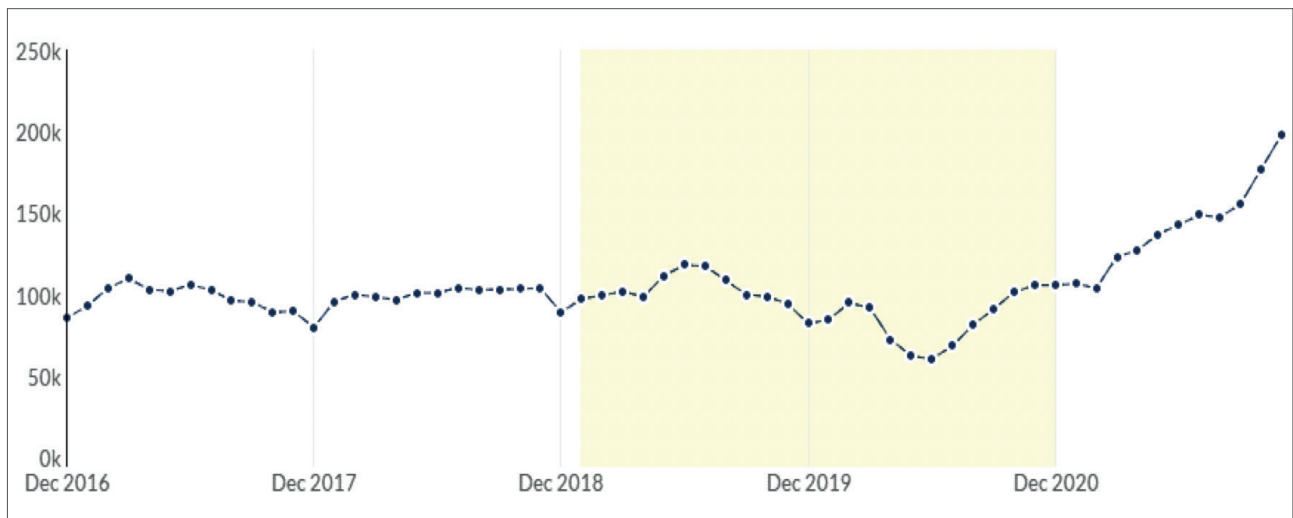


Figure 14 Trend in job postings over the last five years. Note the steep decline from March as the lockdown restrictions were imposed, followed by a strong recovery since the end of the winter 2020/2021 lockdown. Data collated by Emsi.

A decline in job postings may be caused as much by a drop in staff retention as by a drop in growth. While we can speculate that key sectors such as digital and construction may have been more resilient than others to the lockdown and mitigation measures (due to greater ability to continue working), a drop in economic output is likely to significantly

impact employment growth across the board. This decline is corroborated by the job postings figures from the skills data firm Adzuna’s database, which collates job postings on multiple job boards and employer websites. Data made publicly available via ONS for the UK and for the English regions showed a comparable trend over the last year:

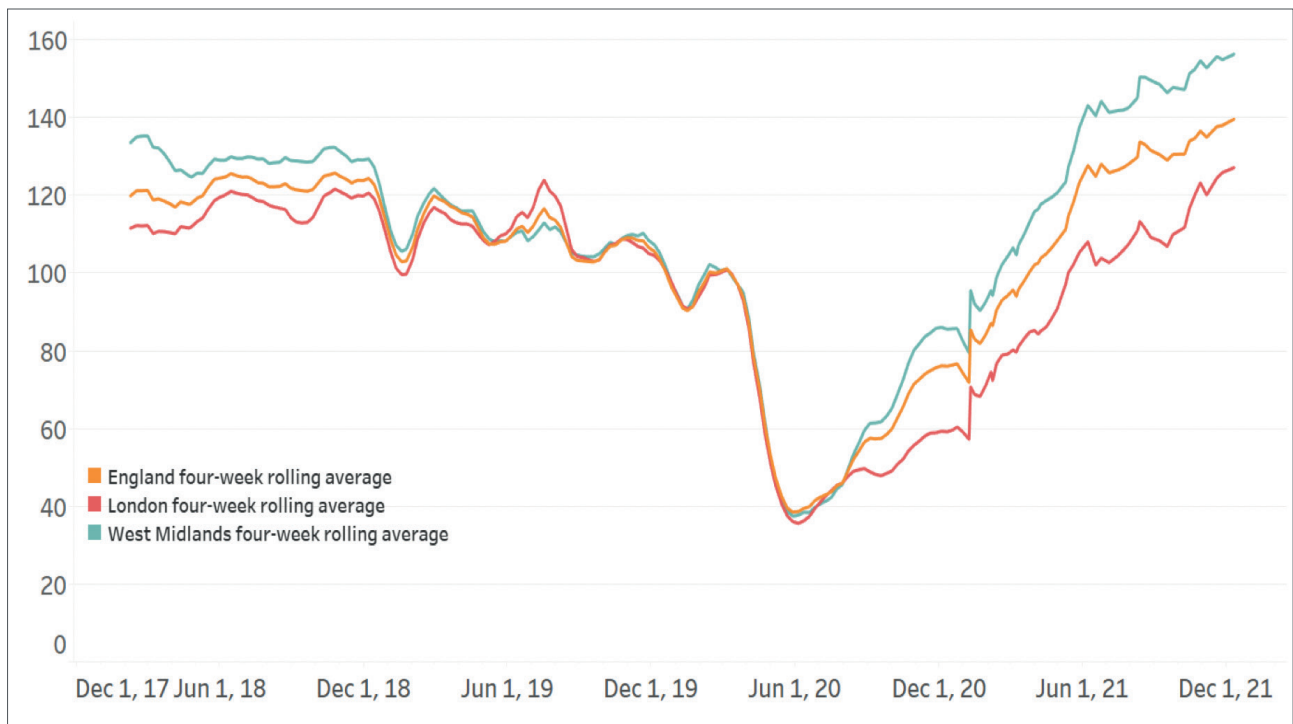


Figure 15 Public Adzuna data contrasts total unique job postings across the West Midlands, London, and the UK, throughout the pandemic.

The average England job postings rate was halved in July 2020 versus the 2019 average. Retail, unsurprisingly, was worst hit of all sectors, with recruitment still around one third of the 2019 average, up from 25% during the

lockdown period. These findings are consistent with the similar decline in the Emsi job postings figures over the same period, and the rising claimant count figures, with the West Midlands being hit less heavily than the England average.

Local Skills Report Evidence Base – Supply and Demand Comparison

Key Findings:

- There is an undersupply of NVQ2 and NVQ4 and an oversupply of NVQ3 and NVQ1, within the West Midlands, creating an imbalance of demand and supply by skill level in the workforce.
- There is a national undersupply of people proficient in digital skills at all levels, with significant growth in the higher end skills and a lack of supply chain through all stages to fulfil these roles.
- The public sector, teaching, care and health remain resilient sectors in terms of job availability and advertisements and demand may outstrip supply with the impact of the pandemic and the ageing population demands.
- The region's heaving manufacturing base relies on a supply of high skilled apprenticeships but short term economic impacts and longer term impacts of exiting the EU are having an impact on business ability to fund and support trainees.
- The supply and demand mismatches ultimately increase the workload of those around them, which can create a fall in productivity.
- In Further Education, shortfalls still exist in marketing, public services, business management, and administration. GCSE resubmissions and employability skills still dominate submission. While these may not align to job roles in specific sectors, they do support general preparation of young people for the workplace.
- Higher Education provision in the region is strong and produces a great number of graduates in business, management, and medicine. However, like most regions, the West Midlands suffers a net loss of graduates despite attracting many young people to study here.
- Wage trends data from PAYE records indicate that wages in IT have grown significantly, arts and entertainment have seen strong wage growth (but correspondingly higher risk), while manufacturing and public sector-dominated professions have seen slow rises and are threatened by inflation. These trends reflect continuing difficulty meeting demand in IT-intensive roles, as well as being able to attract public sector staff in education and health.
- Employers in the region feel that the lack of necessary skills is constraining their competitiveness, increasing their costs, and slowing technological innovation in products and processes.
- The West Midlands' lower overall skills base is reflected in a lower proportion of staff being over-qualified for their current role.

By Qualification Level

Research published in the journal *Regional Studies* this year by City-REDI at Birmingham Business School (titled *Ensuring skills are available in the right locations: are we there yet? A regional analysis of qualification gaps*) compared supply and demand of qualifications across the West Midlands 3-LEP area. This involved using a regression model to forecast occupations for the different local authority areas, before tying each occupation to the relevant NVQ level. This allows us to draw some conclusions about general skills availability in the region:

NVQ1

Transport and labour market mobility were highlighted as challenges at this qualification level, with considerable oversupply in some areas (**9100** candidates in the Black Country) and undersupply in others (**11,000** in the Coventry and Warwickshire LEP). Overall, the West Midlands 3-LEP area is already over-supplied at the NVQ1 skills level.

NVQ2

This qualification level is in short supply in all three LEP area, the greatest shortage being in the GBSLEP (**63,100**, concentrated in Birmingham at **44,200**), followed by Coventry and Warwickshire (**41,200**) and the Black Country (**34,300**). This is likely causing a significant constraint on productivity as firms struggle to find the needed skills within their commuting area.

NVQ3

There is an over-supply at NVQ3-level, but an under-supply at NVQ4, in both the Black Country and GBSLEP, indicating potential value in up-skilling these candidates to NVQ4. In Coventry and Warwickshire there is an under-supply at both NVQ3 and NVQ4, likely resulting from the presence of the auto industry which often require skills at these levels.

This raises the concern on the supply-side that elevating a candidate's skills from NVQ2 to NVQ3 will not automatically improve their employment prospects, unless this training is a stepping-stone to further development. It also suggests the potential value of degree apprenticeships in providing the higher-level technical skills currently in demand.

NVQ4

The region is distinctly short of candidates at this level, with a gap of **63,400** in the GBS LEP, **16,970** in Black Country LEP, and **11,270** in the Coventry and Warwickshire LEP.

Recalling the Working Futures projections, the wider West Midlands region is expected to see stronger growth in NVQ levels 3 and 4 through 2027 (at **0.5%** annually) than the UK average (**0.1%**). However, this is partly a function of the fact that other regions of the UK are achieving strong growth in graduate and postgraduate education at the expense of these lower skill levels.

This leads us to the conclusion that supply-side policy should focus on:

1. Upskilling across the high end of the spectrum (NVQ4 all the way to NVQ7/8 (advanced vocational and postgraduate study) to meet the higher skill requirements of modern professional services, green technology, and biosciences.

2. On the opposite end of the spectrum, accelerate the reduction of ‘no qualifications’ and elevation of young people to at least NVQ2 level. The aforementioned forecast of ‘no qualifications’ falling by an anaemic 2.9% annually, the lowest in the country, would undermine the region’s competitiveness and should not be allowed to happen.

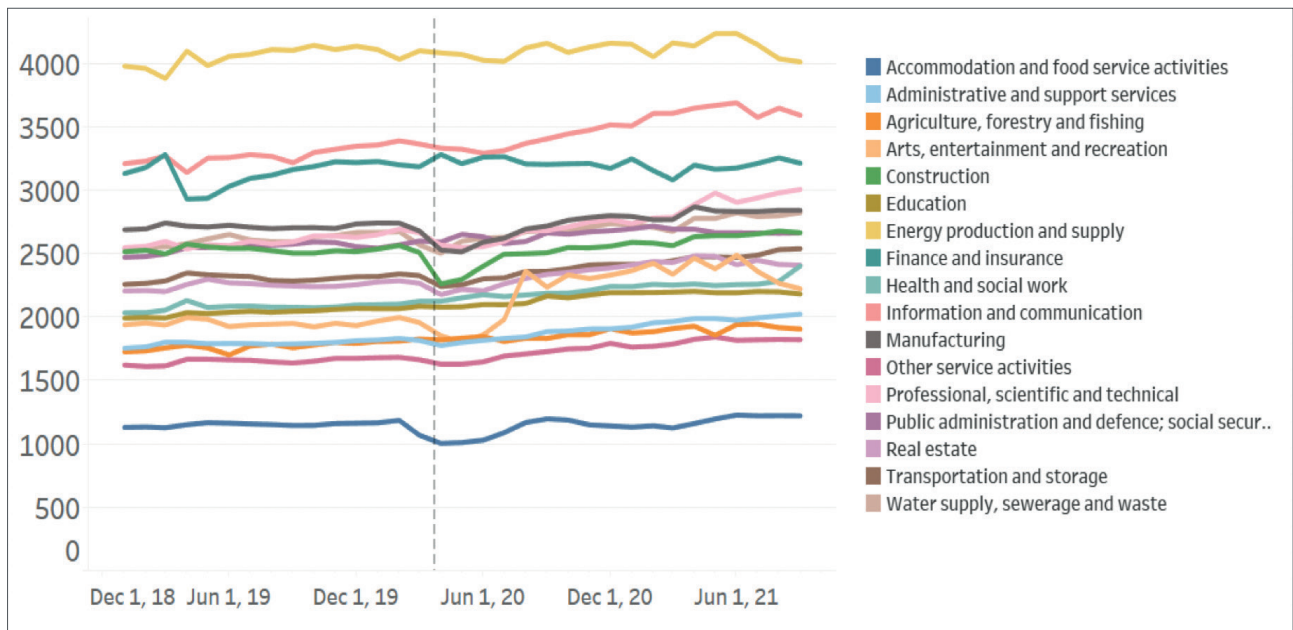


Figure 15 PAYE data shows the trend in mean monthly wages by industry. Note the vertical cutoff point corresponding to the first lockdown on March 23rd, 2020.

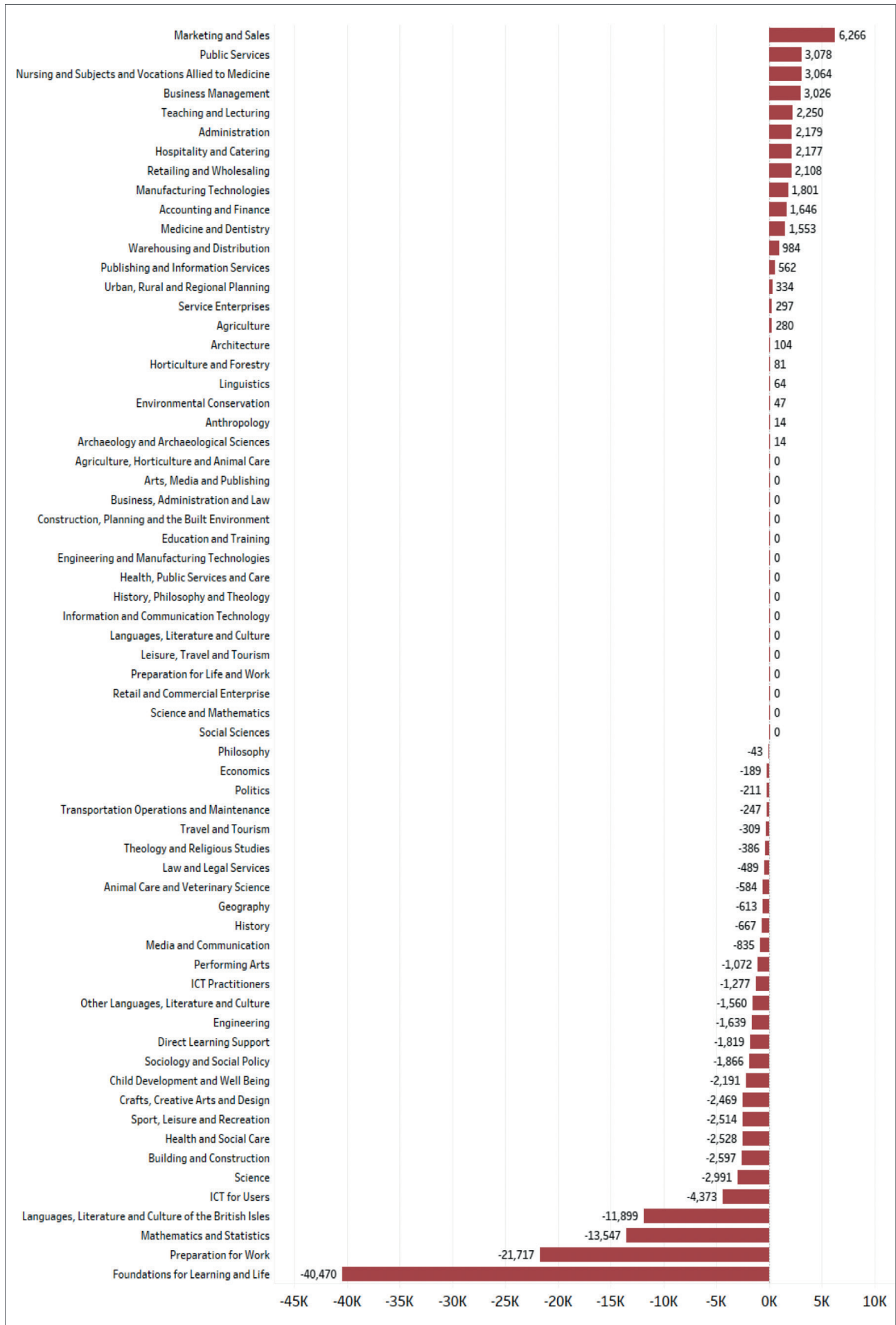
The rate of pay offered within a particular industry is an important indicator of the market’s response to scarcity of labour, and by extension of skills. Wages data collected from PAUE records shows how the imposition of lockdown, and the slowing activity in the days preceding it, strongly affected pay rates (expressed as monthly pay) in some industries but not others. Recent Trends, which are less dynamic, are also shown through September 2021. Several key trends are notable:

- There has been a significant rise in pay within arts, entertainment, and recreation, possibly reflecting the greater level of risk currently associated with this sector.
- Wages in accommodation and food services, badly dented before and during the
- Spring 2020 lockdown, have since recovered and resumed their pre-pandemic trend of slow growth.
- Professional, scientific, and technical roles were modestly impacted by the initial lockdown, but have since recovered strongly and are much higher than in the year preceding the pandemic.
- Wages in construction, badly hit in the initial lockdown, have since recovered and grown somewhat more strongly than prior to the pandemic.
- Public sector-dominant jobs in education and health have seen a consistent but muted rise in wages, unaffected by the pandemic.
- Wages in IT have grown rapidly through the past three years, and faster post-pandemic than before.
- All these trends should be considered in light of the higher level of inflation post-pandemic, which at the time of writing (November 2021) stood at 5.1%.



Figure 16: 2020/21 Emsi data highlights the difference, in each FE subject area, between the number of FE courses completed in that subject area, and the number of job openings in that same area.

Note the large negative discrepancies at the bottom of the chart, which reference generic employability skills and GCSE resubmissions, and key subjects at the top of the chart, including, marketing and sales, public services, nursing, teaching, and business management and administration.



By Subject

Job postings

A comparison is made below between the volume of job postings in the West Midlands, aggregated by Emsi, and the number of apprentices and further education students trained in related subjects. Given the differences between data sources, the geographical area and time period covered are cited in the headings for context.

Top Posted Occupations, West Midlands 3LEP area, December 2020-November 2021

By occupation, the most postings in this period were in Nursing (22,427) primary and nursery teaching and supporting staff (14,371), sales accounts and business development management (18,791), care work (10,025), book-keepers and payroll (9,611), programming and software development (12,987), and van drivers (10,902).

Apprenticeship Starts, West Midlands metropolitan area, August 2020-Jan 2021

15,100 people enrolled in apprenticeships in Q2-3 2019/20. Given the clear need, it is positive that health and social care is the single largest category for apprenticeship provision, with 2,150 people starting apprenticeships in this area in the last six months. 2,090 were trained in business management in the same period; while this goes some way towards meeting demand it also raises the question of whether these highly skilled apprenticeships are reaching those from deprived areas. The previously cited Social Mobility Commission work suggests that currently they are not. Given the high demand for payroll staff, it

is encouraging that many apprenticeships are being trained in administration (1,640) and accounting and finance (1,070). These positions are a potentially valuable ladder into higher-paying roles for young people in vocational education. However, the contrast in levels is marked, with the most administration apprenticeships at intermediate level (790) while accounting and finance were concentrated in the higher level (680). This may be because the latter category is dominated by employers funding apprenticeships for their existing staff.

Further Education Starts, West Midlands metropolitan area, August 2020-Jan 2021

There were a total of 203,708 starts of FE courses in Q2-3 2020/21.

FE course enrolments in health and social care (17,206) greatly outstrip apprenticeship starts in this field, this however being largely pitched at NVQ levels 1-3 and workplace qualifications as opposed to a level aligned with the demand for nurses, for instance.

Within business skills, business management (5,626) predominates, followed by administration (2,939) and law and legal services (1,785). 80.6% of these courses are at NVQ level 3, indicating an effective supply across this range of skills.

Higher education, West Midlands 3LEP area, 2019/20 academic year

Looking at the most recent academic year (2019/20), the most common subject areas studied were business and administrative studies (15,625) followed by subjects allied to medicine (8,460), as summarised in **Figure 3:**



Figure 17: Total graduates in the 2019/20 academic year in the West Midlands Region, by subject.

Business, management, and social sciences continue to predominate, and while a large number of doctors and nurses graduate within the region, these numbers are still outstripped by demand (22,427 in nursing), mirroring the shortfall in the Further Education system.

Impact on Employers

As seen earlier, Employer Skills Survey 2019 indicated that employers in the region feel that the lack of necessary skills is constraining their competitiveness, increasing their costs, and slowing technological change and innovation in products and processes:

	BC LEP	CW LEP	GBS LEP
Lose business or orders to competitors	46%	34%	58%
Delay developing new products or services	44%	55%	36%
Have difficulties meeting quality standards	30%	34%	30%
Experience increased operating costs	60%	22%	56%
Have difficulties introducing new working practices	34%	34%	34%
Increase workload for other staff	92%	95%	78%
Outsource work	35%	16%	27%
Withdraw from offering certain products or services altogether	25%	31%	27%
Have difficulties meeting customer services objectives	64%	59%	47%
Have difficulties introducing technological change	36%	29%	34%
None	2%	3%	3%

Table 25: Impacts identified by employers from the skills gap, by LEP, 2019.

The skills gaps identified locally are primarily the result of employees still being new to the role and training not yet complete. An issue which affect the Black Country more than the other 2 LEPS include non-work related problems e.g. health or personal problems

(11%). An issue which affects CWLEP more than the other 2 LEPs is staff being new to the role (70%), an issue which affects GBSLEP more than the other 2 is that staff have not received the appropriate training (33%).

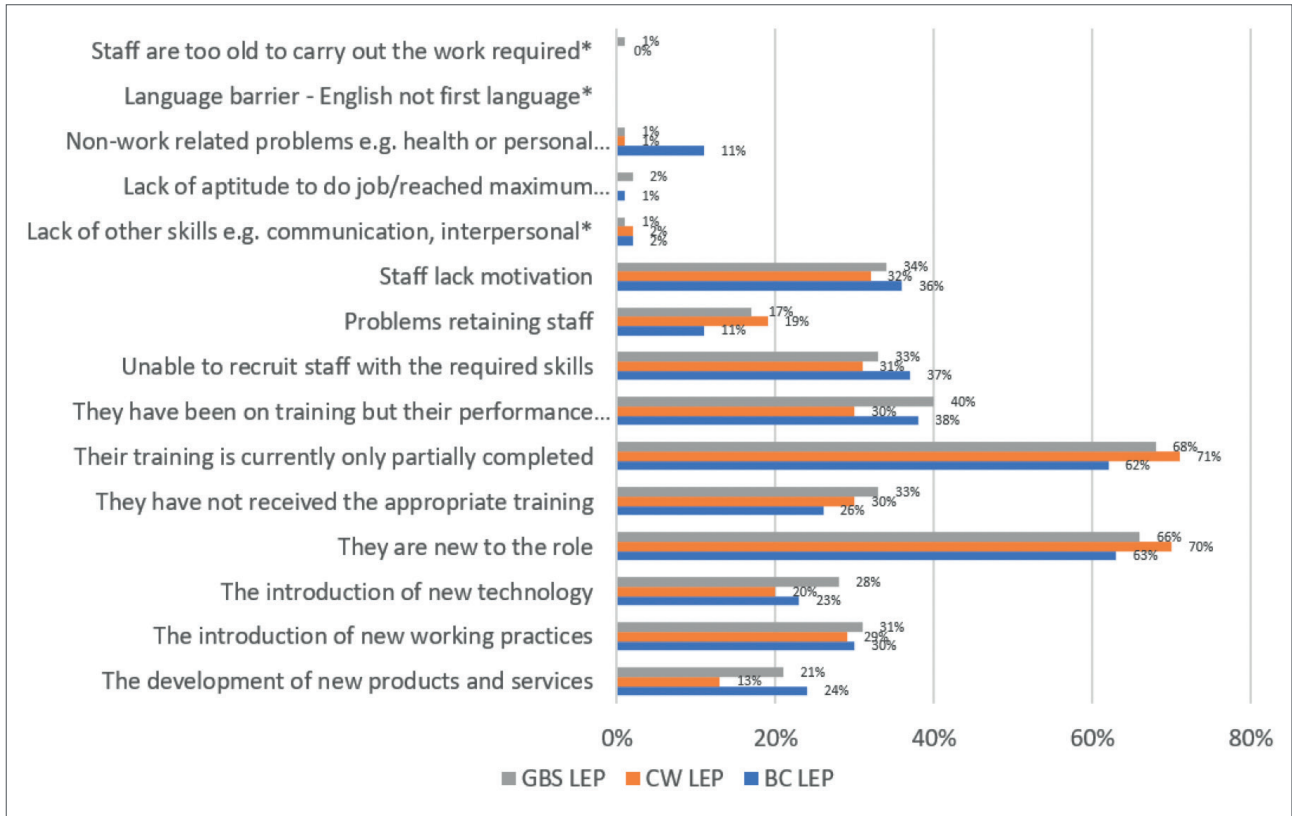


Figure 18: Specific skills issues identified for staff members by firms, by LEP area.

Compared to the UK average, the West Midlands has less of a problem with staff being overqualified for their current role, possibly a reflection of its lower overall skills base:

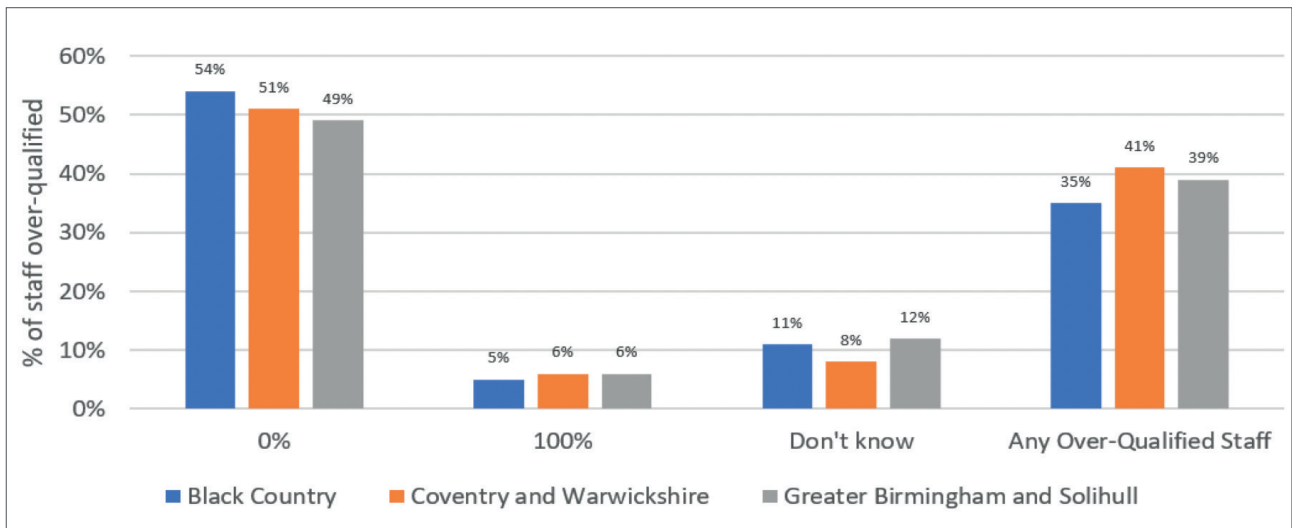


Figure 19: Over-qualified staff as a proportion of total staff by LEP area, Employer and Skills Survey. All three LEP areas had less over-qualified staff than the UK average (9%).

More establishments in the Black Country (50%) and CWLEP (51%) had no staff that were over-qualified for their role compared to the England average (50%), whilst 49% of GBSLEP establishments has no staff over-qualified.

5% of establishments in BC LEP and CW LEP, and 6% in GBSLEP had 100% of staff classed as over-qualified, compared to 9% across England.

Conclusion: Key Findings

- Disparities in the demand and supply for certain NVQ level jobs with there being an oversupply of NVQ1/3 and undersupply of NVQ2/4.
- Apprenticeship recruitment and numbers have fallen during the pandemic which has left few choices for young people especially, who wish to pursue vocational FE.
- Whilst apprenticeship numbers were increasing before the pandemic, a large proportion of these were accounted for by large companies offering further training to pre-existing employees, not new starter opportunities, thereby shutting out young people who are trying to access training and work.
- The West Midlands is behind the UK average in terms of qualification levels, with a larger share of working-age people without any formal qualifications. The Department for Education's long-term forecasts project that the West Midlands will also be the slowest region to reduce 'no qualifications' status.
- Covid-19 and resulting economic turmoil have caused a very sharp increase in claimant count compared, albeit less than the UK average.
- Further Education course provision had changed little from year to year prior to the pandemic, and the distribution of subjects offered is still very similar to the UK average. This indicates that there is a lot of scope for better tailoring the local offer to fit the needs of the region.
- The gender pay gap has been narrower and improving faster than the UK average. However, it is still significant. Men and women are equally likely to pursue further education or an apprenticeship, but there are significant differences in the courses chosen. Further education is a vital ladder to opportunity for Black and Asian students in particular.
- At most levels of further education provision, students take courses at the same level as their previous qualifications or one level higher. However, high-level further education courses are often taken by students already qualified at a yet higher level, for example undergraduate or master's degree graduates taking management or other specialised training courses. This implies that there is a gap in the further education ladder around level 4.