what works centre for local economic growth

‘How to’ guide Understanding local economic performance: Skills

Introduction

Skills are an important driver of local productivity and output. This briefing will help local policymakers understand how to think about the skills performance of their local area and develop appropriate policies.

This briefing is part of a series that provides guidance to help policymakers think about local economic performance. It overviews key economic concepts and provides guidance on data and analysis.

Skills

What are skills?

Skills are the combined knowledge, competence, and abilities required to complete a task successfully. Skills are developed through education, training or other personal development activities, in formal (school, college, university, apprenticeships, etc.) and informal settings (a friend shows you how to use a piece of software).

There are many different types of skills. Some important classifications include:

- **Basic skills** are needed to function in work and society and to acquire higher level skills. Examples include literacy, numeracy, and basic digital skills.

- **Technical or hard skills** are specific knowledge, competence, and abilities needed to perform specialised tasks, often developed through education and training, and can be objectively assessed and accredited.
- **Soft skills** enable individuals to interact effectively with others and include communication, problem solving, teamwork and traits such as adaptability, flexibility, and positivity.
- **Transferable skills** can be applied across different industries, occupations, businesses, and roles. This includes many 'soft' skills such as communication and problem-solving skills and some 'hard' skills, like coding or data analysis.
- **Non-transferable skills** are specific to a particular industry, occupation, business or role.

As it is difficult to measure skills, qualifications are often used as a proxy. One downside of this is that skills that are developed in informal settings, including many developed 'on-the-job' are not captured in qualifications data. For example, many more individuals will have communication or project management skills than qualifications data will suggest.

Why are skills important for local economic performance?

Skills are an important driver of productivity. Productivity measures how efficiently inputs (resources, or factors of production) are converted into outputs (goods and services). Inputs include workers and their skills (human capital), buildings and machines (tangible capital), and ideas and knowledge such as design, branding, R&D, and software (intangible capital). Anything that increases the amount of capital per worker (human, tangible or intangible capital) will usually increase output per worker (productivity).

As a key component of human capital, skills contribute to higher productivity through three main mechanisms:

- First, skilled workers should be able to produce more goods or services than an unskilled worker. For example, a skilled bricklayer should be able to construct a wall more quickly than someone who is untrained.
- Second, skilled workers can produce higher-value goods and services than those without skills. For example, biomedical engineers can develop products that are highly valued by society.
- Third, management and leadership skills can improve the organisation of inputs and increase productivity.

Skills have become more important as the UK economy has moved from manufacturing (which relies more heavily on tangible capital) to services (which rely primarily on human and intangible capital). Human and intangible capital are increasingly important in explaining productivity disparities across the UK.[1]

1 Brandley, P., Distefano, M., Donnat, H., Feld, I., Overman, H. and Shah, K. (2022). Bridging the gap: What would it take to narrow the UK's productivity disparities?, The Resolution Foundation. https://economy2030.resolutionfoundation.org/wp-content/uploads/2022/06/Bridging-the-gap.pdf

Thinking about local skills performance

Some key concepts and considerations include:

Demand for skills comes from employers. The skills demanded will depend on the goods and services produced (for example, housebuilders are looking for bricklayers, electricians, plumbers, etc.). Generally, the scale of demand for skills will reflect the demand for the goods and services they help produce.

Individuals **supply** skills. Individuals decide which skills to develop based on range of factors including the potential wages associated with different skills, the costs of development (including opportunity costs), and personal interests and preferences.

Alignment between supply and demand is mediated by labour markets. Where demand and supply are not aligned, there is a mismatch. Mismatches can have negative effects on employers, for example, reducing the quantity or quality of their outputs or preventing them from expanding. When these are widespread across the local economy (or affect a major local employer), they can impact on local economic performance. As skills often take significant time to develop (for example, many apprenticeships take three years), it can take a long time to resolve mismatches.

There are multiple, **overlapping labour markets**. For example, the labour market for graphic designers overlaps with markets for other types of designers and illustrators. For this reason, wherever possible, it is helpful to go beyond headline data to look at data on specific skills (for example, by using occupations or subjects) and levels.

Commuting time and cost play a role in determining labour markets, which also overlap geographically. Few people can take jobs located a long distance from where they live. In general, labour markets for higher, more specialised skills are geographically larger.

Where demand for a skill exceeds supply, this will generally lead to an increase in wages, encouraging more individuals to develop these skills or for individuals with those skills to move into the area.[2] Where there are **constraints** on developing these skills (for example, local education providers do not have capacity) or on in-migration (for example, due to housing shortages), this can limit the labour market's ability to adjust.

Questions to understand local skills performance

Start by establishing the questions to be answered. Throughout the briefing, key questions are set out at the end of the introduction to each section.

2 The main exception is when the market does not directly set wages, such as national pay scales for some public sector roles.

Analysing data

Data analysis should reflect the questions to be answered, rather than being undertaken for its own sake. When selecting from multiple datasets and measures, consider which most closely aligns with the question. Also consider available geographies, frequency (one-off, biennial, annual, quarterly, monthly), and timeliness (i.e. the lag between collection and publication).

Most economic data relates to either:

- **Stocks** – which measure the quantity that exists at a specific point in time. Examples include the amount of labour, skills, machinery or infrastructure available in a local economy or the overall size of the local economy.
- **Flows** – which measure changes over time. Examples include investment, or numbers gaining qualifications in a specific topic.

Data can be analysed in multiple ways, with a clearly defined research question setting the parameters (for example, by indicating that a comparison across areas or time is required).

Most analysis starts by looking at the **current position**. It is possible to look at the current position for both stocks and flows.

Comparison across areas allows benchmarking. It is important to select comparison areas carefully to ensure benchmarking is useful.

Comparison over time looks at how things are changing. It is good practice to pick a neutral time period (such as 5 or 10 years) but in some cases analysis will look at performance since a notable event (such as recession or election). It is possible to compare over time for both stocks and flows.

Analysing breakdowns can provide additional insights. For example, comparing different geographic areas or different groups within a population.

Combining data can provide additional insights. For example, combining data on productivity and income helps illustrate whether local people are benefiting from high productivity.

This briefing provides **examples** and is not intended to be exhaustive. Only publicly available datasets are suggested. For some questions, commercially provided datasets may be available and provide useful insights. Not all questions will be answerable using existing (secondary) data. In these cases, and where resources allow, primary data collection (for example, a survey of local employers) may be required.

Geography

This briefing uses Wakefield as an illustration. Wakefield is a unitary authority area in West Yorkshire, with a population of just over 360,000. It is the 26th largest urban conurbation in the UK and includes the city of Wakefield and several smaller towns and villages. In 2023, Wakefield's Gross Value Added (GVA) was £10.3 billion. Generally, Wakefield underperforms across a range of economic indicators.

Comparing performance against other geographies can provide additional insights. The main options are to benchmark against higher-level geographies or against other similar areas. Examples of higher-level geographies include countries (United Kingdom, Great Britain, England, Scotland, Wales or Northern Ireland as appropriate), regions, higher level administrative geographies (for example, comparing a local authority to the mayoral strategic authority it sits within) or custom geographies (such as England excluding London). Similar geographies can be drawn from an official source, such as Chartered Institute of Public Finance and Accountancy (CIPFA) nearest neighbours or ONS clusters, or can be selected based on local knowledge (for example, Southampton might choose to compare against Portsmouth as both are port cities on south coast).

The appropriate choice will reflect the research question. For example, for areas that are attractive to retirees (such as Cornwall or Cumbria), comparing the proportion of population aged 65 and over to similar areas is likely to provide less useful insights than comparing to the national average. Issues to consider are the research question and how the data will be used. For example, when demonstrating fit with a national policy priority, a national comparator is likely to be most appropriate, whereas comparing performance of major cities can give insights into the extent to which graduates are staying in the area after graduation.

We will use two comparator groups in this briefing. The first includes a mix of local, regional, and national comparators. The other local authority areas within West Yorkshire Combined Authority area (WYCA) provide insights into how Wakefield is performing compared to neighbouring areas. Two regional comparators – the WYCA area and the Yorkshire and the Humber region – and England as a national comparator provide insights on performance relative to broader economies.

The choice of local, regional, and national comparators will depend on the characteristics of the area being analysed. For example, combined authorities are more common in city regions, and are currently concentrated in the North and Midlands of England, so will not always be a useful comparator.

Figure 1: **Local, regional and national comparators**

	Geographic level
Bradford	Local authority
Calderdale	Local authority
Kirklees	Local authority
Leeds	Local authority
West Yorkshire	Combined authority
Yorkshire and the Humber	Region
England	Country

In some scenarios, it can be useful to compare to other local authorities that are similar to the area being analysed. Various tools exist to generate lists of similar areas. In this briefing, areas that are similar to Wakefield have been selected from the CIPFA nearest neighbours dataset.[3] This identifies areas that are similar based on demographic, social, and economic characteristics.

3 LG Inform can be used to generate a list of CIPFA nearest neighbours. Not all nearest neighbours are included for brevity. Nearest neighbours within West Yorkshire Combined Authority area are excluded as they are in other comparison group.

Figure 2: **Similar area comparators**

	Geographic level
Barnsley	Local authority
Bury	Local authority
Doncaster	Local authority
Gateshead	Local authority
Halton	Local authority
North Lincolnshire	Local authority
North Northamptonshire	Local authority
Rotherham	Local authority
Sheffield	Local authority
St Helens	Local authority
Stockton-on-Tees	Local authority
Telford and Wrekin	Local authority
Wigan	Local authority

Some datasets cover the whole of the UK, whilst others cover only some UK countries. The choice of Wakefield as the case study geography means that where datasets vary across UK, it is the dataset that covers England that has been used. Similar datasets are normally available in other UK countries.

Overall position

Skills demand

The skills demanded by employers reflect the goods and services they produce. For example, a housebuilder will require workers with skills in a range of construction trades (bricklaying, plastering, electrical installation, plumbing, etc.) as well as in project management, sales and marketing, and others.

As demand for different goods and services varies over time, the demand for the skills required to produce those goods and services will also vary. Over time, technological change also influences skills demand. It can reduce demand for skills if the technology enables tasks to be completed with less labour (for example, software reducing need for technicians to draft architectural plans) or increase demand if it creates a new or improved product category (for example, smart phones increasing the demand for software developers).

One of the main challenges is that few datasets directly measure skills demand, with most measuring employment which also reflects supply (as the posts are filled). Employment data is worth looking at it shows what skills are being utilised and provides insights into implied demand. For example, the proportion of population employed as accountants provides insights into demand for these skills. Tracking employment over time provides insights into how skills demand is changing over time. For example, if demand for carers is increasing (due to ageing population), we would expect to see this reflected in employment data. However, if employers are not able to recruit to these roles, the increase in demand may not be fully captured. For this reason, it can be helpful to also look at vacancy data.

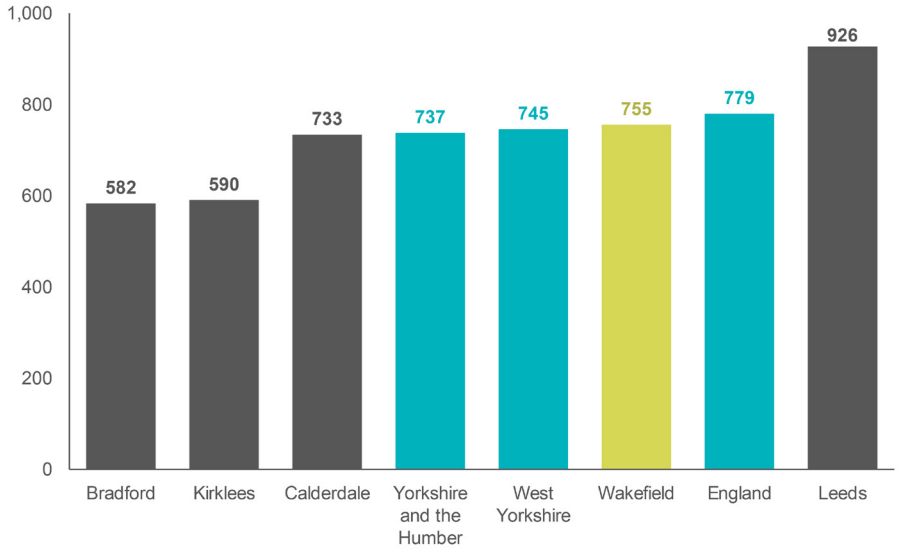
Key questions

- How does the labour market compare to other areas?
- What skills are employers looking for?
- How many vacancies are there?

How does the labour market compare to other areas?

What to look for?	• What is the employment per capita of the area? • How does it compare to other areas?
What might affect performance?	• Some areas are centres of employment, others are primarily residential, and others are a mix. An area that is primarily residential may have low employment per capita (but high employment rates if there is a centre of employment nearby that residents can commute to). • Cities tend to have the highest employment per capita as they are centres of employment.
Other things to be aware of	• Variations in the number of hours worked or quality of employment are not captured in this measure. • Rates can change over time due to changes in either numerator (employment) or denominator (population). Understanding which is changing is important for policymaking.
Suggested dataset	• Business Register and Employment Survey (BRES) (Nomis) and Population estimates (Nomis).
Suggested measure	• Employment per 1,000 working age population (16-64).
How good a match to the question is the available data?	• As BRES measures employment, it does not reflect labour demand (but demand that has been successfully met by supply). • Self-employed people that have not registered for VAT or PAYE, HM Forces, and government-supported trainees are not included in BRES data. • Population estimates are used to create a 'per capita' measure, allowing labour markets to be compared.
What other questions can this dataset help answer?	• How large is the labour market? • How does demand for labour vary across sectors? (See 'Sectoral analysis' section.)

Figure 3: **Employment per 1,000 working age population (16-64), Wakefield, other local authorities within the WYCA area, WYCA area, Yorkshire and Humber, and England, 2023**



Employment per capita in Wakefield is similar to the regional and national comparators.

Within the WYCA area, only Leeds has a higher employment per capita, reflecting its status as a major UK city.

Source: Business Register and Employment Survey (BRES) (Nomis) and Population estimates (Nomis)

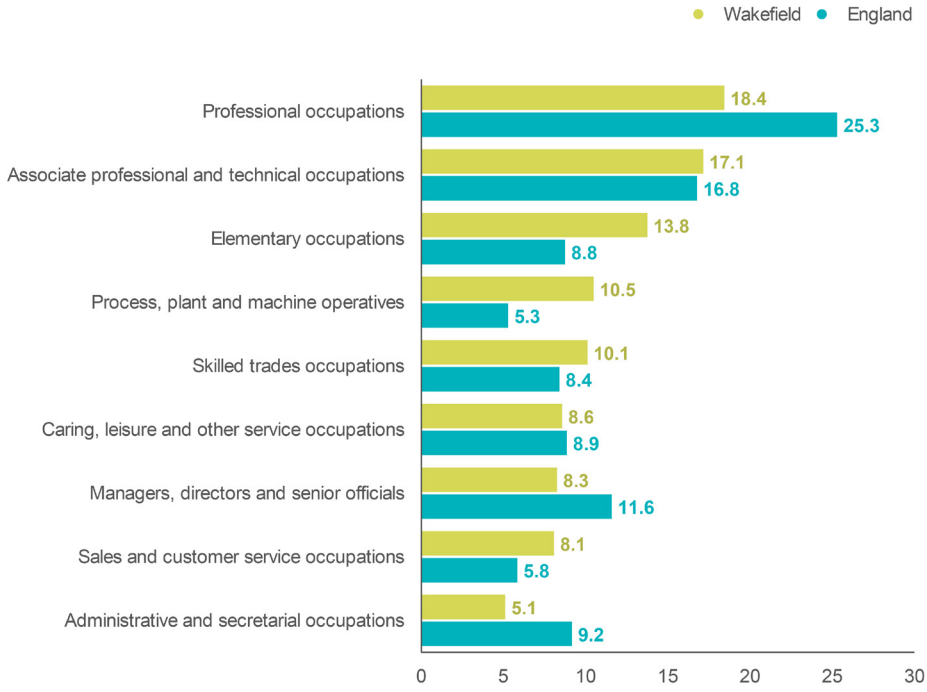
Policy implications

- If employment per capita is low, consider if increasing it is a priority.
- Increasing business starts, increasing business growth, and encouraging inward investment can all help increase employment per capita.
- In some cases, the priority may be to improve connectivity to nearby centres of employment, for example, by improving the skills of residents, job search activities or improving transport links. This would not improve employment per capita (but would improve employment rates).

What skills are employers looking for?

What to look for?	• Which occupations are most common? • Which occupations are under or overrepresented (compared to benchmark)?
What might affect performance?	• Some roles – managers, teachers, nurses, sales assistants, etc. – will exist in all economies. • The sectoral mix and the role of local sites within supply chains will affect the type of jobs available. For example, a large pharmaceutical company will often have R&D and manufacturing facilities in different locations, with the first having predominately professional, and associate professional occupations, whilst the later will have many in the process, plant and machine operatives category.
Other things to be aware of	• Occupations are determined based on the skills and competencies required. • While there are many occupations, most statistics use Standard Occupational Classifications (SOC) to group occupations by level. Multiple breakdowns, with different levels of granularity, are available. The chart below uses a nine broad occupational groups breakdown.
Suggested dataset	• Annual Population Survey (APS) – Workplace analysis (Nomis).
Suggested measure	• Breakdown of employment by occupational group (% of total employment).
How good a match to the question is the available data?	• As APS measures employment, it does not reflect labour demand (but demand that has been successfully met by supply).
What other questions can this dataset help answer?	• Employment by occupation, using more detailed breakdowns. • Employment broken down by age, full-time and part-time, and flexibility. • Employment by industry (although we recommend using BRES instead).

Figure 4: **Breakdown of employment by occupational group (% of total employment), Wakefield and England, 2024**



Professional occupations account for the largest share of employment in Wakefield – but this group is underrepresented compared to England.

Generally, there is higher employment of low skilled occupational groups (such as elementary occupations) and lower employment of high skilled occupational groups (such as managers) in Wakefield than across England.

Source: Annual Population Survey (APS) – Workplace analysis (Nomis)

Note: The confidence intervals are large for Wakefield so proportions should be taken as rough estimates only. See Box 1 below for discussion of confidence intervals.

Box 1: Confidence intervals

Many datasets are based on surveying individuals or businesses, with those surveyed a sample of the total population of individuals or businesses. The answers from the survey sample are used to estimate values for the total population. Confidence intervals are used to express uncertainty about the estimate, indicating the degree of confidence in the result. If there was data from the entire population (for example, the Census or if the data comes from administrative data), there would be no need for a confidence interval, as the exact value would be known.

For example, the Annual Population Survey (APS) surveys individuals about their labour market participation, and confidence intervals are provided for all variables. Using employment rates as an example, in 2024, the employment rate of the working age population (16- to 64-year-olds) in Wakefield was 72.6 percent. The confidence interval was 4.3, meaning those using this data can be 95 percent certain that the true value is between 68.3 (72.6 minus 4.3) and 76.9 (72.6 plus 4.3) percent.

Generally, confidence intervals are smaller for larger samples. For example, the confidence interval for the 2024 employment rate for England as a whole (75.6 percent) is just 0.3, giving a narrower range (75.3 to 75.9 percent).

Over time, the Office for National Statistics and other data providers have found it more difficult to get individuals and businesses to complete surveys, leading to larger confidence intervals on key surveys such as the Annual Population Survey.

Policy implications

- Alongside sectoral breakdown of employment (see 'sectoral analysis' section), occupational breakdown of employment can help inform what skills provision is needed.
- It also provides insights into what types of jobs it would be useful to attract through inward investment (to address gaps in workers) or that the area may be more successful in attracting (as it has a large pool of workers for employers to draw upon).

How many vacancies are there?

What to look for?	• How many vacancies were there in the most recent period? • How are vacancies changing over time? • How do vacancies compare to employment?
What might affect performance?	• Vacancies fluctuate on a month-by-month basis. • Seasonal factors play an important role in fluctuations and will be more important considerations in areas where sectors with seasonal demand (such as agriculture, tourism or retail) are large employers.
Other things to be aware of	• Vacancies reflect a combination of two factors – individuals changing jobs and new jobs created through growth. • Over time, changes in how vacancies are advertised may also affect vacancy data. • Covid-19 had a large impact on vacancy patterns so care should be taken in interpreting trends between 2020 and 2022.
Suggested dataset	• Labour demand volumes by Standard Occupational Classification (SOC 2020), UK (Office for National Statistics (ONS)).
Suggested measure	• Number of vacancies. • Data is available for average monthly vacancies (referred to as 'snapshot') or new vacancies. Both are useful – select based on requirements.
How good a match to the question is the available data?	• All data on vacancies is imperfect as it requires vacancies to be advertised and some vacancies are filled through personal networks. • This dataset measures online vacancies, meaning jobs advertised offline are not included.
What other questions can this dataset help answer?	• Vacancies by occupation.

Figure 5: **Average number of online job adverts, Wakefield, February 2017 to May 2025**

Source: Labour demand volumes by Standard Occupation Classification (SOC 2020), UK (ONS)

Note: Dataset starts in January 2017 but the first month is excluded, in line with guidance from ONS.

Vacancies dropped during Covid-19 and then increased once restrictions were lifted.

Vacancies are higher than pre-Covid-19 but it is unclear what is driving this. Options include growth in labour demand, higher labour turnover (i.e. individuals changing jobs more frequently) or changes in how vacancies advertised (with more advertised online).

Policy implications

- If vacancy rates are high (either compared to earlier periods or other areas), this could be a sign that demand is increasing or that there is high turnover. Both scenarios might mean there is a need for more skills provision. There may also be a need for business support services (if poor management or leadership is a cause of high turnover).
- If vacancy rates are low, it may mean there is a need to support job creation (through business starts, business growth or inward investment).

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Using other comparators. For example:
  - How does employment per capita compare to that in similar local authority areas?
- Analysing change over time. For example:
  - How has employment per capita changed since 2010?
  - How has employment in professional occupations changed over the last five years? How does this compare to change across England as a whole?
- Analysing sectoral breakdowns of employment (discussed in later section).
- Combining data on labour or skills demand with other datasets. For example:
  - How does the local economy compare to England on employment per capita, productivity (GVA per hour worked, ONS), and income (Gross Domestic Household Income per head, Nomis).

- What is the vacancy-unemployment ratio (calculated by combining vacancy data with unemployment data from Annual Population Survey, Nomis or benefits data from DWP).

Skills supply

Individuals supply skills to employers. Analysis of skills supply normally starts by understanding how many individuals are available for work – by looking at population structure and economic activity rates – following by an analysis of the skills available.

Labour markets often cut across multiple administrative boundaries (with labour markets for more highly paid skills generally larger), so it is important to also understand commuting patterns. These are explored in the next section.

The skills available reflect choices made by both individuals and employers. For example, young people make decisions about what subjects to study at school, college and university, and what routes to take post-school (for example, to go straight into work, pursue an apprenticeship or undertake further study), with these choices affecting the skills available within an economy. Individuals make choices based on a wide range of factors including personal interests and preferences, the costs (actual and opportunity) of pursuing that route, and the availability of jobs and wage levels associated with different skills. The latter requires good labour market information, which is why careers education, advice and guidance is so important. Other skills are developed in the workplace, either through formal or informal training and workforce development, meaning employer decisions also play an important role in the skills available. Employers tend to underinvest in training as labour turnover may mean they do not gain the full return on investment in training.

Local skills provision – such as further education colleges, higher education institutions or training providers – also influences the skills available within an economy, although commuting and relocation can mean that skills provision in other areas will also matter.

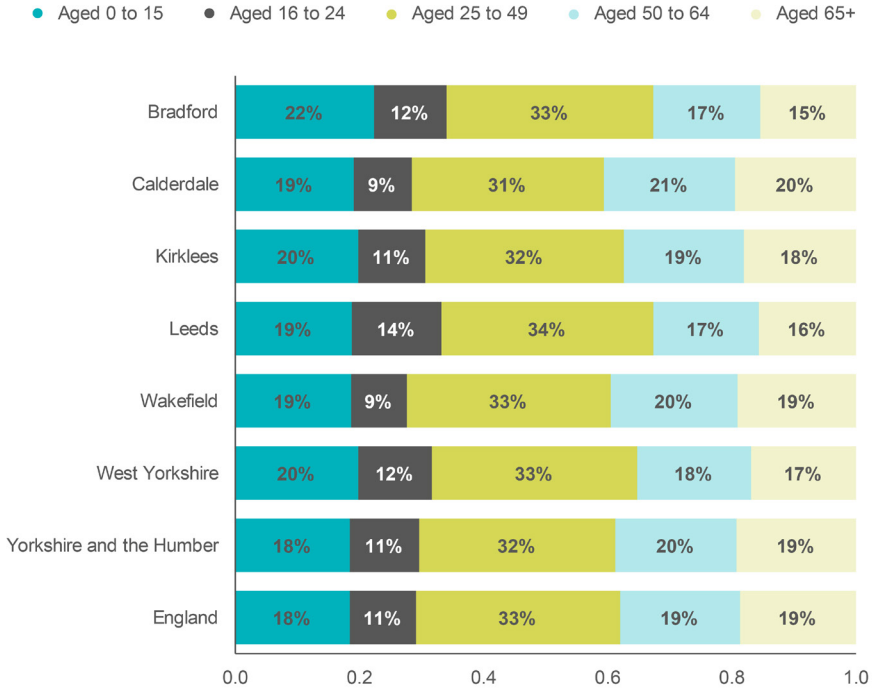
Key questions

- How many residents are working age?
- What proportion of working age residents are active in the labour market?
- What skills do residents have?

How many residents are working age?

What to look for?	• What is the age profile of the local population? • How does the age profile compare to other areas?
What might affect performance?	• Different types of area have different population structures as a result of their characteristics. For example, cities tend to attract young adults as education, career, and social opportunities are more heavily concentrated in them. Attractive rural and coastal areas often attract older adults.
Other things to be aware of	• Working age population (16- to 64-year-olds) is a proxy used for those likely to be available for work but it is imprecise as labour market participation can occur outside of this age band.
Suggested dataset	• Population estimates – local authority based by single year of age (Nomis).
Suggested measure	• Population by age band as % of total population.
How good a match to the question is the available data?	• Measures indicator of interest (population structure).
What other questions can this dataset help answer?	• Population change over time (total and by age band).

Figure 6: **Breakdown of population (% of total population), Wakefield, other local authorities within the WYCA area, WYCA area, Yorkshire and Humber, and England, 2023**



Wakefield has a similar proportion of its population aged 16 to 64 (62 percent) as West Yorkshire, Yorkshire and the Humber and England (all 63 percent).

Leeds has a larger proportion of 16- to 24-year-olds than other areas, reflecting in part its large student population.

Source: Population estimates – local authority based by single year of age (Nomis)

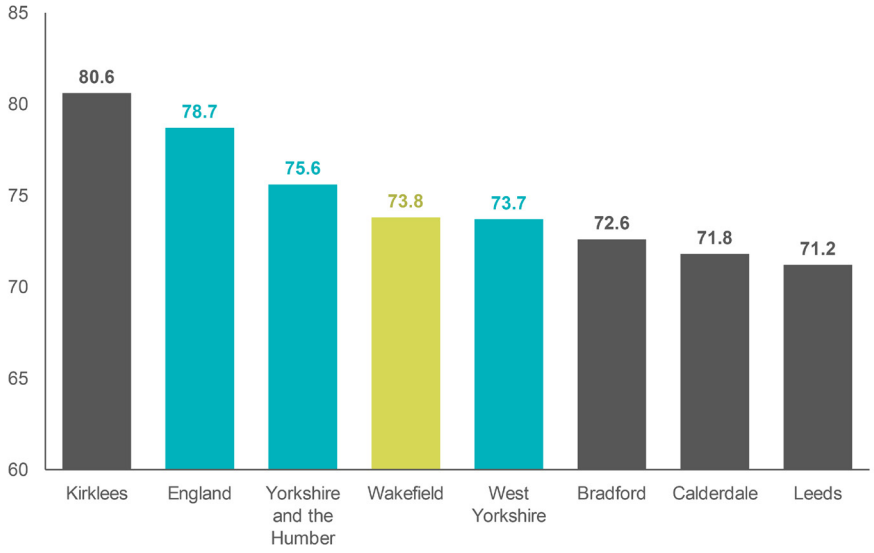
Policy implications

- The larger the proportion of population that is working age, the larger the potential pool of labour. Where the proportion is low, consider the reasons for this and whether addressing it is a priority. For example, if an area would like to increase its working age population but a lack of suitable housing is an issue, intervention in this area may be needed.
- Where local performance varies from benchmark, consider what implications might be for local employers. For example, if a larger proportion is aged 50 to 64, that could mean loss of key skills in the next few years. Consider how these will be replaced.

What proportion of working age residents are active in the labour market?

What to look for?	• What proportion of working age residents are economically active? • How does this compare to other areas?
What might affect performance?	• Reasons for economic inactivity vary, including studying full-time, looking after family, having a health or disability that prevents work, or having retired early. • Areas with different characteristics attract different types of individuals, this may affect economic activity rates. For example, an economy with a large number of university students or that is attractive to early retirees will tend to have lower economic activity rates. • Economic activity rates can also be affected by the availability of employment opportunities.
Other things to be aware of	• Over recent years, and particularly since the Covid-19 pandemic, ONS has found it more difficult to get individuals to complete the Annual Population Survey, with this resulting in smaller sample sizes, and increases in the confidence intervals. This has a larger effect on the statistics for smaller geographies. See Box 1 on Page 10 for more details on confidence intervals.
Suggested dataset	• Annual Population Survey (APS) (Nomis).
Suggested measure	• Economic activity rate (% of working age population).
How good a match to the question is the available data?	• Includes both those in employment and those that are unemployed but actively seeking employment (i.e. everyone active in labour market).
What other questions can this dataset help answer?	• Economic inactivity rates (%). • Employment rates (%). • Unemployment rates (%). • Breakdowns of economic activity, inactivity, employment, and unemployment by age band and gender. • Breakdown of economic inactivity by reason (student, looking after children or home, long-term sickness or disability, temporary sickness or disability, retired, discouraged, and other).

Figure 7: **Economic activity rate (% of working age population), Wakefield, other local authorities within the WYCA area, WYCA area, Yorkshire and Humber, and England, 2024**



Just under three-quarters of Wakefield's working age population are economically active. This is a similar rate to the WYCA area, but Wakefield underperforms England.

There is a relatively large variation in the rate across West Yorkshire, ranging from 71.2 in Leeds to 80.6 percent in Kirklees. Leeds' low rate is likely to reflect its large student population.

Source: Annual Population Survey (Nomis)
Note: Over recent years, and particularly since the Covid-19 pandemic, ONS has found it more difficult to get individuals to complete the Annual Population Survey, with this resulting in smaller sample sizes, and increases in confidence intervals. This has a larger effect on the statistics for smaller geographies. This means care should be taken when comparing data across areas and time, especially when differences are small. See Box 1 on Page 10 for more details on confidence intervals.

Policy implications

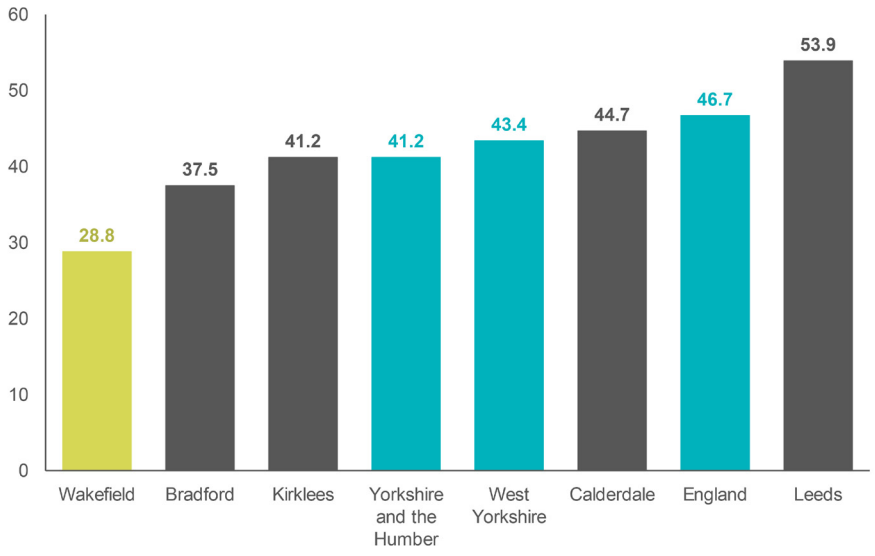
- Policy implications will depend on the area's performance. For example:
  - Where economic activity is low due to a large student population, intervention is not generally needed.
  - Where economic activity is low due to a large proportion having health and disability issues, this may require health interventions, employment support interventions, and working with employers to adapt working conditions.
  - Where economic activity is low due to large proportions having caring responsibilities (either childcare or elder care), this may require intervention in care provision.
  - When unemployment is high, interventions to increase job creation and to support individuals to move into work (such as assistance with job search, training, and work experience) may be needed.

What skills do residents have?

What to look for?	• What proportion of residents have qualifications at different levels? • How does this compare to other areas?
What might affect performance?	• When making decisions about whether to develop skills, individuals will weigh up costs and benefits (for example, higher wages once qualified vs. cost of taking time out of work to develop skills). These calculations will be influenced by many factors, including the skills demanded by local employers. • Skills demand and wages associated with different skills can influence where individuals choose to live and work. For example, many recent graduates choose to relocate to London, Edinburgh or Manchester where there are concentrations of jobs that require graduate skills, with this affecting the skills profile of both those areas and the areas the graduates leave.
Other things to be aware of	• As skills are difficult to measure, qualifications are generally used as a proxy for skills. Qualifications are easy to quantify and data is gathered regularly. However, not all skills are accredited with qualifications, and some types of skills (those developed in the workforce and in informal settings) are less likely to be accredited. As accreditation of skills was less common in the past, qualifications data tends to underestimate the skills of older workers. • England has recently introduced a new way of categorising skills levels – Regulated Qualifications Framework (RQF) levels. As a relatively new categorisation, it is not intuitive to most people and will need to be explained in most contexts.
Suggested dataset	• Annual Population Survey (APS) (Nomis).
Suggested measure	• Breakdown of qualifications of working age population (16-64) by level. • Percentage of working age population (16-64) with RQF level 4 and above qualifications (shown below). • Percentage of working age population (16-64) with no qualifications.

How good a match to the question is the available data?	• APS data relates to qualification levels. These are determined by the skills required, with higher-level qualifications generally requiring more advanced and complex skills that take longer to acquire. • The highest RQF level currently published by APS is RQF level 4 and above, a broad category that includes everything from intermediate technical and vocational skills such as a HNC or higher apprenticeship through to postgraduate degrees and professional qualifications. This makes it difficult to understand what is happening at a more granular level (for example, how does the proportion on individuals with intermediate skills or post-graduate skills compare to other areas).
What other questions can this dataset help answer?	• Other qualification levels (e.g. percentage with no qualifications). • Qualifications data for other age bands (e.g. 25 to 49). • Qualifications data for economically active residents. • Qualifications data for employed residents.

Figure 8: **Percentage of working age population (16-64) with RQF level 4 and above qualifications, Wakefield, other local authorities within the WYCA area, WYCA area, Yorkshire and Humber, and England, 2023**



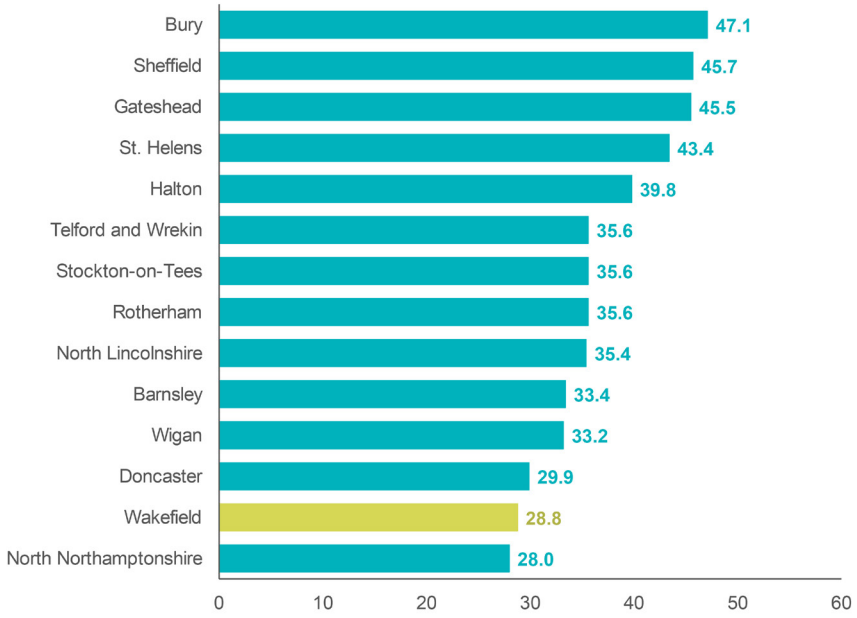
Less than 30 percent of Wakefield's working age population has intermediate and above qualifications, compared to almost 50 percent across England. Every local authority within the WYCA area has a higher proportion qualified to this level.

Source: Annual Population Survey (Nomis)

Notes:

1. RQF level 4 is equivalent to a higher apprenticeship, higher national certificate (HNC), certificate of higher education (CertHE) or a level 4 award, certificate, diploma or NVQ. These are intermediate-level technical and vocational skills.
2. Confidence intervals on Annual Population Survey data at local authority level can be large. See Box 1 on Page 10 for more details on confidence intervals.

Figure 9: **Percentage of working age population (16-64) with RQF Level 4 and above qualifications, Wakefield and selected other local authorities, 2023**



One potential interpretation of Wakefield's underperformance compared to the rest of the WYCA area on the proportion qualified to RQF level 4 or above is that it may reflect the type of area it represents.

However, Wakefield has a lower proportion of its working age population qualified to RQF level 4 and above than all except one of the 'similar' comparator areas.

Source: Annual Population Survey (Nomis)

Notes:

1. RQF level 4 is equivalent to a higher apprenticeship, higher national certificate (HNC), certificate of higher education (CertHE) or a level 4 award, certificate, diploma or NVQ. These are intermediate-level technical and vocational skills.

2. Confidence intervals on Annual Population Survey data at local authority level can be large. See Box 1 on Page 10 for more details on confidence intervals.

Policy implications

- Generally, more highly skilled economies perform better (as highly skilled individuals are more likely to be in employment and because skills are a key driver of productivity).
- A low level of skills can make it difficult to attract employers to the area and may lead to current employers being less likely to expand or to only expand lower skilled roles.
- Areas with low skills levels should consider how to increase skill levels, focusing on skills that meet employer needs.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Using other comparators. For example:
  - How does the economic activity rate compare to that in similar local authority areas?
- Analysing change over time. For example:
  - How has the working age population changed over the last 10 years?
  - How has the qualifications profile changed over the last five years?

- Exploring data in more detail. For example:
  - What are the population trends for 16- to 18-year-olds?
  - How do qualification levels vary across age bands and gender?
- Examining other data sources. For example:
  - How is the population projected to change over the next 10 years (shown in later section)?
  - What skills provision is available in the area?

Skills are not just supplied by those living within the local area, as many workers commute. It is important to also look at commuting patterns. These are discussed next.

Commuting patterns

Many individuals live and work in different areas. Data relating to workplaces (such as employment or vacancy rates) covers those working in the area (including in-commuters) but does not include residents that commute to another area to work. Most data on individuals (such as population estimates or qualification levels) relates to residents of an area and does not capture in-commuters.

Data on commuting patterns can provide additional insights into the local labour market. They provide insights into both where local residents work and where local workplaces recruit from. When an area has high levels of either in- or out-commuting, this may explain apparent disconnects between outcomes. For example, if the employment per capita rate is low but employment rates are high.

Many datasets are also available for travel-to-work areas (TTWAs). TTWAs are a statistical geography created once every 10 years by ONS based on Census data to allow analysis of functional economic geographies. The current criteria for TTWAs is that they must have an economically active population of at least 3,500, at least 75 percent of the area's resident workforce work in the area, and at least 75 percent of the people who work in the area also live in the area. There are currently 228 TTWAs (218 in Great Britain plus 10 in Northern Ireland). They range in size from London (with population of over 8.3 million) to Ullapool (with a population of 6,800). Some labour market statistics are available for TTWAs, meaning it is possible to analyse the labour market that an administrative geography sits within.

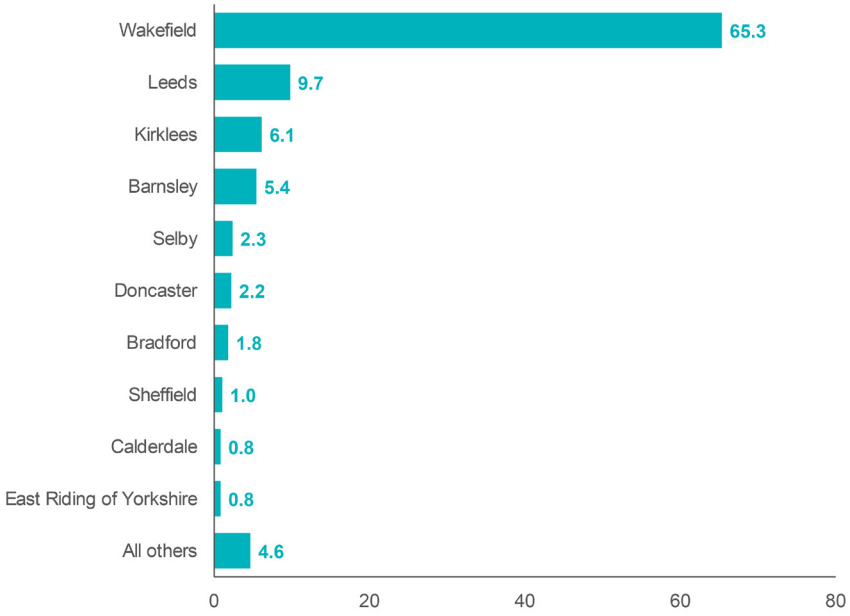
Key questions

- What proportion of jobs are taken by local residents?
- Where do local residents work?

What proportion of jobs are taken by local residents? Where do local residents work?

What to look for?	• What proportion of jobs are taken by local residents? • Where do in-commuters come from? • Where do local residents work?
What might affect performance?	• Availability of employment opportunities and housing in each location. For example, areas with good quality housing and few employment opportunities but that have good accessibility to areas with large numbers of jobs will have high levels of out-commuting.
Other things to be aware of	• Transport connectivity will influence commuting patterns. • Commuting patterns vary across job roles, with long commutes generally requiring higher pay to be worthwhile. • As the Census is main source of data on commuting and the Census is undertaken once every 10 years, it can be quite out-of-date at points in the cycle.
Suggested dataset	• Census 2011 (Nomis).
Suggested measure	• Usual residence by place of work. • Place of work by usual residence.
How good a match to the question is the available data?	• Census captures data from all households on commuting. • Census 2011 is used rather than Census 2021 as data on commuting in the latter was affected by working from home in response to Covid-19. However, this means data is quite out-of-date. This is likely to be particularly the case in areas that have been affected by significant improvements in transport infrastructure (for example, a new train line opening) or where there has been significant housebuilding.
What other questions can this dataset help answer?	• Commuting patterns by age. • Commuting patterns by method of travel.

Figure 10: **Usual residence for Wakefield workers (%), 2011**

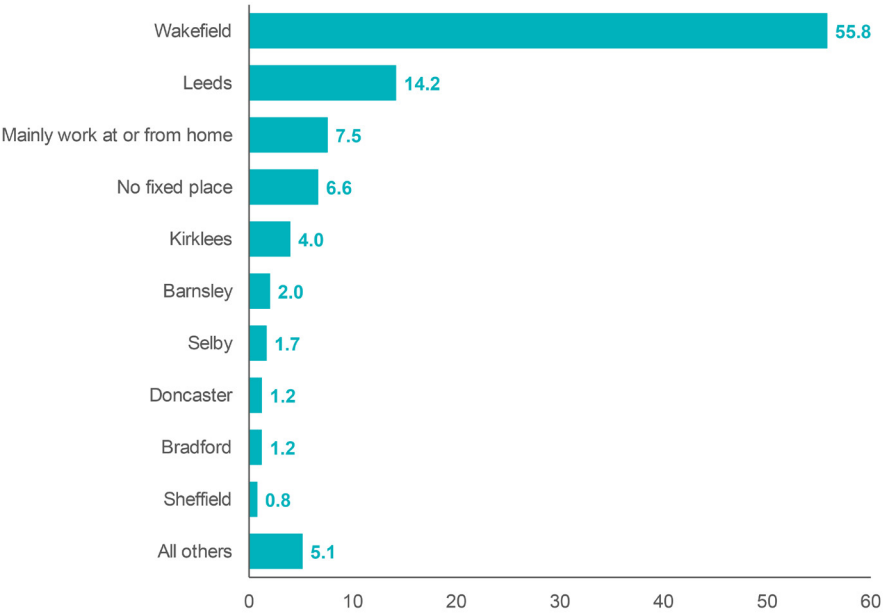


Almost two-thirds of jobs in Wakefield are held by Wakefield residents.

Most other jobs are held by residents of other Yorkshire local authorities. This is likely to reflect the types of jobs available in Wakefield.

Source: Census 2011 (Nomis)

Figure 11: **Place of work for Wakefield residents (%), 2011**



Over 50 percent of Wakefield residents work in Wakefield, with a further 7.5 percent working from home in 2011. The proportion working from home is likely to be higher now, as Covid-19 led to changes in work patterns.

The largest proportion of out-commuters from Wakefield work in Leeds. This reflects Leeds's role as a major city and employment centre.

Source: Census 2011 (Nomis)

Policy implications

- Commuting patterns have implications for transport, education, and employment support policies. For example, if there is limited commuting to a neighbouring area with lots of employment opportunities, this may reflect poor transport connectivity.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Exploring data in more detail. For example:
  - How do commuting patterns vary by age?
  - How do commuting patterns vary by method of transport?

Alignment between demand and supply

Policymakers are interested in whether employers are able to access the skills they need – i.e. whether skills supply is meeting skills demand. Two common signs of skills demand being higher than supply are skills vacancies (vacancies that are hard to fill due to a lack of skills, qualifications or experience among applicants) and skills gaps (where an employee is judged by their employer to lack full proficiency). Another sign can be increasing wage rates (for occupations and industries where wages can respond to demand). Where demand is lower than supply, unemployment, underemployment, failing wages or individuals moving into other sectors may be observed.

Alignment requires there to be a good understanding of current and future demand and individuals, employers, and the skills system responding to changes.

Key questions

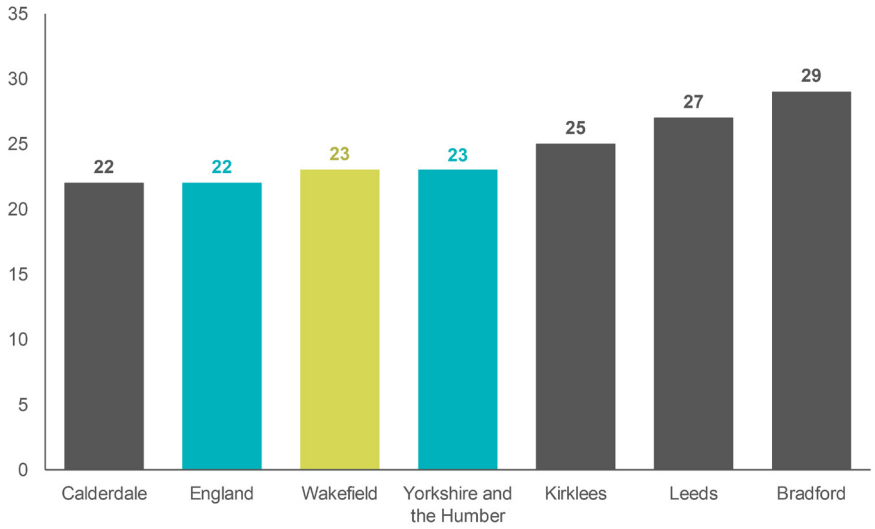
- Are employers able to access the skills they need?

Are employers able to access the skills they need?

What to look for?	• What proportion of employers have skills vacancies? • What proportion of employers have skills gaps?
What might affect performance?	• Wages can play a part – for example, if the reward for developing skills in demand is not compensated by higher wages, then there is little incentive to develop them.
Other things to be aware of	• As skills needs and economic conditions are constantly changing, there will always be some skills vacancies and skill gaps. • Where skills vacancies or skills gaps are low, this reflects strong alignment. However, this is not always positive. For example, if only low skills are available and employers design jobs to reflect these low skills levels.
Suggested dataset	• UK Employer Skills Survey (Department for Education (DfE)).

Suggested measure	• Percentage of establishments with skills vacancies over past 12 months. • Percentage of establishments with skills gaps over past 12 months. • Percentage of establishments with skills vacancies, skills gaps or both over past 12 months (shown below).
How good a match to the question is the available data?	• The UK Employer Skills Survey is a biennial survey that asks employers with about whether they have any skills vacancies or skills gaps. • UK Employment Skills Survey only includes employers with two or more employees so excludes the smallest businesses.
What other questions can this dataset help answer?	• Skills vacancies and skills gaps by occupation. • Skills employers found difficult to obtain. • Skills current staff need to improve. • Impact of skills vacancies and skills gaps on employers' operations. • Other (non-skills related) recruitment issues. • Training and workforce development.

Figure 12: **Percentage of establishments with skills vacancies, skills gaps or both over past 12 months, Wakefield, other local authorities within the WYCA area, Yorkshire and Humber, and England, 2022**



23 percent of establishments in Wakefield had skills vacancies, skills gaps or both. This is similar to both Yorkshire and the Humber and England and is lower than most of the other WYCA local authorities.

Source: UK Employer Skills Survey 2022 (DfE)

Note: Data is not available for combined authority geographies.

Policy implications

- Where skills vacancies or gaps are high, demand and supply are not aligned. This can have negative impacts for both employers and workers. For example, businesses may not be able to meet customer demand or expand.
- Both skills vacancies and gaps can be addressed through skills provision. The appropriate provision (type and delivery mechanisms) will depend on the skills vacancies and gaps identified.
- Changing commuting patterns and migration could also play a role in addressing skills vacancies. Examples include improvements to transport infrastructure that help workers in other areas with required skills to commute to available employment opportunities or increase in housebuilding encouraging workers to relocate.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Analysing data in more detail. For example:
  - What are the causes of skills vacancies (skills gaps)?
  - What are the consequences of skills vacancies (skills gaps) on businesses?
- Analysing breakdowns to understand variations?
  - How do skills vacancies (skills gaps) vary across occupations?

Understanding overall performance provides a good starting point for policymaking, but most policy questions are more specific. For example, policymakers may be interested in the skills issues facing a specific sector, or the dynamics of the labour market. The following sections look at a number of topics that may be of interest.

Labour market entrances and exits

Population change

Whilst there is a minimum age at which young people can work full-time (which varies across the UK), there is no upper limit at which individuals must retire. Individuals will make decisions about when to join and leave the labour market based on personal circumstances and economic conditions. Despite this flexibility, most individuals join the labour market in their late teens or early twenties and leave at some point in their fifties or sixties. Given this, understanding how the population structure is changing can help provide insights into how labour supply will change over time.

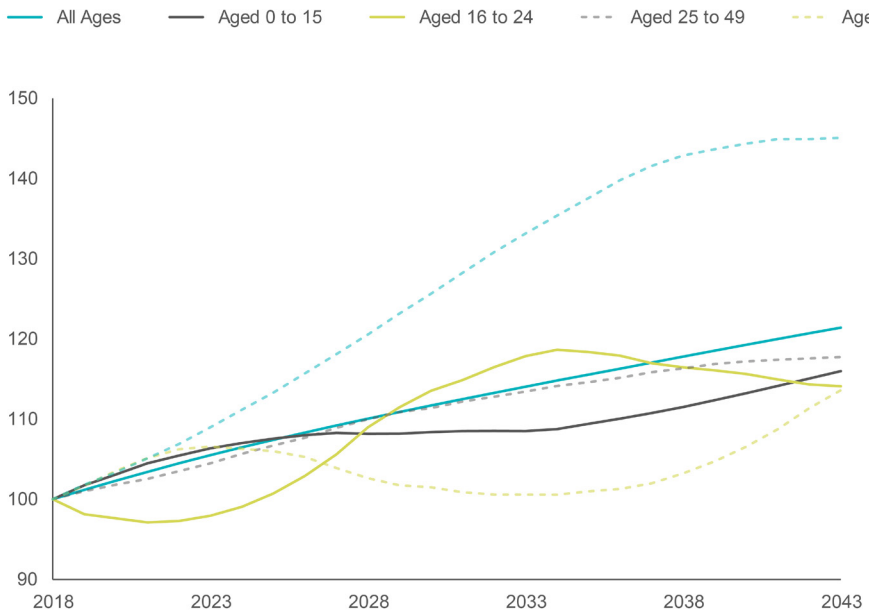
Key questions

- How will labour supply change over time?

How will labour supply change over time?

What to look for?	• How will population change over time? • How will labour supply change over time?
What might affect performance?	• Births, deaths, and migration all affect population projections. • Past trends affect future projections. For example, the UK birth rate was high in the 1960s but low in late 1970s and early eighties, affecting the numbers moving into and out of the 50-64 age band in coming years.
Other things to be aware of	• Particular groups that are useful to look at are young people (0- to 15-year-olds and 16- to 24-year-olds) and older workers (50- to 64-year-olds), as they represent the groups joining and leaving the labour market. For example, if there was a decline in the numbers aged 16 to 24, that would imply that sectors that traditionally employ large numbers of young people (such as retail or hospitality) or recruit those at the beginning of their careers through apprenticeship or graduate trainee programmes may find it more difficult to recruit than in the past. • Population projections can also provide some insights into labour demand. For example, the projected increase in 65+ population will lead to changing consumer demand. Sectors that might experience higher demand include arts, hospitality, health, and care.
Suggested dataset	• Population projections - local authority based by single year of age (Nomis).
Suggested measure	• Population projections by age band, indexed to base year.
How good a match to the question is the available data?	• Based on Census and administrative data. • Important to recognise that this dataset is a projection based on modelling. It is important to revisit as updates are published.
What other questions can this dataset help answer?	• Population projections for other age bands.

Figure 13: **Population projections by age band indexed to 2018 (2018=100), Wakefield, 2018 to 2043**



Wakefield is projected to see its population grow by 21 percent between 2018 and 2043. The largest growth is in the over-65 age band, which is projected to grow by 45 percent.

The decline in numbers aged 16 to 24 has already bottomed out, with this group projected to increase to mid-2030s. In contrast, the number of 50- to 64-year-olds has already begun to decline.

Source: Population projections - local authority based by single year of age (Nomis)

Policy implications

- Looking at population projections provides insights into where there may be emerging issues with labour supply. For example, those aged 50 to 64 are among the most experienced workers in the economy. In areas (and sectors) where this age group is projected to decline, employers may need support to ensure continuity as this group leaves the workforce.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Comparing across areas. For example:
  - How does the change in 16- to 24-year-old population compare to England?

Uptake of training and education

Given that many skills are developed by young people as they join the labour market – through apprenticeships, further education, and higher education – understanding take-up of these routes provides insights into the skills that will become available.[4] These routes are also used by career changers and those looking to re-join the labour market (for example, after a period of looking after children).

4 Further education (FE) is any study undertaken after secondary education, that is not part of higher education (i.e. not part of an undergraduate or graduate degree). It involves a wider range of courses from basic skills (numeracy, literacy, digital, etc.) to higher national diplomas (HNDs). FE is open to all post-16, but plays an important role in helping 16- to 19-year-olds develop skills. Data for FE is similar to that available for apprenticeships – including starts, participants, achievements, and outcomes, with breakdowns by level and broad subject. Definitions of apprenticeships and higher education are given elsewhere in this briefing.

Employers are an important source of training and workforce development. This can include both formal (often accredited) and informal learning opportunities. Employers tend to underinvest in training compared to the economic and social optimal level. This is because they may not receive the full benefits of investment, as employees can leave for other roles elsewhere. Understanding employer training – including the amount of training and types of training offered – provides further insights into the skills being developed. Over time, businesses that are not training are likely to lag behind competitors that are training.

Key questions

- What education and training is available for those (re-)joining the labour market?
- How much employer training is there in the local area?

What education and training is available for those (re-)joining the labour market?

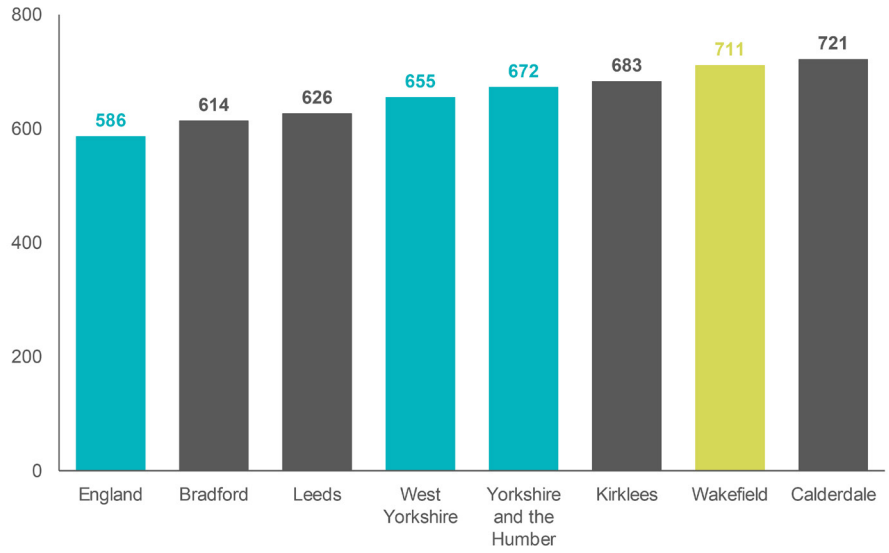
Apprenticeships are used as an example here. Similar data is available for further education and higher education. Apprenticeship data is also discussed in the section on sectoral analysis.

Apprenticeships combine paid employment with an employer, with practical training and study to gain job-specific skills and recognised qualifications. Apprentices must spend at least 20 percent of their normal working hours on training. Depending on the occupation and level, apprenticeships can take between one and five years to complete.

What to look for?	• How many apprenticeship starts are there? • How does the number of apprenticeship starts compare to other areas?
What might affect performance?	• As apprenticeships are jobs, they are dependent on employer demand. • Apprenticeships can also be affected by the availability of local training providers.
Other things to be aware of	• Traditionally, most apprentices have been young people entering the workforce for the first time, but the introduction of the apprenticeship levy in 2017 led to an increase in older workers completing apprenticeships.
Suggested dataset	• Apprenticeship statistics (DfE) and Population estimates (Nomis).
Suggested measure	• Apprenticeship starts per 100,000 population.

How good a match to the question is the available data?	• Direct count based on DfE administrative data (as a funder of apprenticeship training). • Apprenticeship starts reflect combination of demand and supply, as there must be an employer willing to offer an apprenticeship and an individual willing to fill it.
What other questions can this dataset help answer?	• Apprenticeship participation. • Apprenticeship achievement. • Apprenticeship levels. • Apprenticeship subjects (see sectoral analysis). • Partial data is available for the current academic year, allowing progress to be monitored.

Figure 14: **Apprenticeships starts per 100,000 population, Wakefield, other local authorities within the WYCA area, WYCA area, Yorkshire and Humber, and England, 2023/24**

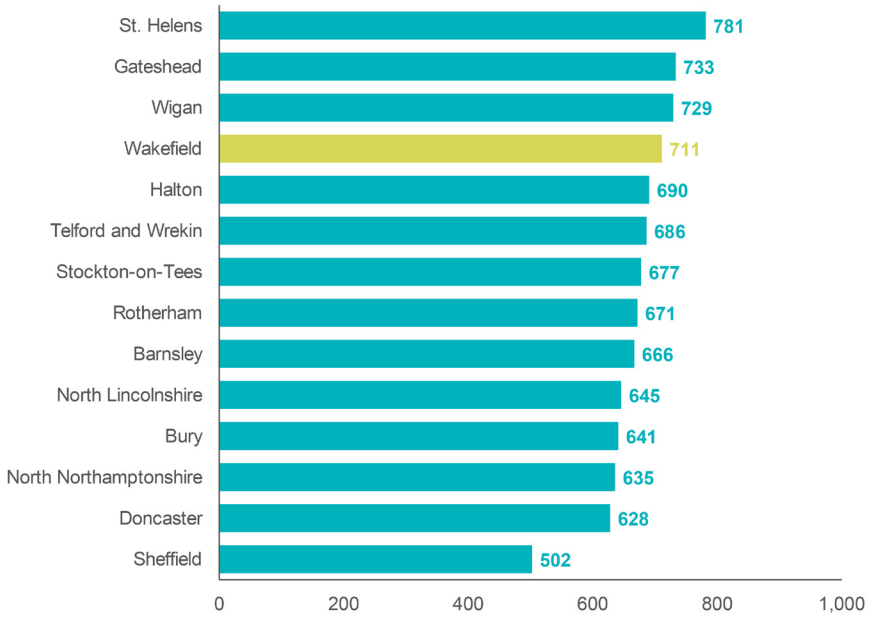


In the 2023/24 academic year, there were 711 apprenticeship starts per 100,000 population in Wakefield. This is higher than regional and national comparators, and higher than most local authority areas within WYCA.

It is unclear why this is – it may be that as there is no university in the area, individuals may be seeking other education and training opportunities.

Source: Apprenticeship statistics (DfE) and Population estimates (Nomis)

Figure 15: **Apprenticeships starts per 100,000 population, Wakefield and selected other local authorities, 2023/24**



Wakefield not only has a high rate of apprenticeship starts compared to the rest of WYCA but also compared to similar areas, with Wakefield having a higher rate of starts than all except St Helens, Gateshead, and Wigan.

Source: Apprenticeship statistics (DfE) and Population estimates (Nomis)

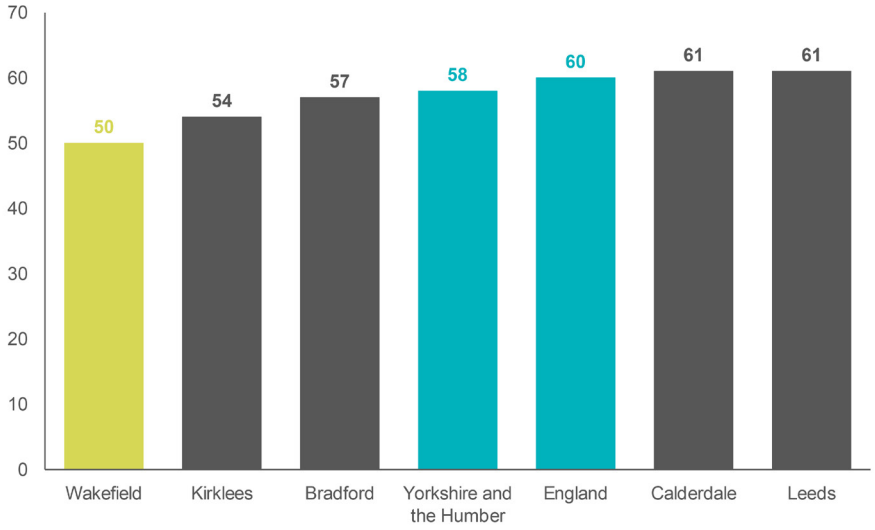
Policy implications

- High per capita rates (of apprenticeships or other training) suggest that there are opportunities for young people, those re-joining the labour market, and career changers to develop skills required by employers. Consideration should be given to whether all groups are able to access available opportunities.
- Low per capita rates may imply there is unmet need, although this may reflect area-specific characteristics (for example, sectors that make use of apprenticeships being underrepresented in the local economy).
- In all scenarios, looking at total levels is unlikely to be sufficient, with analysis of levels and subjects also needed to ensure provision is meeting employer needs.

How much employer training is there in the local area?

What to look for?	• What proportion of employers are offering training? • How much training do employees receive?
What might affect performance?	• Large employers tend to be more likely to offer training than smaller employers, and some sectors are more likely to offer training, including some such as construction, health, and food service where training is required under legislation. This means the composition of the local business base will affect employer training rates.
Other things to be aware of	• Whilst helpful to understand overall levels of employer training, also important to understand how many (and which) workers receive training, the quality and appropriateness of provision, completion rates, etc.
Suggested dataset	• UK Employer Skills Survey (DfE).
Suggested measure	• Percentage of establishments funding or arranging training for staff over past 12 months. • Average number of training days per staff over past 12 months.
How good a match to the question is the available data?	• The UK Employer Skills Survey is a biennial survey that asks employers about the training and workforce development they offer. • UK Employment Skills Survey only includes employers with two or more employees so excludes the smallest businesses.
What other questions can this dataset help answer?	• Types of training provided. • Barriers to training.

Figure 16: **Percentage of establishments funding or arranging training for staff over past 12 months, Wakefield, other local authorities within the WYCA area, Yorkshire and Humber, and England, 2022**

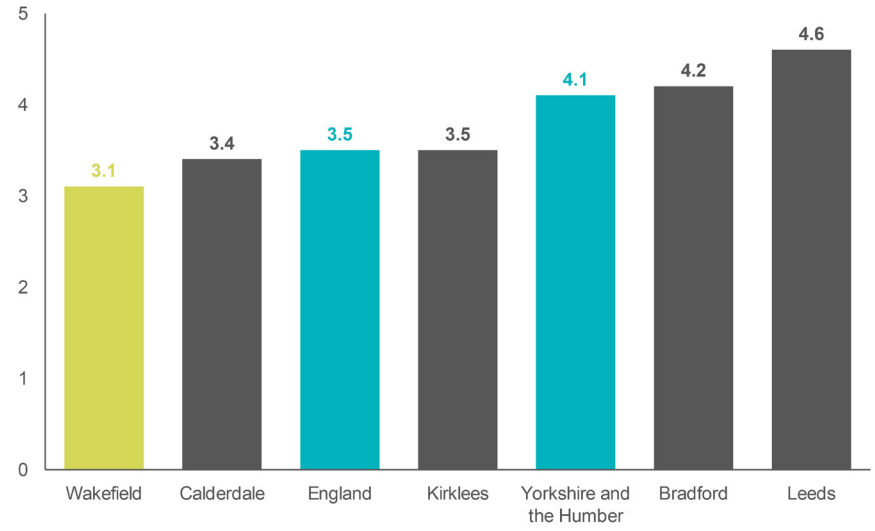


Half of employers in Wakefield funded or arranged training for their staff, a lower percentage than across Yorkshire and the Humber and England. Wakefield has the lowest proportion of all local authorities within the WYCA area.

Source: UK Employer Skills Survey 2022 (DfE)

Note: Data is not available for combined authority geographies.

Figure 17: **Average number of training days per staff over past 12 months, Wakefield, other local authorities within the WYCA area, Yorkshire and Humber, and England, 2022**



Wakefield underperforms the other local authority areas within WYCA, Yorkshire and the Humber, and England, with an average of just 3.1 training days per staff member. This compares to 4.6 in Leeds.

Source: UK Employer Skills Survey 2022 (DfE)

Note: Data is not available for combined authority geographies.

Policy implications

- Employers are an important source of skills. Where employer training is low, this should be a concern, especially in areas where there are also low levels of other forms of training and development.
- Policies to encourage employer training can include subsidies and grants, improving connections between training providers and employers, and signposting employers to available training.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Analysing data in more detail. For example:
  - Analysing apprenticeship starts by level or subject.
- Examining other data sources. For example:
  - Analysing further education starts.
- Exploring data in more detail. For example:
  - What types of employer training are being offered?
  - What barriers to training have local employers identified?

Student destinations

Understanding student outcomes (referred to in statistics as 'destinations') helps understand whether education and training is meeting employer needs. As with other indicators, these are available separately for apprenticeships, further education, and higher education, with breakdowns available across different subject areas.

Data is generally presented by type of outcome (for example, employment or further learning) or grouped into 'positive' or 'negative' destinations (with employment and further learning defined as 'positive destinations'). Destinations are generally measured at a set point after completion of learning (for example, 6 or 15 months). With lags in publication, this means they normally relate to those completing courses two-years or more ago. Subjects aligned with employer demand will tend to have higher rates of positive destinations.

Key questions

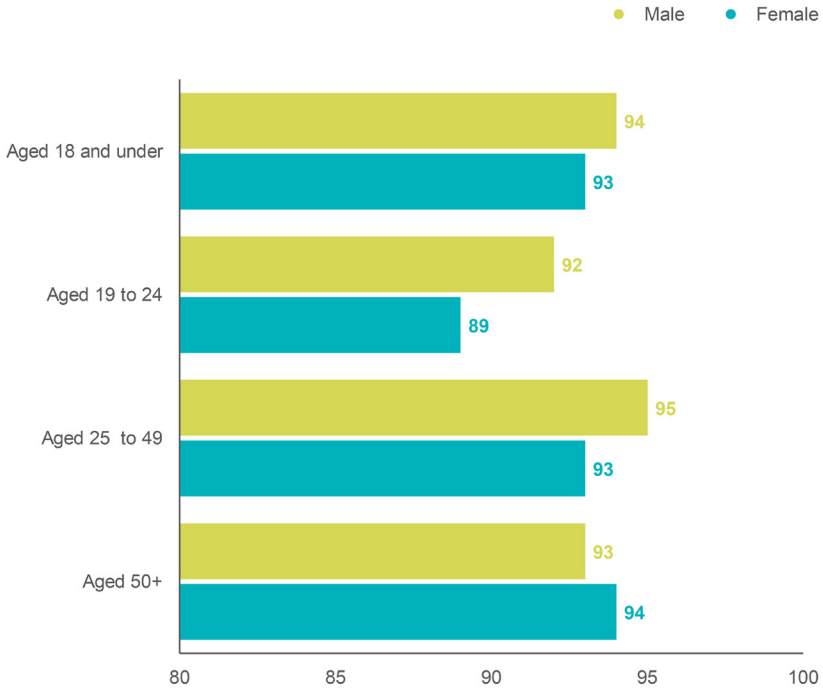
- Are students in employment or further learning after completing their course?
- What proportion of students stay in the region after completing their course?

Are students in employment or further learning after completing their course?

Apprenticeships are used as an example here. Similar data is available for further education and higher education. Apprenticeship data is also discussed in the section on sectoral analysis.

What to look for?	• What proportion of apprenticeships are in employment after completing their course?
What might affect performance?	• Outcomes will vary across courses. For example, those studying higher level courses are generally more likely to be in employment after than those studying at lower levels. • Outcomes will also vary by personal characteristics. For example, older students tend to be more likely to be in employment, whilst those with learning difficulties will tend to be less likely.
Other things to be aware of	• As apprenticeships are jobs, they tend to have higher rates in employment than those completing other further education courses. Factors include that they reflect employer needs, apprentices have gained work experience, and built personal relationships and networks. • Further education outcomes (including apprenticeship outcomes) look at sustained outcomes over a six month period following completion of the course (as opposed to an outcome on a fixed date). More details on individual measures are given here.
Suggested dataset	• Further education outcomes (DfE).
Suggested measure	• Sustained positive destination. • Sustained employment. • Sustained employment and learning. • In example below, we have provided sustained employment broken down by age and gender.
How good a match to the question is the available data?	• Direct count based on DfE administrative data (as a funder of apprenticeship training).
What other questions can this dataset help answer?	• Sustained positive destination, employment, or employment and learning by level. • Sustained positive destination, employment, or employment and learning by subject. • Sustained positive destination, employment, or employment and learning by learning disability.

Figure 18: **Sustained employment destinations of apprenticeships by age and gender (% of completions), Wakefield, 2021/22 completions**



All age groups in Wakefield have high sustained employment rates after completing apprenticeships, although the 19 to 24 age group have the lowest rates. Generally, males have marginally higher sustained employment rates than females, with the exception being in the 50+ age group.

Source: Further education outcomes, 2021/22 academic year (DfE)

Note:

1. Based on learner postcode.
2. The sustained employment measure aims to count the proportion of learners in sustained employment following the achievement of their qualification. Employment destinations are produced by matching Individual Learner Record data to HMRC tax records. The definition of sustained employment looks at employment activity in the six-month October to March period following the end of the academic year in which the learning aim took place. For 2021/22 achievers to be counted as in sustained employment:
    - A learner must have completed a self-assessed return for tax year 2022/23 or must be in paid PAYE employment in five out of the six months between October 2022 and March 2023.
    - A learner needs to be in paid PAYE employment for at least one day in a month for that month to be counted.
    - If a learner is employed in the five months between October 2022 and February 2023, but not in March 2023, then they must also be employed in April 2023.

Policy implications

- If the proportion of students going onto employment or further learning is low, this could be a sign that provision does not meet employer needs. This could suggest a need to improve relationships between employers and training providers.
- Improving careers education can also help ensure individuals are selecting appropriate options.

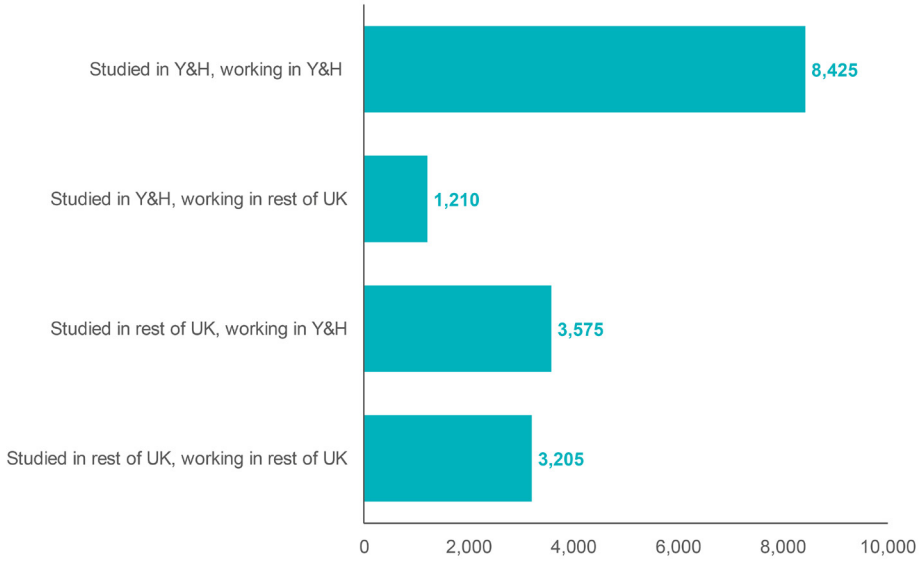
What proportion of students stay in the region after completing their course?

In addition to looking at the type of destination for students (for example, whether they move into employment or further study), for higher education graduates, it is also possible to look at where graduates are working around 15 months after graduation.

Higher education (HE) is the provision of courses leading to degree-level qualifications, including both undergraduate and graduate level. Most HE is delivered by universities, with some delivered by further education (FE) colleges.

What to look for?	• What proportion of graduates stay in the region? • What proportion of graduates from rest of UK move to the region? • Where do residents study – and where do they work after graduating?
What might affect performance?	• Availability of employment opportunities across different areas. • Those from lower socio-economic backgrounds are less likely to study in a different region to permanent residence or move to a new area after graduation than those from higher socio-economic backgrounds.
Other things to be aware of	• Data is only available by region. • Major cities are centres of employment and other opportunities and attract many graduates.
Suggested dataset	• Higher education graduate outcomes statistics (Higher Education Statistics Agency (HESA), Office for Students, and Department for Economy, Northern Ireland Executive).
Suggested measure	• Number of graduates working in the region, broken down by region of permanent address and region of provider.
How good a match to the question is the available data?	• Based on survey of recent graduates.
What other questions can this dataset help answer?	• Graduate activities and outcomes. • Graduate salaries. • Graduate reflections on activities (for example, whether they are utilising what they studied in their current activity).

Figure 19: **Graduates entering work from Yorkshire and the Humber (Y&H) by region of HE provider and region of work, 2022/23**

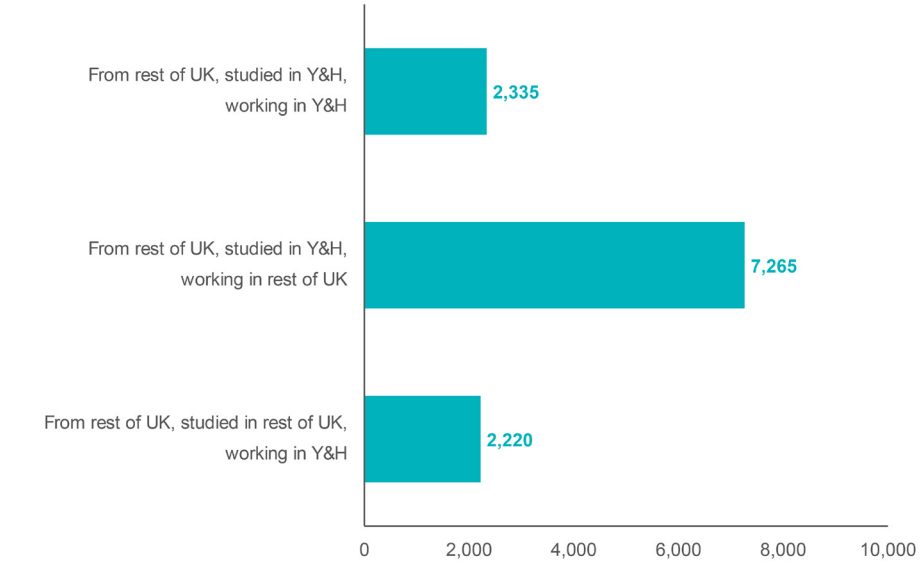


Of the 16,000 permanent residents of Yorkshire and the Humber that were graduates in 2022/23, around 12,000 are working in the region 15 months after graduation.

Most of the Yorkshire and the Humber graduates that are working in the rest of the UK studied at HE institutions outside Yorkshire and the Humber.

Source: Higher education graduate outcomes statistics (HESA, Office for Students, and Department for Economy, Northern Ireland Executive)

Figure 20: **Graduates from rest of UK that studied in or are working in Yorkshire and the Humber (Y&H) by region of HE provider and region of work, 2022/23**



Of the 9,600 residents from rest of the UK who studied at a Yorkshire HE provider, only 2,355 were working in the region 15 months after graduation.

Only 2,220 students that are not from Yorkshire and the Humber and did not study in the region are working in the region 15 months after graduation.

Source: Higher education graduate outcomes statistics (HESA, Office for Students, and Department for Economy, Northern Ireland Executive).

Policy implications

- Where small proportions of graduates stay in a region, or an area is not attracting graduates from elsewhere, consider whether this is because there is a lack of available roles or due to a lack of awareness of available roles.
- Policy approaches to lack of roles involve supporting employers in relevant sectors to grow or move into area. Lack of awareness can be tackled through improved careers education.
- Policy approaches will depend on role the local economy plays within wider region.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Comparing across areas. For example:
  - How do further education destinations compare to England?
- Analysing change over time. For example:
  - How have destinations changed over the last five years? How does this compare to change across England?
- Analysing data in more detail. For example:
  - How do destinations vary across subjects?
  - What are average earnings for those completing different courses?

Sectoral analysis

Sectoral skills demand

Looking at employment at the sectoral level provides more detailed insights into the types of skills being demanded. Some sectors – such as health and retail – are substantial employers in all local economies, whilst others will be more concentrated in specific localities (for example, finance and insurance in the City of London, Edinburgh, and Leeds). Looking at different levels of sectoral granularity (for example, looking at professional, scientific, and technical services as a whole versus looking at legal services, accounting services, advertising agencies, etc. separately) can provide different insights.

As well as examining current sectoral skills demand, it can also be useful to examine projections of future skills demand. These are based on continuation of current trends, alongside assessments of economic and social changes.

Key questions

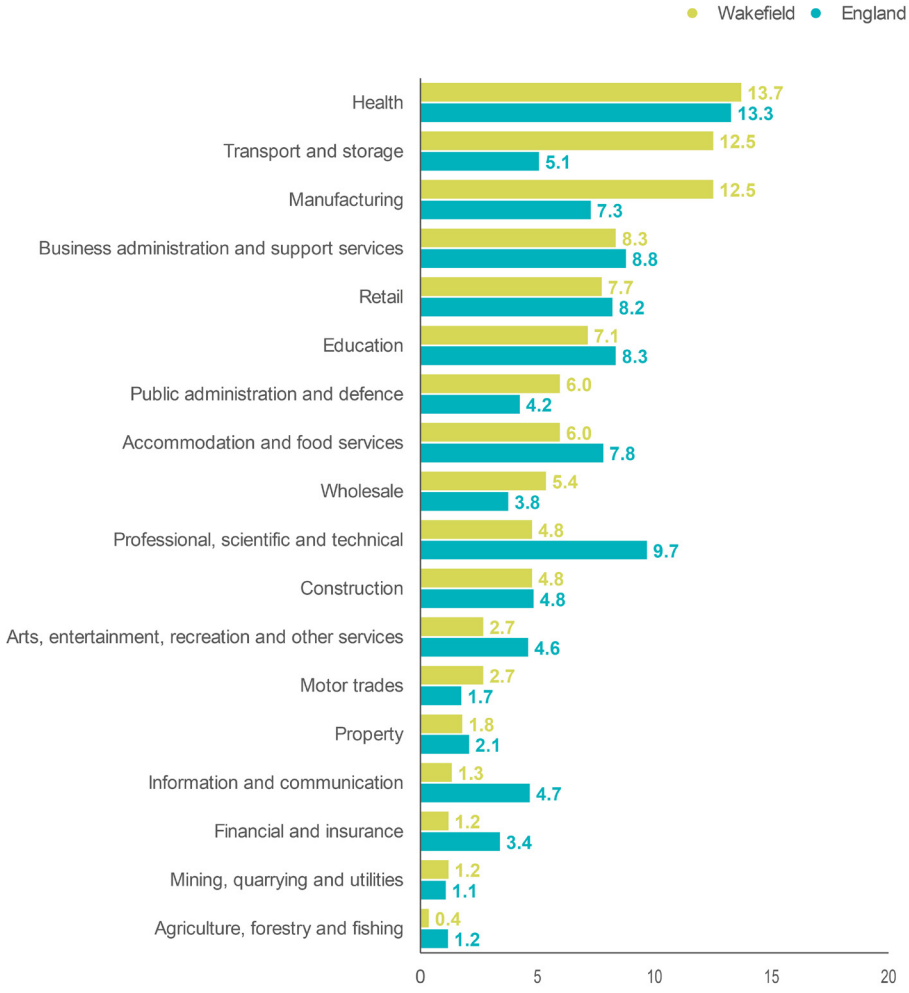
- How does demand for labour vary across sectors?
- What are the area's sectoral specialisms?

How does demand for labour vary across sectors?

What to look for?	• Which sectors are the largest employers? • Which sectors are under or overrepresented (compared to benchmark)?
What might affect performance?	• Sectoral composition will reflect a combination of factors including historic specialisms and competitive advantages. • Some sectors – such as health, education, public administration and defence, retail, and construction – will be large employers in all areas. • Health is generally the largest sector in all areas.
Other things to be aware of	• Data is organised by Standard Industrial Classifications (SICs). Various breakdowns are available, with more detailed breakdowns nested within broader ones. Consider how detailed a breakdown is needed.
Suggested dataset	• Business Register and Employment Survey (BRES) (Nomis).[5]
Suggested measure	• Employment by sector as % of total employment. • As outlined above, different breakdowns are available. The figure below uses the broadest grouping as an example.
How good a match to the question is the available data?	• As BRES measures employment, it does not reflect demand (but demand that has been successfully met by supply). • Self-employed people that have not registered for VAT or PAYE, HM Forces, and government-supported trainees are not included.
What other questions can this dataset help answer?	• Total numbers employed in each sector. • Areas of sectoral specialism (measured using location quotients) (discussed next). • Data also available for employees.

5 BRES is also used in Figure 3. See discussion earlier on use of this dataset.

Figure 21: **Breakdown of employment by broad sector (% of total employment), Wakefield and England, 2023**



Health is the largest sector in Wakefield and England. In Wakefield, it accounts for 13.7 percent of total employment.

The (joint) second largest sectors are transport and storage and manufacturing, with these sectors accounting for a much larger proportion of employment in Wakefield than England as a whole.

Sectors that are underrepresented compared to England include professional, scientific and technical, information and communication, and finance and insurance.

Source: Business Register and Employment Survey (BRES) (Nomis)

Policy implications

- Understanding the sectoral composition of a local economy can help determine what skills provision is needed and inform careers advice.
- It can also provide insights into the wider economy. For example, being underrepresented in high productivity sectors will have implications for productivity, wages, and growth of the local economy. Tackling these will require intervention in other policy areas – such as business advice or innovation.

What are the area's sectoral specialisms?

What to look for?	• Which sectors does the local economy specialise in? • Which specialisms are major employers?
What might affect performance?	• Sectoral specialisms will reflect competitive advantages.
Other things to be aware of	• Specialisms can be identified at different levels of granularity. In the example below, the SIC 2-digit division which breaks the economy down into 88 sectors is used. One challenge of looking at more detailed breakdowns is that sectors can sometimes employ relatively few individuals. For this reason, it is good practice to look at employment numbers alongside sector location quotients.
Suggested dataset	• Business Register and Employment Survey (BRES) (Nomis).

Suggested measure	• Location quotient. These are a way of understanding specialisms within a local economy. They compare local employment shares in an occupation or industry to national employment shares in that occupation or industry.
	  ▪ If a local area had the same proportion of total employment in a sector as the area it is being benchmarked against (for example, the sector accounts for 3 percent of total employment in both areas), that sector will have a location quotient of 1.
	  ▪ If the sector accounts for twice the proportion of employment in the local area as in the benchmark area (for example, 6 percent compared to 3 percent), it will have a location quotient of 2.
	• It is possible to choose different cut offs (e.g. 1.2, 1.5, 2.0, etc.). For example, looking at all sectors with a location quotient over 1.5 means looking at all sectors that are overrepresented by 50 percent or more compared to the benchmark.

How good a match to the question is the available data?	• Availability of granular employment data enables specialisms to be identified. • Self-employed people that have not registered for VAT or PAYE, HM Forces, and government-supported trainees are not included in BRES.
What other questions can this dataset help answer?	• Employment by sector (see previous question).

Figure 22: **Employment and location quotient, Wakefield benchmarked against England, 2023**

	Employment	Location quotient
Manufacture of wearing apparel	700	5.31
Manufacture of beverages	900	4.17
Warehousing and support activities for transportation	15,000	4.13
Manufacture of other non-metallic mineral products	1,500	3.68
Printing and reproduction of recorded media	1,000	2.57
Manufacture of furniture	1,000	2.53
Manufacture of food products	5,000	2.52
Manufacture of textiles	600	2.39
Manufacture of coke and refined petroleum products	100	2.39
Manufacture of machinery and equipment not elsewhere classified	2,000	2.35
Manufacture of motor vehicles, trailers and semi-trailers	1,750	2.34
Manufacture of paper and paper products	400	1.76
Wholesale and retail trade and repair of motor vehicles and motorcycles	4,500	1.52
Manufacture of rubber and plastic products	1,250	1.52
Manufacture of electrical equipment	600	1.52

The sectors in Wakefield with the largest location quotients (all over 4) are manufacturing of wearing apparel, manufacturing of beverages, and warehousing and support activities for transportation.

However, only warehousing and support activities for transportation is a major employer (employing 15,000), with this being the overrepresented sector that employs the most people.

Most of the sectors in Wakefield with a location quotient of over 1.5 and over 1,000 employees are in manufacturing.

Source: Business Register and Employment Survey (BRES) (Nomis)

Notes:

1. Uses 2-digit SIC codes
2. All location quotients over 1.5.

Policy implications

- Understanding sectoral specialisms can help inform skills provision.
- It can also help identify sectors for targeted business support.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Using other comparators. For example:
  - How does employment by broad sector in the area compare to the region?
- Analysing change over time. For example:
  - How has employment in manufacturing changed over the last 10 years? How does this compare to change across England as a whole?
- Analysing other datasets. For example:
  - How many vacancies are there by sector?
- Undertaking different analysis to see if it provides alternative insights. For example:
  - What are the sectoral specialisms when 3-digit SIC codes are used (instead of 2-digit) to calculate location quotients?

Sectoral skills supply

Given the importance of manufacturing to the Wakefield economy, we will look at skills supply for this sector. Similar analysis can be undertaken for other sectors.

Most data on skills supply at the sectoral level relates to flows – how many people are developing skills in particular areas. Looking at skills development helps us understand how skills are changing within an area. Data is organised by provision type (for example, apprenticeships, further education or higher education), and breakdowns are generally available by (broad) subject and level. Breakdowns by the characteristics of learners are sometimes available.

When examining data on skills development, important considerations include:

- Whether the data relates to individuals living within an area or studying within an area (i.e. at a college or university in area).
- Whether the data relates to starts (sometimes referred to as 'enrolments'), participations (i.e. total number studying) or achievements (i.e. those completing programme, normally associated with achieving qualifications) within a time period. Data may also be available on the outcomes of those successfully completing a course.

One final consideration is whether skills will stay within the area. Individuals may choose to move or commute to another area. This tends to be more of an issue with skills developed through higher education than other provision.

This section focuses on post-16 skills. In some cases, there may also be a need to look at school-level attainment. In each case, by understanding the profile of skills being developed it is possible to assess whether they meet employer demand.

Key questions

- What skills are being developed locally?

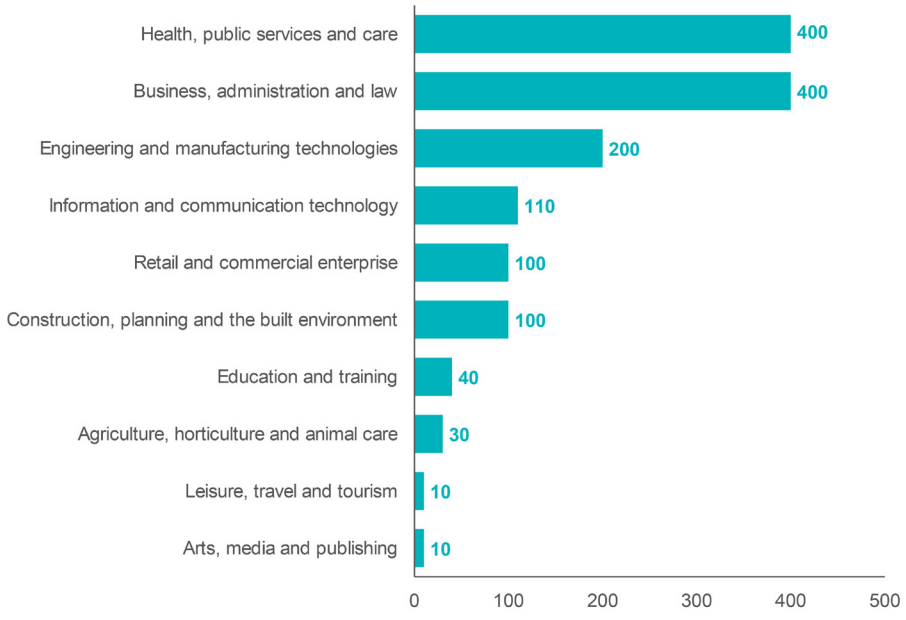
What skills are being developed locally?

Apprenticeships

What to look for?	• What apprenticeship subjects are most common? • Do apprenticeship subjects reflect local skills demand?
Suggested dataset	• Apprenticeship statistics (DfE).
Suggested measure	• Apprenticeship starts by subject. • Apprenticeship participants by subject. • Apprenticeships achievements by subject.

See discussion of apprenticeship data on Pages 29 and 31 for more details.

Figure 23: **Apprenticeships achievements by subject, Wakefield, 2023/24**



Manufacturing is a sector that has traditionally utilised apprenticeships. Engineering and manufacturing technologies accounted for the third highest number of apprenticeship achievements in Wakefield in 2023/24.

Only some of these apprenticeships will be in manufacturing, but even if they all worked in manufacturing on completion, they would account for under 2 percent of the total workforce.

Source: Apprenticeship statistics (DfE)

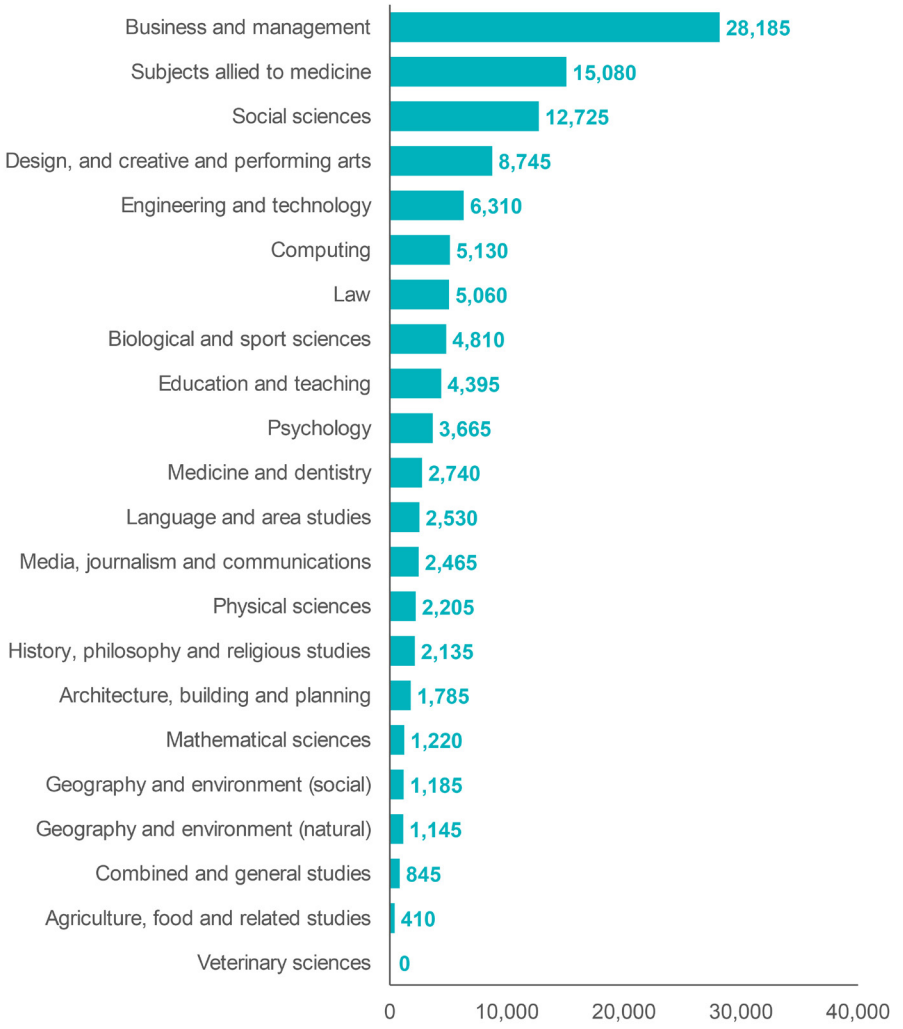
Notes:

1. Academic year 2023/24
2. Other subject areas had fewer than 10 achievements

Higher education

What to look for?	• What HE subjects are most common? • Do HE subjects reflect local skills demand?
What might affect performance?	• Not all HE students pick subjects based on career decisions. • Interest in subjects can reflect wider economic and social trends. For example, interest in studying economics increased following the global financial crisis. • Subjects can reflect research specialisms of local HE institutions that are unconnected to local economy. For example, Loughborough University has a specialism in sports science.
Other things to be aware of	• Compared to other skills provision, it is less likely skills developed through HE will stay in the local area, with universities attracting students from across the UK and internationally. It can be useful to look at data on retention of students alongside data on student numbers.
Suggested dataset	• HE student enrolments by HE provider and subject of study (HESA).
Suggested measure	• Enrolments by subject (shown below). • Breakdown of enrolments by subject (% of total). • The focus would normally be on the universities located within the area or within the broader region. As Wakefield does not have a university, Figure 24 looks at universities in West Yorkshire. See note under Figure 24 for more information about which universities are included.
How good a match to the question is the available data?	• Direct count based on HE administrative data.
What other questions can this dataset help answer?	• Breakdowns available including: ▪ Level – All undergraduate; First degree; Other undergraduate; All postgraduate; Postgraduate taught; Postgraduate research. ▪ Mode – Full time; Part-time. • HESA also has a range of other data available.

Figure 24: **Enrolments by subject, all HE students at West Yorkshire universities, 2023/24**



Engineering and technology is the subject most likely to be applicable to manufacturing, although only some courses will directly apply. There were 6,310 enrolments at West Yorkshire universities during 2023/24.

Other subjects may also be relevant, including agriculture, food and related studies for 'manufacturing of food products', which employs 5,000 in Wakefield.

This suggests there are many students in subjects that would be relevant to Wakefield's manufacturing sectors. However, they may not choose to stay in West Yorkshire on graduation or move to Wakefield.

Source: HESA

Note:

1. Academic year 2023/24
2. As Wakefield does not have a university, data is presented for all universities in West Yorkshire (except University of the Law, as its students are distributed across multiple campuses in different regions). Includes University of Bradford, University of Huddersfield, University of Leeds, Leeds Beckett University, Leeds Trinity University, and Leeds Arts University.

Policy implications

- Looking at skills provision, allows an assessment to be made of whether current provision is likely to meet current or future demand.
- If there are fewer apprenticeships in a subject than expected given size of the sector, this could be because local employers are reliant on less skilled workers, use other routes to develop skills or lack an understanding of apprenticeships. It could also reflect a lack of suitable training providers. Understanding the reasons will help identify what interventions are needed.

Additional topics to explore

Other analysis that may be useful to undertake includes:

- Comparing across areas. For example:
  - How does the number of apprenticeship completions in 'engineering and manufacturing technologies' per capita compare to England?
- Analysing change over time. For example:
  - How has the number of 'engineering and manufacturing technologies' apprenticeship completions changed over the last five years?
- Analysing data in more detail. For example:
  - Analysing HE enrolments using more detailed subject breakdowns.
  - Analysing HE enrolments by level (undergraduate, postgraduate taught, and postgraduate research).
- Undertaking different analysis to see if it provides alternative insights. For example:
  - How many apprenticeship starts (instead of apprenticeship achievements) are there in 'engineering and manufacturing technologies'?

Next steps

The guide provides suggestions about data that may be useful to explore to understand skills performance. To get started with analysis:

- Consider what questions to answer. This will help determine the data to analyse and how best to analyse it.
- Establish what data and measures are available. For skills, the main sources of data are ONS, Nomis, and HESA. The UK government's Department for Education also publishes data (mainly for England) and the devolved governments of Scotland, Wales, and Northern Ireland publish data for their geographies. UK and devolved government agencies such as Skills England and Skills Development Scotland also publish data. There are also many commercial datasets available. Many datasets will include multiple measures.
- Select the dataset and measure. The main consideration should be which dataset and measure most closely aligns with the question being answered. Other considerations include geographies available, frequency, and timeliness of data.
- Consider what geography and comparator areas to use.
- Consider whether analysis should look at current position, change over time or both.
- When analysing change over time, consider what time periods to use. When looking at the current position, it is nearly always best to use the most recent data. When looking at change over time, the main options are a neutral time period (for example, five or 10 years) or from a point of interest (for example, since policy introduced).

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