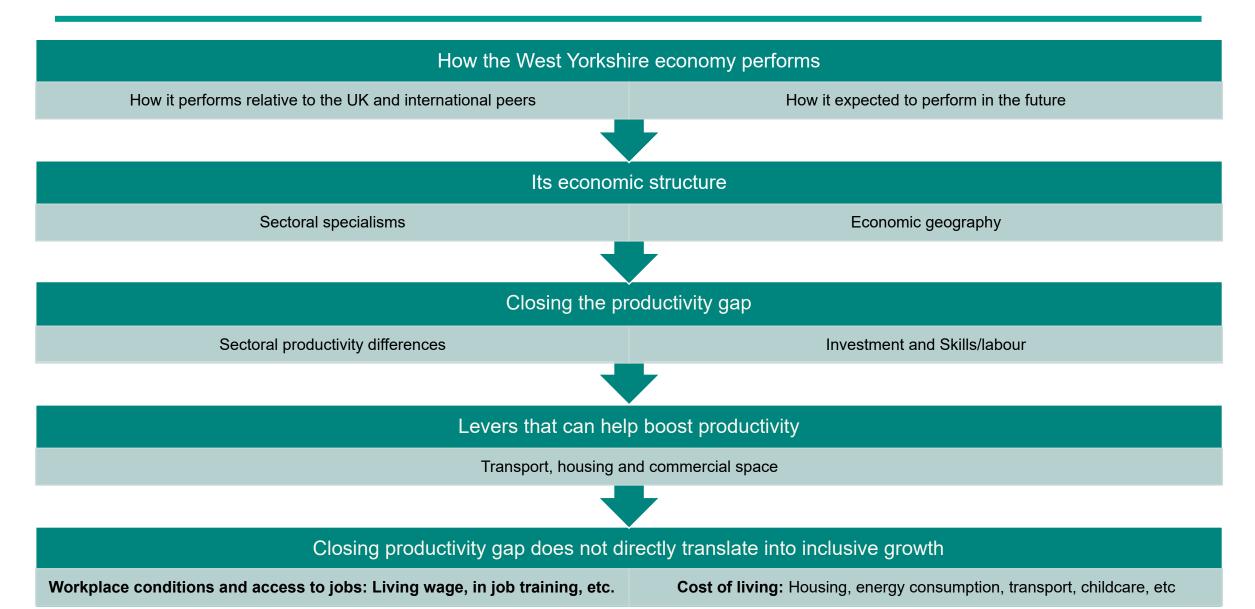


Evidence for economic strategy



Framework for analysis

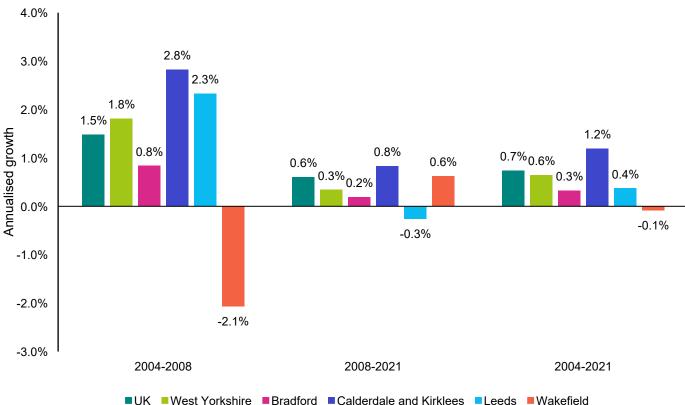


Economic performance and specialisms

Since 2004, real productivity growth below national average in West Yorkshire, with the exception of Calderdale & Kirklees

Figure: Chained Volume (unsmoothed) GVA per hour, 2004-2021



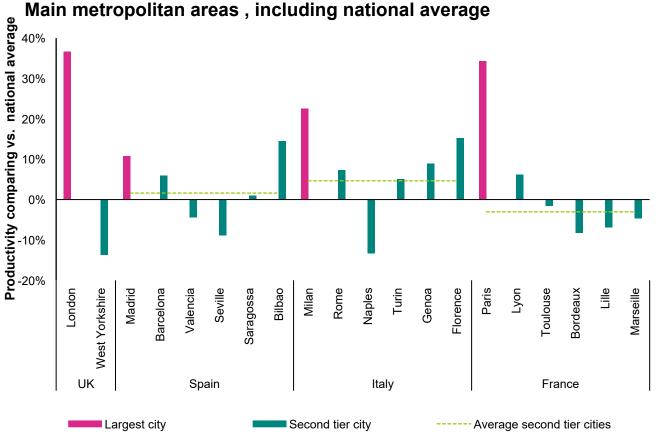


Source: ONS, Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions. Note: Data not available at the Local Authority level, unlike nominal productivity.

- West Yorkshire faced a larger productivity slowdown than the national average.
 Productivity growth since 2008 was 0.3% a year.
- With strong differences across its districts.
 Leeds and Bradford being the two local authorities performing the national average.
- Wakefield had a relatively good performance since the financial crisis, in line with the national average. However, the previous period was characterised by a significant productivity decline.
- Calderdale & Kirklees are the only areas where productivity growth has been above national average, both before and after the financial crisis.
- That gap accounts for £9.6 billion in 2021 alone (around £4,100 per resident). Closing that gap would boost West Yorkshire living standards.
- Projections that the gap will widen in the next decades. Estimated to reach £14.9bn (around £5,900 per resident) in 2042.

Comparisons with peer countries suggest that West Yorkshire should aim to reach UK's average productivity

Figure: Labour productivity, 2019 (GDP per worker in USD, constant prices, constant PPP, base year 2015)



Source: OECD, Metropolitan areas, GDP per worker. Leeds OECD's definition of metropolitan area being used for West Yorkshire.

The second cities considered are the following. **Spain:** Barcelona, Valencia, Seville, Bilbao and Saragossa. **Italy:** Rome, Milan, Naples, Turin, Palermo, Genoa and Florence. **France:** Lyon, Toulouse, Strasbourg, Bordeaux, Nantes and Lille.

- West Yorkshire underperforms the national average, while second tier cities in other large countries tend to perform in line with the average.
- Not all metro areas overperform the national average, but only Naples underperforms (against the national average) as much as West Yorkshire.
- In absolute terms, West Yorkshire is the third least productive area analysed. Only ahead of Naples and Seville by 1.4% and 0.7%, respectively.
- This <u>feature</u> is common across the UK's largest cities outside London like Manchester, Glasgow and Birmingham.
- London's productivity relative to the national average is broadly in line with other countries.

West Yorkshire is a diversified economy – large manufacturing sector dispersed across the region and service specialisms mostly located in Leeds

Figure: Industrial specialisms within West Yorkshire

Local Authority	Specialisms (based on jobs Location Quotients for tradeable activities), 2021
Bradford	Manufacture of textiles Printing and reproduction of recorded media Manufacture of chemicals and chemical products Manufacture of machinery and equipment Financial service activities, except insurance and pension funding
Calderdale	Insurance, reinsurance and pension funding, except compulsory social security Manufacture of coke and refined petroleum products Manufacture of other non-metallic mineral products Manufacture of machinery and equipment Financial service activities, except insurance and pension funding
Kirklees	Manufacture of furniture Manufacture of textiles Chemicals and chemical products Manufacture of machinery and equipment Manufacture of basic pharmaceutical products and pharmaceutical preparations
Leeds	Advertising and market research Printing and reproduction of recorded media Manufacture of coke and refined petroleum products Activities auxiliary to financial services and insurance activities Telecommunications
Wakefield	Manufacture of wearing apparel Printing and reproduction of recorded media Warehousing and support activities for transportation Manufacture of other non-metallic mineral products Manufacture of beverages

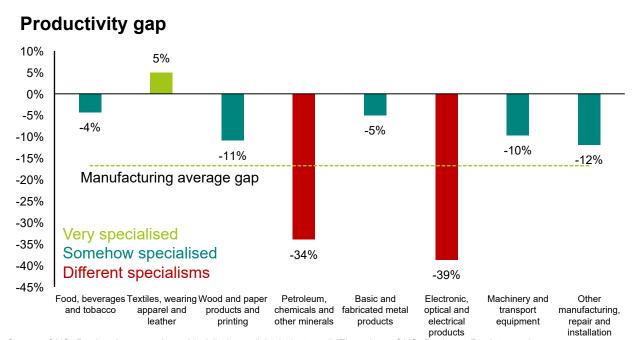
- West Yorkshire has a strong manufacturing sector with more than 100,000 manufacturing jobs - the highest number of manufacturing jobs per capita in a Combined Authority; and 13.4% of GVA.
- The manufacturing base is diverse both geographically (mostly outside Leeds) and sectorally (textile, furniture, chemicals and machinery).
- Across all Combined Authorities, West Yorkshire has the highest number of jobs in "Financial service activities" and "Computer programming, consultancy and related activities" (2021). Combined accounting for almost 50,000 jobs.
 - Around 22,000 jobs in financial services (44% of them in Leeds) and 26,000 in Computer programming, consultancy and related activities (76% of them in Leeds);
 - Mostly Leeds, but some in Calderdale.
 Some evidence that Bradford is becoming more relevant on this front.

Source: ONS, Business Register and Employment Survey. Note: Leeds air transport was excluded due to the specific geographical nature of that activity.

Closing the productivity gap will require new manufacturing specialisms in West Yorkshire and a deepening of the sector specialisms that Leeds already has

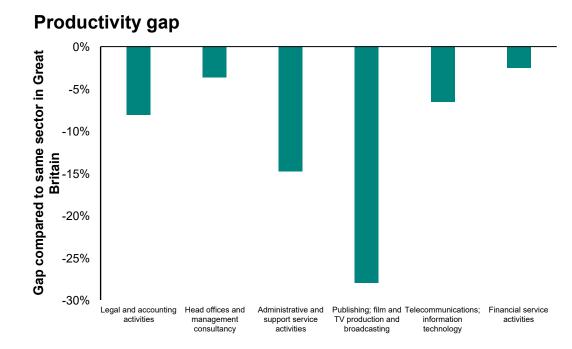
Figure: Manufacturing productivity by ITL3 and industry, West Yorkshire 2019

Figure: Services productivity in Leeds by its specialisms, 2019



Source: ONS, Regional gross value added (balanced) by industry: all ITL regions. ONS, Business Register and Employment Survey.

- The productivity gap is small (if existent) in areas that West Yorkshire is specialised. The gap is driven by the absence in specialisms in highly productive industries like electronics (electric lighting equipment vs. electronic components) and chemicals (agrochemicals vs. pharma and petroleum). The main productivity differences are in sectors in which West Yorkshire is not specialised.
- Closing the productivity gap will require new manufacturing-related specialisms. Closing (or widening) the gap in existing specialisms may not be enough.

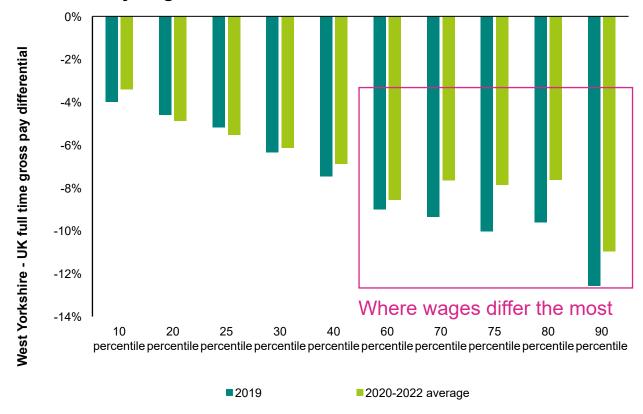


Leeds underperforms in the services that it has a specialism.
 Closing the productivity gap requires making those sectors more productive. Either by attracting new businesses in these sectors and enabling the benefits of agglomeration.

Closing productivity gap alone likely to boost wages at the top, unlikely at the bottom of the wage distribution

Figure: Workplace median pay, full time workers by Metropolitan County 2019-2022

Differences by wage distribution



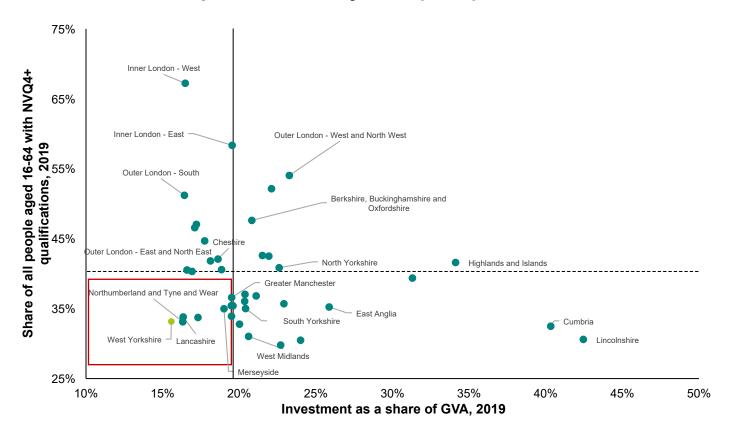
- The same way the productivity gap is driven by the lack of high performing firms, a similar trend is observed in wages, with the largest gap at the top of the distribution.
- The wage differences between West Yorkshire and the national average are mostly driven by lack of highly paid jobs.
- Under certain circumstances, closing this gap could lead to issues around housing affordability.
- This highlights the importance of aiming for inclusive growth.

Source: ONS, annual survey of hours and earnings - workplace analysis.

Main productivity drivers: labour and capital

West Yorkshire is currently in an equilibrium of low investment intensity and relatively low share of workers with level 4 qualifications that affects its productivity

Figure: Productivity per hour and share of all people aged 16-64 with NVQ4+ qualifications by ITL2 (2019)



- In terms of investment and skills, West Yorkshire underperforms the national average.
- Investment as a share of GVA is estimated to be the lowest among all ITL2. A common feature across all local authorities.
- Below the national average in terms of working age population with level 4 qualification of above. Particularly low for Bradford and Wakefield. Only Leeds perform in line with the national average.
- Closing the productivity gap likely to involve an increase in both components.
- Today, closing the investment gap (public and private) would require £2.6bn a year. Closing the skills gap would require around 100,000 additional graduates, which would require new graduates from elsewhere (either new residents or commuters from other areas).

Source: ONS, NOMIS annual population survey. ONS, Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions. ONS, Experimental regional gross fixed capital formation (GFCF) estimates by asset type: 1997 to 2020. ONS, GVA at ITL2, current price estimates: 1998 to 2020. West Yorkshire Combined Authority calculations.

West Yorkshire's investment pipeline is diverging from UK average mainly since 2013

Figure: Investment at the subnational by ITL2 (1998-2020)

Gross Fixed Capital Formation share of GVA



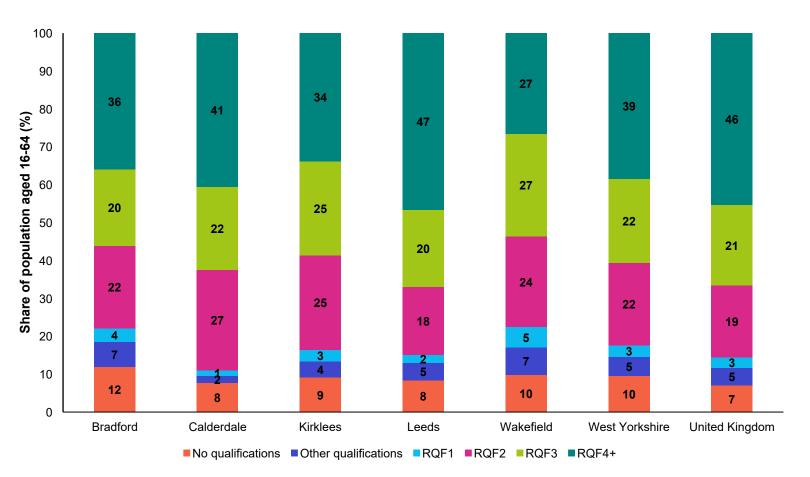
Source: ONS, Experimental regional gross fixed capital formation (GFCF) estimates by asset type: 1997 to 2020. ONS, GVA at ITL2, current price estimates: 1998 to 2020. West Yorkshire Combined Authority calculations.

- Lower investment than the national average (which is <u>lower</u> than its peers), diverging especially since 2013. It is around this time that West Yorkshire's productivity diverges from the national average.
- This is a common feature across all local authorities.
- Asset composition (buildings, ICT, intangibles, etc) in West Yorkshire similar to national average.
- Investment underperformance in almost all industries.
- Research and Development investment also underperforms the national average.

Skills to unlock productivity and reach inclusive growth

West Yorkshire has a weak qualification profile but again picture varies by local authority

Figure: Profile of working age population by RQF level of highest qualification held

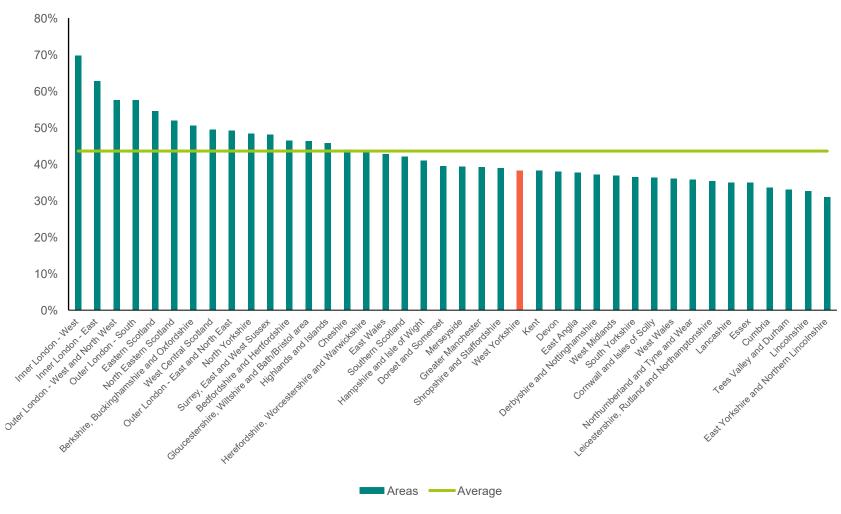


National Vocational
Qualifications (NVQ)
estimates have been
replaced with estimates
on a Regulated
Qualifications Framework
(RFQ) basis

Source: Annual Population Survey, Jan – Dec 2022

West Yorkshire has a significant deficit of higher skilled people

Figure: Proportion of working age population qualified to Level 4 by NUTS2 area (people aged 16-64)

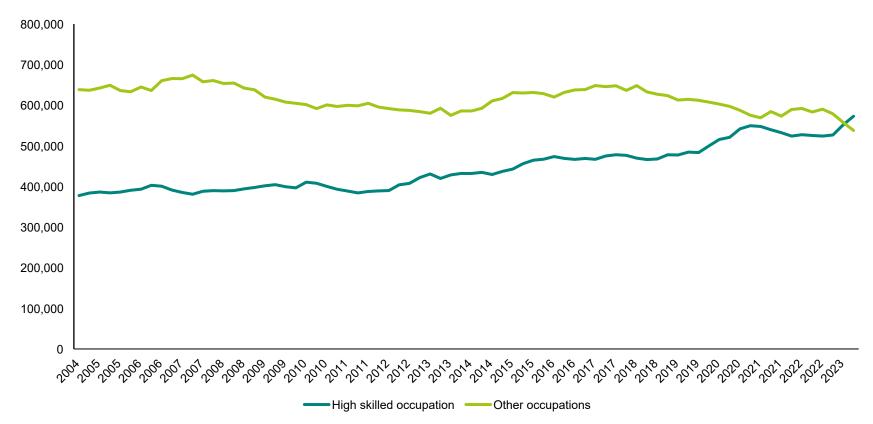


West Yorkshire would need 100,000 additional higher qualified residents simply to match the national average

Source: Annual Population Survey, ONS (Jan 2021-Dec 2021)

Despite weak productivity performance, there has been a shift towards higher skilled occupations

Figure: Trend in employment for high skilled occupations, West Yorkshire 2004-2023

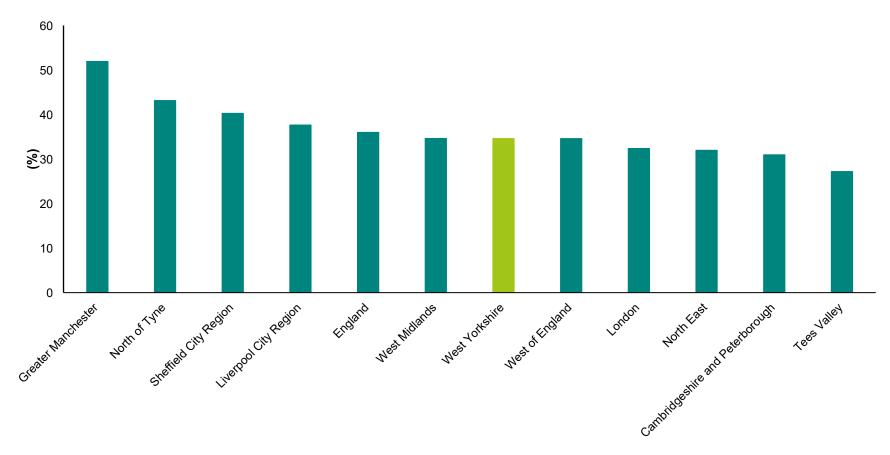


Source: Annual Population Survey, workplace employment.

Note: High skilled defined by "managers", "professionals" and "associated professionals", based on SOC2010 groups (codes 1 to 3).

Employers find it difficult to get the skilled people they need

Figure: Share of skill shortage vacancies as a share of all vacancies, by Mayoral authority area, 2022

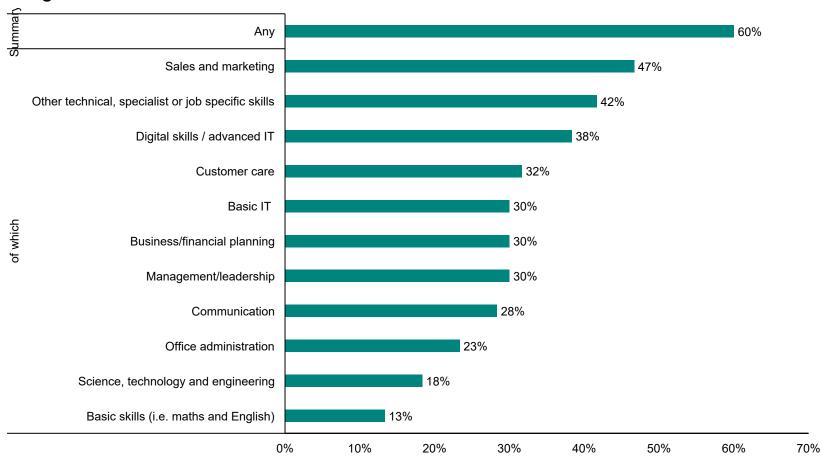


Skills shortage vacancies happen when employers face a shortage of candidates with the right skills for the job - they have a significant impact on firms' productivity performance.

Source: Employer Skills Survey, 2022

Evidence of skills deficits suggests that the skill base is likely to be constraining the economy today

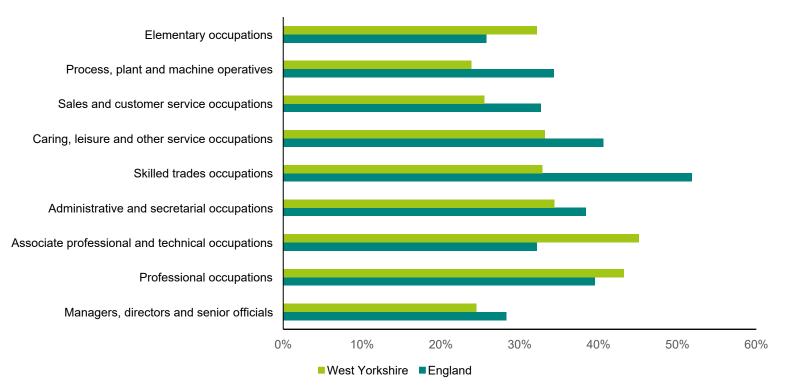
Figure: Which of the following skills need improving during the next 12 months to meet your business/organization's needs?



Source: West Yorkshire Business Survey, 2023.

Shortages suggests that the skill base is likely to be constraining the economy today

Figure: Skill shortage vacancies as a share of total vacancies, by occupation major group



- Relative to occupations, compared to England, occupations shortages are more acute for professional and associated professionals.
- Research <u>shows</u> that deficits of STEM skills may be limiting the UK economic performance, especially outside the South of England.

Source: Employer Skills Survey 2022.

West Yorkshire performs below national average on supply of young people with qualifications and divergence in recent years

Figure: Proportion of young people achieving qualifications at level 2 and level 3 equivalent by age 19 in 2021/22 (State sector)

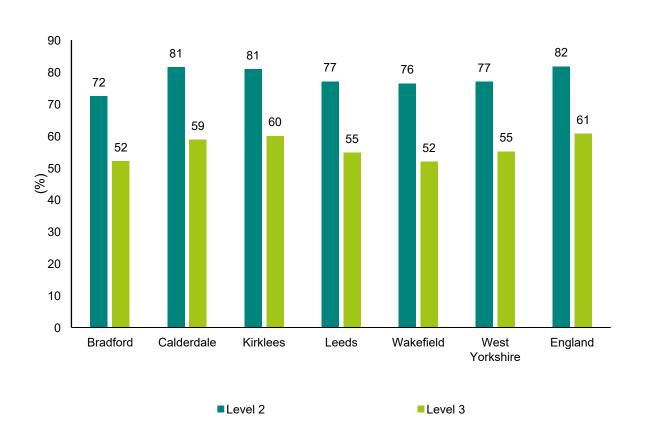
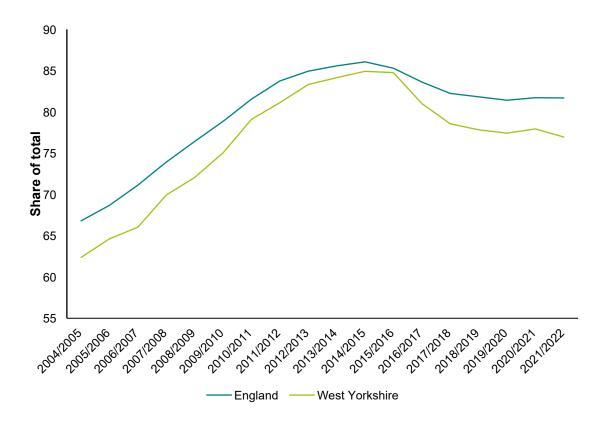


Figure: Share of who achieve level 2 by the age of 19 (2004/05 and 2021/22)

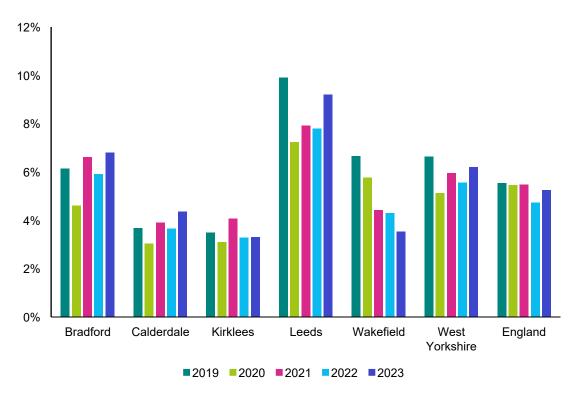


Source: Department for Education

Source: DfE, Level 2 attainment age 16 to 25, Academic year 2021/22.

Build a pipeline that can benefit from future well-paid jobs

Figure: Young people not in education, employment or training (NEET) or activity unknown, by local authority (2019-2023)

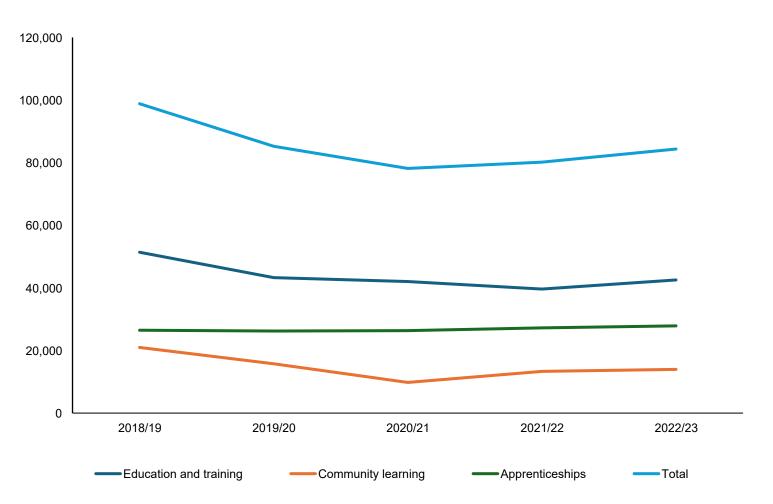


- West Yorkshire residents will need to have a certain level of skills to benefits from high paying jobs of the future.
- Today, West Yorkshire has an above average high share of NEETs, mainly driven by in Leeds and Bradford, which shows exclusion among the young.
- Unlike England, the share of NEET has been rising in recent years.
- Without further interventions, building on the existing productive industries in West Yorkshire would not directly benefit the NEET.

Source: Participation in education, training and NEET age 16 to 17 by local authority, 2022/23 academic year, Department for Education.

Government investment in further education and skills programmes has fallen in recent years

Figure: Adult participation in further education and skills programmes, West Yorkshire

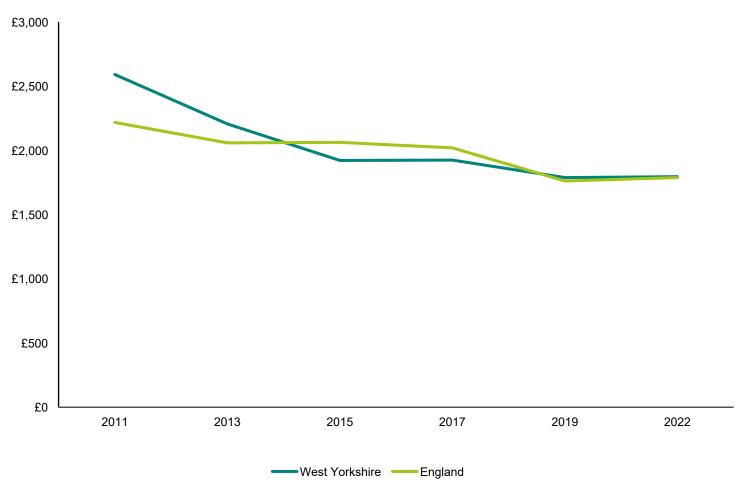


FES includes adult apprenticeships, Education and Training (19+) and Community Learning

Source: Department for Education

Estimated employer investment in training has also fallen over the last decade

Figure: Trend in estimated employer investment in training per employee, West Yorkshire

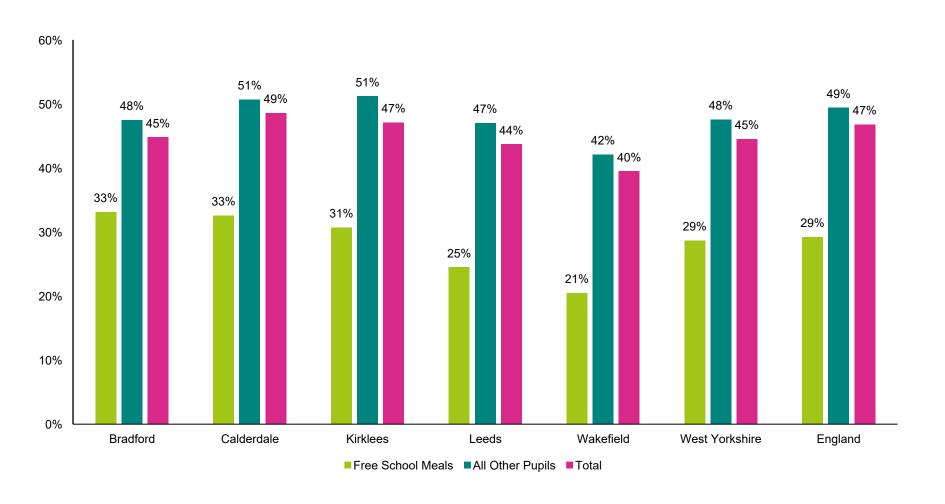


FES includes adult apprenticeships, Education and Training (19+) and Community Learning

Source: Employer Skills Survey

West Yorkshire has a mixed picture in terms of entry rates into higher education

Figure: Progression rates to higher education by age 19 for state-funded pupils, 2021/22 by free school meal status



Source: Department for Education

West Yorkshire's employment rate gap with national average is due to economic inactivity

Figure: Employment, unemployment and economic inactivity by local authority (2023)

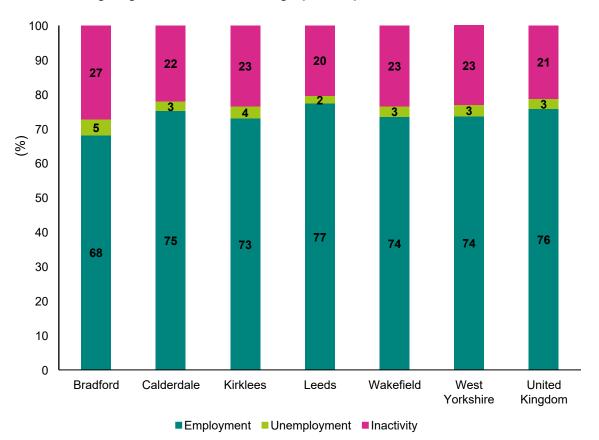
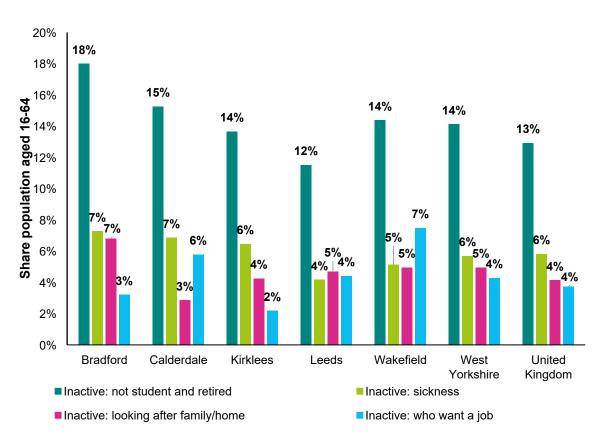


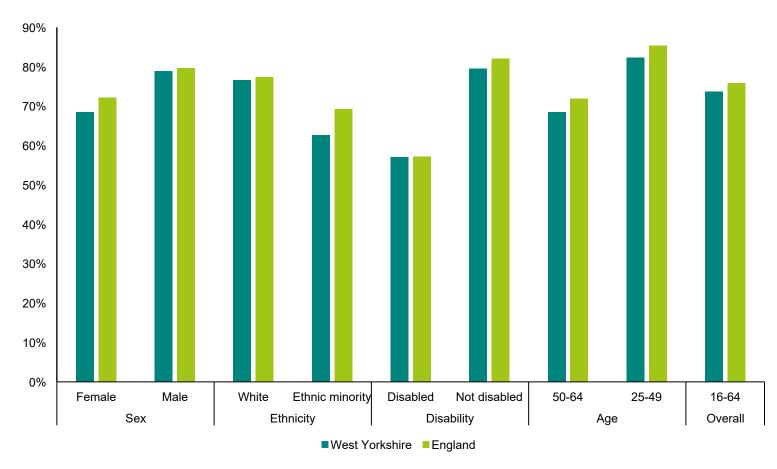
Figure: Inactivity by reason (2023)



Source: Annual Population Survey, October 2022 to September 2023

Key groups face significant employment rate gaps

Figure: Employment rates by selected population groups (Oct 2022-Sep 2023)

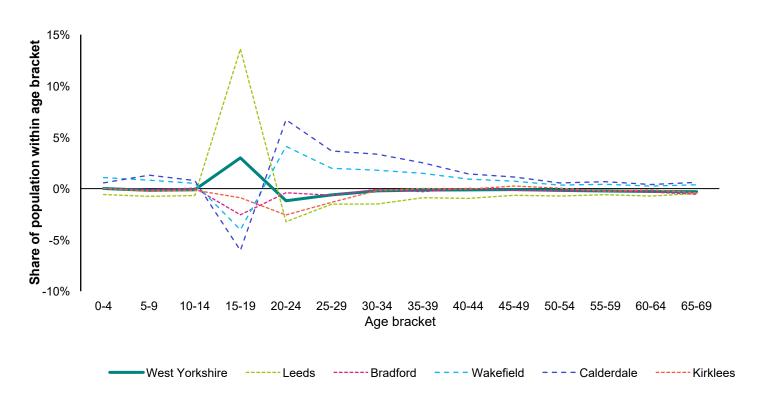


Source: Annual Population Survey.

West Yorkshire loses people to other parts of UK over time, especially at peak prime working age

Figure: Internal migration by age bracket (2019)

Internal migration by age bracket

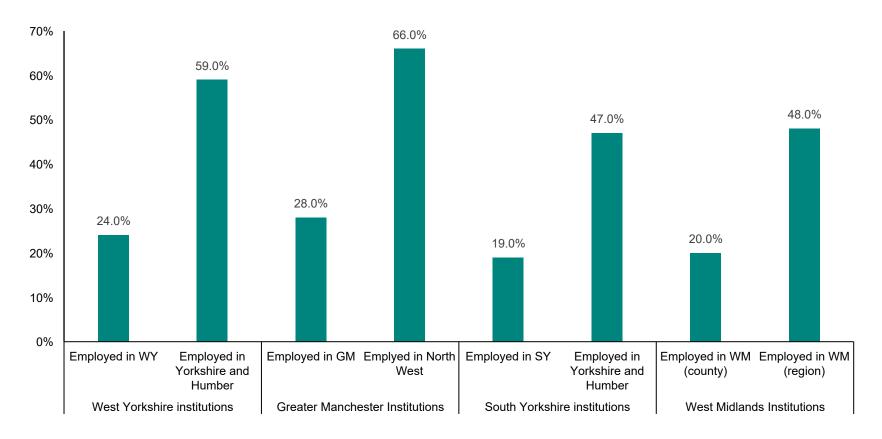


- West Yorkshire sees net outflow of people at prime working age.
- West Yorkshire absorbs population between 15 and 19, when a lot of people attend its universities.
 However, over time West Yorkshire loses population to other areas of the UK.
- Calderdale and Wakefield attract people during their prime working age years. This may be driven by intra WY flows.
- Improving West Yorkshire's economy requires being an attractive place for workers at prime age. Both retaining graduates but also attracting new people.

Source: ONS, Internal migration: by local authority and region, five-year age group and sex ONS, Population estimates - local authority based by single year of age.

Most graduates go elsewhere limiting the labour pool of West Yorkshire

Figure: Share of graduates in employment retained in MCA area and ITL region at 15 months, by location of institution (2020/21)



Note: UK domiciled leavers from WY institutions in employment after 15 minutes. Excludes overseas destinations and not known destination.

Source: Graduate Outcomes Survey 2020/21.

Self-employment without employees is high within ethnic minorities but slightly lower in the most deprived areas

Figure: Distribution of economic activity by ethnicity, West Yorkshire (2021)

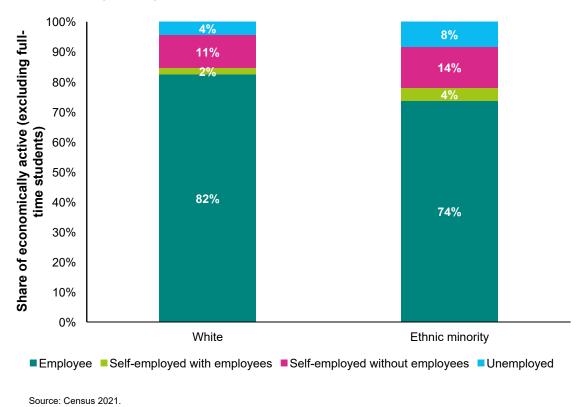
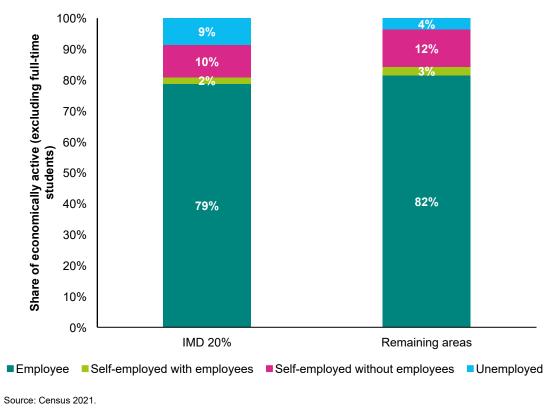


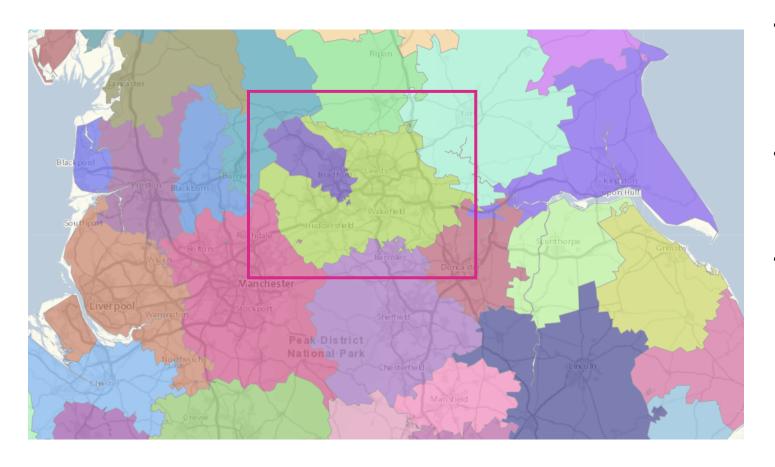
Figure: Distribution of economic activity by IMD in West Yorkshire (2021)



- Self-employment is particularly high for ethnic minorities, especially among men. Self-employed without employees is the most common form of self-employment.
- Providing business support to these groups is fundamental to generate inclusive growth.
- The most deprived areas face more unemployment but not higher self-employment than the remaining areas.

Interventions should contribute to the integration of the combined authority as a labour market

Figure: Alternative Travel to Work Areas, Full time employed (2011)



- Despite the census showing that there are plenty of flows between local authorities. Travel to Work Areas (2011) full time workers suggest that Bradford is not entirely integrated as a labour market.
- This is likely to be driven by a combination of factors like connectivity (road congestion and rail capacity) but also the level of skills of the workforce to benefit from longer commutes.
- The remaining combined authorities do not necessarily match their TTWA (GM and Wigan, or Doncaster and Sheffield) but this seems to be significant.

Source: ONS.

Conclusions

- West Yorkshire is in low skill equilibrium requiring co-ordinated action on both skills demand and skills supply to raise productivity levels.
- West Yorkshire under-performs on higher skilled employment compared with national average but has seen growth in this area in recent years.
- West Yorkshire also under-performs on skills supply with public and private investment also lower compared with previous years.
- West Yorkshire faces challenges around economic inclusion reflected in employment rates.
- Skills mismatches present a challenge to business performance and productivity growth.
- The indicators provide a mixed picture of performance on employment and skills across the local authorities, with important implications for the economic strategy.