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THE CO-DESIGN OF AN INNOVATIVE ALL-AGE CAREERS FRAMEWORK IN COUNTY DURHAM

LMI Analysis Report: Context for County Durham's All-Age Careers Framework

February 2025

Peter Dickinson, Senior Researcher
University of Warwick Institute for Employment Research (IER)

Contents

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dmh associates background

In 2008, Dr Deirdre Hughes OBE established dmh associates to encourage collaboration and fresh thinking in careers, education and skills policy, research and practice. The outcomes from the organisation's work are designed to inform and influence policies, research and practice in the UK, Europe and internationally.

The company is based in North Shields, England. Our expertise includes consultancy, evaluation, evidence and impact assessment, literature reviews, qualitative and quantitative research, digital and labour market intelligence (LMI). We provide a full range of activities each tailored to meet specific organisational or individual needs.

Introduction

Overview

This report provides an analysis of the County Durham labour market from a number of perspectives. A key aspect of this report is providing analysis of local labour market information (LMI) that supports and informs the development of the careers framework. The focus of the analysis was determined in consultation with DCC information analysts with the intention that it did not duplicate existing analyses. There is a wealth of local based information available through Durham Insights which provides data and analysis across a range of themes including: Children and Young People; Deprivation and Poverty; Economy and Employment; Health and Wellbeing; and Population.

The economy and labour market in Durham

In 2021, Durham County Council (DCC) commissioned ekosgen to undertake an analysis of the local economy[1]. At the time of the report, the local economy was emerging from the COVID-19 pandemic and the global economy had yet to be impacted by the Russian invasion of Ukraine.

The main conclusion from the analysis was that, in regional terms, the County Durham was performing relatively well. However, in national terms, County Durham was underperforming on key aspects of the fundamentals of economic growth, productivity and skills. Another key point in the analysis was the range of economic development across the county with high GVA generating employers, sectors and jobs and affluence in some areas, and levels of low performing employers, sectors and jobs and deprivation in others.

Despite this relatively advantageous economic base, other published research shows high levels of deprivation across the county, and presents County Durham as one of the most deprived local authorities in England. Analysis for the County Durham Pound Project[2] found:

- High levels of deprivation across the county with almost half the population (47%) living in Local layer Super Output Areas (LSOAs) with high to severe overall deprivation;
- Seven wards where 100% of the population live in LSOAs that experience high to severe overall deprivation;
- Much higher levels of 16-17 year old NEETs (15%) and lower levels of GCSE attainment (-4%) than the regional average; and,
- Hourly income levels comparable to the region but lower than the national average.

Compared to the North East, County Durham has higher levels of deprivation on more than half of the domains, and significantly higher levels in the health and employment domains[3]. The wards with the highest levels of overall deprivation are: Aycliffe West, Craghead and South Moor, Peterlee East, Shildon and Dene Valley, Shotton and South Hetton, Tow Law, and Woodhouse Close. All of these wards have 100% of their population living in areas that experience high to severe overall deprivation.

Research undertaken by OCSI and Local Trust[4] has led to an alternative metric of disadvantage 'left-behind neighbourhoods'. This measure is based on the IMD but also incorporates measures of community and civic assets and infrastructure[5]. On this measure, 16 of County Durham's wards have been included, the most of any local authority in England. On this left-behind neighbourhoods measure: Aycliffe West, Craghead and South Moor, Peterlee East, Shildon and Dene Valley, Shotton and South Hetton, and Woodhouse Close from the previous list of wards are present, Tow Law is not. Wards on the left-behind neighbourhoods measure but not included in the previous list are: Blackhalls, Coundon, Deneside, Easington, Ferryhill, Horden, Peterlee West, Stanley, and Trimdon and Thornley.

Analysis for recent county monitoring reports[6] show that recent progress on Employment and Skills KPIs provides a mixed picture, as does the performance of the local economy but with variation across the county. As the following data and analysis will show, there are a number of strengths, but also aspects to develop and focus on, within the local labour market.

Structure of the report

- Section 2: Population and economic activity;
- Section 3: employment by occupation and sector, and employment forecasts;
- Section 4: young people's transitions towards and into employment;
- Section 5: Qualifications of residents, FE participation and apprenticeships;
- Section 6: Employer recruitment and training.

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[1] Ekosgen (March 2021). County Durham Economic Review: Final Report.

[2] County Durham Council (March 2022). County Durham Pound Project: Local Needs Analysis.

[3] As measured by the % of the population living in areas of high to severe deprivation (the top 30% most deprived areas LSOAs).

[4] https://ocsi.uk/2022/07/19/list-of-left-behind-neighbourhoods/

[5] This is based on the Community Needs Index https://ocsi.uk/2019/10/21/community-needs-index-measuring-social-and-cultural-factors/

[6] Economy and Enterprise Overview and Scrutiny Committee 22 April 2024 Quarter Three, 2023/24 Performance Management Report.

Population and economic activity

Introduction

This section provides data on and analyses of the population and demographic change, and economic activity and inactivity for County Durham and comparisons with the North East region and England.

Key points:

- The age profile of County Durham's population is very similar to that of the region and England, as is the gender split;
- Population growth is forecast in each area, those aged 0-64 are forecast to decline in each area and those aged 65+ are forecast to grow. The number of young people aged 5-19 is forecast to decline reducing the school age population;
- Population change by gender is very similar in each area up to the age of 65;
- The age profile of County Durham's seven parliamentary constituencies is virtually identical to that of County Durham. from the one exception is the City of Durham due to the presence of the university;
- The economic inactivity rate in County Durham (23% of the working age population) sits between the region (25%) and England (21%);
- The economic inactivity rate of younger people in County Durham is much lower than the region or England;
- Current economic inactivity rates in all three areas are similar to the average over the past 30 years, however, they are high compared to the previous decade;
- There are four main categories of economic inactivity and people within these different groups are likely to require different types support;
- County Durham has higher levels of people who are long-term sick than in the region or country, and the gap with England has widened;
- County Durham, according to the APS, has a much lower proportion of young people who are students, and a much higher proportion of economically inactive people of working age who are retired;
- The percentage of economically inactive people in County Durham who want a job is much lower than in the North East and England (18%), and the gap has widened;
- The overall employment rate for the working age population is very similar in the three areas. County Durham has a much higher employment rate amongst 16-19 and 20-24 year olds suggesting that more young people in County Durham choose to work rather than study;
- The employment rate gap with England has narrowed in both County Durham and the North East since 2013;
- Men have higher employment rates than women in all three areas, although this gender gap has narrowed.

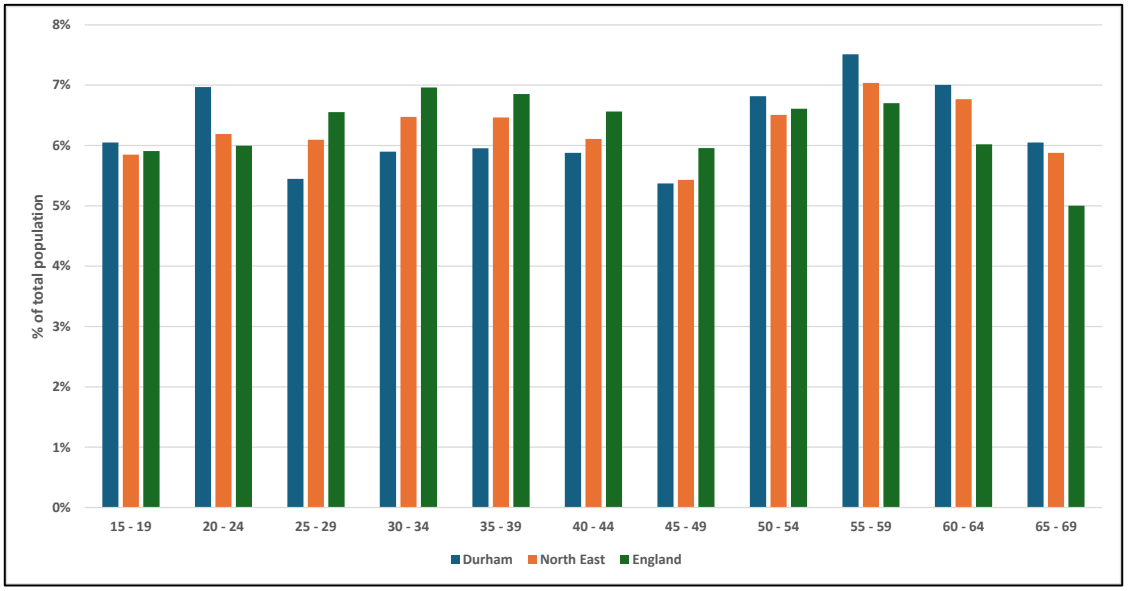
Population

Population and demographic change in County Durham

In 2022, the population in County Durham was just over half a million (527,700) and represented 20% of the North East region's population and 1% of England's. Figure 1 shows that the age profile of County Durham is very similar to that of the region and England. County Durham and the North East has a more elderly population. This is apparent over age 54. In County Durham 36% of the population is aged 55+, as is 35% in the North East, and this compares to 31% in England.

The gender split across the three areas is virtually identical. Up to the age of 24 there are marginally more men than women, but after this age there are slightly more women than men. This continues until the age of 65 where the gap widens due to the greater life expectancy of women compared to men.

Figure 1: Age profile of the population in 2022: County Durham, North East and England



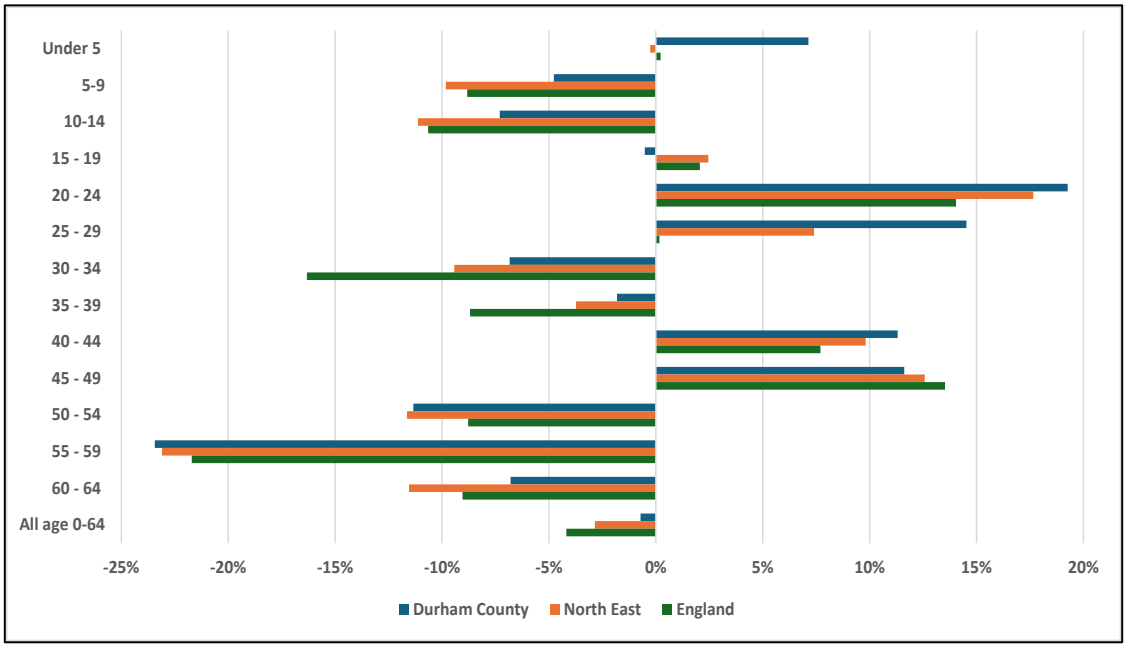
Source: ONS Population estimates; NOMIS

Between 2022 and 2035 the population in all three areas is forecast to grow. By 6% in County Durham, 4% in the North East and 5% in England. This is due to a growth in the number of people aged 65+. Those aged 0-64 are forecast to decline in each area by -1%, -3% and -4% respectively.

Figure 2 shows that there will be an expected fall in the 5-19 school population in County Durham. The same is true in the North East and England except in these areas the 15-19 population is expected to grow slightly. Therefore in County Durham there are forecast to be fewer young people at key decision or transition points at Year 6 when pupils move to secondary school, in Year 11 as pupils make post-16 choices, and at Year 13 when most young people transition into the labour market or HE.

People aged 50-64 are forecast to decline significantly in each area. From age 20-29 and 40-49, there are forecast to be a large increases in the population in all three areas, but a decrease of 30-39 year olds. At age 20-24, many young people are moving from HE into the labour market and require support with their career choices.
Whilst there are significant differences by age, the gender split is very similar up to the age of 65.

Figure 2: Population change by age group 2022-2035: Durham, North East and England



Source: ONS Population estimates and projections; NOMIS

Population profiles within County Durham

Table 1 shows the population of County Durham's parliamentary constituencies[7] by age in 2022. The age profile of the constituencies is virtually identical to that of County Durham. All that is apart from the City of Durham which has a much higher proportion of 15-19 (3 percentage points [ppts] higher than County Durham) and 20-24 (7 ppts) year olds due to the presence of Durham University.

The gender split by age group and population totals is very similar across the seven areas.

Table 1: Population age group 2022: County Durham and Parliamentary Constituencies

	Bishop Auckland	Blaydon and Consett	City of Durham	Easington	Newton Aycliffe and Spennymoor	North Durham	County Durham
Under 5	5%	5%	4%	5%	5%	5%	5%
5-9	5%	6%	5%	6%	6%	5%	5%
10-14	6%	6%	5%	6%	6%	6%	6%
15 - 19	5%	5%	9%	6%	6%	5%	6%
20 - 24	5%	5%	14%	5%	5%	5%	7%
25 - 29	5%	6%	5%	6%	6%	6%	5%
30 - 34	5%	6%	5%	6%	6%	6%	6%
35 - 39	5%	6%	6%	6%	6%	6%	6%
40 - 44	5%	6%	5%	6%	6%	6%	6%
45 - 49	6%	6%	5%	6%	6%	6%	6%
50 - 54	7%	7%	6%	7%	7%	8%	7%
55 - 59	8%	8%	6%	8%	8%	8%	8%
60 - 64	8%	7%	6%	7%	7%	7%	7%
65+	25%	22%	19%	21%	21%	22%	22%
Total	92,948	92,199	102,538	94,305	95,943	95,565	527,500

Source: ONS Population estimates; NOMIS

Economic activity and inactivity

Introduction

Table 2 shows that in 2023 just under one quarter (23%) of the working age population in County Durham was economically inactive which is slightly lower than for the North East (25%) but higher than in England (21%)[8].

Table 2: Rates of economic inactivity and activity by age 2013-2023: Durham, North East and England

Percent		**2023**			**PPT change 2013-2023**		
		Durham	**North East**	**England**	**Durham**	**North East**	**England**
16-19	Economically inactive	36%	53%	59%	-15%	-3%	4%
	Economically active	65%	47%	41%	16%	3%	-4%
20-24	Economically inactive	15%	27%	27%	-9%	1%	1%
	Economically active	85%	73%	73%	9%	-1%	-1%
25-34	Economically inactive	23%	20%	12%	5%	4%	-3%
	Economically active	77%	80%	88%	-5%	-4%	3%
35-49	Economically inactive	13%	14%	12%	-1%	0%	-2%
	Economically active	87%	86%	88%	1%	0%	2%
50-64	Economically inactive	32%	32%	26%	-6%	-3%	-2%
	Economically active	68%	68%	74%	6%	3%	2%
Total	Economically inactive	23%	25%	21%	-4%	0%	-1%
	Economically active	77%	75%	79%	4%	0%	1%

Source: Annual Population Survey; NOMIS

[7] All of County Durham's six parliamentary constituencies are within the county boundaries with the exception of Blaydon and Consett around half of which is in Gateshead.

[8] Concerns have been raised about the validity of the Annual Population Survey/Labour Force Survey because of a reduction in sample sizes which occurred after the pandemic. This is likely to have a greater impact on local level data because these are based on a smaller number of respondents. The concerns have particularly focused on the employment rate (the largest component of economic activity) which is lower than the rate implied by other sources of data. Similar concerns have not been raised about levels of economic inactivity.

The economic inactivity rate of younger people in County Durham is much lower than the region or England. In 2023, the economic inactivity rate of 16-19 year olds was 17 percentage points (ppt) lower in County Durham and 23 ppts lower than in England. There were also much lower economically inactive rates for 20-24 year olds. This is likely to be due to the smaller proportion of students (see Table 3).
Compared to the North East the proportion of economically inactive 25-34 year olds is higher but similar for the older age groups. Economic inactivity in County Durham is higher for all of the 24+ age groups when compared to England.

Economic inactivity
There has been much recent discussion about the high rates of economic inactivity and their causes[9]. The latest data for the UK shows an economic inactivity rate of 22% March-May 2024 (which is a less seasonally affected quarter) in the working age population (16-64 years olds). The average economic inactivity rate since 1992 is 22.8%. Economic inactivity in the UK tended to be higher in the 1990s and 2000s before falling almost consistently after the Great Financial Crisis to a low point of 21% just before the COVID-19 pandemic.

Rather than the overall rate itself, it is the components of economic inactivity which is causing most concern.

Table 3 shows that in 2023, 74,900 working age people in County Durham were economically inactive which is almost one quarter (23%) of the 16-64 population.

There are different reasons for economic inactivity. The figure is primarily made up of four categories: students, those looking after the family or home, those who are long-term sick, and retired people (before the state pension age). Economically inactive people within these different groups are likely to require different types of information, advice, guidance and support to move them closer to or into employment.

In County Durham, 37% of economically inactive people are long-term sick. This figure is much higher than in the North East (34%) and England (26%). In 2013, the proportion of long-term sick in County Durham and the North East was also higher than in England. And whilst there has been an increase in all three areas, the gap with England has widened (especially in County Durham).

The other stark difference between County Durham and the other two areas is the lower proportion of students. In 2023, the percentage of economically inactive people who were students in County Durham (13%) was half the national average (27%). In both County Durham and the North East there has been a sharp fall in the proportion of students since 2018. But this has been much greater in County Durham where the 2023 figure is almost half that of 2018. The smaller proportion of students in County Durham is likely due to the smaller percentage of young people who are economically inactive i.e. because young people are more likely to choose employment. Data on the destinations of young people (see Figure 14 and Figure 16) show that the proportion of young people in County Durham entering sustained education, sustained employment and not sustained destinations is very similar to the North East.

County Durham also has a higher percentage of working age retired people compared to the region and England (20%, 14% and 13% respectively). And whilst the figure has decreased in the North East and England since 2013, it has risen in County Durham.

[9] For example, see https://commonslibrary.parliament.uk/economic-update-inactivity-due-to-illness-reaches-record/

Table 3: Reasons for economic inactivity 2013-2023: Durham, North East and England

% of working age population economically inactive:	Durham			North East			England		
	2013	**2018**	**2023**	**2013**	**2018**	**2023**	**2013**	**2018**	**2023**
- student	20%	25%	13%	24%	25%	21%	27%	27%	27%
- looking after family/home	24%	24%	21%	22%	21%	18%	27%	24%	20%
- temporary sick	4%	3%	-	3%	3%	3%	2%	2%	2%
- long-term sick	27%	26%	37%	27%	28%	34%	21%	22%	26%
- discouraged	1%	-	-	1%	1%	0%	1%	0%	0%
- retired	15%	13%	20%	16%	13%	14%	15%	13%	13%
- other	8%	9%	7%	8%	10%	9%	9%	11%	12%
- who want a job	26%	21%	15%	23%	19%	19%	24%	21%	18%
- who do not want a job	74%	79%	85%	77%	81%	81%	76%	80%	83%
% working age pop economically inactive	27%	23%	23%	26%	25%	25%	23%	21%	21%
Number economically inactive	86,400	72,900	74,900	4,226	4,019	4,149	7,716,200	7,335,800	7,441,200

Source: Annual Population Survey; NOMIS

The percentage of economically inactive people in County Durham who want a job (15%) is much lower than in the North East (19%) and England (18%). In 2013, 26% of economically inactive people in County Durham wanted a job, a fall of 11 ppts to 2023. In the North East the proportion of economically inactive people wanting a job fell by four ppts (2013-2023) and by six ppts in England.

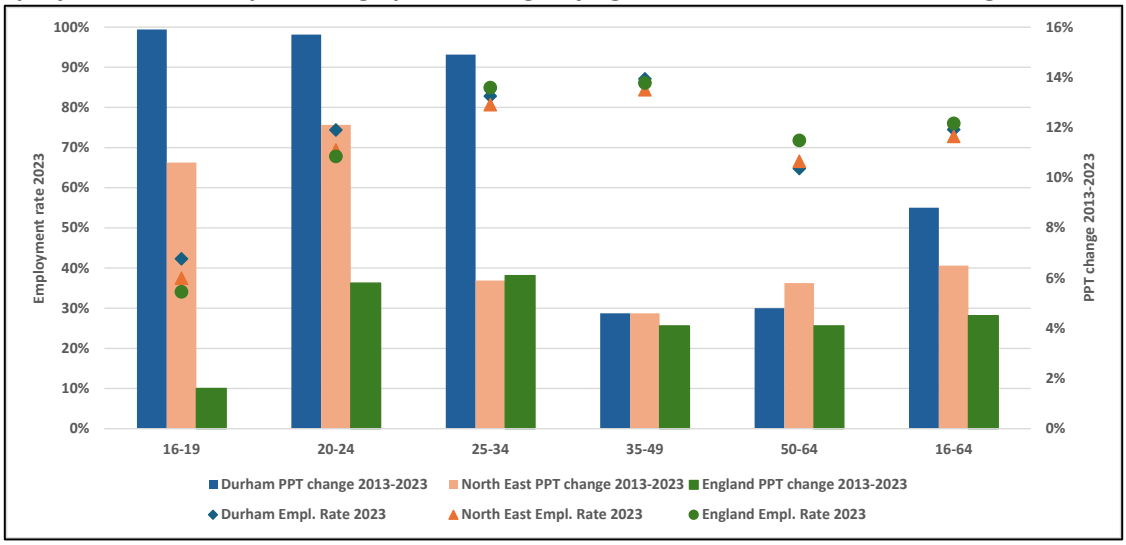
Economic activity

As the working age population can either be economically active or inactive, this section provides a mirror image of the previous one. Economic activity is broken into two categories: employed and unemployed. For County Durham, the number (though not necessarily the proportion) of unemployed people is too small that the figures are not published.

Figure 3 shows the employment rate by age in the three areas (the points), and the percentage point change since 2013 (the bars). The overall employment rate (left axis) for the working age population (16-64) is very similar in the three areas. County Durham (75%) has a slightly lower rate than England (76%) but higher than the North East (73%). County Durham has a much higher employment rate amongst 16-19 and 20-24 year olds suggesting that more young people in County Durham choose to work rather than study. England tends to have a higher employment rate amongst the older age groups.

The changes in the employment rate between 2013 and 2023 (right axis) are much greater in County Durham and the North East than in England. Between 2013 and 2023 the employment rate for 16-19, 20-24 and 25-34 year olds in County Durham increased by 15-16 ppts whereas the changes in England were all single digit. In the North East, 16-19 and 20-24 year olds' employment rates followed a similar trend to County Durham's though not as large.

Figure 3: Employment rate and percentage point change by age: Durham, North East and England



Source: Annual Population Survey; NOMIS

Even though the APS has supressed the unemployment rate, unemployment will be a mirror image of employment trends i.e. the unemployment has reduced for all age groups 2013-2023.

Men have higher employment rates than women in all three areas. In all these areas this gender gap has narrowed except for 16-19 year olds. Between 2013 and 2023 the gender gap overall narrowed by three ppts in all three areas. In each area, the employment rate of both men and women increased, but at a faster rate for women.

For 16-19 year olds the gender gap increased by 24 ppts in County Durham, six ppts in the North East and three ppts in England between 2013 and 2023. Based on the analysis in the previous section this is likely to be because young men are choosing work rather than economic inactivity (most likely as a student). Much of this change occurred between 2013 and 2018, but has continued since then.

The next section provides more detail on employment, providing analysis of the occupations, sectors and forecasts for people working in County Durham.

Employment

Introduction

This section provides data on and analyses of employment in County Durham by status, occupation sector and detailed sector, and forecasts to 2035. Comparisons with the North East region and England are provided.

Key points:

- Levels of self-employment are higher in County Durham than in the region and England, and has grown faster. Men have higher self-employment rates in all areas;
- Covid-19 had a detrimental impact on levels self-employment in the North East and England but in County Durham the rate rose;
- In 2023 the largest occupations of people working in County Durham are professional occupations, followed by associate professional and technical occupations;
- Compared to the North East and England, fewer people work in higher level skilled occupations and more work in low skilled occupations;
- Over the past ten years, the most significant changes in County Durham are a relative fall in administrative and secretarial occupation jobs and an increase in associate professional and technical and professional occupations;
- Employment in County Durham rose significantly 2014-23 resulting in growth in almost all occupations. Employment rose in 15 of the 25 occupations. Of the top ten occupations by employment size in 2014, employment rose in seven and fell in three;
- Employment forecasts are only available for NECA, where employment is forecast to increase by +2% between 2025 and 2035, this is lower than in England;
- The pattern of occupational change (though not the magnitude) is similar to England;
- At a 2-digit SOC level, employment is forecast to increase in 15 of the 25 occupations between 2025-2035. Double digit percentage increases are predicted in six occupations and double digit falls in three occupations;
- In 2022, five sectors accounted for 60% of employment in County Durham: wholesale and retail trade; human health and social work activities; manufacturing; education; and, public administration and defence;
- Compared to England, County Durham has relatively more people working in: manufacturing; education; and, public administration and defence;
- At 2-digit SIC level, the top seven sectors constitute half of all employment in County Durham. The performance of the top 20 sectors varied significantly 2015-2022;
- Employment by sector varies significantly across the seven County Durham parliamentary constituencies, although there are similarities. One in ten or more people work in: wholesale and retail trade; education; and human health and social work. These three sectors account for at least one third of employment in each area;
- Between 2015 and 2022, employment rose in every constituency except for Bishop Auckland and Easington. It remained unchanged in Darlington;
- Analysis of online job advert data shows that recent employer recruitment activity has declined from a high point of December 2021, just before the Russian invasion of Ukraine;
- Compared to the UK, County Durham has lower levels of online job adverts;
- Since 2019, the number of online job adverts has increased significantly in County Durham, especially for associate professional and technical, and professional occupations;
- Employment change by sector is forecast to be quite similar in NECA and England. The main difference is construction where employment is forecast to decline in NECA but grow in England;
- At a more detailed sector level, employment is forecast to increase in 12 of the 22 sectors. In the top five sectors by employment size in 2025, growth is forecast in three and a decline in two;
- Replacement demand will continue to provide job opportunities in all sectors and occupations;
- As a result of the occupational and sectoral trends there is forecast to be an increase in demand for people with higher and medium level skills, especially those equivalent to first degree level and above.

Employment by status

In County Durham 13% of employed people are self-employed (2023). This compares to 9% in the North East and 12% in England. Between 2013 and 2023, self-employment increased in County Durham much faster than elsewhere. In 2013, County Durham had the lowest self-employment rate for the three areas. But since 2013, self-

employment increased by four ppts in County Durham whereas it fell by one ppt in the North East and two ppts in England.

In 2023, men had a higher self-employment rate than women in each area, with County Durham having the largest gender differential. The self-employment gender gap was seven ppts in County Durham. Between 2013 and 2023, the self-employment rate for both men and women in County Durham increased, in England both rates fell. In the North East, self-employment rose for women but not men.

Covid-19 had a detrimental impact on self-employment, reducing the self-employment rate for both men and women in the North East and England between 2018 and 2023. However, in County Durham the rate rose for both men and women.

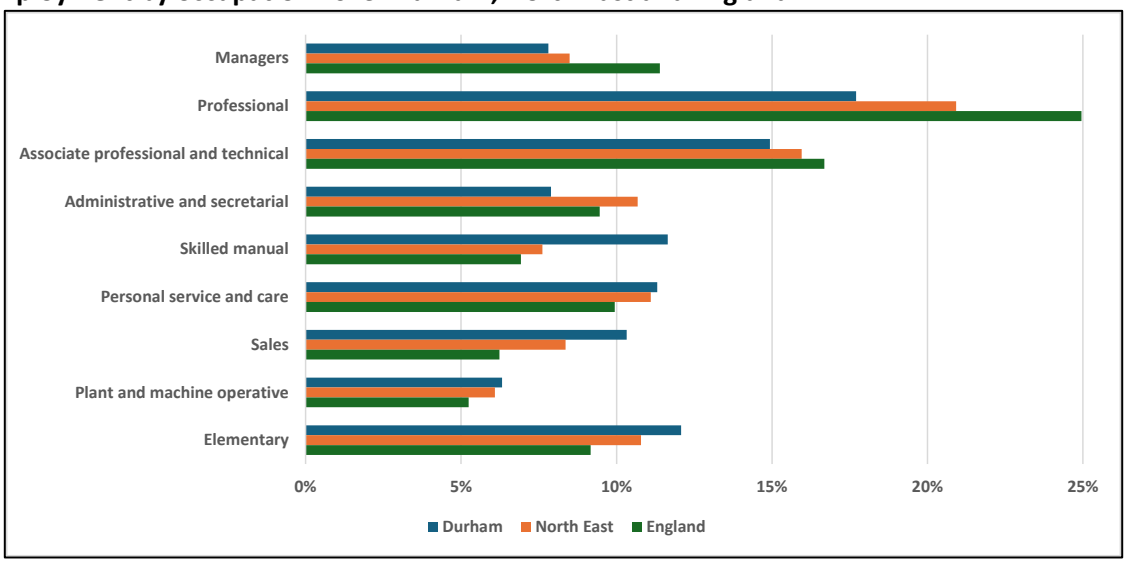
Employment by occupation

Up to date data on the employment of residents by occupation is not available, so the analysis switches in this section to people who *work* in County Durham rather than those who *live* there.

In 2023, according to the APS, almost a quarter of a million people worked in County Durham (234,400)[10]. Figure 4 shows that in 2023 the largest occupation category of people working in County Durham is professional occupations (18%), followed by associate professional and technical occupations (15%). There are four categories each accounting for around 10% to 12% of employment: skilled manual; personal service and care; sales; and, elementary occupations. Compared to the North East, there are fewer people working in higher level skilled occupations (40% compared to 45%), and England (53%); and more working in low skilled occupations (29%, 25% and 21% respectively).

Between 2014 and 2023, the most significant change in County Durham was a relative fall in employment in administrative and secretarial occupations (-4 ppts) and an increase in associate professional and technical (+3 ppts) and professional (+2 ppts) occupations.

Figure 4: Employment by occupation 2023: Durham, North East and England



Source: Annual Population Survey; NOMIS

More detailed data is available on occupations. Table 4 shows employment in 2-digit SOC occupations ranked by employment size, and shows the percentage change 2014-2023. Employment in County Durham rose significantly (+26%) over this period so there was growth in almost all occupations. Employment rose in 15 of the 25 occupations. There was employment growth of over 90% in six occupations: business and public service associate professionals; science, research, engineering and technology professionals; skilled agricultural and related trades; textiles, printing and other skilled trades; customer service occupations; protective service occupations; and, science, engineering and technology associate professionals. Of the top ten occupations by employment size in 2014,

[10] The workplace data includes people of all ages not just the working age population (16-64). In 2023 in County Durham, there were around 9,000 people age 65+ who were in employment.

employment rose in seven and fell in three: administrative occupations; caring personal service occupations; and, other managers and proprietors all declined.

Table 4: Employment by 2-digit SOC occupation 2014-2023: County Durham

2-digit SOC occupations	2014	2023	% 2023	% change 2014-23
Elementary Administration and Service	17,000	22,900	10%	35%
Sales	13,400	17,600	7%	31%
Business and Public Service Assoc. Prof.	8,300	16,100	7%	94%
Administrative	16,600	15,000	6%	-10%
Teaching and Educational Professionals	9,600	14,700	6%	53%
Science, Research, Engineering and Technology Professionals	4,700	14,400	6%	206%
Skilled Metal, Electrical and Electronic Trades	10,000	13,900	6%	39%
Caring personal service	14,600	13,000	5%	-11%[11]
Corporate Managers and Directors	8,400	10,800	5%	29%
Transport and Mobile Machine Drivers and Operatives	8,400	8,600	4%	2%
Other Managers and Proprietors	8,300	7,500	3%	-10%
Skilled Agricultural and Related Trades	2,300	7,400	3%	222%
Textiles, Printing and Other Skilled Trades	3,700	7,400	3%	100%
Customer service	3,100	6,600	3%	113%
Business, Media and Public Service Professionals	7,600	6,500	3%	-14%
Protective Service Assoc. Prof.	2,500	6,200	3%	148%
Process, Plant and Machine Operatives	6,700	6,200	3%	-7%
Science, Engineering and Technology Assoc. Prof.	3,100	6,100	3%	97%
Leisure, Travel and Related Personal Service	4,400	6,100	3%	39%
Skilled Construction and Building Trades	7,700	6,000	3%	-22%
Health Professionals	7,200	5,900	2%	-18%
Elementary Trades and Related	4,600	5,400	2%	17%
Culture, Media and Sports Assoc. Prof.	5,100	4,700	2%	-8%
Secretarial and Related	4,900	3,500	1%	-29%
Health and Social Care Assoc. Prof.	3,500	1,900	1%	-46%[12]
All occupations	**187,714**	**236,423**	**99%**	**26%**

Source: Annual Population Survey; NOMIS

Occupation forecasts

Employment forecasts are available but the lowest geographic level they are available is Combined Authority level, therefore the data in this section is presented for NECA.

[11] This seems strange given what has happened with increased demand for health and care occupations. This SOC increased in North East and England. However, it is consistent with the SIC data below.

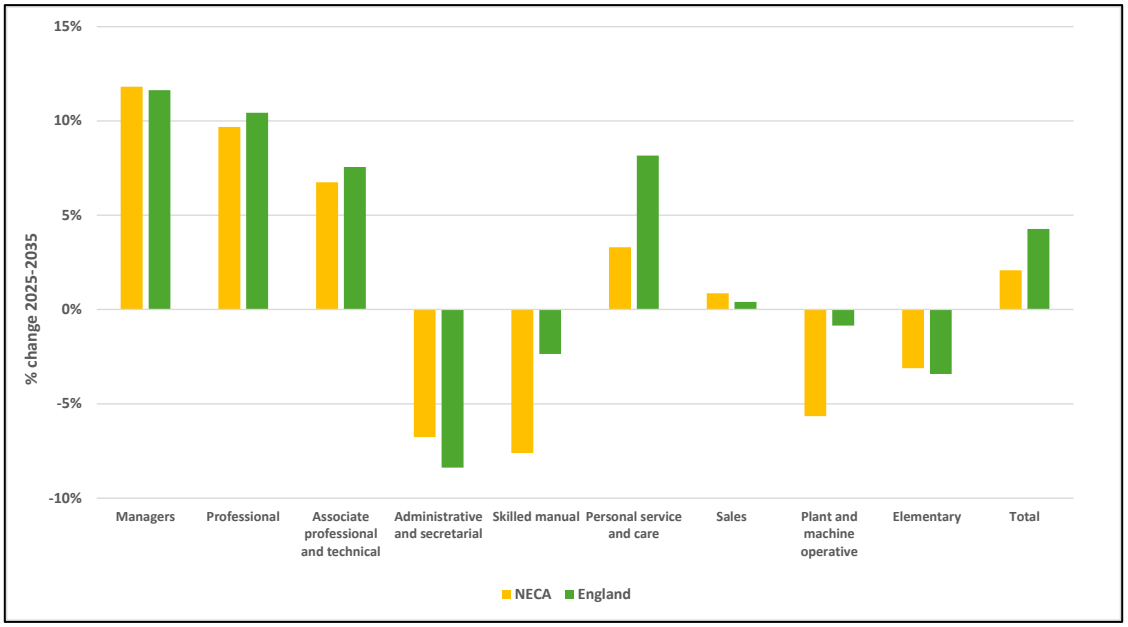
[12] Ibid.

Figure 5 shows that employment in NECA is forecast to increase by +2% between 2025 and 2035, which is lower than the forecast increase for England (+4%). The pattern of change (though not the magnitude) is very similar for NECA and England. In both areas there are forecast to be significant increases in managers, professional, and associate professional and technical occupations. A significant increase is also forecast for personal service and care occupations in England, but less so in NECA. The forecasts predict a fall in the number of jobs in administrative and secretarial; skilled manual; plant and machine operative; and elementary occupations.

It is important to note that the employment forecasts have three components: occupational changes due to the impact of different trends on particular jobs; sectoral changes which indirectly affect occupations because of trends impacting on sectors (e.g. the reduction in miners due trends reducing employment in extraction industries); but by far the biggest effect is due to replacement demand i.e. the need to replace people who leave their jobs most notably due to retirement.

Therefore, the biggest job opportunities (and challenges) in a particular area is because of the 'conveyor belt' process by which people eventually leave (mostly due to retirement) from their jobs and people at the beginning of their careers start them.
In the NECA area, the total requirement for people entering the workforce due to these three changes is forecast to be 249,000 between 2020-2035. Of this 94% will be due to the need to replace people leaving their jobs (replacement demand). Even in those occupations that are predicted to lose overall numbers, there will be a total requirement of 70,000 job opportunities arising due to replacement demand.

Figure 5: Employment forecasts by occupation 2025-35: NECA and England



Source: Working Futures

Table 5 shows the employment forecast for 2-digit SOC occupations 2025-2035. Employment is forecast to increase in 15 of the 25 occupations. Double digit percentage increases are predicted in six occupations: other managers and proprietors; business, media and public service professionals; protective service occupations; culture, media and sports occupations; skilled agricultural and related trades; and, customer service occupations. Double digit falls are forecast in three occupations: secretarial and related occupations; skilled metal, electrical and electronic trades; and, skilled construction and building trades. However, replacement demand will still mean opportunities for people entering all types of occupations.

Table 5: Forecast employment by 2-digit SOC occupation 2025-2035: NECA

	2035	**Numerical change 2025-2035**	**% change 2025-2035**
Corporate managers and directors	25,234	2,048	9%
Other managers and proprietors	20,456	2,779	16%

Science, research, engineering and technology professionals	26,475	2,160	9%
Health professionals	34,326	2,842	9%
Teaching and other educational professionals	25,804	1,730	7%
Business, media and public service professionals	30,199	3,575	13%
Science, engineering and technology assoc. prof.	9,367	234	3%
Health and social care assoc. prof.	11,167	752	7%
Protective service assoc. prof.	9,034	1,039	13%
Culture, media and sports assoc. prof.	5,984	650	12%
Business and public service assoc. prof.	21,867	953	5%
Administrative	37,997	-2,126	-5%
Secretarial and related	7,872	-1,202	-13%
Skilled agricultural and related trades	4,388	434	11%
Skilled metal, electrical and electronic trades	16,746	-1,965	-11%
Skilled construction and building trades	14,221	-1,603	-10%
Textiles, printing and other skilled trades	7,822	-422	-5%
Caring personal service	34,879	1,240	4%
Leisure, travel and related personal service	10,612	202	2%
Community and civil enforcement	560	28	5%
Sales	38,751	-1,392	-3%
Customer service	13,165	1,833	16%
Process, plant and machine operatives	18,229	-1,009	-5%
Transport and mobile machine drivers and operatives	17,902	-1,155	-6%
Elementary trades and related	4,881	-462	-9%
Elementary administration and service	44,843	-1,134	-2%
All occupations	**492,778**	**10,027**	**2%**

Source: Working Futures

Employment by sector

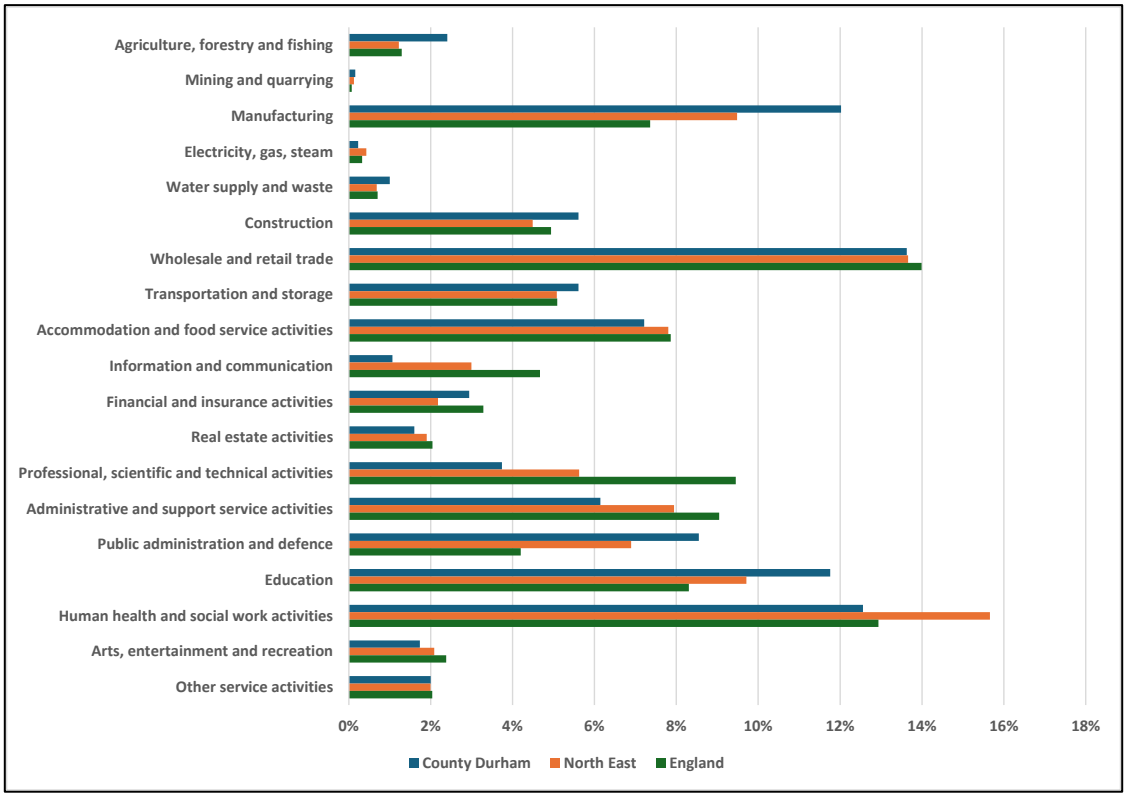
Data in this section comes from the Business Register and Employment Survey (BRES) and is available from NOMIS from 2015 until 2022. It refers to people who *work* in County Durham.

In 2022, according to the BRES, there were 187,000 people in employment in County Durham[13]. Between 2015 and 2022, employment rose by +4% which was higher than the North East (+1%) but lower than in England (+8%). Figure 6 shows that in 2022, five sectors accounted for 60% of employment in County Durham: wholesale and retail trade; human health and social work activities; manufacturing; education; public administration and defence. Compared to England, County Durham has relatively more people working in: manufacturing; education; and, public administration and defence. County Durham has relatively fewer people working in: administrative and support service activities; professional, scientific and technical activities; and, information and communication.

[13] This is much smaller than reported by the APS. This is because the BRES data only includes employees, and is based on a survey of employers rather than households.

The sectoral distribution of employment is very similar in County Durham and the North East region. Amongst the large employment sectors, County Durham has comparatively fewer people working in human health and social work activities, and more working manufacturing.

Figure 6: Employment by sector 2022: County Durham, North East and England



Source: BRES; NOMIS

Table 6 shows the largest employment sectors in County Durham. The top seven sectors in the list make up about half (48%) of all employment in County Durham. The performance of these top 20 sectors between 2015 and 2022 has varied significantly. Some sectors - financial service activities and warehousing and support for transportation – have seen very large increases in employment, whilst some have seen falls – human health, and social work.

Table 6: Employment in largest 20 2-digit SIC sectors 2015-2022: County Durham

	2015	2022	% 2022	% change 2015-22
Education	20000	22000	12%	10%
Retail trade	18500	18000	10%	-3%
Public administration and defence	14000	16000	9%	14%
Food and beverage service activities	11000	10500	6%	-5%
Human health activities	11500	10000	5%	-13%
Residential care activities	6000	7000	4%	17%
Social work activities	7500	7000	4%	-7%
Specialised construction activities	5500	6000	3%	9%
Warehousing and support for transportation	1875	5000	3%	167%
Financial service activities, except insurance and pensions	1000	5000	3%	400%
Wholesale trade	5000	4750	3%	-5%
Crop and animal production	3750	4500	2%	20%

Manufacture of fabricated metal products	4500	4500	2%	0%
Land transport and transport via pipelines	4000	4250	2%	6%
Employment activities	3000	4000	2%	33%
Manufacture of machinery and equipment (not elsewhere classified [nec])	2750	3250	2%	18%
Wholesale and retail trade and repair of motor vehicles and motorcycles	3000	3250	2%	8%
Real estate activities	2750	3000	2%	9%
Services to buildings and landscape activities	2375	3000	2%	26%
Civil engineering	1875	2750	1%	47%

Source: BRES; NOMIS

Even more detailed data is available at the 5-digit SIC level for County Durham. The 5-digit level provides over 730 detailed industrial classifications.
Table 6 shows the 5-digit subclasses for those sectors that employ 1% or more of people working in County Durham. There are a wide range of sectors, although employment in specific public administration, education, and human health and social work sectors account for over half of these 5-digit sectors. Detailed sectors in accommodation and food service activities are also represented.

The 27 detailed sectors in Table 7 represent just over half (51%) of all employment in County Durham.

Table 7: Employment in largest 20 5-digit SIC sectors 2015-2022: County Durham

Broad sector	Sector sub classification	Employment	Percent	Broad sector	Sector sub classification	Employment	Percent
Public admin. & defence	84110: General public admin. activities	9,000	5%	Human health & social work activities	87300: Residential care for the elderly & disabled	2,500	1%
Wholesale & retail trade	47110: Retail sale in non-specialised stores with food/ beverages/tobacco dominant	8,000	4%	Accommodation & food service activities	56102: Unlicensed restaurants & cafes	2,375	1%
Education	85200: Primary education	6,500	3%	Professional, scientific & technical activities	78109: Employment placement agencies nec	2,375	1%
Education	85421: First-degree level higher education	6,000	3%	Construction	42990: Construction of other civil engineering projects nec	2,250	1%
Financial & insurance activities	64191: Banks	5,000	3%	Public admin. & defence	84240: Public order & safety activities	2,250	1%
Education	85310: General secondary education	5,000	3%	Human health & social work activities	86210: General medical practice activities	2,250	1%
Human health & social work activities	86101: Hospital activities	5,000	3%	Human health & social work activities	88990: Other social work activities without accomm.	2,250	1%
Transportation & storage	52103: Operation of warehousing & storage facilities for land transport	4,750	3%	Wholesale & retail trade	45200: Maintenance & repair of motor vehicles	2,125	1%
Agriculture, forestry & fishing	01000: DEFRA/Scottish Executive Agricultural Data	4,250	2%	Human health & social work activities	87900: Other residential care activities	2,125	1%
Human health & social work activities	88100: Social work activities without accommodation	3,250	2%	Accommodation & food service activities	56101: Licensed restaurants	2,000	1%
Accommodation & food service activities	56302: Public houses & bars	3,000	2%	Education	85590: Other education nec	2,000	1%
Transportation & storage	49410: Freight transport by road	2,750	1%	Human health & social work activities	87100: Residential nursing care activities	2,000	1%
Public admin. & defence	84230: Justice & judicial activities	2,750	1%	Human health & social work activities	86900: Other human health activities	1,875	1%
Accommodation & food service activities	55100: Hotels & similar accommodation	2,500	1%				

Source: BRES; NOMIS

Employment by sector in Parliamentary constituencies

Table 8 shows employment by sector for the seven parliamentary constituencies in County Durham. In 2022, City of Durham had the highest number of jobs (48,745) and North Durham the least (22,550).

The distribution of employment varies significantly across the different constituencies. For example, manufacturing accounts for 26% of all employment in Sedgefield but only 3% in City of Durham and 5% in Darlington. Public administration constitutes 15% of employment in City of Durham but only 2% in Sedgefield and 4% in North Durham and North West Durham.

There are similarities; however, around one in ten people at least work in wholesale and retail trade, education, and human health and social work in each area. Together, these three sectors account for at least one third of employment in each area.

Between 2015 and 2022, employment rose in most areas. Employment grew by the largest amount in North Durham (14%) and City of Durham (12%). However, employment fell in Bishop Auckland (-7%) and Easington (-2%) and remained unchanged in Darlington.

Employment fell in professional, scientific and technical activities in each of the seven constituencies. The number of jobs in manufacturing, wholesale and retail, and human health and social work either fell or did not increase in all but one area (Darlington, Easington and North West Durham respectively).

No one sector grew in every area but there were a number of sectors which grew in the majority of constituencies these are: construction; transportation and storage; information and communication; financial and insurance activities; real estate activities; administrative and support service activities; public administration and defence; education; arts, entertainment and recreation; and, other service activities.

	Bishop Auckland N=32,640		City of Durham N=48,745		Darlington N=42,530		Easington N=26,560		North Durham N=22,550		North West Durham N=22,810		Sedgefield N=32,890	
	% 2022	% chng 2015-22	% 2022	% chng 2015-22	% 2022	% chng 2015-22	% 2022	% chng 2015-22	% 2022	% chng 2015-22	% 2022	% chng 2015-22	% 2022	% chng 2015-22
Agriculture, forestry and fishing	0%	100%	0%	50%	0%	120%	0%	-	0%	-	0%	133%	0%	150%
Mining and quarrying	0%	13%	0%	425%	0%	0%	0%	-	0%	-	0%	50%	0%	-50%
Manufacturing	15%	-10%	3%	-8%	5%	44%	21%	-27%	11%	-26%	20%	-6%	26%	-12%
Electricity, gas, steam	0%	0%	0%	122%	0%	-	0%	567%	0%	125%	0%	-	0%	43%
Water supply and waste	0%	22%	2%	25%	1%	14%	0%	567%	1%	23%	0%	14%	0%	100%
Construction	7%	-21%	5%	10%	3%	9%	3%	18%	6%	0%	7%	31%	5%	-7%
Wholesale and retail trade	18%	-17%	13%	0%	15%	-8%	14%	27%	17%	-20%	14%	0%	12%	-6%
Transportation and storage	3%	22%	2%	317%	5%	6%	4%	-25%	9%	-12%	3%	23%	5%	177%
Accommodation and food service activities	7%	0%	9%	-6%	6%	-20%	7%	7%	8%	13%	8%	0%	8%	-10%
Information and communication	1%	5%	1%	64%	4%	83%	2%	-53%	1%	-12%	1%	-33%	6%	-73%
Financial and insurance activities	1%	-33%	1%	75%	5%	-35%	3%	-86%	1%	1536%	1%	23%	0%	17%
Real estate activities	2%	55%	2%	-21%	1%	-24%	1%	86%	2%	0%	1%	-9%	1%	5%
Professional, scientific and technical activities	5%	-29%	4%	-7%	9%	-13%	4%	0%	5%	-16%	8%	-47%	8%	-40%
Administrative and support service activities	4%	10%	7%	0%	9%	-38%	9%	30%	4%	39%	3%	73%	3%	175%
Public administration and defence	7%	0%	15%	20%	6%	60%	9%	-15%	4%	13%	4%	-22%	2%	150%
Education	10%	0%	16%	19%	8%	0%	9%	-5%	9%	13%	10%	6%	8%	9%
Human health and social work activities	14%	0%	15%	-13%	19%	-6%	11%	-8%	16%	0%	16%	13%	13%	-24%
Arts, entertainment and recreation	2%	-25%	1%	-31%	2%	0%	1%	30%	4%	-26%	2%	140%	1%	100%
Other service activities	3%	-18%	2%	45%	2%	5%	2%	0%	2%	0%	2%	6%	1%	22%
Total	**100%**	**-7%**	**100%**	**12%**	**100%**	**0%**	**100%**	**-2%**	**100%**	**14%**	**100%**	**4%**	**100%**	**4%**

Source: BRES; NOMIS

Table 8: Employment in largest 20 2-digit SIC sectors 2015-2022: County Durham Parliamentary constituencies

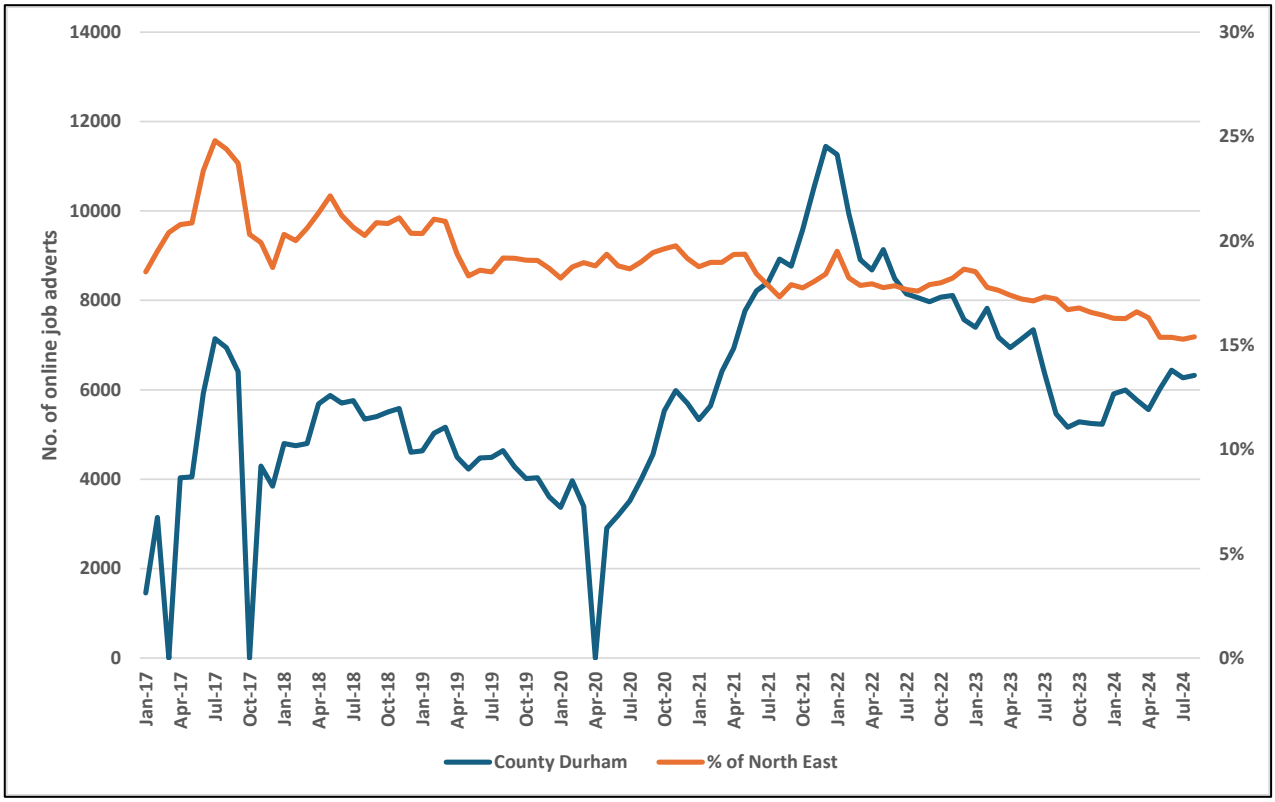
Current employer recruitment

ONS has recently made available data at a local authority level of employer recruitment activity through online job adverts. Monitoring job adverts provides an up-to-date measure of employer recruitment activity, and recent trends. However, some occupations and sectors are less well represented than other methodologies because they predominantly recruit through other mechanisms, including word of mouth.

Figure 7 shows the number of monthly job adverts in County Durham between January 2017 and August 2024. Since the lifting of the COVID-19 lockdowns in May 2021, there have been an average of around 7,500 online job vacancies each month (some of which will be advertised for several months). The number of online job adverts rose to a peak of almost 11,500 in December 2021, since which the figure has fallen to around 6,500.

As a proportion of job adverts in the North East, the proportion in County Durham has fallen since March 2019 when it stood at 21%. In the first 8 months of 2024 the percentage has averaged 16% suggesting relatively reduced employer recruitment activity since pandemic lockdowns ended.

Figure 7: Monthly online job adverts County Durham and % of North East 2017-2024

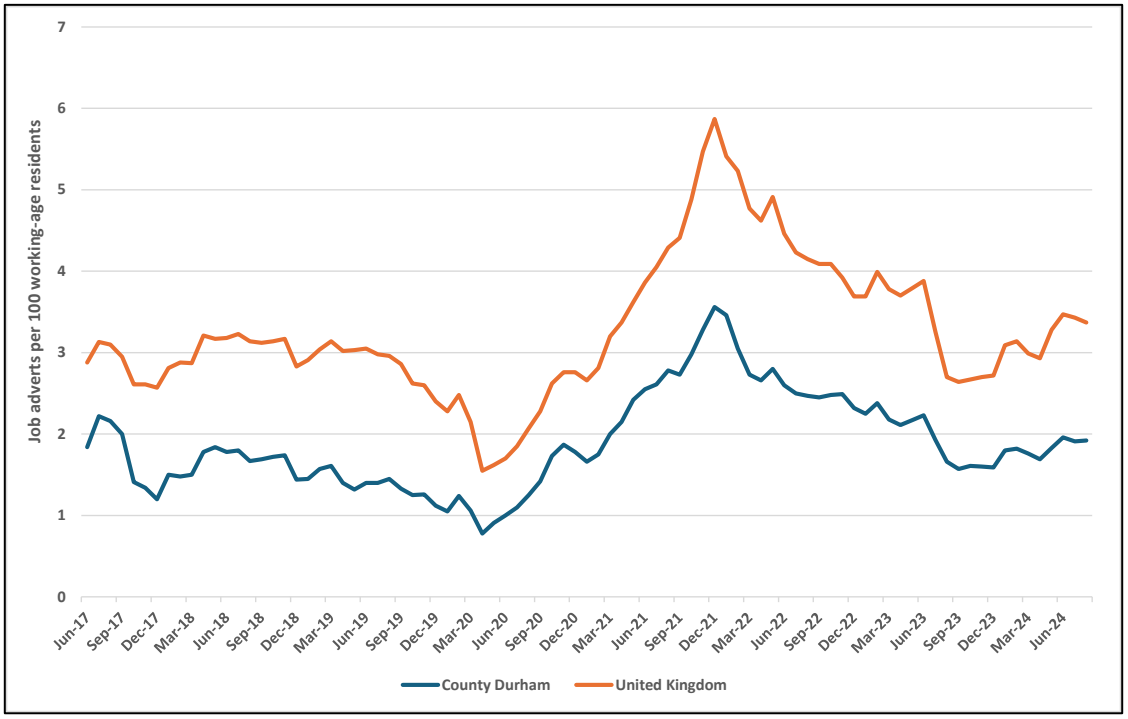


Source: Textkernel, Office for National Statistics

Figure 8 shows the proportion of job adverts per 100 working age residents in County Durham and the UK between January 2017 and August 2024. Over this period there have 1.9 job adverts for 100 working age residents in County Durham and 3.3 in the UK. Since the COVID-19 pandemic in June 2021, there have been 2.3 in County Durham and 3.9 across the UK.

Whilst there have been relatively fewer job adverts in County Durham, the trend since 2017 has been very similar to the UK. The post-pandemic recovery peaked in December 2021, and the decline was accelerated by the Russian invasion of Ukraine. The subsequent low point was September 2023 in both areas.

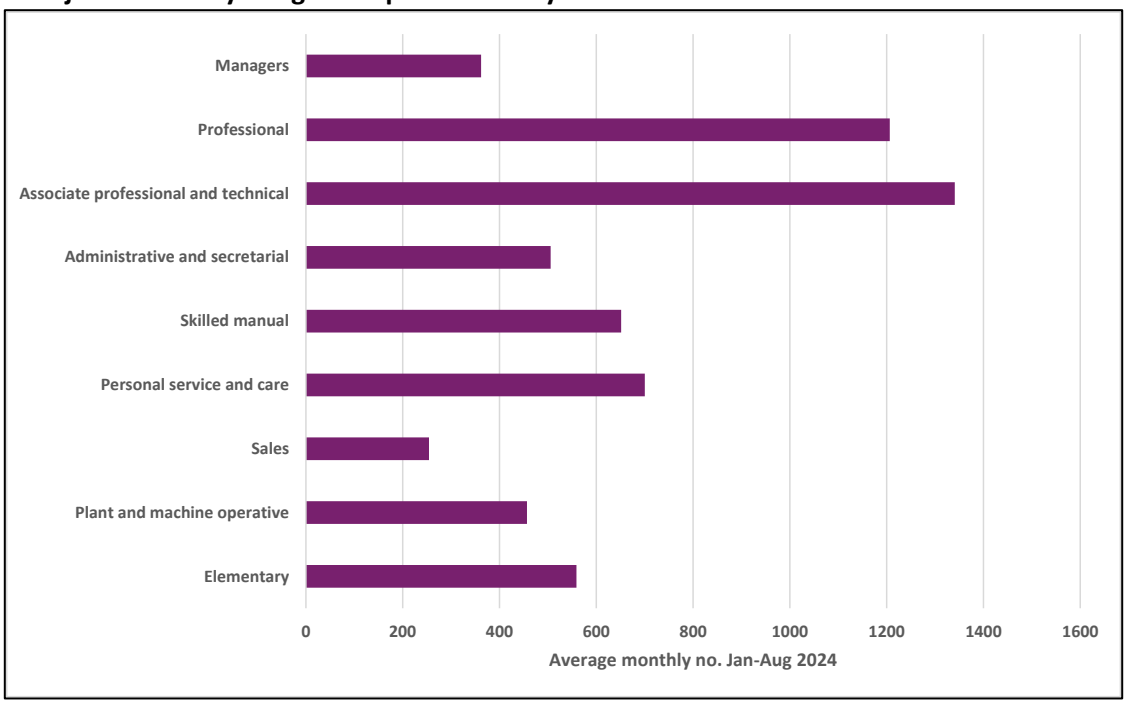
Figure 8: Online job adverts per 100 working age residents 2017-2024: County Durham and the UK



Source: Textkernel, Office for National Statistics

Figure 9 shows the average number of job adverts by 1-digit SOC for the first 8 months of 2024. Of the 6,000 average monthly total job adverts over this period around two in five were for associate professional and technical (1,340 or 22% of the total) or professional occupations (1,200 or 20%) Around one quarter were for personal service and care (700 or 12%) or skilled manual (650 or 11%).

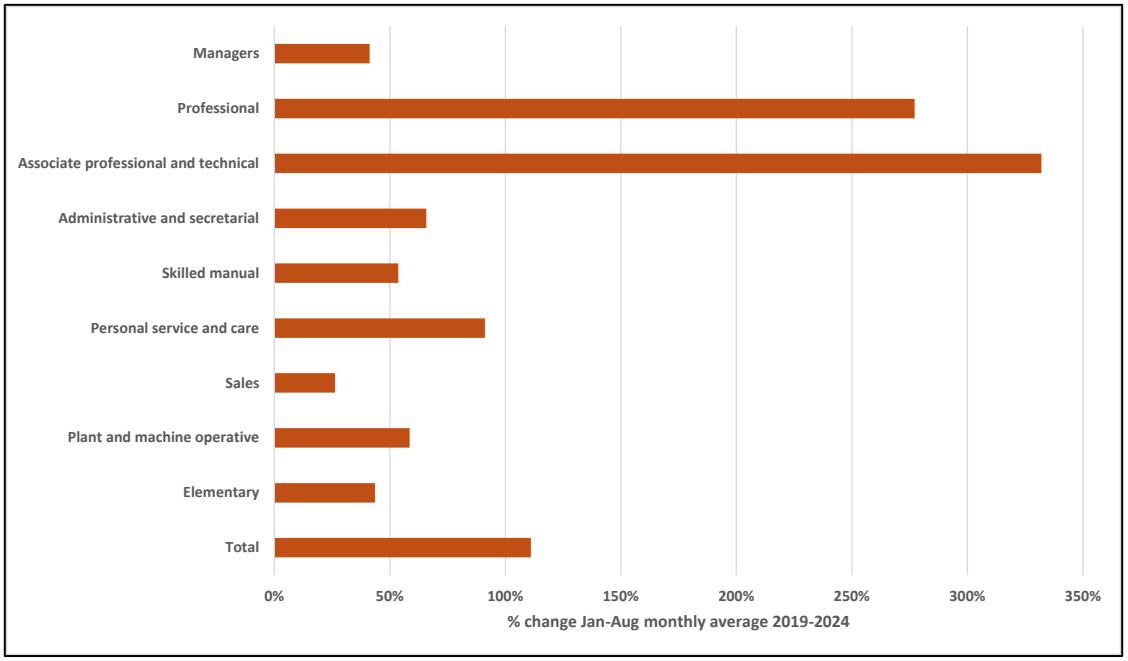
Figure 9: Online job adverts by 1-digit occupation County Durham 2024



Source: Textkernel, Office for National Statistics

If we take the same period prior to the pandemic (i.e. January-August 2019), Figure 10 shows the percentage change in the monthly average of online job adverts in County Durham by 1-digit SOC. Overall, there has been a doubling of job adverts (+111%). There have been triple digit increases in online job adverts for associate professional and technical (+332%) and professional (+277%) occupations. Some of the increases may be due to employers increasingly using online job adverts as a recruitment tool compared to other approaches. The number of online job adverts increased for all occupations.

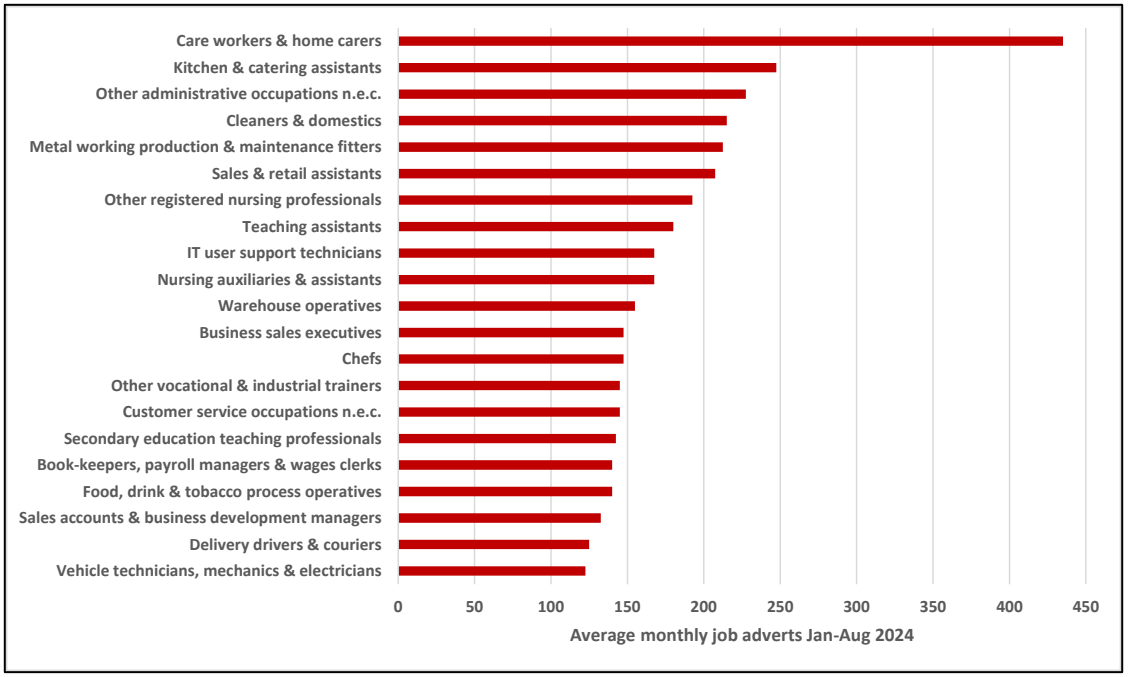
Figure 10: Online job adverts by 1-digit occupation County Durham 2019-24



Source: Textkernel, Office for National Statistics

Figure 11 shows the top 20 4-digit occupations for online job adverts averaged across the first 8 months of 2024. These 20 occupations account for one third of all online job adverts in 2024.
The largest category is care workers and home carers, 435 or 4% of all online job adverts were for this type of job. The next largest occupations are kitchens and catering assistants (%), other administrative occupations, cleaners and domestics, and metal working production and maintenance fitters (each 2%.) All of the major occupation groups are represented with the exception of managers.

Figure 11: Top 20 4-digit occupations: Online job adverts County Durham 2024



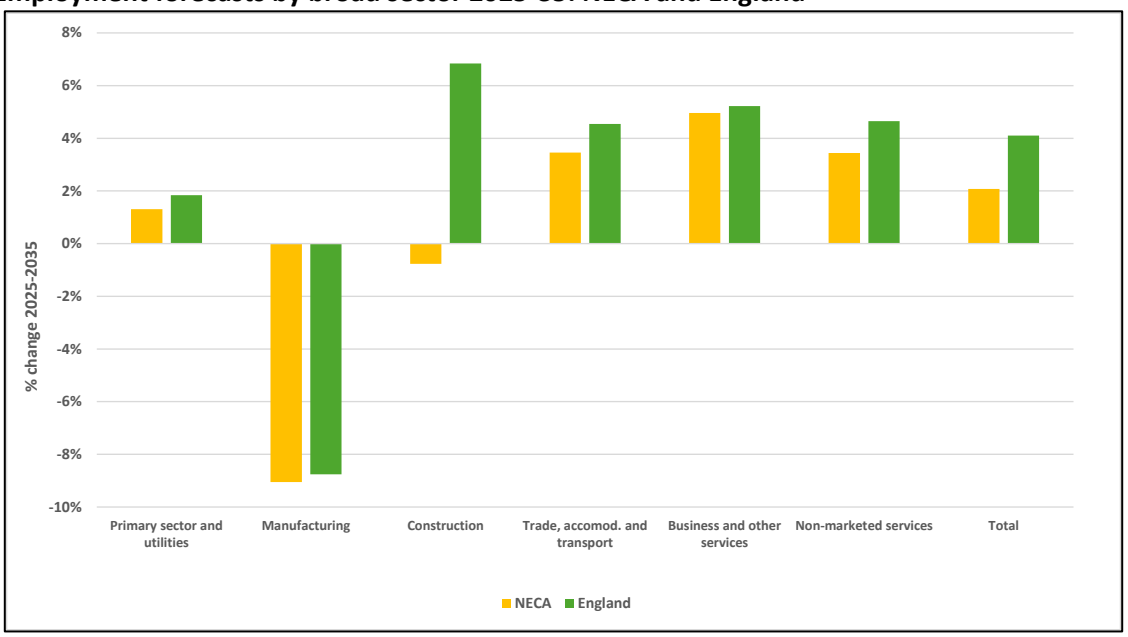
Source: Textkernel, Office for National Statistics

Employment forecasts by sector

Figure 12 shows forecasts for employment change 2025-2035 in NECA and England. Over this period employment is forecast to rise in NECA by +2% which is half the expected national increase. Employment change by broad sector is forecast to be quite similar in the sub-region when compared to England. The main difference is construction where employment is forecast to grow strongly in England by +7% (the largest of any sector) whilst a small decrease (-1%) is predicted for NECA.

As with occupations, replacement demand means that there will always be job openings available even in those sectors forecast to decline.

Figure 12: Employment forecasts by broad sector 2025-35: NECA and England



Source: Working Futures

Table 9 shows the employment change forecast in more detailed sectors. Employment is forecast to increase in 12 of the 22 sectors. Double digit growth is estimated in real estate (+16%), accommodation and food (12%), and information technology (12%).
In the top five sectors by employment size in 2025, growth is forecast in three (support services, education, and health and social work) whilst declines are predicted in two (rest of manufacturing, and the wholesale and retail trade).

Table 9: Forecast employment by more detailed sectors 2025-2035: NECA

	2035	**Numerical change 2025-2035**	**% change 2025-2035**
Agriculture	2,025	55	3%
Mining and quarrying	367	-49	-12%
Food drink and tobacco	4,329	-127	-3%
Engineering	9,450	-1,100	-10%
Rest of manufacturing	35,276	-3,656	-9%
Electricity and gas	5,866	125	2%
Water and sewerage	3,600	22	1%
Construction	29,410	-227	-1%
Wholesale and retail trade	71,717	294	0%
Transport and storage	28,281	38	0%
Accommodation and food	39,094	4,313	12%
Media	2,888	51	2%
Information technology	6,717	594	10%
Finance and insurance	8,201	-21	0%
Real estate	7,844	1,082	16%
Professional services	25,575	1,664	7%
Support services	37,687	1,650	5%

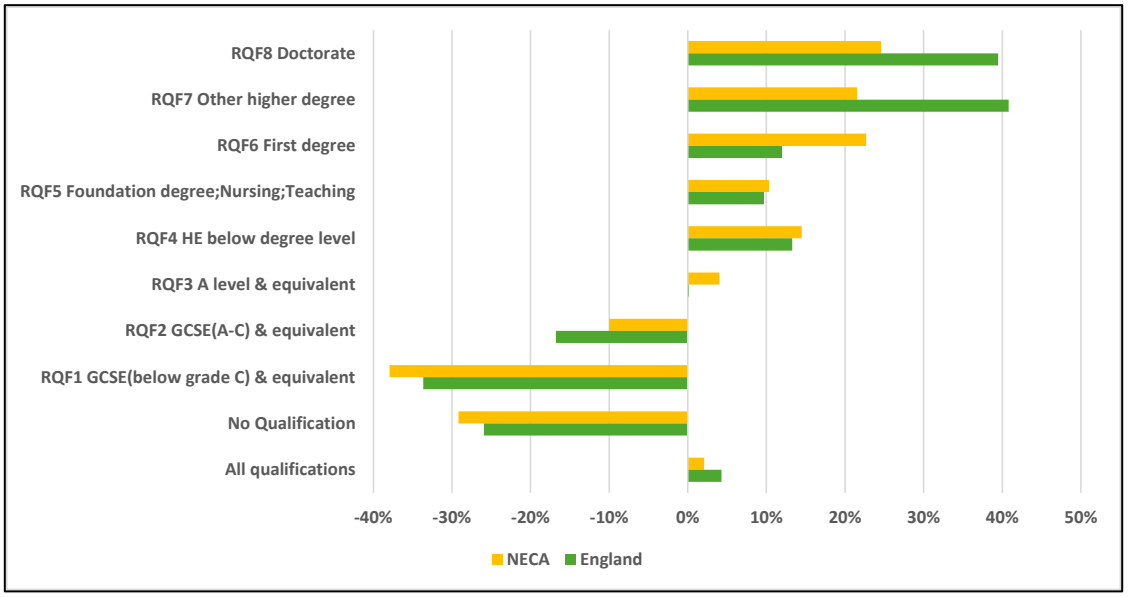
Public admin. and defence	30,647	152	0%
Education	47,142	1,507	3%
Health and social work	72,477	3,335	5%
Arts and entertainment	14,023	1,120	9%
Other services	10,162	-795	-7%
All industries	**492,778**	**10,027**	**2%**

Source: Working Futures

Employment forecasts by skills level

The result of the above mentioned occupational and sectoral trends (especially the increase in professional, and associate professional and technical jobs) will be an increase in demand for people with skills equivalent to higher and medium level qualifications (Figure 13). Between 2025 and 2035 in both NECA and England, there will be greater demand for people qualified at RQF level 3 (equivalent to A levels), especially at first degree level and above. Demand for people with qualifications lower than RQF level 3 are forecast to fall by 10% or more to 2035. As most of the people who will be in employment in 2035 are already working, it implies a significant investment in upskilling people already in the workforce.

Figure 13: Employment forecasts by skills level 2025-35: NECA and England



Source: Working Futures

The new industrial strategy identified eight sectors which provide the highest growth opportunities[14]. The document doesn't provide an SIC definition of the sectors so it is not possible to calculate how many people are employed in these growth sectors in County Durham.

The next section focuses on young people's transitions towards and into the labour market.

[14] Advanced manufacturing; clean energy industries; creative industries; defence; digital and technologies; financial services; life sciences; and professional and business services. See Department for Business and Trade (2024). Invest 2035: the UK's Modern Industrial Strategy.

Young people's transitions

Introduction

This section provides young people's destinations as they transition towards and into the labour market from Key Stage 4. It provides comparisons between different population groups and, where possible, comparisons with the North East and England.

Key points:

- The large majority of KS4 pupils in each area (nine out of ten) progress into a sustained destination. This is most likely to be into a sustained education destination. KS4 pupils in County Durham and the North East were marginally more likely to enter an apprenticeship, and not to have a sustained destination;
- Between 2012/13 and 2022/23, there were similar changes in KS4 destinations in all three areas - there was a reduction in young people entering sustained education, and an increase in those entering work, and advanced and higher apprenticeships;
- Destinations differ by groups of young people: females were more likely to enter a sustained education destination and to enter an apprenticeship than males. Disadvantaged pupils and young people with SEN were more likely to have a non-sustained destinations. BAME pupils were less likely to have a non-sustained destination;
- For 16-18 young people, in County Durham, one in five did not have a sustained destination. Compared to England, in County Durham: young people are less likely to choose HE, they are more likely to enter an apprenticeship, and not to have sustained destination;
- Between 2018/19 and 2022/23, the overall direction of travel in each area is broadly similar: increases in young people going into HE, employment and not a sustained destination, and decreases in all other categories;
- In County Durham, there is an overall switch in the destinations of young people from education to employment, but not as great as suggested by the economic inactivity data presented previously;
- Females and BAME young people are more likely to enter a sustained education destination, and less likely to have a not sustained destination;
- Longer term destination data for County Durham show that non sustained destinations almost treble between year 1 and 3 and stay at this level into year 5. By year 5, 37% are in employment and one third in HE;
- Females and BAME young people are much more likely to enter HE and less likely to be in employment at year 5;
- The gap in the levels of non-sustained destinations between disadvantaged and non-disadvantaged young people increases at each time point.

Young people's destinations[15]

Key stage 4 destinations

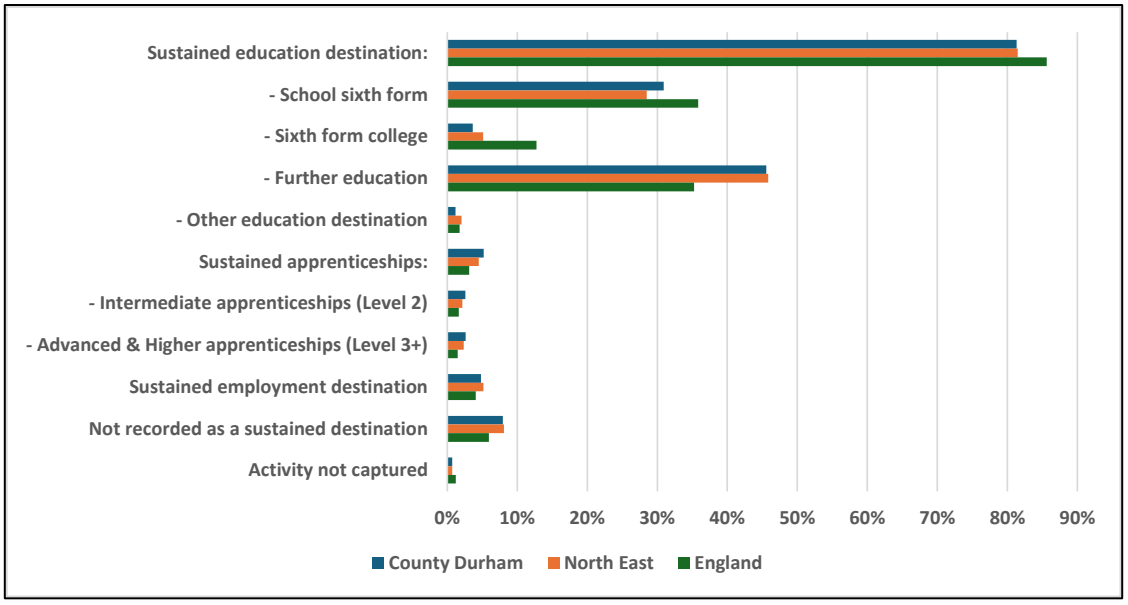
In 2022/23, the destinations were recorded for 5,281 young people at the end of Key Stage 4 (KS4). The data in this section includes pupils attending state funded mainstream and special schools in County Durham.

Figure 14 shows that more than four out of five young people progressed on to a sustained education destination in each area: 81% in County Durham and the North East, and 86% in England. Young people in County Durham and the North East were more likely to enter an FE college than in England (which is most likely due to the nature of provision in an area rather than any choice factors on the part of pupils).

Young people in England were less likely than their peers in County Durham and the North East to enter an apprenticeship, and not to have a sustained destination.

Figure 14: Pupil destinations at KS4 2022/23: County Durham, North East and England

[15] Data in this section refers to the place of the institution where the pupil/student attended, not the area where they reside.

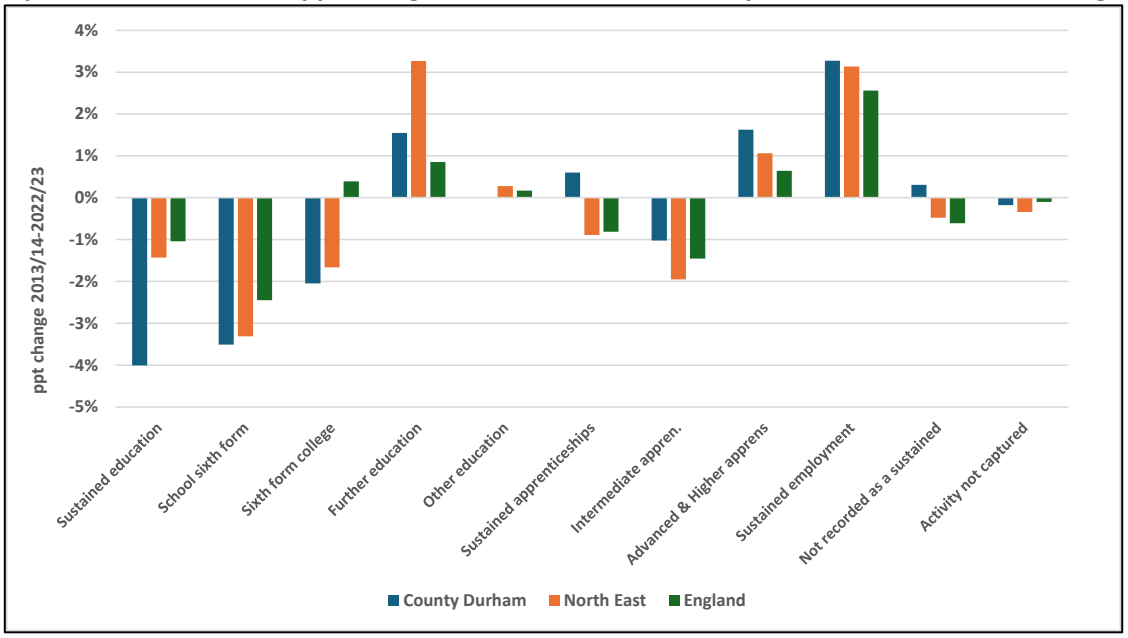


Source: Key stage 4 local authority level destinations; GOV.UK

Figure 15 shows that over the ten year period from 2012/13, there were similar changes in KS4 destinations in all three areas. Although the magnitudes varied, there was a reduction in young people entering sustained education, and an increase in those entering work, and advanced and higher apprenticeships.

By 2022/23 in County Durham, young people were less likely to choose to enter a sixth form school or college and more likely to enter FE (+2 ppts), a sustained job (+3 ppts), and advanced and higher apprenticeships (+2 ppts).

Figure 15: Pupil destinations at KS4 ppt change 2012/13-2022/23: County Durham, North East and England



Source: Key stage 4 local authority level destinations; GOV.UK

Table 10 shows the ppt difference between different groups of young people at KS4 in County Durham in 2022/23. For example, females were +6 ppts more likely to enter a sustained education destination than males, and less likely than males to enter an apprenticeship by -4 ppts. BAME pupils are more likely to have a sustained education destination and less likely to have a not sustained destination.

Disadvantaged young people and young people eligible for Free School Meals (FSM) were +10-11 ppts more likely to have a non-sustained destination, and young people identified as having Special Education Needs (SEN) were +6 ppts more likely to have a non-sustained destination.

Table 10: Difference in KS4 destinations of different cohorts 2022/23: County Durham

ppt difference between groups	Female-male	Disadv-not disadv[16]	BAME-White	FSM-no FSM	SEN-not SEN
Sustained education destination	6%	-8%	9%	-8%	-1%
Sustained apprenticeships	-4%	-3%	-1%	-3%	-4%
Sustained employment destination	-2%	0%	-2%	0%	-1%
Sustained total	0%	-11%	7%	-11%	-6%
Not sustained/not captured*	0%	11%	-7%	11%	6%

* The large majority of these young people will have a not sustained destination as opposed to not captured.

Source: Key stage 4 local authority level destinations; GOV.UK

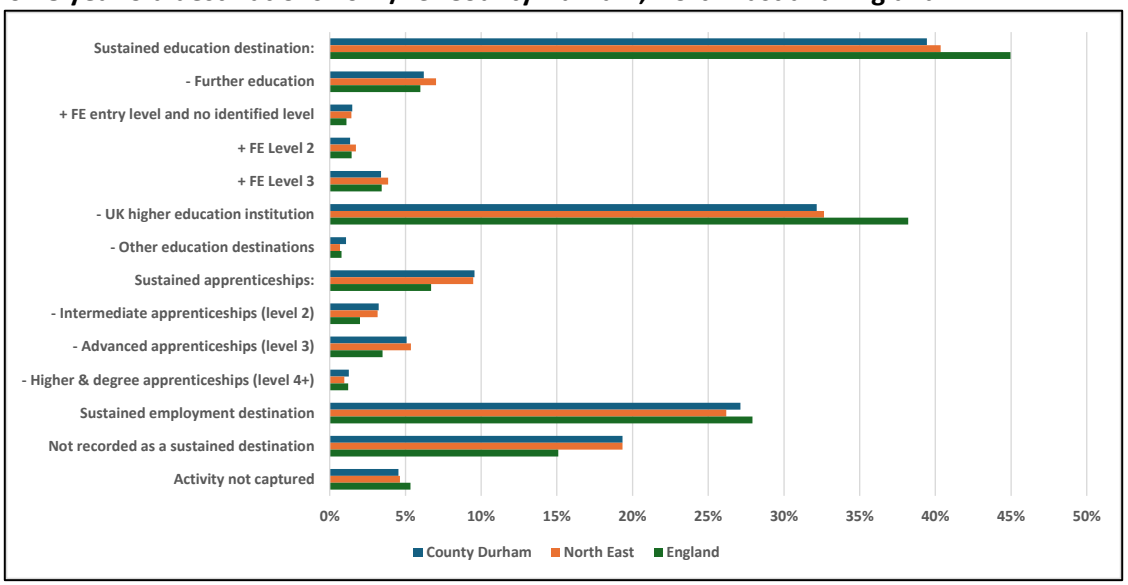
16-18 destinations

In 2022/23, the destinations were recorded for 4,391 young people in KS5. The data in this section includes young people at state funded mainstream schools and colleges. There is a shorter time series available (from 2018/18) than for KS4 and fewer indicators available for cohort groups.

In County Durham, three quarters of young people (76%) entered a sustained education, apprenticeship or employment destination (Figure 16). One quarter (24%) did not with 19% recorded as not having a sustained destination. The destination profile for County Durham and the North East is almost identical.

Compared to England there are three key differences. In County Durham, young people are less likely to choose HE (-6 ppts less likely than in England [all other education destinations are the same]), they are more likely to enter an apprenticeship (+3 ppts), and more likely not to have sustained destination (+ 4ppts).

Figure 16: 16-18 year old destinations 2022/23: County Durham, North East and England



Source: 16-18 local authority level destinations; GOV.UK

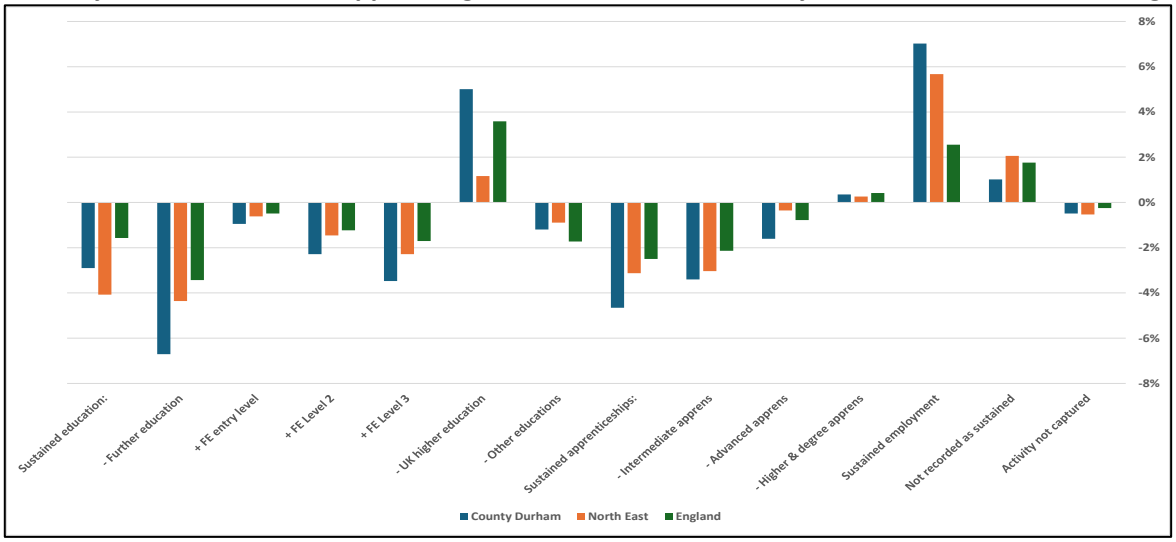
Data is only available over a limited time period than KS4 so changes in destinations are shown between 2018/19 and 2022/23. Figure 17 shows that the overall direction of travel in each area is broadly similar across the three areas: increases in young people going into HE, employment and not a sustained destination. There are decreases in all other categories.

In County Durham, there is an overall switch in the destinations of young people from education to employment, but not as great as suggested by the economic inactivity data in Table 2.

[16] Disadvantaged pupils is a composite indicator based on pupils who were eligible for free school meals at any point in the previous six years or having been looked after by their local authority.

Specifically in County Durham there have been the greatest relative decreases in FE level 3 courses, and intermediate apprenticeships. Young people entering sustained employment has increased by 7 ppts and HE by 5 ppts.

Figure 17: 16-18 year old destinations ppt change 2018/19-2022/23: County Durham, North East and England



Source: 16-18 local authority level destinations; GOV.UK

Table 11 shows the ppt difference between different groups of young people aged 16-18 in County Durham in 2022/23. For example, females were +13 ppts more likely to enter a sustained education destination than men, and -6 ppts less likely than males to enter an apprenticeship. In County Durham, females are much more likely to enter HE (+13 ppts) and less likely not to have as sustained destination (-6 ppts).

Disadvantaged young people are much less likely to move into any of the sustained destinations, especially HE (-20 ppts) compared to non-disadvantaged young people. They are much more likely not to have a sustained destination (+24 ppts).

BAME young people are much more likely to enter HE (+30 ppts) and much less likely to not have a sustained destination (-10 ppts).

Table 11: Difference in 16-18 destinations of different cohorts 2022/23: County Durham

ppt difference between groups	Female-male	Disadv-not disadv	BAME-White
Sustained education destination:	13%	-17%	31%
- UK higher education institution	13%	-20%	30%
Sustained apprenticeships	-6%	-4%	-9%
Sustained employment destination	-1%	-3%	-12%
Sustained total	6%	-24%	10%
Not sustained/not captured*	-6%	24%	-10%

* The large majority of these young people will have a not sustained destination as opposed to not captured.

Source: 16-18 local authority level destinations; GOV.UK

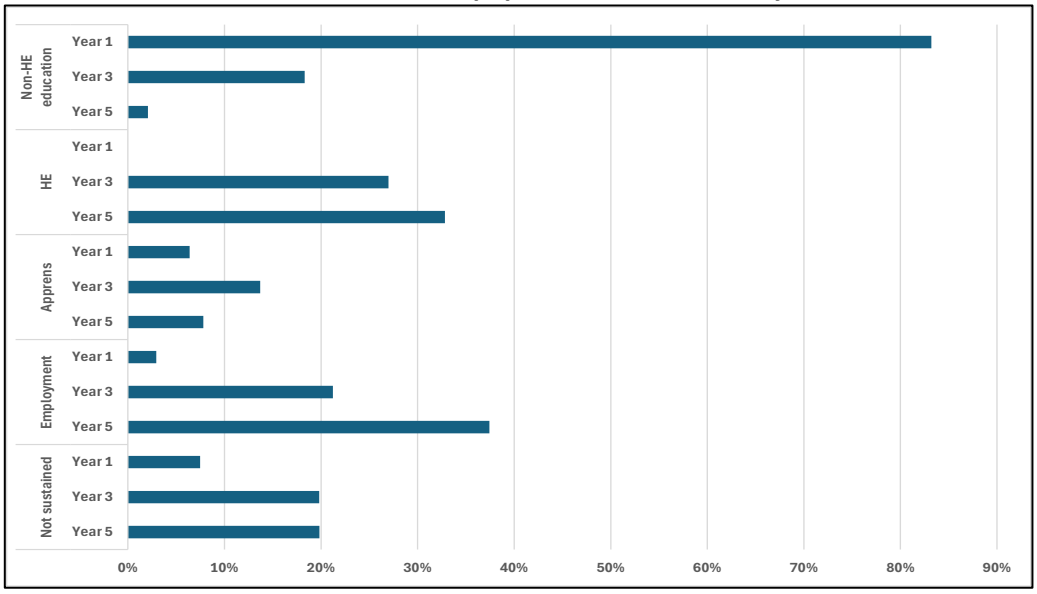
School leaver long term destinations

Data is available which tracks the longer term destinations of KS4 school leavers as they progress towards and into the labour market. The latest data is available for those who left KS4 in 2016/17 and tracks their destinations after one (2017/18), three (2019/20), and five years (2021/22). Because of the size of the dataset and its complexity, data is analysed for state-funded mainstream school pupils only.

Figure 18 shows the routes that KS4 pupils took in the five years after 2017/18. The large majority of pupils progress into some form of further education but then at year 3 their routes start to diverge mostly into HE, employment and FE; until year 5 when 70% are other in work or in HE. Apprenticeship take up more than doubles between year 1 and

year 3 (from 6% of pupils to 14%) but then reduces to 8%. Non sustained destinations almost treble between year 1 and 3 (from 7% to 20%) and stay at this level into year 5.

igure 18: Year one, three and five destinations of KS4 pupils in 2017/18: County Durham



Source: Longer term destinations; GOV.UK

Table 12 shows the differences in cohort groups for the longer term destinations. Females are much more likely than males to enter HE in year 3, and to continue in HE through to year 5. Males are more likely to enter an apprenticeship in all three years, and ultimately enter employment in year 5. This gender difference matches the difference between BAME and White young people, with BAME young people much more likely to enter and remain in HE, and less likely to enter employment especially in year 5. BAME young people are much less likely to have a non-sustained destination.

There are two measures of disadvantage, one based on FSM and being in care and one based on attainment (i.e. whether the young person had achieved 9-4 in English and maths by the end of KS4). Disadvantaged young people and those with lower attainment are much more likely to have a non sustained destination in all three years, not enter HE and undertake an apprenticeship. They are more likely to continue into FE in their year 3. Young people with lower attainment are much more likely to enter employment, especially in years 3 and 5. The gap in the levels of non-sustained destinations between disadvantaged and non-disadvantaged young people increases at each time point.

Table 12: Difference in KS4 pupil longer term destinations of different cohorts from 2017/18: County Durham

Destination	Year	Female-male	Disadv-not disadv	BAME-White	KS4 E&M 9-4 not achieved-achieved
Non-HE education	Year 1	3%	-7%	13%	-15%
	Year 3	1%	7%	-2%	14%
	Year 5	1%	1%	-1%	2%
HE	Year 1	0%	0%	0%	0%
	Year 3	7%	-17%	28%	-36%
	Year 5	13%	-21%	28%	-40%
Apprentice-ship	Year 1	-3%	-4%	-4%	0%
	Year 3	-8%	-8%	-9%	-2%
	Year 5	-5%	-3%	-5%	-4%
Employment	Year 1	-2%	2%	-2%	4%
	Year 3	2%	-2%	-7%	3%
	Year 5	-10%	-1%	-18%	15%
Not sustained	Year 1	2%	9%	-6%	10%
	Year 3	-2%	21%	-10%	21%
	Year 5	2%	24%	-4%	27%

Source: Longer term destinations; GOV.UK

The next section reports on levels of FE participation and qualifications amongst the working age population.

Qualifications and FE participation

Introduction

This section includes data and analysis of the qualifications of working age residents and their participation in FE, including analysis by age and gender. It also presents data on apprenticeship starts, this is based on where apprentices work rather than where they live.

Key points:

- In levels of qualification attainment of the working age resident population in 2023, County Durham has a similar profile to the North East at lower levels but divergence starts at Level 2. Compared to the North East and England, there are many fewer people with NVQ Level 4+ qualifications;
- Between 2013 and 2023, the proportion of the working age population qualified at below Level 2 decreased in each area and those qualified to at least Level 3 rose;
- In County Durham men are more likely to be qualified below Level 2 but also above Level 3;
- In County Durham, the level of qualification in each age group increased 2013-23;
- In 2023/24, there were 10,600 FE learners in County Durham most of whom were undertaking a Level 2 qualification, this applies to every age group;
- Men are much more likely to be undertaking provision below level 1/no level assigned than women;
- In 2023/24 there were 3,230 apprenticeship starts in County Durham. Four out of five were undertaking apprenticeships in four main subject areas: business, administration and law; health, public services and care; engineering and manufacturing technologies; and, construction;
- Around half of all apprenticeship starts were on intermediate apprenticeships (48%) and 29% on higher apprenticeships;
- There are significant gender gaps, especially in the four largest apprenticeship subjects;
- In County Durham in 2023/24, 44% of apprenticeship starts were by people aged 25+ and only 30% by those aged 16-18;
- Apprenticeship starts are most likely to be with larger employers in County Durham and England. But County Durham has higher levels of starts with smaller employers.

Qualifications

Table 13 shows qualification attainment of the working age resident population in 2023, and the ppt change since 2013. County Durham has a very similar profile to the North East. The North East has slightly fewer people with Level 2 and Level 3 attainment, but more with Level 4+ qualifications.

The most significant difference with England is at NVQ Level 4+. Almost half the working age population in England (47%) is qualified at this level. This compares with just over one third in County Durham (36%) and 40% in the North East. Between 2013 and 2023, the proportion of the working age population qualified at below Level 2 decreased in each area. The percentage qualified to at least Level 3 rose in every area. The increase was the same in all three areas. However, County Durham saw an increase in those with Level 3 qualifications rather than Level 4+.

Table 13: Qualifications of residents 2023 and ppt change 2013-23: County Durham, North East and England

	County Durham		North East		England	
	% 2023	**ppt change 2013-23**	**% 2023**	**ppt change 2013-23**	**% 2023**	**ppt change 2013-23**
No qualifications	8%	-3%	8%	-2%	6%	-3%
Other	3%	-4%	3%	-2%	5%	-2%
NVQ Level 1	3%	-12%	3%	-10%	3%	-9%
NVQ Level 2 & apprenticeship*	24%	0%	22%	-1%	19%	-1%
NVQ Level 3	25%	7%	23%	4%	21%	4%
NVQ Level 4+	36%	12%	40%	12%	47%	12%
Total	**100%**		**100%**		**100%**	

* 2023 APS data, unlike previous versions does not provide separate data for apprenticeships so previous year's data has been merged with Level 2.

Source: Annual Population Survey; NOMIS

Table 14 shows qualifications by gender. In each area the proportion of men with qualifications below Level 2 is higher than that for women, with twice the difference in County Durham. However, County Durham differs from the North East and England as men are more likely than women to be qualified at Level 4 or higher.
The ppt change between 2013 and 2023 for men has been very similar in County Durham and England. But the difference for women in County Durham shows a greater reduction in those qualified below Level 2 than in England, and a much greater increase in those qualified to Level 3.

Table 14: Qualifications of residents 2023 and ppt change 2013-23 by gender: County Durham, North East and England

	County Durham		**North East**		**England**	
Male	**% 2023**	**ppt change 2013-23**	**% 2023**	**ppt change 2013-23**	**% 2023**	**ppt change 2013-23**
Below Level 2/ None	17%	-15%	16%	-13%	14%	-14%
Level 2 incl. appren.	23%	-3%	21%	-3%	18%	-2%
Level 3	23%	5%	24%	4%	22%	5%
Level 4+	38%	13%	39%	12%	45%	12%
Total	100%		100%		100%	
Female						
Below Level 2/ None	13%	-23%	14%	-16%	13%	-14%
Level 2 incl. appren.	26%	4%	23%	1%	20%	0%
Level 3	27%	9%	22%	4%	19%	2%
Level 4+	34%	10%	41%	12%	48%	12%
Total	**100%**		**100%**		**100%**	

* 2023 APS data, unlike previous versions does not provide separate data for apprenticeships so previous year's data has been merged with Level 2.

Source: Annual Population Survey; NOMIS

Table 15 provides the qualifications of working age residents in County Durham by age. Between 2013 and 2023 the level of qualification in each age group increased. The proportion with a qualification below Level 2 declined. The percentage of people in each age group with a qualification at Level 2-3 increased, but the largest increase was in Level 4 + qualifications for each age group.

Excluding the youngest age group, the proportion of people with qualifications below Level 2 represent the smallest category in each age group (ranging from 10% to 17%), with older people more likely to hold their highest qualification at this level. Those with level 2 or Level 3 qualifications are the largest group in each age category.

Table 15: Qualifications of residents 2023 and ppt change 2013-23 by age: County Durham

County Durham		**% 2023**	**ppt change 2013-23**
16-19	Below Level 2/none	22%	-17%
	Level 2-3	70%	11%
	Level 4+	12%	10%
20-24	Below Level 2/none	10%	-13%
	Level 2-3	61%	4%
	Level 4+	24%	4%
25-29	Below Level 2/none	10%	-16%
	Level 2-3	46%	-5%
	Level 4+	46%	23%

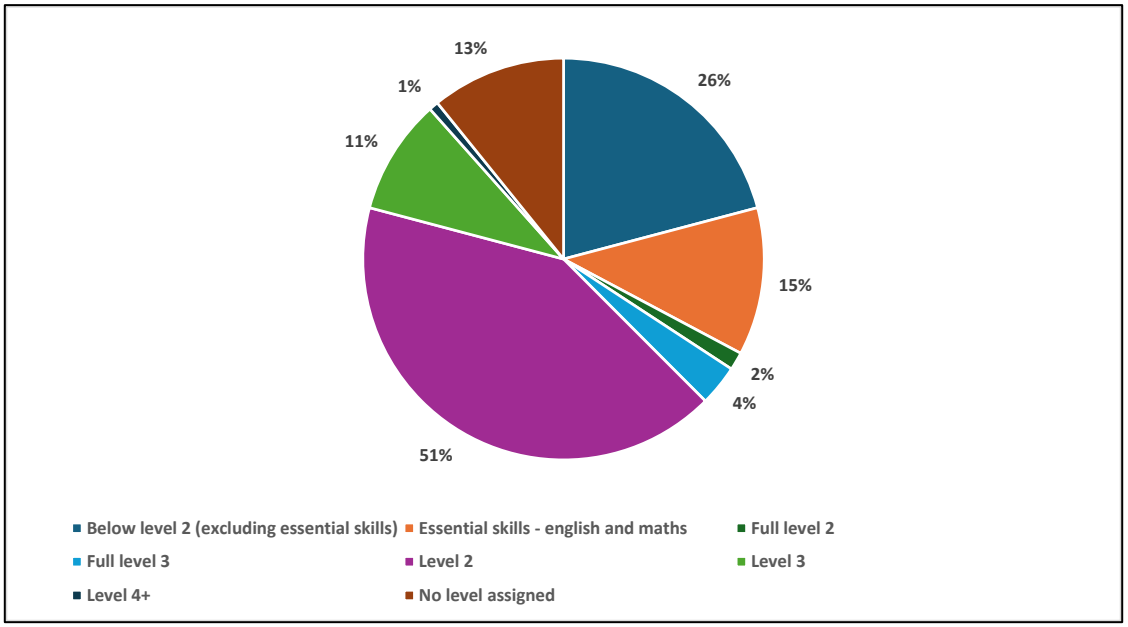
30-39	Below Level 2/none	16%	-9%
	Level 2-3	46%	3%
	Level 4+	37%	5%
40-49	Below Level 2/none	13%	-18%
	Level 2-3	45%	5%
	Level 4+	43%	14%
50-64	Below Level 2/none	17%	-29%
	Level 2-3	47%	16%
	Level 4+	37%	13%
Total	**Below Level 2/none**	**15%**	**-19%**
	Level 2-3	**49%**	**7%**
	Level 4+	**36%**	**12%**

Source: Annual Population Survey; NOMIS

FE participation

In 2023/24, there were 10,600 FE learners in County Durham. Figure 19 shows that most learners were undertaking a Level 2 qualification (51% of learners). Just over one quarter were undertaking a full Level 2 qualification (26%). Around two out of five were studying for either a qualification below Level 2 (26%) or an essential skills qualification (15%).

Figure 19: Participation in FE by level 2023/24: County Durham

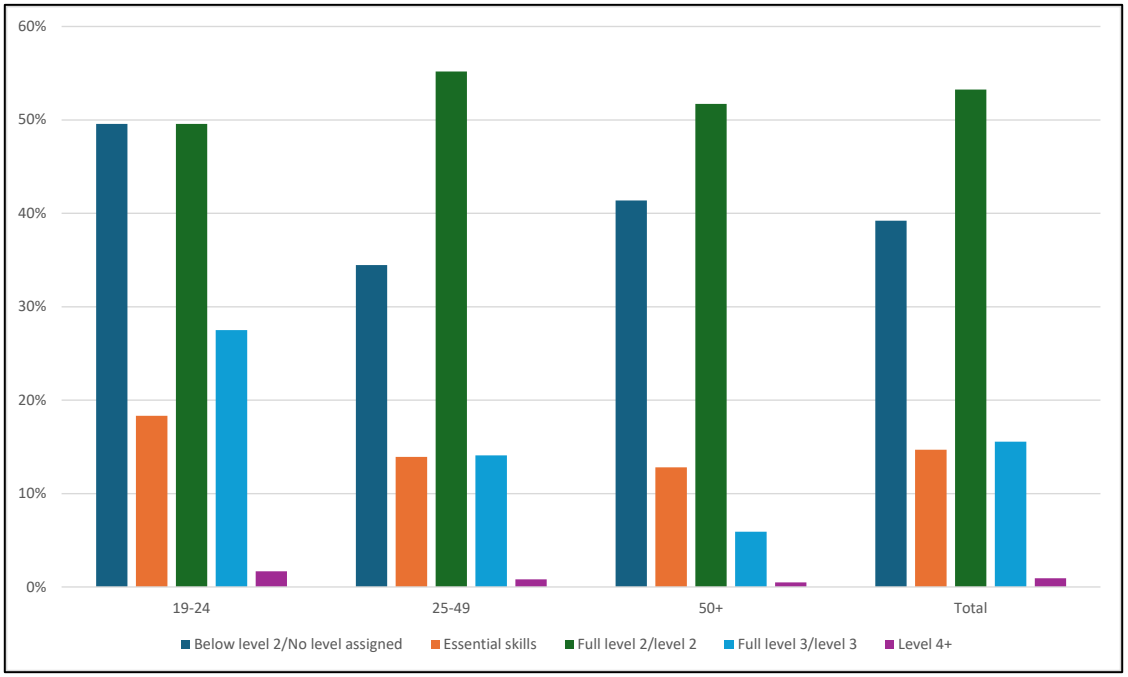


NB: The data involves some double counting as learners may be undertaking more than one qualification.

Source: FE education and skills data; GOV.UK

Figure 20 shows FE participation by age group and level in County Durham. Around half of people in every age group are undertaking a full level 2/level 2 qualification. The next largest category for each group is below level 2 (including no level assigned).

Figure 20: Participation in FE by age group and level 2023/24: County Durham

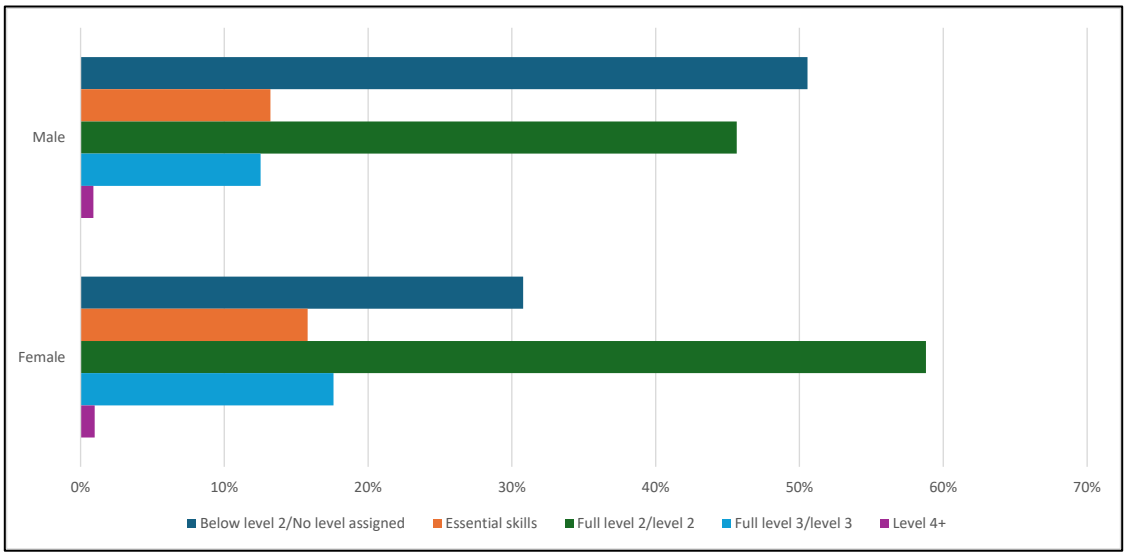


NB: The data involves some double counting as learners may be undertaking more than one qualification.

Source: FE education and skills data; GOV.UK

Figure 21 shows FE participation by level and gender. Men are much more likely to be undertaking provision below level 1/no level assigned than women. The proportions of men and women undertaking provision where no level is assigned is very similar, so men are much more likely to on courses below level 1. Women are much more likely to be on courses at full level 2 or level 2.

Figure 21: Participation in FE by gender and level 2023/24: County Durham



NB: The data involves some double counting as learners may be undertaking more than one qualification.

Source: FE education and skills data; GOV.UK

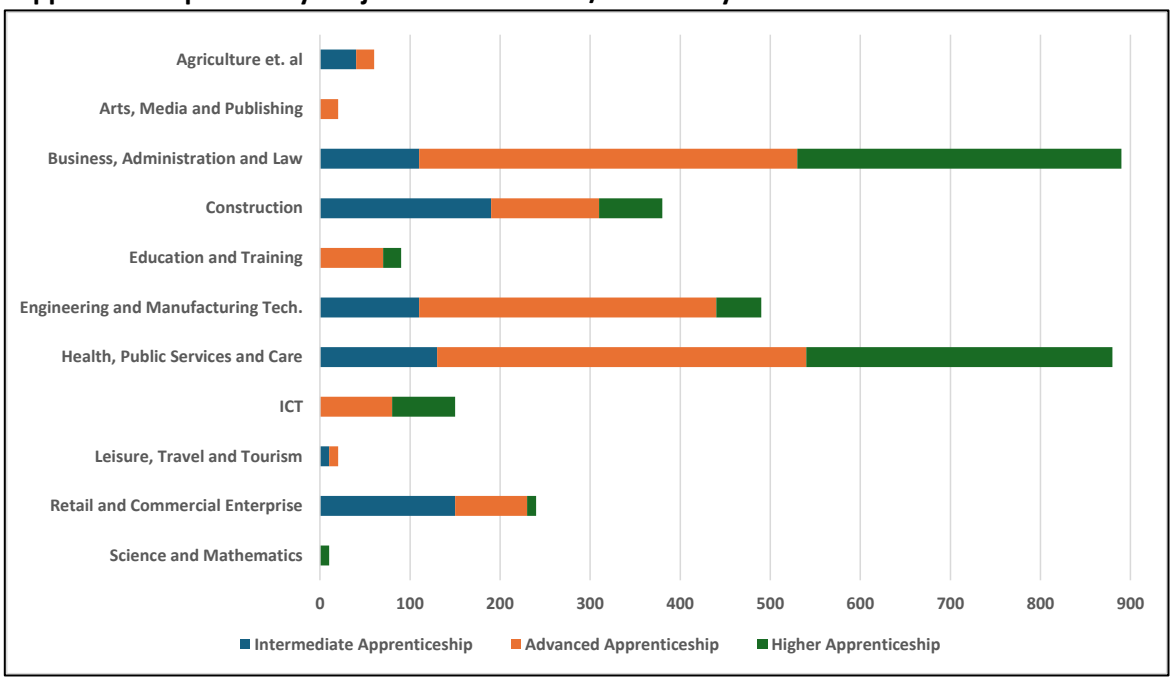
Data is available by ethnicity, but only 7% of FE learners were of BAME origin.

Apprenticeships

In 2023/24 in County Durham there were 3,230 apprenticeship starts. Figure 22 shows that there were four main subject areas: business, administration and law; health, public services and care; engineering and manufacturing technologies; and, construction. Together these four accounted for more than four out of five apprenticeship starts (82%). Two of them - business, administration and law; health, public services and care – accounted for 55% of starts.

Around half of all apprenticeship starts were on advanced apprenticeships (48%) and 29% on higher apprenticeships. Nationally, the proportion of higher level apprenticeships has increased exponentially since they were introduced in 2009/10. Higher level apprenticeships are the only level of apprenticeships that has risen over the past ten years, for all age groups and in virtually all subject areas[17].
In the two largest apprenticeship subject areas, higher apprenticeships account for 40% of all starts in County Durham. In engineering and manufacturing technologies, advanced apprenticeships account for two thirds. In construction, half of apprenticeship starts are at intermediate level.

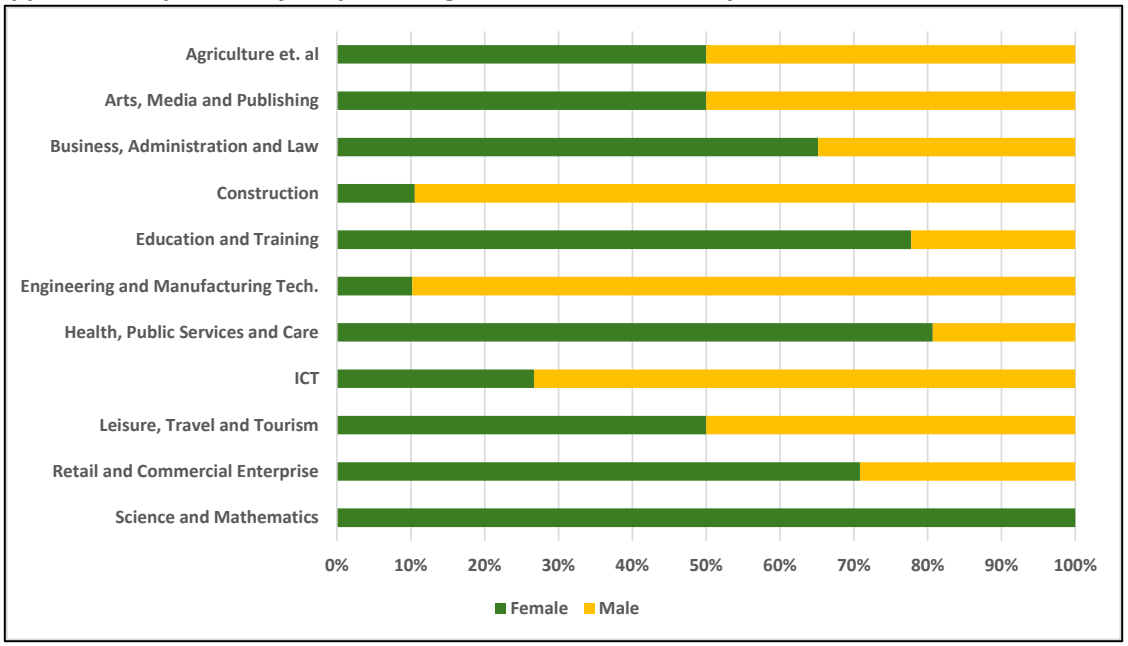
Figure 22: Apprenticeship starts by subject and level 2023/24: County Durham



Source: Apprenticeship data; GOV.UK

There are still significant gender gaps in subject areas (Figure 23). In the four largest apprenticeship subjects: nine out of ten starts in engineering and manufacturing technologies, and construction were by men; four out of five starts in health, public services and care were by women; and women accounted for two thirds of business, administration and law starts.

Figure 23: Apprenticeship starts by subject and gender 2023/24: County Durham



Source: Apprenticeship data; GOV.UK

[17] Dickinson, P, (2024). Apprenticeship winners and losers.

In part due to the introduction of the apprenticeship levy, apprenticeships are no longer primarily a route into the labour market for young people. They are most likely to be undertaken at an advanced or higher level, by older people who are already working for the sponsoring employer.[18] In County Durham in 2023/24, 44% of apprenticeship starts were by people aged 25+ and only 30% by those aged 16-18. Intermediate apprenticeships are most likely to be undertaken by young people aged 16-18 (53%). But almost three quarters (72%) of higher apprenticeship starts were by those aged 25+.

In England, apprenticeship starts are most likely to be with larger employers (62%) but in County Durham this is much lower (52%). Apprenticeships are much more likely to be offered by smaller employers 37%) than in England (27%).

The next section explores the recruitment and training behaviour of employers.

Employer training and recruitment

Introduction

This section is based on the national 2022 Employer Skills Survey. Data from the survey is available at unitary local authority level. Within the national sample, 982 employer interviews with companies based in County Durham were undertaken. This section provides comparative data and analysis on employer recruitment and training behaviour in County Durham.

Key points:

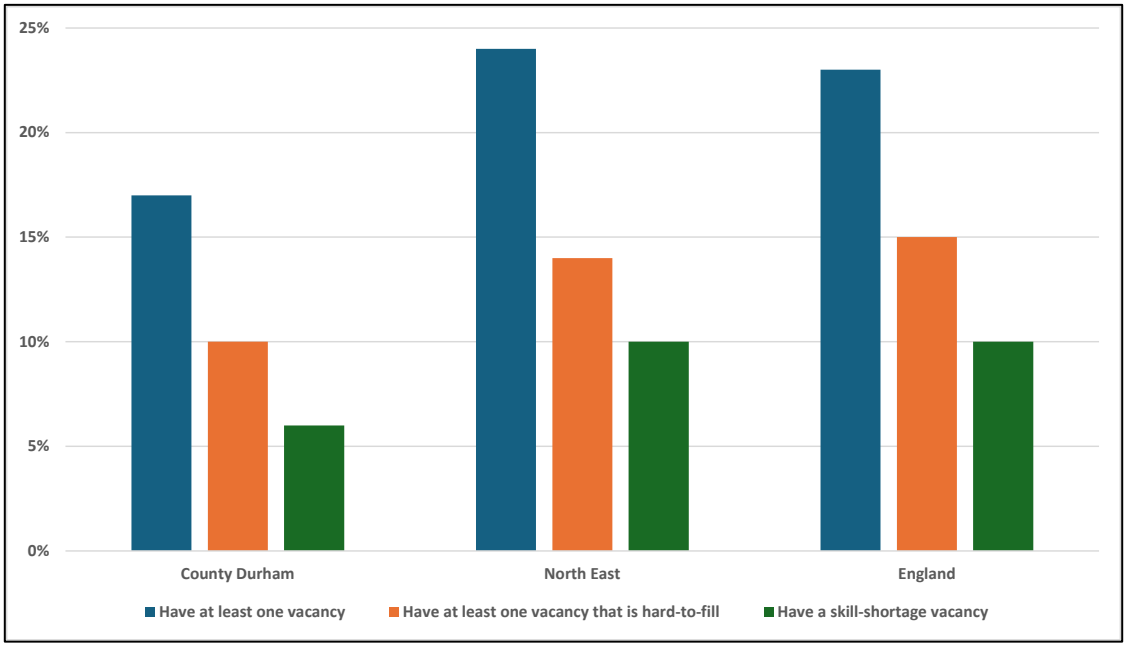
- In 2022, employer recruitment activity in County Durham was lower than in the North East and England, and employers were less likely to report hard-to-fill or skill shortage vacancies;
- Hard-to-fill and skill shortage vacancies are a relatively small concern for employers compared to skills gaps and staff under-utilisation. In County Durham, 43% of employers report they have under-utilised staff as did 39% in the North East and 35% in England;
- Most employers in the three areas do provide training for at least some of their staff, but this tends to be on-the-job training;
- In all three areas, most employers train managerial staff followed by administrative or secretarial staff;
- In County Durham, the number of training days per trainee and per employee is higher than in the North East and England;
- For employers that do not train, the major reason (around two thirds) is that all of their staff are fully proficient or there is no need for training.

Employer recruitment

The level of vacancies and hard-to-fill vacancies, as a proportion of employment (rather than employers) was lower in County Durham, but skill shortage vacancies were the same level as in the North East and England (2%).

[18] Dickinson, P. and Hogarth, T. (2021). The benefits of hindsight: assessing the impact of apprenticeship reforms on employer behaviour.

Figure 24: Employer vacancies 2022: County Durham, North East and England

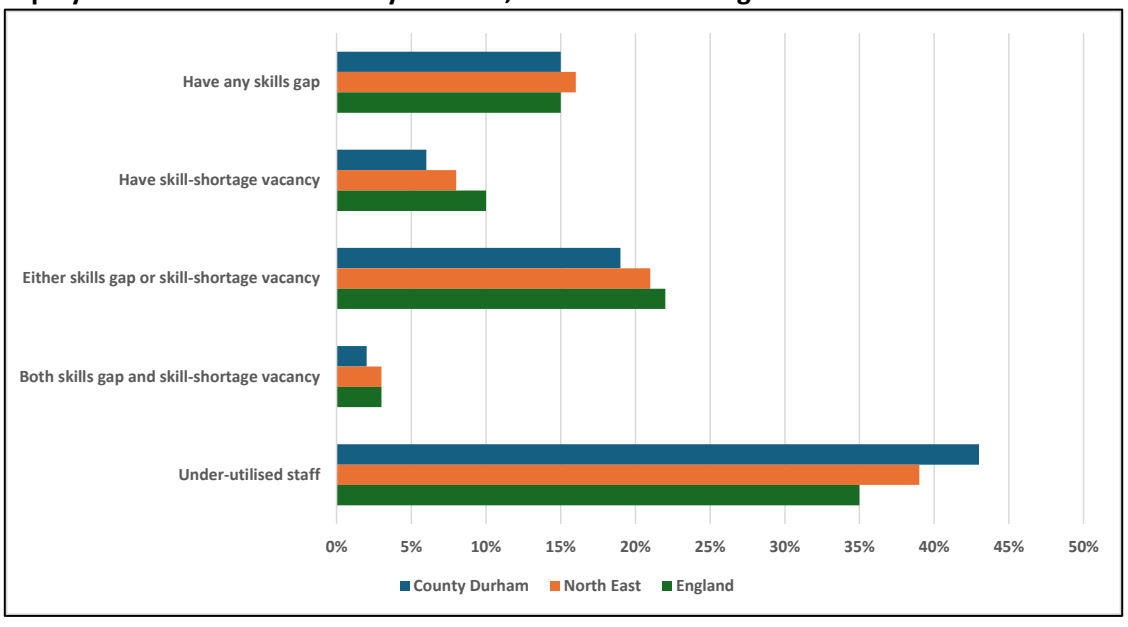


Source: Employer Skills Survey 2022

Hard-to-fill and skill shortage vacancies are therefore a relatively small concern for employers. What are greater concerns are skills gaps and staff under-utilisation[19]. Figure 25 shows employers reporting skills gaps are very similar in the three areas (around 15%). In County Durham and the North East, this is almost 10 ppts higher than those reporting skills gaps. Employers tend to report one or the other, therefore very few employers report both skills shortages and skills gaps.

A far greater issue in all areas is staff under-utilisation. In County Durham 43% of employers report they have under-utilised staff compared to 39% in the North East and 35% in England.

Figure 25: Employer vacancies 2022: County Durham, North East and England



Source: Employer Skills Survey 2022

[19] A skills gap is when a worker is not fully proficient in their job role. Under-utilised staff are those that have both qualifications and skills more advanced than required for their current job role.

Employer training

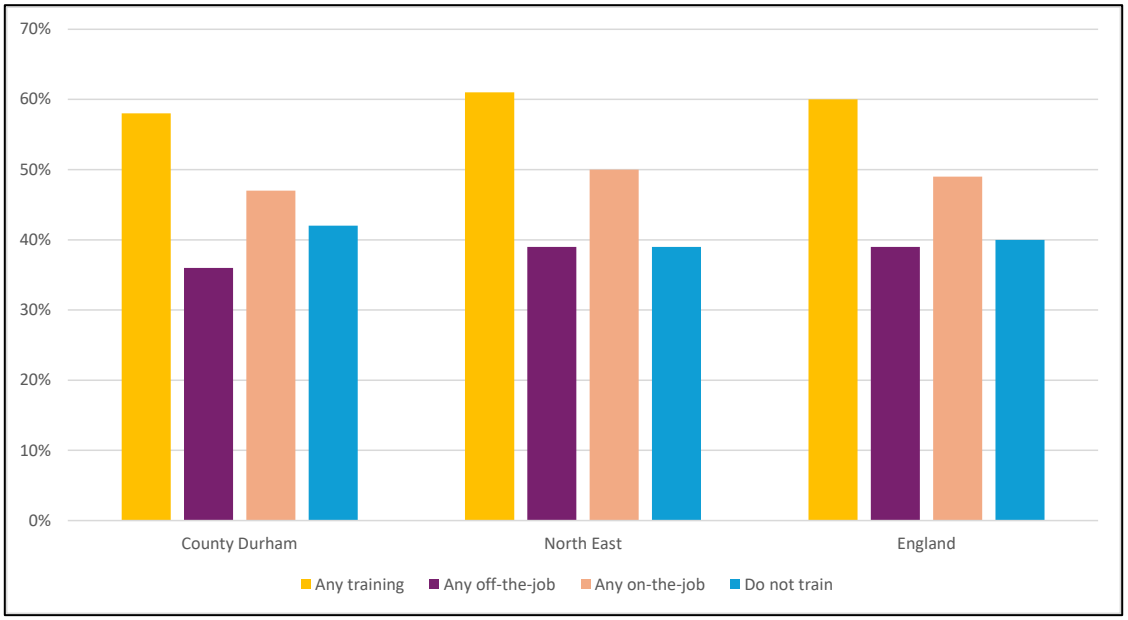
Figure 26 shows that most employers in the three areas do provide training for at least some of their staff. It is around 60% of employers in each area. Around two thirds of that training is, however, on-the-job. Employers in County Durham are marginally less likely to provide training than the North East and England.

In all three areas, most employers train managerial staff (about 70% of employers in each area who provide training) followed by administrative or secretarial staff (around 35% in each area). In County Durham, the number of training days per trainee (9.0 days) and per employee (4.9 days) is higher than in the North East (6.3 and 3.9), and England (5.9 and 3.5).

Nationally training is related to size, with smaller employers much less likely to train their staff than medium or large employers.

For employers that do not train, the major reason (around two thirds) is that all of their staff are fully proficient or there is no need for training.

Figure 26: Employer training 2022: County Durham, North East and England



Source: Employer Skills Survey 2022

Employer and skills implications of the digital and green transitions

Introduction

This section provides analysis of secondary information and data on the employment and skills implications of the digital and green transitions.

The digital transition

When assessing the impact of new technology on jobs and skills it is important to differentiate between what is predicted and what happens in practice. Recently, the negative consequences of new technology have been at the forefront of recent reports. However, the history technological change over the past two hundred years shows that new technology is associated with job gains (McGuinness et al., 2019[1]).

In the most recent literature, Frey and Osbourne (2013[2]) stirred the hornets' nest by predicting that almost half of occupations have a high risk of automation. They did this by looking at the task content of occupations, and the extent to which each task could be automated. Since then, other researchers have tempered Frey and Osbourne's conclusions suggesting that new technology will have much less of a negative impact, and produce some positive effects as well. More recent studies suggest that between 9%-14% of jobs are at risk of automation (Cedefop, 2020[3]). Whilst the Unit For Future Skills (2023[4]) estimates that 10%-30% of jobs are automatable with artificial intelligence (AI). Oliveira-Cunha et al.'s (2024[5]) survey found that those organisations that had recently introduced AI had a net positive effect of +6 ppts (3% had reduced employment and 9% increased employment). There was also a net positive effect on training of +10 ppts.

A number of studies have analysed the impact of new technology through the last decade focusing on the occupations which Frey and Osborne (2013) deemed at risk. Analysis of the European Skills and Jobs Survey 2013-18 found that those jobs deemed most at risk from automation actually saw employment levels rise. The occupations identified as fully automatable did not perform as well as those not fully automatable, but 40% of the occupations increased employment (Cedefop, 2020). This study also found that only 5% of workers in firms that had introduced new technology were fearful for their jobs. Firms that had introduced new technology were more likely to see their employment levels grow.

The reasons why the worst case scenario has not materialised is due to a combination of factors: the nature of the technology, of organisations, and job tasks and competencies. Tangible technologies (such as, 3D printing and robotics) affects manual workers, and intangible technology (e.g. machine learning and cloud computing) impacts more on non-manual jobs. So the impacts are not linear (Prytkova et al., 2024[6]). Certain technologies are specific and not generalisable to other sectors, so certain types of jobs may be unaffected if they are in different sectors. Svanberg et al. (2024[7]) analysed the take-up of computer vision and found that cost effectiveness is a key factor. The research calculated that only 1.6% of wages are due to vision tasks. Cost effectiveness is a key factor, and 77% of vision tasks are not economical to automate.

At an organisational level there are a number of barriers to technology adoption. Two UK surveys found that main barriers firms face are: finance; a lack of information about the technologies; policy and regulatory uncertainty; and, a lack of workforce skills (Oliveira-Cunha et al., 2024; ERC, 2023[8]). The COVID-19 pandemic was a major driver of technology adoption (Oliveira-Cunha et al., 2024). But most of the investments concerned sales and marketing, remote working, cloud computing, and cyber security (Oliveira-Cunha et al., 2024; ERC, 2023). The number of firms investing in data analytics and AI was much lower.

Whether new technology investments have a positive or negative impact on jobs and skills can be dependent on the nature of the organisation. Cedefop (2020) found that who provided information on the technology, consulted workers about its introduction, and had individual performance management practices saw employment increase. This is a socio-technical view of new technology (which underpins the burgeoning Industry 5.0 approach) that positive gains from new technology require an integration of the technical and social aspects of an organisation (Dickinson, 2024[9]).

The third dimension which affects the employment and skills impacts of new technology is the nature of job skills and tasks, and the impact of new technology on them. There are three effects of new technology on job skills and tasks: displacement, development/reinstatement and productivity (which creates increased demand for workers) (Prytkova et al., 2024). Analysis of the ESJS found that skills displacing technological (SDT) change has a positive impact on employment through the development/reinstatement effect as task content and skills complexity increases. Tasks are heterogeneous and whilst technology may impact adversely on some they have a positive effect on others (Cedefop, 2020). McGuinness et al. (2019) found that 90% of workers affected by SDT improved their skills.

A number of studies have assessed the effect of new technology on the types of occupations. There is a general consensus that as past technologies impacted negatively on routine manual occupations (due to them being tangible technologies), the current batch of new technologies is expected to impact more negatively on non-manual occupations (as they are more intangible technologies). Analysis of trends over the 2010s shows that it is white collar and knowledge based workers that have seen employment levels fall (Gmyrek et al., 2023[10]). Prytkova et al.'s (2024) analysis of the task impact of patents finds that higher level jobs are more exposed to current new technologies i.e. managerial, professional, and associate professional and technical occupations. However, their analysis also reports impacts on jobs in clerical workers, plant and machine operative, and assembler occupations. AI is also expected to impact most on professional occupations and higher skilled people (RQF 4+) (Unit for Future Skills, 2023).

However, because occupations have task heterogeneity there is the potential for those occupations most exposed to new technology to co-exist with it. Those occupations requiring critical thinking, problem solving, personal communication and team working skills can augment creating a 'symbiotic relationship' with technologies such as AI (Zirar et al., 2023). However, this will require investment in skills updating (McGuinness et al., 2019).

The green transition

The effect and, especially, the pace of the impact of the green transition is uncertain because it depends so much on strategy and legislation. For example, the switch to electric vehicles was affected by the extension of the deadline for selling new petrol and diesel cars to 2035.

The impact of the green transition will impact on occupations in four ways. There will be increases in three types of jobs:

- Green New and Emerging Occupations: these are occupations that have unique requirements for working in or on the decarbonisation of goods, processes and services, such as electric vehicle power unit designers;
- Green Enhanced Skills and Knowledge Occupations: occupations that currently exist but require a change in their competencies and/or context for working in or on the decarbonisation of goods, processes and services e.g., maintenance of electric vehicles (EVs);
- Green Increased Demand Occupations: those occupations whose demand is increased due to the decarbonisation of goods, processes and services, but do not entail significant changes to their competencies or context e.g., example electric power line installers.

There will be a decrease in employment in a small number of occupations that are significantly dependent on carbon fuels e.g. mining and drilling.

Analysis undertaken by IER for several local labour markets[20] showed that all occupations will be affected by the green transition, but in different ways. For example, caring, leisure and other services, and sales and customer service occupations will benefit from an increase demand but this will require little change to their inherent knowledge, skills and behaviours (KSBs). Managers, directors, and senior officials, professional occupations, associate professional and technical occupations and skilled trades will have changes to a significant number of jobs either through new occupations emerging or a change to the KSBs involved in carrying them out.

Analysis of detailed occupations shows that most are green increased demand jobs, and then green enhanced skills and demand. Because most jobs affected by the green transition are in these two groups, most of the knowledge skills and behaviours required of the green transition already exist by people working in these occupations or those that are being trained to do them.

The early alarmist predictions of analysts of the impact of new technology on jobs and skills have not been borne out by later research. There will, undoubtedly be impacts on a range of jobs but the predicted net effect on employment and skills development is generally positive. Researchers forecast that the current range of new technologies will impact more on higher skill level occupations.

But there is still a large amount of uncertainty in how the transitions will affect jobs and skills. For example, the green transition has been and will be affected by legislation and regulation, so the timescales are difficult to predict. What is more certain are the types of jobs that will be affected. These are most likely to be existing occupations that either will not have their knowledge, skills and behaviours affected (green increased demand jobs) or will require skills augmentation and upskilling (green enhanced skills and demand jobs).

Conclusions

There are a number of labour market similarities between County Durham, the North East region and England. However, there are important differences some of which are likely to affect the nature of the demand for careers advice and guidance over the coming years.

At an aggregate levels the population profiles, age and gender splits, and forecast changes, are similar across the three areas. Compared to the North East, the proportion of economically active and inactive people is similar, although compared to England both areas have higher levels of inactivity. A key difference in County Durham is the nature of economic inactivity where people are more likely to be inactive due to long term health issues as opposed to studying. As a consequence a higher proportion of inactive people say they are not looking for a job. This suggests that such people are a longer distance from the labour market and would need different types of support to gain employment than, say, students. This may also suggest that more people in County Durham are unpaid carers and this limits their labour market activity also.

[20] IER has undertaken research in Liverpool City Region, York travel to work area, Sheffield City Region and Scotland. For example, see https://warwick.ac.uk/fac/soc/ier/researchthemesoverview/researchprojects/greenjobsandgreeneconomyyork/york_green_jobs_and_skills_report_final_report.pdf

The employment rate in County Durham sits above the North East but below the national average. A key feature is the much higher employment rate of young people and a lower rate of economic inactivity due to being a student. There is a significant difference between County Durham and the region and England. However, young people's destination data does reveal that County Durham young people are more likely to enter employment than HE, the difference is not as great as suggested by the APS data.

At a broad level the occupational profiles are also similar across the three areas. The largest occupational categories are professional, and associate professional occupations. Changes in occupations over recent years has also been similar in the proportion of people but not in the magnitude of change. The gap in the number of people working in higher skill occupations is greater in the North East and England and the gap has been widening. The occupational forecasts (for NECA) suggest that the higher level skill gap will continue to widen to 2035.

Within County Durham a handful sectors account for a large proportion of employment. There are still key sector differences across the areas, as there are within County Durham's parliamentary constituencies. Sector job forecasts (NECA) predict similar changes. Employment is forecast to grow but even in those occupations and sectors where lower employment is predicted, large numbers of job opportunities will still exist due to replacement demand. But it is the skill level of jobs that is the main difference. This is matched on the skill level of residents where in County Durham there are many fewer people with NVQ Level 4+ qualifications. There are similar proportions of people with qualifications below Level 2. But whilst more people in County Durham have Level 2 and 3 qualifications, significantly fewer are qualified to Level 4+, especially comparted to England.

This is likely to begin at the transition into the labour market. Fewer young people in County Durham have sustained education and HE destinations, with proportionally larger numbers entering employment (similar to the North East). A key feature of County Durham is the high levels of disadvantage in the area, and disadvantaged young people are much less likely to enter HE and much more likely to have a not sustained destination. And the differential is even greater for lower attainers.

There is an additional issue in that even though qualification levels are relatively low in County Durham, there are high levels of skills underutilisation in the workforce where workers are more qualified/skilled for their job roles. This is a greater problem than in the North East and England. So when people do get qualifications and skills, they are not being used to their full potential.

Both the digital and green transitions will impact jobs and skills locally, regionally and nationally. However, the net effect of both is generally viewed positively by most analysts, and will provide skills updating opportunities. The analysis of the County Durham labour market and its relative performance identifies consistent themes suggesting a holistic approach is required. There are demands for effective and aspirational careers advice across all ages. There is also a need to careers IAG to link up with other support (e.g. health-work interventions) to support people who are some distance from the labour market. The analysis also suggests the need for continued IAG support across people's working lives, especially working with employers, so that their potential is maximised and that they are fully utilised within the labour market.

Endnotes

[1] McGuinness, S., Pouliakas, K and Redmond, P. (2019). *Skills-Displacing Technological Change and Its Impact on Jobs: Challenging Technological Alarmism?* IZA Discussion Paper No. 12541. IZA Institute of Labor Economics.
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[9] Dickinson, P., Erickson, E. and Warhurst, C. (2024). *Maximising productivity through managing new technology*. The Productivity Institute
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