

**TEES
VALLEY**

Tees Valley Economic Assessment

2022



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Section 1: Introduction

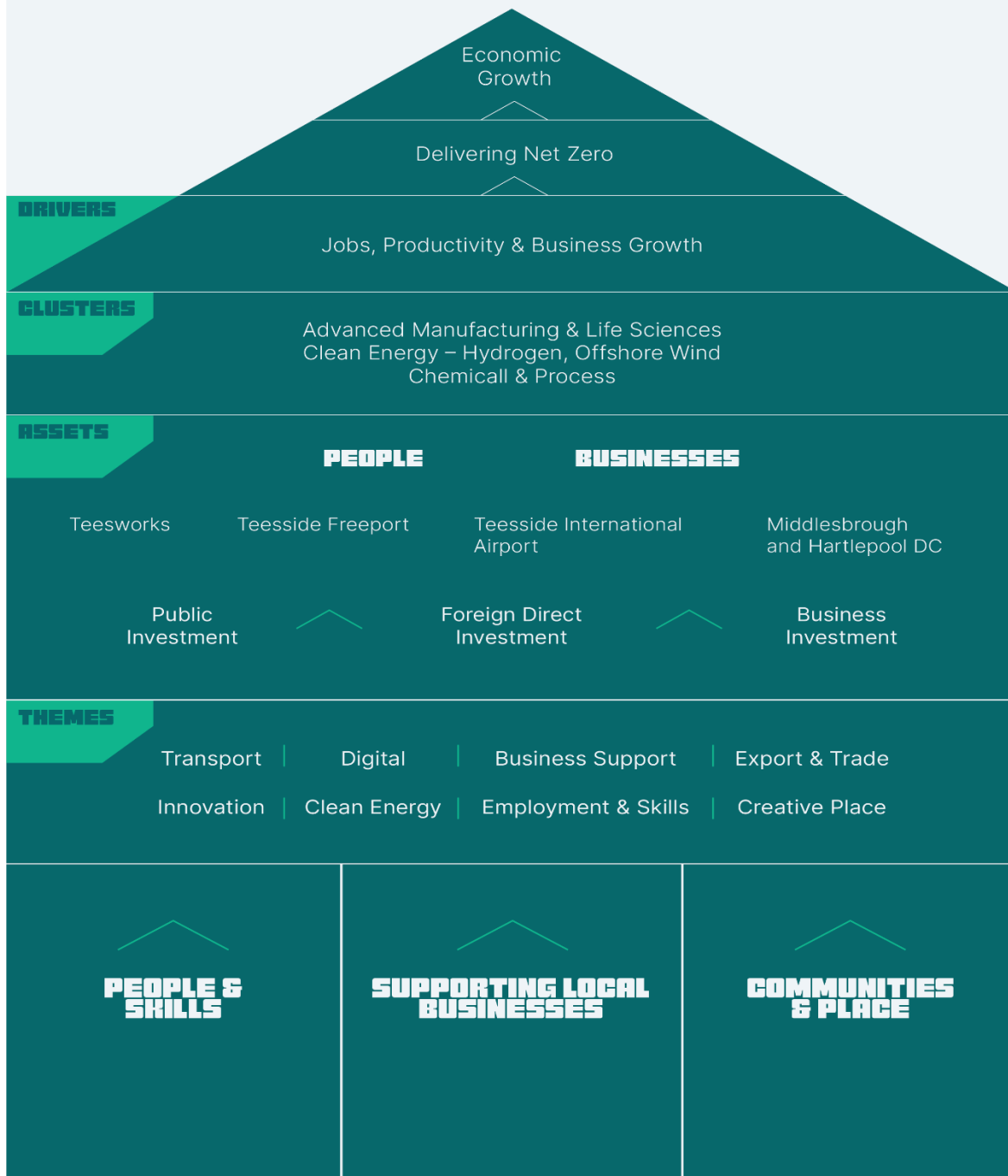
The Tees Valley Economic Assessment is the core statistical document related to economic development in Tees Valley. It provides an evidence base, including rationale and supporting assumptions about the comparative economic performance of the region. The assessment does this by identifying the core components of economic performance including sectoral composition, place characteristics and the demographic and skills profile of the resident population.

Additionally, the assessment goes on to identify how the relative inter-relatedness of people, places, sectors and associated supply chains impacts both economic output and productivity and also assesses economic implications associated with the environment and equality of opportunity across the region.

The assessment is based upon data and analysis for key areas that contribute towards growth in our economy and builds on our ambitions regarding clean energy and a low carbon economy. A graphical representation of Tees Valley's growth model is shown below and includes the following key cross-cutting elements:

- Growing globally **competitive clusters**
- Developing **skills** that meet future business needs
- Excellent **digital and transport connectivity**
- **Equality of opportunity** for all Tees Valley residents

TEES VALLEY GROWTH MODEL

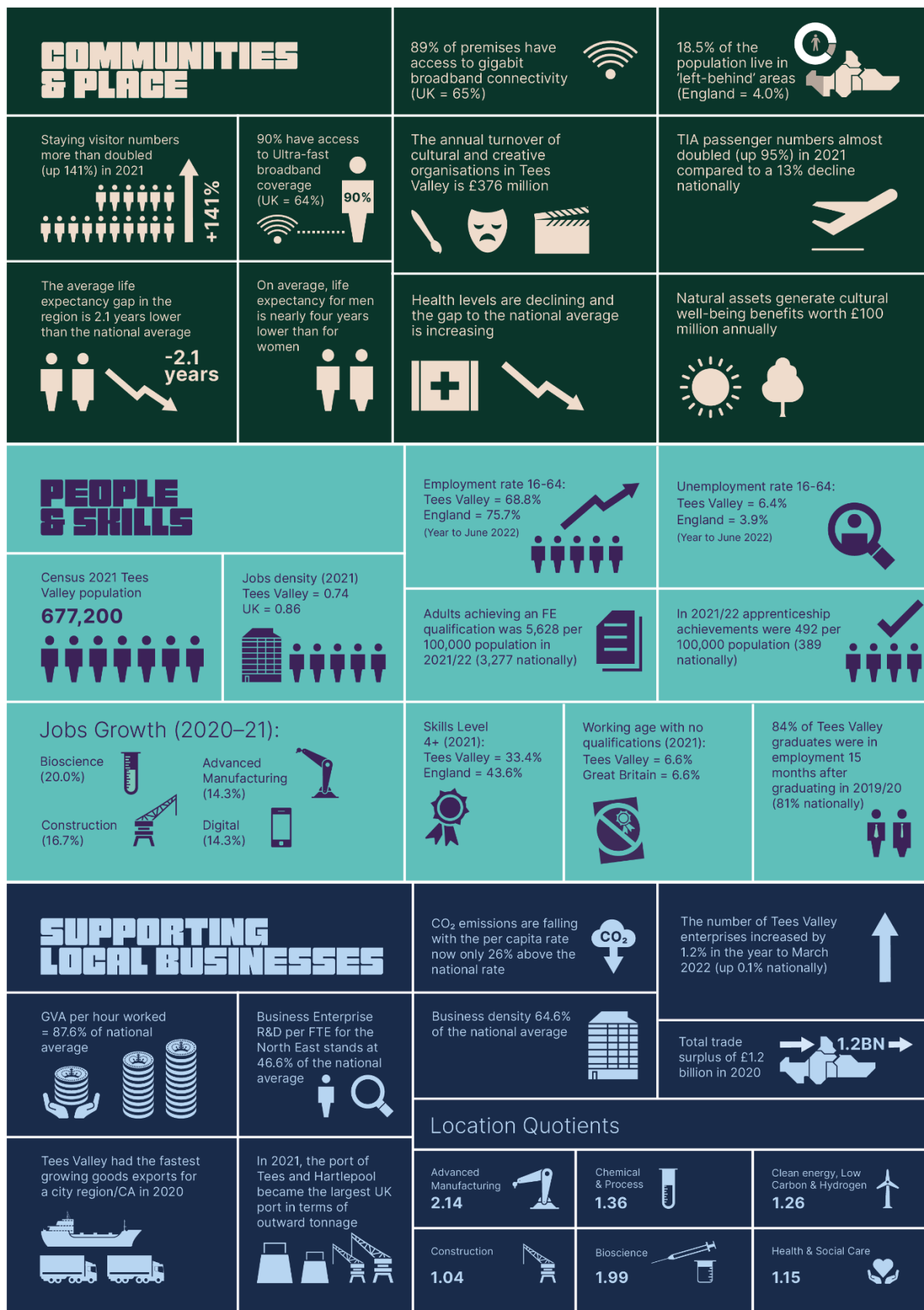


The Economic Assessment is updated annually. It reflects the priorities in the Tees Valley Strategic Economic Plan (2016-26), the Tees Valley Local Industrial Strategy (locally agreed in 2019) and the Tees Valley Investment Plan (2019-29). It also provides an evidence base to support the achievement of levelling-up, both within Tees Valley and between Tees Valley and the rest of the country.

The Economic Assessment supports the development of business cases, as well as helping to inform local authority assessments and other policy and strategy documents.

Data is presented for Tees Valley wherever possible, and sometimes at Local Authority level. When available, performance is benchmarked against the wider region and nationally.

Section 2: Executive Summary Infographics



Section 3: Communities and Place

3.1. Area Profile

3.1.1. Introduction

This section outlines the demographics and geography of the Tees Valley, which inform the Combined Authority's Strategic Economic and Investment Plans. In addition, it examines inequality, well-being and health metrics.

The Tees Valley comprises five distinct local authorities. Combined, these areas have unique natural assets and sectoral strengths that offer huge potential to build a diverse and inclusive economy for local residents and businesses with specialisms in Chemical & Process, Advanced Manufacturing and Clean Energy, Low Carbon and Hydrogen.

The River Tees runs through all Tees Valley districts and together Tees Valley forms a compact, well connected, functional economic geography with significant economic assets. It has a conterminous, fully integrated Combined Authority and Local Enterprise Partnership, responsible for overseeing economic growth. Tees Valley also includes the newly created Teesside Freeport which stretches across the region, including Teesworks, Teesport, the Port of Middlesbrough, the Port of Hartlepool, Liberty Steel, LV Shipping, Wilton International and Teesside International Airport and is the largest low tax customs zone in the UK.

However, the area continues to experience high levels of deprivation and comparatively weak health outcomes, as well as an ageing population, creating economic challenges and distributional imbalances, exacerbated by the impact of Coronavirus.

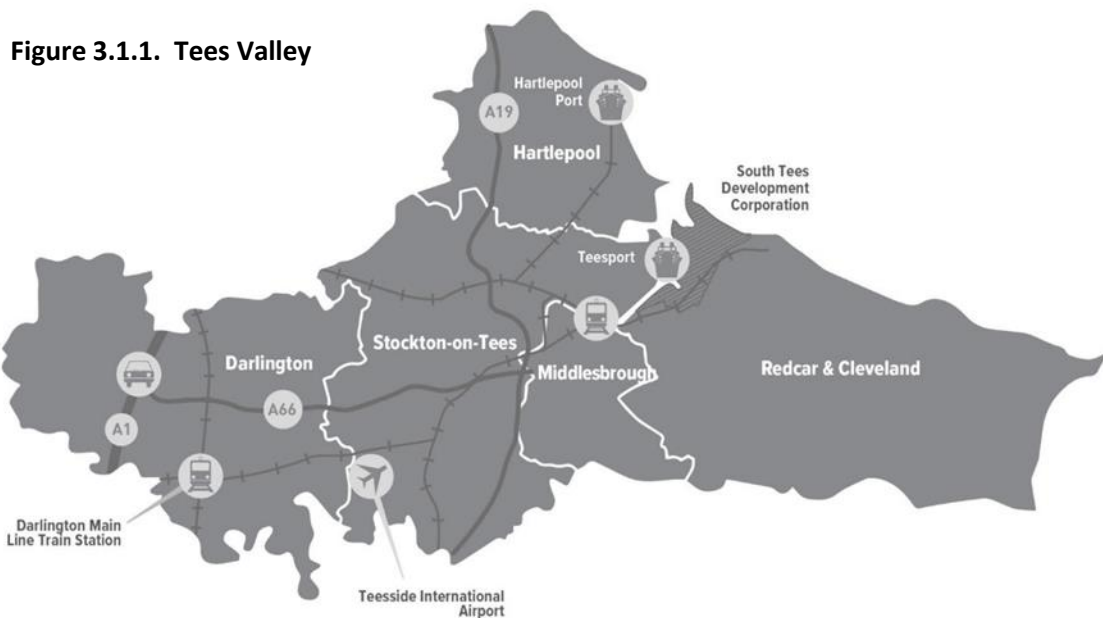
3.1.2. Key messages

- The total resident population stood at 678,200 in 2021.
- The working age population is projected to decline by 22,000 by 2040.
- 93% of the population live in a built-up area.
- The life expectancy gap between Tees Valley and the national average is over 2.1 years for both men and women.
- This gap is even more pronounced when comparing across local authorities with life expectancy in Middlesbrough more than nine years lower for men and eight years lower for women when compared to central London.
- On average, life expectancy for men is nearly four years lower than for women.
- In terms of internal migration within the UK, Tees Valley experiences a net population loss to other parts of the country.
- Without net international migration the Tees Valley population would be shrinking.
- Deprived areas classed as 'left-behind' wards account for 18.5% of the total Tees Valley population compared to just 4.0% nationally.

- The present rates of high inflation and associated cost of living crisis impact more negatively on less affluent areas. Research suggests that Tees Valley has some of the highest rates of vulnerability to cost of living increases and that Middlesbrough ranks as the most vulnerable in the whole country.
- Research suggests that Tees Valley residents have some of the poorest levels of health in England, that health levels are declining and that the gap with the national average is increasing.

3.1.3. Geography

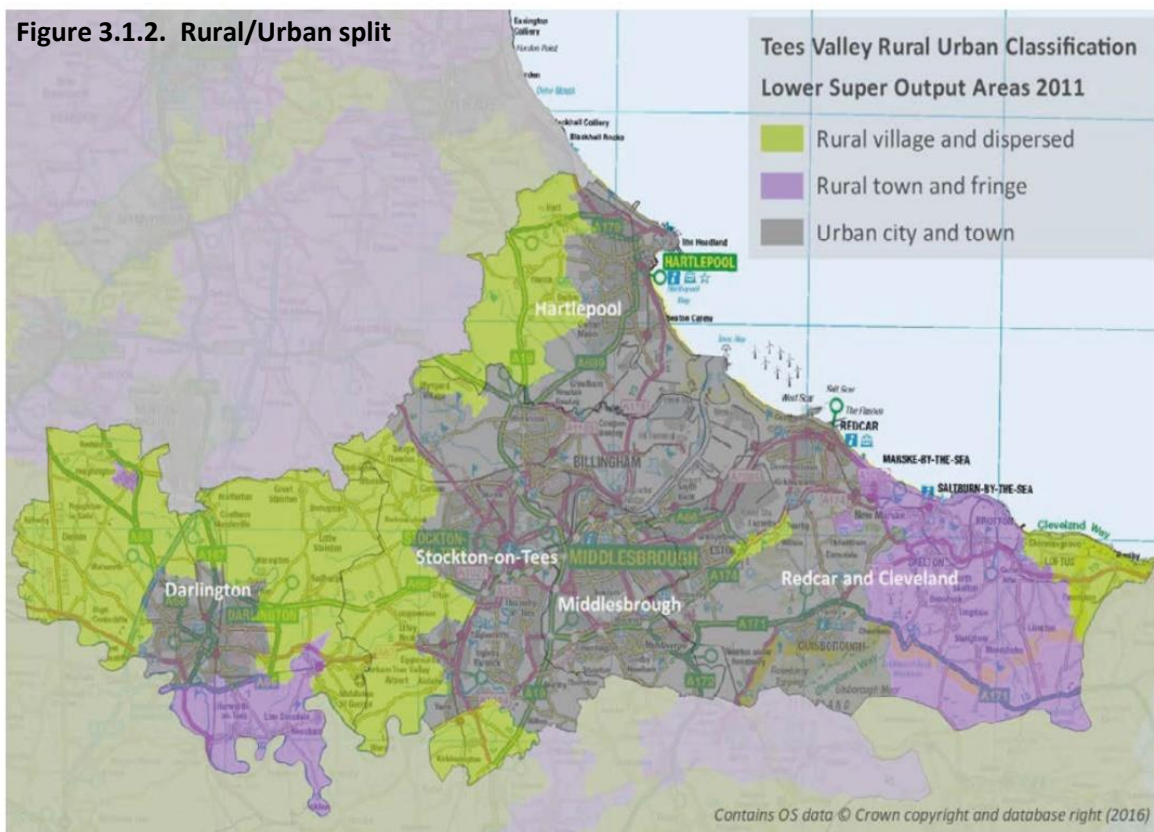
Covering over 300 square miles and located on the North East of England coast, Tees Valley comprises five local authority areas including: Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton-on-Tees.



Source: TVCA

All five local authorities have a higher population density than nationally with Middlesbrough the most concentrated and Darlington and Redcar & Cleveland the least. Overall, the Tees Valley area represents 1.2% of the population of England and 0.6% of the English landmass. It is highly urbanised, with around 93% of the population in built-up areas. Around one third of the total population is concentrated in the five main town centre areas with the remaining population located in the suburbs, in smaller settlements, or rural areas.

Figure 3.1.2. Rural/Urban split



Source: Tees Valley Rural Action and Rose Regeneration, Tees Valley Rural Economy Evidence Base, January 2021

3.1.4. Local authority pen-pictures

Darlington (Census 2021 population 107,799) is a gateway to Tees Valley, with direct connections to the A1(M) motorway and the East Coast mainline railway, as well as Teesside International Airport. Sectoral strengths are Advanced Manufacturing, Digital, Logistics, Health & Social care and Professional Services, with the town host to some major engineering and specialist services companies (Nobia, Cummins, Wood, and Capita). At Central Park, the home to CPI’s National Biologics Manufacturing Centre and Teesside University’s National Horizons Centre, the town is the ideal location for the development of the biologics and life sciences market. With its proximity to the A1(M) the borough is a growing location for logistics distribution centres – Amazon opened a fulfilment centre in May 2020, recruiting more than 1,000 new permanent jobs – with the opportunity for further developments at key sites. The Government’s new Darlington Economic Campus will be located in Darlington town centre and accommodate 750 senior civil servants from HM Treasury, along with other economic focused government departments, including the newly formed Department for Business and Trade and Department for Energy Security and Net Zero. Darlington was one of the first towns to be awarded a share of the Governments Towns Fund and the £23.3 million will be spent on projects to revitalise and improve the town. Darlington has a rich industrial and cultural heritage including the world’s first passenger railway (celebrating its bicentenary in 2025). A large percentage of the population of Darlington is located in the Darlington built-up area, with the remainder of the population spread between a number of towns and villages. Outside of the urban area, the largest population shares are in Middleton St. George, Hurworth, Heighington and Piercebridge.

Hartlepool (Census 2021 population 92,338) is the smallest Local Authority in Tees Valley in both population and employment terms. It is home to Hartlepool Port, has strong historic links to the maritime industry and its sectoral strengths include Clean Energy Low Carbon & Hydrogen, Chemical & Process, Advanced Manufacturing, Health & Social Care and Education and a growing creative industries sector. The BIS, an award-winning managed workspace facility in the town's cultural quarter, is home to a vibrant community of creative businesses. Hartlepool is also home to the Northern School of Art, the leading provider of specialist creative art and design in the north, counting Sir Ridley Scott among its alumni. It is central to the opportunity to create the biggest film studios outside London on the former council depot site, which will put Hartlepool at the centre of film making in the north. The town, also home to the National Museum of the Royal Navy, offers excellent opportunities for port-related industries with more than 300 acres at the Port of Hartlepool owned and operated by PD Ports, with deep water access, warehousing and open storage. Engineering companies employ around 1,700 people with Liberty Steel and TATA Steel pipe mills exporting to the world. Able Seaton Port is one of the largest dry dock facilities in the world and a recycling facility of international significance (currently dismantling the Shell Brent Delta platform). The chemicals industry is still also important to the town and clean energy production at EDF's Nuclear Power Plant generates 60GW (2% of GB's peak electricity demand). Hartlepool was awarded £25 million of the governments Towns Fund to assist with regenerating the town and includes creating a clearly defined mixed use heart of the town centre. A smaller percent of the population of Hartlepool is located in and around the town centre area, with the population mainly spread between a number of local areas such as Throston, West View, Seaton Carew, Middle Warren and Clavering. A mayoral development corporation has also been established in the borough to help drive regeneration (more details in Section 3.1.9.).

Middlesbrough (Census 2021 population 143,924) continues to diversify its economy with a stronghold in Advanced Manufacturing companies across the borough, the thriving TeesAMP site has continued to develop and provides world-class research and commercial premises, including a home to TWI, an internationally renowned research institute. The digital and creative cluster centred in the Boho area is becoming nationally recognised and has a unique opportunity to play a critical role in the productivity growth of the Tees Valley's industrial base in its adoption of Industry 4.0 (industrial digitalisation). Middlehaven continues to develop as a mixed-use regeneration site with a leisure element (for instance it is home to Middlesbrough FC), offices including Boho 5, innovative residential developments and education facilities. In addition to Middlesbrough College with its new T-levels offer, with the Teesside University campus located in the centre, the development of modern student facilities and proposals for a student village integrates the important role of both the college and university within the town. Captain Cook Square has been identified as the location for the towns key leisure destination and is central to the Council's regeneration plans for the area which will benefit from funding from the Future High Streets Fund (£14.1 million) and Towns Deal (£21.9 million). The town is also home to a major employer in South Tees NHS Trust, with around 9,300 employees. The introduction of direct rail services to London and improvements at the station and the surrounding area will form the stimulus for independent businesses in the Historic Quarter and link centre to the Boho area. A significant amount of the population of Middlesbrough is located in Middlesbrough's built-up area with the remainder of the population spread between numerous local areas such as Acklam, Linthorpe, Coulby Newham, Grove Hill & Beechwood and Marton. A mayoral development corporation has also been established in the borough to help drive regeneration (more details in Section 3.1.9.).

Redcar and Cleveland (population 136,531) which contains the coastal town of Redcar and is historically associated with the steel and chemicals industry, has the third largest population. The town has been awarded £25 million from the government's Towns Fund to rejuvenate the area. It has a broad range of sectoral strengths including Raw Materials and Agriculture, Chemical & Process, Clean Energy, Low Carbon & Hydrogen, Advanced Manufacturing, Logistics and Creative and Culture & Leisure. Redcar & Cleveland is home to the UK's largest integrated industrial complex with Wilton International one of the UK's most important locations for process manufacturing including global companies, Sabic, Sembcorp Utilities, Ensus, Alpek Polyester UK, Huntsman and Falck. Teesworks is one of the biggest industrial and coastal development sites (4,500 acres) in Britain and it presents a unique opportunity to develop the Tees Valley's strength in clean growth. With the combination of assets including large scale sites, deep access port facilities, global companies and innovation organisations including the Materials Processing Institute and the Centre for Process Innovation, the area can become the clean growth centre of the UK. The North East Process Industry Cluster also supports the chemical and process sector across the region. The mining and processing of minerals is growing with Boulby mine, one of the deepest in Europe, and the new £2.3 billion polyhalite mine under construction in North Yorkshire with processing to take place at Wilton. A large amount of the population of Redcar and Cleveland is located in the Redcar area with the remainder of the population spread between a number of local towns and villages such as rural Guisborough, Skelton and Brotton, more urban Eston, Grangetown and Ormesby and coastal Saltburn and Marske.

As a major settlement with a growing service industry, **Stockton-on-Tees (population 196,595)** is the largest of the Local Authority areas in employment, population, and business terms. The borough's economy is diverse, with sectoral strengths in Chemical & Process, Advanced Manufacturing, Clean Energy, Low Carbon & Hydrogen and Construction. Key companies include Fujifilm Diosynth Biotechnologies and Johnson Matthey; heavy industries include the expansion of the SUEZ UK energy from waste site and a growing digital sector includes fast expanding Visualsoft. Amazon are also establishing themselves in the borough with the building of a Fulfilment Centre at Wynyard, offering excellent links to the A19 and creating up to 1,500 jobs when complete. Stockton is also home to a major employer in North Tees NHS Trust, with around 5,500 employees. A range of office and industrial business accommodation is available, such as at Wynyard Business Park, Durham Lane Industrial Estate, Teesside Industrial Estate, Teesdale Business Park and Belasis Business Park, together with the industrial areas of North Tees and Seal Sands. In addition, there are incubation facilities at various locations across the borough. The borough is to benefit from £23.9 million from the Government's Towns Fund to boost regeneration in Thornaby as part of Stockton-on-Tees Borough Council's ongoing commitment to the development of its six town centres. A relatively large percentage of the population of Stockton-on-Tees is located in the wider Stockton central area, with the remainder of the population spread between several other town areas including Billingham, Thornaby, Yarm, Ingleby Barwick, Norton and in rural villages.

A wide range of local authority level data is also available through the new ONS subnational indicator explorer:

<https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/subnationalindicatorsexplorer/2022-01-06>

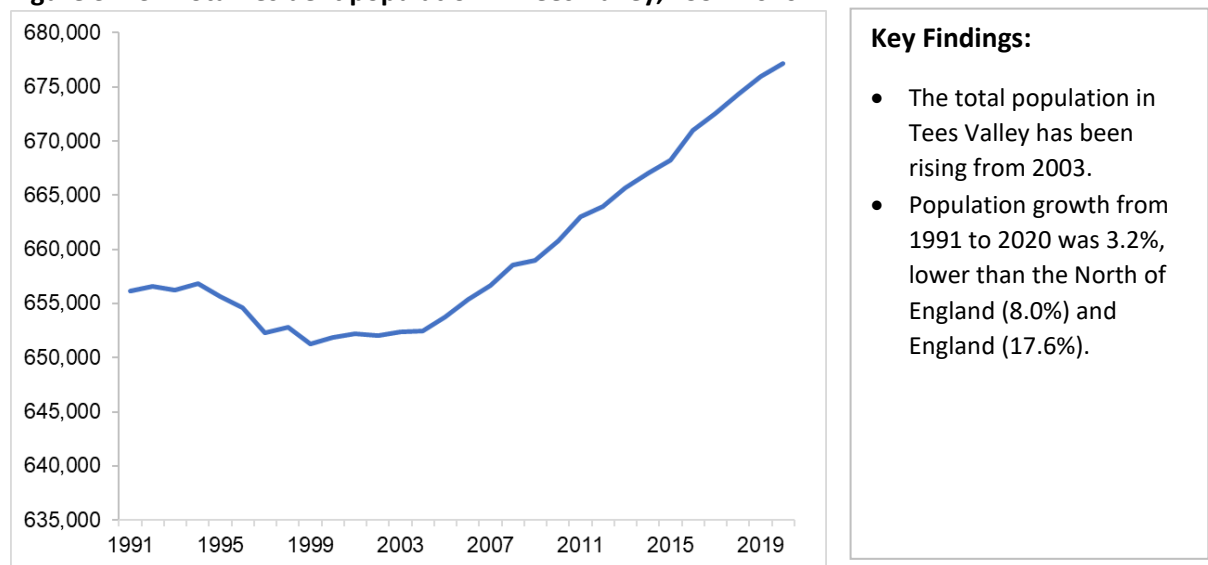
The tool promotes transparency and makes it easy for users to access and visualise subnational indicators in one place. The indicators are grouped in three categories ("boosting productivity, pay, jobs and living standards", "spreading opportunity and improving public services" and "restoring a sense of community, local pride and belonging") in line with the Government's Levelling Up White Paper at: [Levelling Up the United Kingdom: missions and metrics Technical Annex](#).

3.1.5. Tees Valley demography

Total population

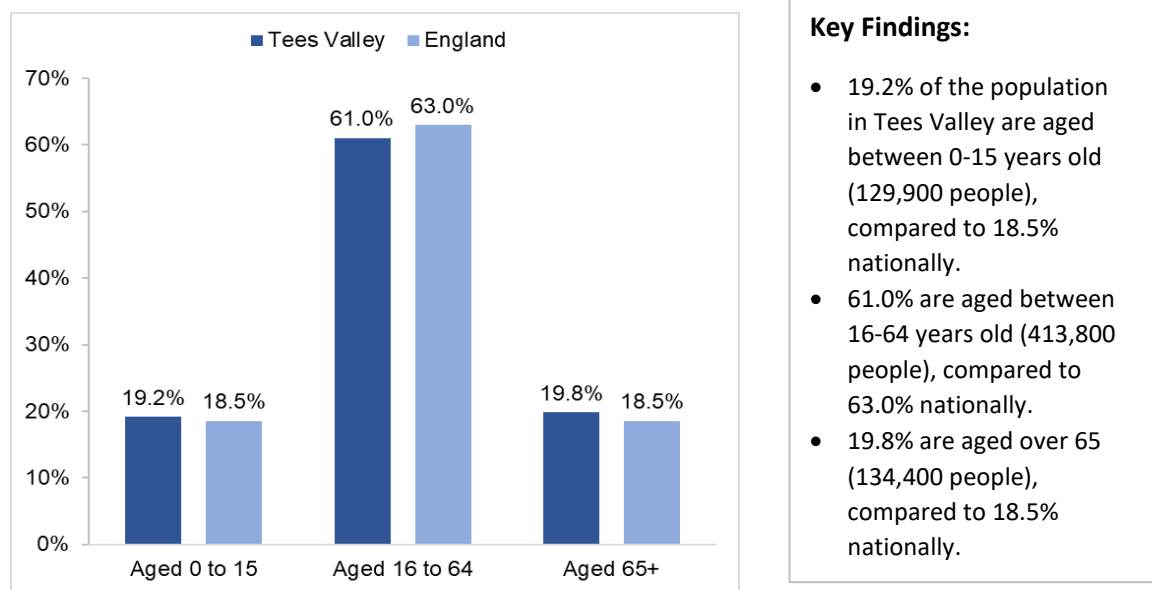
The mid-2021 population of Tees Valley is estimated to be 678,200 with around three million people living within an hour's drive of the area. The figure below illustrates the overall population change in Tees Valley over the last three decades. Note that 2012 to 2020 population estimates will be revised during 2023 so as to be consistent with the Census 2021, the mid-2021 estimates and future estimates going forwards. Presently this therefore means that there is a break in the time-series and that mid-2021 population estimates cannot be compared with previous year's estimates.

Figure 3.1.3. Total resident population in Tees Valley, 1991-2020



Source: ONS Mid-Year Population Estimates

Figure 3.1.4. Age split of current population, 2021



Source: ONS Mid-Year Population Estimates

Table 3.1.1. below compares the demographic profile of Tees Valley to England as a whole:

Table 3.1.1. Demographic profile, Tees Valley and England

| Description | Tees Valley | England | Tees Valley as % of England |
|--|-------------|------------|-----------------------------|
| Population (2021 Census) | 677,189 | 56,490,048 | 1.20% |
| Population projection (2030) | 681,467 | 59,181,798 | 1.15% |
| Population projection (2040) | 682,961 | 61,157,868 | 1.12% |
| Geographical coverage (hectares) | 79,400 | 13,027,800 | 0.61% |
| Population density (persons per hectare) | 8.5 | 4.3 | |
| Life expectancy - Male (2018-20) | 77.23 | 79.40 | |
| Life expectancy - Female (2018-20) | 81.01 | 83.14 | |
| International in-migration rate (2020) | 0.55% | 0.98% | |
| International out-migration rate (2020) | 0.15% | 0.57% | |
| Internal in-migration rate (2020) | 2.31% | n/a | |
| Internal out-migration rate (2020) | 2.42% | n/a | |
| Median age (2020) | 40.2 | 39.2 | |
| Population growth rate (2019-2020) | 0.2% | 0.5% | |

Source: ONS

3.1.6. Migration

Migration within the UK (excluding International Migration)

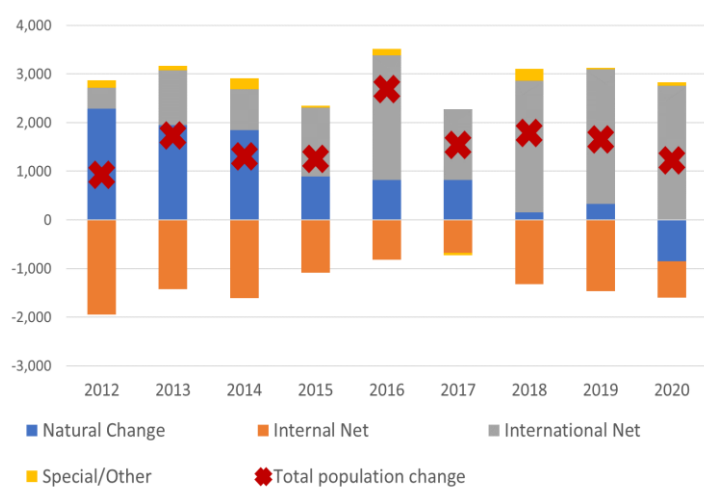
- Internal migration flows are primarily based on changes in record-level patient registrations with GP surgeries.
- In 2020, Tees Valley recorded a net decrease of 749 residents with 16,371 people moving out of the area compared to 15,622 moving in.
- Tees Valley had a net outward flow of people to County Durham (687) and Tyne & Wear (425)
- Tees Valley had a net inward flow of people from York & North Yorkshire (67) and other parts of the UK (296)
- Within Tees Valley, Middlesbrough recorded a net increase of 253 from other parts of Tees Valley with Redcar & Cleveland also seeing a net increase (46). Stockton lost a net 150 residents to other parts of Tees Valley, Darlington a net decrease of 114 and Hartlepool 35 fewer.
- Overall, Darlington saw the largest net increase in population of 689 with Redcar & Cleveland up 249. Middlesbrough saw the largest net decrease with 908 with Stockton losing 759. Hartlepool saw a slight fall with 20.

Table 3.1.2. Internal migration summary matrix, 2020

| Destination area | Origin area | | | | | | | | | | | Total |
|--------------------|-------------|---------------|--------------------|----------|------------|-------------|---------------|-------------------|---------------|-------------|--------|-------|
| | Hartlepool | Middlesbrough | Redcar & Cleveland | Stockton | Darlington | Tees Valley | County Durham | York and N. Yorks | Tyne and Wear | Other areas | | |
| Hartlepool | - | 183 | 87 | 398 | 50 | 718 | 545 | 95 | 312 | 970 | 2,640 | |
| Middlesbrough | 154 | - | 1,117 | 1,166 | 147 | 2,584 | 347 | 409 | 516 | 2,352 | 6,208 | |
| Redcar & Cleveland | 50 | 1,196 | - | 437 | 80 | 1,763 | 177 | 476 | 227 | 1,573 | 4,216 | |
| Stockton | 407 | 1,270 | 488 | - | 429 | 2,594 | 614 | 454 | 583 | 2,409 | 6,654 | |
| Darlington | 72 | 188 | 117 | 443 | - | 820 | 894 | 645 | 388 | 1,636 | 4,383 | |
| Tees Valley | 683 | 2,837 | 1,809 | 2,444 | 706 | 8,479 | 2,577 | 2,079 | 2,026 | 8,940 | 24,101 | |
| County Durham | 607 | 426 | 250 | 1,178 | 803 | 3,264 | - | - | - | - | - | |
| York and N. Yorks | 113 | 468 | 493 | 511 | 427 | 2,012 | - | - | - | - | - | |
| Tyne and Wear | 398 | 654 | 286 | 740 | 373 | 2,451 | - | - | - | - | - | |
| Other areas | 859 | 2,731 | 1,129 | 2,540 | 1,385 | 8,644 | - | - | - | - | - | |
| Total | 2,660 | 7,116 | 3,967 | 7,413 | 3,694 | 24,850 | - | - | - | - | - | |

Source: ONS

Figure 3.1.5. Trend in migration, 2012 to 2020, Tees Valley



Source: ONS

Key Findings:

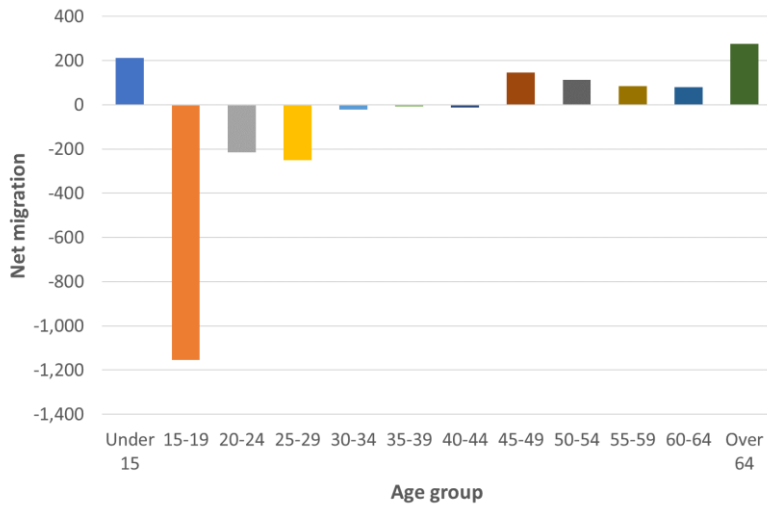
- Natural change i.e. births less deaths has been a declining contributor to population growth over recent years and with the sharp increase in deaths because of Coronavirus, became negative in 2020.
- Internal (within the UK) net migration acts to reduce the Tees Valley population.
- For the past six years, Tees Valley total population has only increased because of international net migration.

Migration by age

Net internal migration i.e. migration within the UK, is dominated by movements in younger age groups. This is predominantly driven by movements in the student population.

Student population movements vary greatly across the country with larger university cities seeing significant net inflows of 15-19 year olds. For example, Newcastle upon Tyne, Leeds and Manchester each saw net inflows of over 5,000 15-19 year olds in 2020 compared to just 100 in Middlesbrough.

Figure 3.1.6. Tees Valley internal net migration by five year age band, 2020



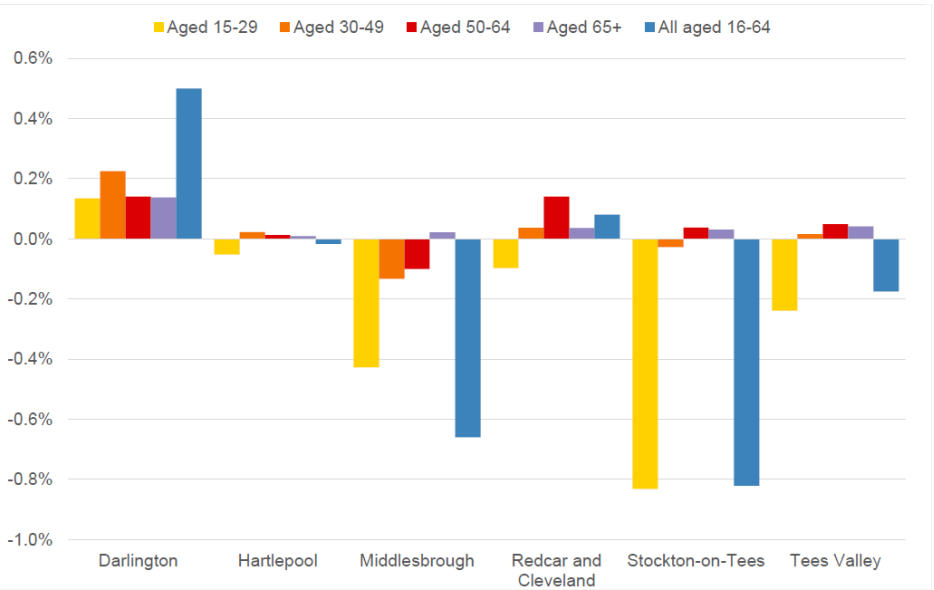
Key Findings:

- Internal net migration was negative for the broad 15 to 29 age group in 2020. It was broadly flat for 30 to 44 year olds and positive for over 44s.
- The largest migration flows were seen in the 15-19 age group, where a net 1,154 young people left the Tees Valley for other parts of the UK in 2020. This was comprised of 1,437 moving into Tees Valley and 2,591 moving out.

Source: ONS

Four of the five local authorities saw net outflows of younger people in the year to June 2020. The largest loss outflow was in Stockton-on Tees, which lost nearly 1% in the space of twelve months. Overall, Tees Valley lost 0.25% of residents aged 15-29 over the period. These losses are not made up by inflows of people in other ages: overall the combined authority saw nearly 0.2% of all residents leave. The exception is Darlington, which saw net inflows across every age bracket. These flows are shown in the chart below.

Figure 3.1.7. Migration by local authority area, 2020



Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

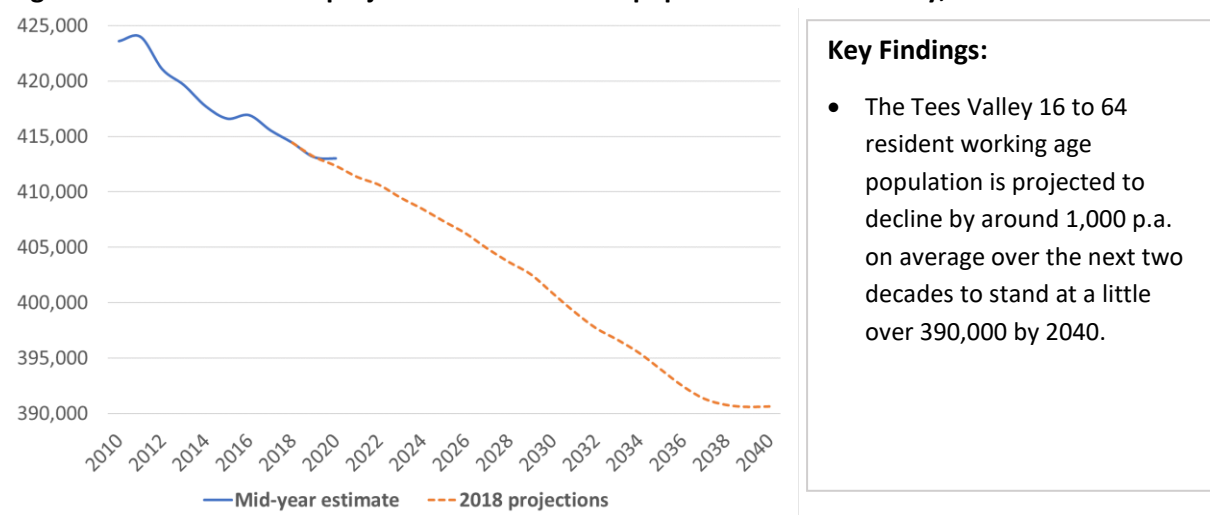
International Migration, 2020

- Without net international migration the Tees Valley population would be shrinking.
- Immigration into Tees Valley in 2020 was 3,741 with emigration 984, a net increase in migration of 2,757. Middlesbrough accounted for 1,134 of this net increase, Stockton 911, Hartlepool 319, Redcar & Cleveland 248 and Darlington 145.

3.1.7. Population projections

The Tees Valley has an ageing population. In 2020, Tees Valley residents aged 65 and over made up around one fifth (19.5%) of the total population. By 2040 this was projected to be over one quarter (25.7%). Similarly, the Tees Valley working age population is projected to continue to shrink from 61.0% in 2020 to 57.2%. In contrast the cohort aged 65 and over is expected to increase to 2040.

Figure 3.1.8. Historic and projected 16-64 resident population in Tees Valley, 2010-2040

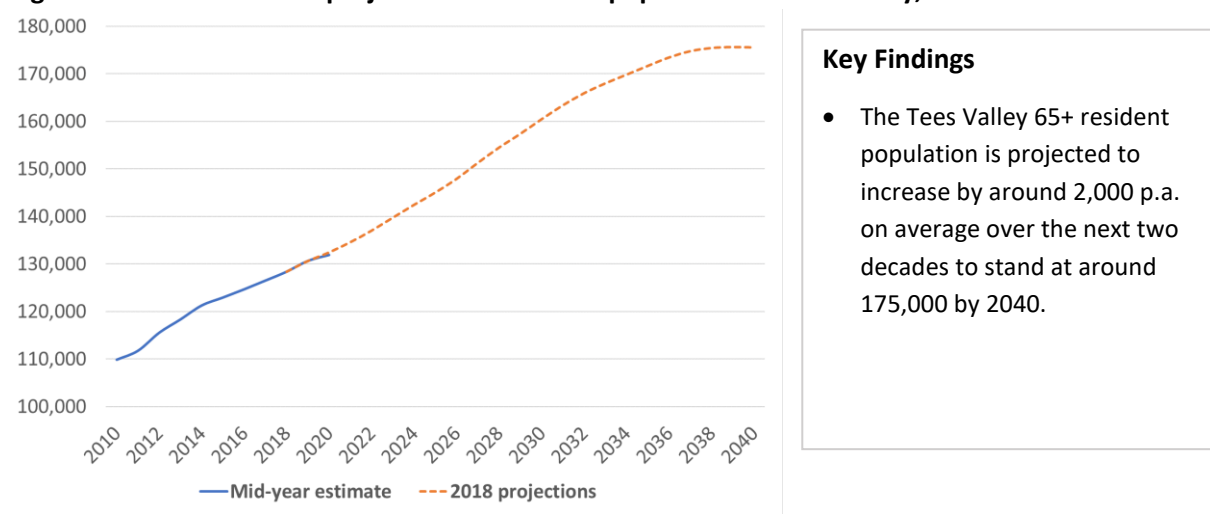


Key Findings:

- The Tees Valley 16 to 64 resident working age population is projected to decline by around 1,000 p.a. on average over the next two decades to stand at a little over 390,000 by 2040.

Source: ONS, 2018-based projections

Figure 3.1.9. Historic and projected 65+ resident population in Tees Valley, 2010-2040



Key Findings

- The Tees Valley 65+ resident population is projected to increase by around 2,000 p.a. on average over the next two decades to stand at around 175,000 by 2040.

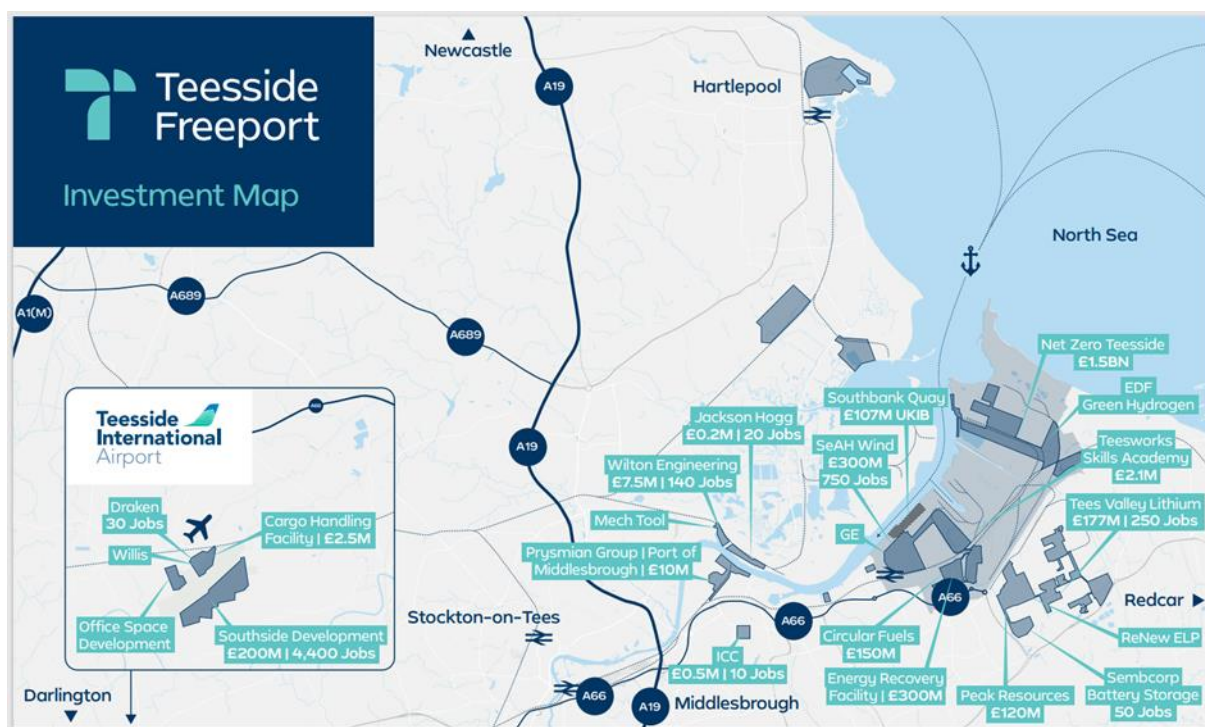
Source: ONS, 2018-based projections

3.1.8. Teesside Freeport

Freeports are secure customs zones located at ports where business can be carried out inside a country's land border, but where different customs rules apply. They can reduce administrative burdens and tariff controls, provide relief from duties and import taxes, and ease tax and planning regulations. While located geographically within a country, they essentially exist outside its borders for tax purposes.

Key points

- In March 2021, the Tees Valley was announced as one of the first places in the UK to receive freeport status and became fully operational in December 2022 following government sign off. The Teesside Freeport stretches across the region, including Teesworks, Teesport, the Port of Middlesbrough, the Port of Hartlepool, Redcar Bulk Terminal, LV Logistics, Wilton International and Teesside International Airport.
- As the UK's largest freeport, the site covers approximately 4,500 acres, the equivalent of 2,550 football pitches. On top of that, its transport links make it the country's best connected freeport and a gateway to global markets via air, sea, rail and road.
- Complementing this scale and connectivity is the east coast of England's deepest port, Redcar Bulk Terminal. Alongside this, the UK's fifth largest maritime complex, Teesport, and a new 1km quay at South Bank, help make the Tees Valley a major export region and the go-to place for renewables, offshore wind and hydrogen manufacturing. This is supported by its close proximity to the majority of UK wind farms. 80% are located within a 24-hour vessel time including the world's biggest offshore project, Dogger Bank, which lies just 80 miles away.
- A number of investments are already flowing into the freeport as shown in the map below.



Source: Teesside Freeport

3.1.9. Mayoral Development Corporations

Mayoral Development Corporations (MDCs) have been established in Hartlepool and Middlesbrough to support the accelerated regeneration of the towns. They will enable Tees Valley Combined Authority to influence Government policy and leverage private sector investment to deliver a step change in the local economy, creating jobs and supporting healthier, happier towns. The MDCs will drive regeneration by accelerating development opportunities, stimulating private sector investment, creating and growing strategic partnerships and prioritising and increasing the available resources to support delivery.

The MDC areas are presented in map form below:



HARTLEPOOL DEVELOPMENT CORPORATION



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3.1.10. Equality and Diversity

| Local Authority Baselines | | England % | D/ton % | H/pool % | M/bro % | R&C % | S/ton % |
|-------------------------------------|---|-----------|--------------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------------|
| Age | 0-15 | 18.6 | 18.3 | 19.1 | 20.8 | 17.7 | 19.6 |
| | 16-64 | 63.0 | 61.3 | 61.1 | 62.4 | 59.0 | 61.5 |
| | 65+ | 18.4 | 20.4 | 19.7 | 16.8 | 23.3 | 18.9 |
| Disability in household | No long-term disability | 68.0 | 66.2 | 60.3 | 62.8 | 61.7 | 64.9 |
| | Long-term disability | 32.0 | 33.8 | 39.7 | 37.2 | 38.3 | 35.1 |
| Gender (sex) | Male | 49.0 | 48.9 | 48.4 | 49.3 | 48.4 | 49.1 |
| | Female | 51.0 | 51.1 | 51.6 | 50.7 | 51.6 | 50.9 |
| Marriage / Civil partnership | Married or in civil partnership | 44.7 | 44.2 | 42.3 | 39.4 | 44.0 | 45.6 |
| | Single / other | 55.3 | 55.8 | 57.7 | 60.6 | 56.0 | 54.4 |
| Race / ethnicity | Asian / Asian British / Asian Welsh | 9.6 | 2.8 | 1.7 | 10.5 | 0.8 | 4.6 |
| | Black / Black British / Black Welsh / Caribbean or African | 4.2 | 0.7 | 0.5 | 2.7 | 0.2 | 1.1 |
| | Mixed / Multiple ethnic groups | 3.0 | 1.4 | 0.7 | 2.1 | 0.9 | 1.4 |
| | White | 81.0 | 94.4 | 96.5 | 82.4 | 97.7 | 92.0 |
| | Other ethnic group | 2.2 | 0.9 | 0.6 | 2.4 | 0.4 | 0.8 |
| Religion / belief | No religion | 36.7 | 39.7 | 40.1 | 36.4 | 40.2 | 39.1 |
| | Christian | 46.3 | 52.1 | 52.5 | 46.0 | 53.0 | 51.1 |
| | Buddhist | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 |
| | Hindu | 1.8 | 0.4 | 0.2 | 1.0 | 0.1 | 0.4 |
| | Jewish | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Muslim | 6.7 | 1.7 | 1.3 | 10.2 | 0.7 | 3.4 |
| | Sikh | 0.9 | 0.4 | 0.2 | 0.4 | 0.1 | 0.4 |
| | Other religion / Not answered | 0.6 / 6.0 | 0.4 / 4.9 | 0.3 / 5.1 | 0.3 / 5.3 | 0.4 / 5.3 | 0.3 / 5.0 |
| Sexual Orientation | Straight or heterosexual | 89.4 | 91.4 | 91.1 | 89.5 | 91.3 | 91.6 |
| | Gay or lesbian | 1.5 | 1.5 | 1.5 | 1.6 | 1.3 | 1.4 |
| | Bisexual | 1.3 | 1.1 | 1.0 | 1.2 | 0.9 | 0.9 |
| | All other orientations | 0.3 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 |
| | Not answered | 7.5 | 5.7 | 6.1 | 7.3 | 6.3 | 5.9 |
| Socio-economic status | IMD average rank score | N/A | 18284.63 | 22581.98 | 23729.10 | 20348.40 | 17541.72 |
| | IMD Proportion of LSOAs in most deprived decile rank (out of 317 districts) | N/A | 47 th most deprived | 10 th most deprived | Most deprived district in England | 29 th most deprived | 39 th most deprived |
| | Unemployment rate | 3.9% | 4.6% | 8.0% | 8.8% | 3.1% | 6.3% |
| | Median F/T wage | £645.8 | £558.2 | £593.7 | £555.0 | £568.4 | £609.4 |

Source: ONS, Census 2021, IMD 2019

Additionally, in terms of life expectancy, Tees Valley has some of the worst rates in the country. Middlesbrough has the second worst male life expectancy and fourth worst female life expectancy of all English LAs. Compared to the best life expectancy rates, boys born in Middlesbrough will on average live for 9.30 years less than boys born in Westminster and girls born in Middlesbrough 8.04 years less than girls born in Kensington and Chelsea.

Table 3.1.3. Life expectancy, 2018-20

| | Male (years) | Female (years) |
|--------------------|---------------------|-----------------------|
| Darlington | 78.13 | 81.24 |
| Hartlepool | 76.54 | 81.08 |
| Middlesbrough | 75.44 | 79.82 |
| Redcar & Cleveland | 77.45 | 81.51 |
| Stockton-on-Tees | 78.11 | 81.29 |
| Tees Valley | 77.23 | 81.01 |
| North East England | 77.62 | 81.51 |
| England | 79.40 | 83.14 |

Source: ONS

3.1.11. Left-behind areas

Local Trust commissioned Oxford Consultants for Social Inclusion (OCSI) to determine where 'left-behind' areas are across England. They identify 'left-behind' areas as those with:

- a) high levels of need, multiple deprivation and socio-economic challenges
- b) poor community and civic infrastructure, relative isolation and low levels of participation.

A Community Needs Index was developed to identify areas experiencing these second set of challenges by combining a series of indicators, conceptualised under three domains:

- Social Infrastructure: Measures of the presence of key community, civic, educational and cultural assets in and in close proximity to the area
- Connectedness: Measures of connectivity to key services, digital infrastructure, isolation and strength of the local jobs market
- Active and engaged community: Measures concerning the levels of third sector civic and community activity and barriers to participation and engagement

The 2019 Community Need Score was then combined with the 2019 Index of Multiple Deprivation (IMD), with wards that were ranked among the most deprived 10% on both the Community Needs Measure and the IMD identified as 'Left-behind' areas.

Results

The research shows a positive correlation between a community's place on the community-needs index and its position on the IMD. However, there are a large number of areas with high levels of community need which have low levels of deprivation, and vice versa. It may be concluded that the community-needs index is measuring and mapping factors that were distinctive from and additional to the IMD and may be an important consideration in delivering 'levelling-up'.

The Tees Valley recorded a particularly high proportion of wards classed as left-behind with 16, listed below by borough. The aggregate population of these left-behind wards is over 125,000 residents, around 18.5% of the total Tees Valley population compared to just 4.0% nationally.

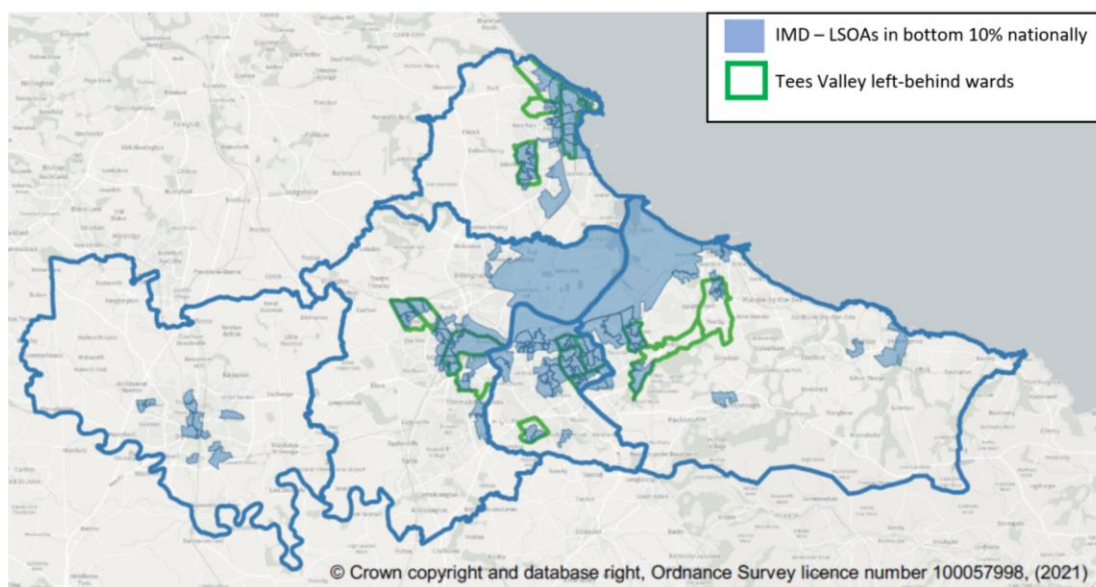
Table 3.1.4. Tees Valley left-behind areas, wards

| Hartlepool | Middlesbrough | Redcar & Cleveland | Stockton-on-Tees |
|--|--|------------------------------------|--|
| De Bruce Headland & Harbour Jesmond Manor House | Berwick Hills & Pallister Brambles & Thorntree Hemlington North Ormesby Park End & Beckfield | Eston Grangetown Kirkleatham | Hardwick & Salters Lane Mandale & Victoria Roseworth Stockton Town Centre |

Source: Local Trust & OCSI. *Left behind? Understanding communities on the edge, 2019.*

The contrast between deprivation coverage, as measured by the IMD, and left-behind areas is shown in the map below. Whilst there is broadly a good degree of overlap, Darlington stands out as having no left-behind wards.

Figure 3.1.11. Index of Multiple Deprivation (IMD) LSOAs in most deprived 10% and Left-behind wards



3.1.12. Cost of Living

A combination of high inflation and falling real incomes are significant challenges for the UK economy and are impacting negatively on the living standards of the population and on business profitability and viability.

The economic backdrop during 2022 was characterised by high oil, gas and commodity prices, ongoing high inflation and its impact on consumers’ cost of living.

With its relatively lower rates of household income and discretionary spending power (Tees Valley households typically spend a larger proportion of their income on essential higher inflation items such as energy, petrol and food), the average Tees Valley household experiences a higher rate of inflation than nationally.

The Centre for Progressive Policy (CPP) have produced a Cost of Living Vulnerability Index report which explores the challenges facing different places during the cost-of-living crisis. New analysis, published in September 2022, highlights which places in England are most vulnerable to the impact of rising costs.

The CPP identifies vulnerability to the cost of living crisis as characterised by a combination of both:

- i) **Poverty-based vulnerability:** this refers to existing levels of poverty in a place, focusing specifically on indicators that correspond with pressures arising from the cost of living crisis. The absence of sufficient government support to tackle rising prices would hit those who are already living in poverty hardest.
- ii) **Work-based vulnerability:** this measurement of vulnerability is based upon rates of participation in the formal labour market alongside the prevalence of low-paying jobs within a place. Rising prices may mean that those not active in the labour market, or in low paying jobs, risk being dragged into a state of poverty.

Key points

- Middlesbrough is the most vulnerable local authority in the country.
- Redcar and Cleveland (12th most vulnerable) and Hartlepool (23rd) also rank in the most vulnerable decile.
- Darlington is in the most vulnerable quintile of local authorities whilst Stockton is the least vulnerable local authority in Tees Valley but still in the most vulnerable quartile nationally.

Table 3.1.5. Summary indicator table, Tees Valley local authorities

| | M/bro | R&C | H/pool | D/ton | S/ton |
|--|----------|-----------|-----------|-----------|-----------|
| Child poverty (% of children) | 41.2 | 39.3 | 39.0 | 37.7 | 37.3 |
| Fuel poverty (% of adults) | 16.8 | 14.3 | 14.6 | 13.4 | 12.9 |
| Food insecurity (% of adults) | 13.7 | 14.1 | 16.4 | 11.7 | 11.3 |
| Claimant count (% of working age) | 8.3 | 5.5 | 6.8 | 5.7 | 5.4 |
| Economic inactivity (% of working age) | 30.1 | 29.7 | 26.4 | 18.9 | 24.9 |
| Low pay (% of jobs) | 24.0 | 22.8 | 14.9 | 20.7 | 13.3 |
| | | | | | |
| Poverty-based vulnerability rank | 11 | 28 | 22 | 59 | 71 |
| Work-based vulnerability rank | 1 | 8 | 38 | 68 | 90 |
| | | | | | |
| Overall ranking | 1 | 12 | 23 | 54 | 69 |

Source: CPP, *Hard Up, How rising costs are hitting different places, and how they can respond*, September 2022

3.1.13. Fuel Poverty

BEIS publish statistics on levels of fuel poverty in England at various geographical levels, with the most recent data covering 2020. A household is defined as 'fuel poor' if its required fuel costs are above the national median, and spending on fuel would leave it below the official poverty line.

The North East ranked equal 3rd among 9 English regions for fuel poverty in 2020: 14.4% of households were fuel poor. Tees Valley had a total of 42,891 households in fuel poverty, marginally down on 2019's 43,034. The proportion of Tees Valley households classed as fuel poor, at 14.3%, was a little below the North East average, though above the English rate of 13.2%. The Tees Valley accounted for nearly one quarter (24.8%) of the number of fuel poor households in the North East,

and 1.4% of the English total. Of the five local authorities, Stockton had the lowest proportion of fuel poor households at 12.9%, while Middlesbrough had the highest proportion of fuel poor households at 16.8%.

Table 3.1.6. Fuel poverty by Tees Valley local authorities (2020)

| Tees Valley LA | Number of households | Number of households in fuel poverty | Proportion of households fuel poor (%) |
|----------------------|----------------------|--------------------------------------|--|
| Middlesbrough | 60,599 | 10,161 | 16.8 |
| Hartlepool | 42,831 | 6,257 | 14.6 |
| Redcar and Cleveland | 63,181 | 9,031 | 14.3 |
| Darlington | 49,434 | 6,626 | 13.4 |
| Stockton-on-Tees | 83,906 | 10,816 | 12.9 |
| Tees Valley | 299,951 | 42,891 | 14.3 |

Source: BEIS Sub-regional Fuel Poverty England 2022 (2020 Data)

BEIS's figures also come with analysis at LSOA level; the table below lists the top 10 most fuel poor LSOAs in the Tees Valley in 2020 and makes comparison with 2019. Overall, whilst the proportion of Tees Valley households in fuel poverty fell slightly from 14.4% in 2019 to 14.3% in 2020, the rate amongst existing fuel poverty local areas increased sharply, particularly so in parts of Middlesbrough as shown in the table below. Whilst impacting the whole of the area, the cost of living challenges that have been of increasing concern through 2022 will be felt most in local areas such as those identified below.

Table 3.1.7. Top 10 Tees Valley LSOAs in 2019 and 2020 by % of households in fuel poverty and annual change

| LSOA Name | House of Commons Library MSOA Name | Proportion of households fuel poor (%) | | Annual change 2019 to 2020 (%) |
|---------------------------|------------------------------------|--|------|--------------------------------|
| | | 2019 | 2020 | |
| Middlesbrough 001D | Middlesbrough Central | 29.4 | 36.8 | 7.4 |
| Middlesbrough 003D | Ayresome | 29.4 | 34.2 | 4.8 |
| Middlesbrough 001A | Middlesbrough Central | 27.7 | 33.9 | 6.2 |
| Middlesbrough 001E | Middlesbrough Central | 28.9 | 32.4 | 3.5 |
| Middlesbrough 003A | Ayresome | 27.7 | 30.6 | 2.9 |
| Stockton-on-Tees 012C | Eastbourne & Newham Grange | 29.1 | 30.5 | 1.4 |
| Stockton-on-Tees 017A | Thornaby North | 27.9 | 30.2 | 2.3 |
| Redcar and Cleveland 009B | Grangetown | 30.0 | 30.0 | 0.0 |
| Middlesbrough 011B | Beechwood & James Cook | 29.0 | 29.5 | 0.5 |
| Middlesbrough 008A | Newport & Maze Park | 27.7 | 28.1 | 0.4 |

Source: BEIS Sub-regional Fuel Poverty England 2022 (2020 Data); House of Commons Library MSOA Names v1.15.

3.1.14. Personal well-being and health

ONS Personal well-being in the UK: April 2021 to March 2022

These are estimates of life satisfaction, feeling that the things done in life are worthwhile, happiness and anxiety in the UK and available down to local authority level. Key headlines include:

- Life satisfaction rates in Tees Valley fell from an average score of 7.60 in Apr'19-Mar'20 to 7.33 in Apr'20-Mar'21. This recovered to 7.42 in Apr'21-Mar'22.
- Feeling that the things done in life are worthwhile in Tees Valley fell from an average score of 7.83 in Apr'19-Mar'20 to 7.67 in Apr'20-Mar'21. However, this only improved marginally in Apr'21-Mar'22 to stand at 7.68.
- Happiness in Tees Valley fell from an average score of 7.39 in Apr'19-Mar'20 to 7.27 in Apr'20-Mar'21. This recovered to 7.40 in Apr'21-Mar'22.
- Anxiety rates in Tees Valley increased from 2.98 in Apr'19-Mar'20 to 3.31 in Apr'20-Mar'21. This recovered to 3.10 in Apr'21-Mar'22.

All four well-being indicators demonstrated improvement in the year to March 2022 following significant deteriorations during the pandemic. However, well-being indicators remain in a worse position than pre-pandemic except happiness which is back to what it was in April 2019 to March 2020. In comparison to the UK average, Tees Valley has slightly lower rates of well-being except for anxiety where residents are marginally less anxious than nationally.

Average scores out of ten for each indicator are detailed below.

Table 3.1.8. Well-being indicators, year to March 2021 and year to March 2022

| | Life satisfaction | | Worthwhile | | Happiness | | Anxiety | |
|---------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2020/21 | 2021/22 | 2020/21 | 2021/22 | 2020/21 | 2021/22 | 2020/21 | 2021/22 |
| Darlington | 7.25 | 7.37 | 7.55 | 7.80 | 7.12 | 7.35 | 3.63 | 3.29 |
| Hartlepool | 7.33 | 7.42 | 7.68 | 7.75 | 7.21 | 7.54 | 3.39 | 3.30 |
| Middlesbrough | 7.21 | 7.50 | 7.62 | 7.65 | 7.26 | 7.41 | 3.11 | 3.02 |
| Redcar & Cleveland | 7.44 | 7.50 | 7.76 | 7.74 | 7.49 | 7.46 | 3.15 | 2.73 |
| Stockton-on-Tees | 7.40 | 7.30 | 7.74 | 7.45 | 7.25 | 7.23 | 3.26 | 3.18 |
| Tees Valley* | 7.33 | 7.42 | 7.67 | 7.68 | 7.27 | 7.40 | 3.31 | 3.10 |
| North East | 7.36 | 7.50 | 7.68 | 7.71 | 7.27 | 7.37 | 3.31 | 3.08 |
| UK | 7.39 | 7.54 | 7.71 | 7.77 | 7.32 | 7.45 | 3.31 | 3.12 |

Source: ONS, *Headline estimates of personal well-being from the Annual Population Survey (APS): by counties, local and unitary authorities, year ending March 2020 to year ending March 2021*. *Note that Tees Valley rates are simple averages of district rates.

Local level key findings

- **Anxiety.** Redcar & Cleveland and to a lesser degree Middlesbrough recorded relatively low levels of anxiety (and therefore higher well-being) compared to other areas. Hartlepool and Darlington showed the highest levels of anxiety.
- **Life satisfaction.** Middlesbrough and Redcar & Cleveland showed the highest rates of life satisfaction, only slightly below the national rate. Stockton recorded the lowest rate in 2021/22.
- **Worthwhile.** Darlington showed the highest rates for considering life to be worthwhile, a little above the national rate. Stockton recorded the lowest rate.
- **Happiness.** Hartlepool saw the highest rate for happiness, somewhat above other Tees Valley LAs, regional and national rates. As for both the life satisfaction and worthwhile metrics, Stockton again recorded the lowest rate of the five Tees Valley local authority areas.

Health

Long-term sickness is a major concern across Tees Valley and its impact on labour supply is acting as a significant constrain on the area’s productive capacity. Long-term sickness is on an upward trend and presently running at historical highs with seven of the past eight quarters (up to June 2022) seeing increasing numbers of Tees Valley residents who are economically inactive because of a long-term sickness. By July’21-June’22 there were 36,400 such individuals in Tees Valley, 33.8% of the total economically inactive population – the second highest rate of any LEP area. This compares to just 24.4% in England as a whole. This means Tees Valley has over 10,000 additional residents long-term sick than nationally.

Economic inactivity due to temporary sickness is also higher in Tees Valley than nationally (although not to such a great extent as long-term sickness) and accounted for an additional 3,200 economically inactive Tees Valley residents in July’21-June’22.

The **ONS Health Index for England** uses a broad definition of health, including health outcomes, health-related behaviours and personal circumstances, and wider determinants of health that relate to the places people live, such as air pollution. The Health Index provides a single value for health showing how health changes over time and can be broken down to focus on specific topics to show what is driving these changes.

Of particular significance in the Tees Valley is health’s strong correlation with economic inactivity and unemployment. Unhealthy people have more difficulties engaging successfully with the labour market and unemployment itself tends to lead to unhealthy people, both physically and mentally. Tees Valley has some of the highest levels of economic inactivity, unemployment and health issues anywhere in the country.

The overall health indices for all five Tees Valley local authorities are below the national average and have generally deteriorated since 2015. The latest estimates are for 2020 and include the impact of Coronavirus. Nationally, the overall index fell by 0.4 points in 2020 compared to 2019 but was still higher in 2020 than in 2015. In contrast, an average of Tees Valley LA scores show that local rates have been on a downward trend since 2015.

Finally, there is a clear distinction to be made between the health of the people e.g. mortality, physical and mental health and the lives they lead e.g. unemployment, working conditions and education, where Tees Valley scores relatively poorly, as compared with the health of the Tees Valley itself as a place e.g. access to green space, housing and services where it scores relatively highly. These results are summarised in the table below.

Table 3.1.9. Tees Valley Health Indices

| | Healthy People | | Healthy Lives | | Healthy Places | | Overall Health Index | |
|---------------------|----------------|-------------|---------------|-------------|----------------|--------------|----------------------|-------------|
| | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 |
| Darlington | 92.1 | 83.7 | 100.0 | 98.0 | 99.3 | 104.2 | 96.6 | 94.3 |
| Hartlepool | 83.5 | 82.3 | 84.1 | 84.3 | 93.9 | 98.8 | 84.6 | 86.2 |
| Middlesbrough | 78.2 | 78.6 | 81.4 | 74.6 | 85.9 | 93.2 | 78.3 | 78.6 |
| Redcar & Cleveland | 89.7 | 84.8 | 95.3 | 89.7 | 101.5 | 104.0 | 94.6 | 91.4 |
| Stockton-on-Tees | 90.9 | 86.2 | 100.1 | 100.6 | 96.1 | 102.0 | 94.8 | 95.5 |
| Tees Valley* | 86.9 | 83.1 | 92.2 | 89.4 | 95.3 | 100.4 | 89.8 | 89.2 |
| North East | 86.3 | 83.2 | 97.3 | 95.8 | 98.4 | 102.7 | 92.9 | 92.7 |
| England | 99.6 | 95.4 | 102.0 | 101.4 | 99.7 | 103.4 | 100.5 | 100.1 |

Source: ONS *The Health Index 2020 – measuring the nation’s health, November 2022*. Notes: *Tees Valley rates are simple averages of local authority rates.

Local level key findings

- For Tees Valley as a whole the overall health index fell by 0.6 in 2020.
- The Healthy People index was generally lower in 2020 than in 2019. Middlesbrough was an exception to this but from an already very low level. Falls were driven by lower rates of mental health and well-being and higher mortality rates.
- The Healthy Lives index fell a little on average. However, Hartlepool and Stockton saw small rises. Obesity, particularly amongst children, increased in 2020 as did drug misuse.
- The Healthy Places index increased across all geographies in 2020. Lower crime rates, reduced air pollution and fewer road accidents during Coronavirus lockdowns were a key contributor to this.

3.1.15. Area Profile SWOT analysis

| Strengths | Weaknesses |
|---|--|
| <p>Tees Valley operates as a compact, well-connected functional economic area with significant economic assets.</p> <p>Mayoral Development Corporations (MDCs) in Hartlepool and Middlesbrough, Tees Valley’s most deprived districts, will drive regeneration by accelerating development opportunities, stimulating private sector investment, creating and growing strategic partnerships and prioritising and increasing the available resources to support delivery.</p> <p>There are a wide range of cost-effective sites and premises across Tees Valley, with the Freeport offering a range of financial incentives to companies choosing to locate in the region, as well as simplified planning and super-fast broadband.</p> <p>Tees Valley is an attractive place to live, with easy access to coast, countryside, hills, affordable housing, and widely available health services.</p> <p>The more rural local authority areas, Redcar & Cleveland and Darlington, both score above the national average in terms of the Healthy Places Index.</p> | <p>Overall health levels in Tees Valley remain lower than those observed nationwide, particularly so in deprived areas. The number of people with a long-term illness is above national average, affecting the working age population. Relatively poor levels of life expectancy, mental health and well-being exist across Tees Valley.</p> <p>Fuel poverty is extensive with over 3 in 10 households in fuel poverty in eight Tees Valley local areas in 2020. 2022’s cost of living crisis is affecting areas already struggling the most.</p> <p>In terms of protected characteristics, Tees Valley’s population is comprised of relatively high numbers of older people and relatively low numbers of the BAME community. Middlesbrough however has a younger population profile and a similar ethnic balance as nationally.</p> <p>The Tees Valley has relatively high numbers of wards classed as ‘left-behind’ which in addition to high levels of deprivation have high levels of community need such as poor community and civic infrastructure, relative isolation, and low levels of participation – with demonstrable need to ‘level-up’.</p> |
| Opportunities | Threats |
| <p>Tees Valley contains Teesside Freeport – the first and biggest operational Freeport in the country. It contains Teesworks – the UK’s largest industrial development zone.</p> <p>Tees Valley’s sector strengths and natural assets across the five local authority areas present opportunities for the area to become a global leader in clean energy including Carbon capture, Hydrogen and Offshore wind.</p> <p>Retaining and attracting young people – making Tees Valley an area young people want to stay in and move to with career opportunities across the economy.</p> | <p>Based on historic trends, the working age population in Tees Valley is projected to decline by over 20,000 in the next two decades. However, these ONS projections do not consider local policy or development aims, such as schemes aimed at reversing the loss of young talent to other parts of the country, that have not yet had an impact on observed trends.</p> <p>The Tees Valley has an ageing population and declining working age population / labour force. There is a risk of skill shortages when experienced and highly skilled staff leave the workforce with an added implication for health services.</p> |

Section 3.2: Natural and Built Environment

3.2.1. Introduction

This section details Tees Valley's environmental assets, related ecosystem services and also discusses flood risk. Tees Valley's cost of living through house price and earnings ratios alongside the area's business floorspace and vacancy rates offer are also examined.

Tees Valley has a strong and distinctive sense of place. It reflects our industrial heritage, our geographical location and natural assets. Place is now recognised as central to the creation of a diversified and inclusive economy, with vibrant town centres which attract and retain young people and families, housing which provides affordable and aspirational choices, and a commercial property market which provides the industrial and office development to support growth sectors and new investment.

Housing development that meets local needs, aligned to wider economic ambitions will ensure Tees Valley is a place where people want to live, work and play. The region continues to have surplus brownfield sites that left unchecked will not be developed by the market. The development of brownfield and under-utilised public land can provide the space for business and housing growth, ensuring the whole of Tees Valley is an attractive and vibrant place.

The role of natural assets in delivering a sustainable economy and supporting the achievement of net zero ambitions is increasingly recognised. The natural environment of the Tees Valley is a huge potential resource in terms of carbon sequestration, supporting health and wellbeing, securing biodiversity net gains and contributing to sustainable economic growth.

Successful and sustainable economies are underpinned by both the built environment and the area's underlying social and environmental characteristics. The health and well-being of the people goes hand in hand with the natural environment and the success of the economy. The excellent natural assets and green infrastructure offer in such a compact geography provides a significant opportunity to position Tees Valley as an attractive location that delivers a high quality of life. This is particularly important following the pandemic and the trend towards more outdoor activities. These natural assets complement the area's varied creative place offer.

3.2.2. Key messages

- Great value housing offer across Tees Valley with rural and semi-rural settings having higher average house prices than town centres.
- Tees Valley rents are value for money and affordable for both residents and workers.
- A wide range of easily accessible and affordable commercial floorspace.
- Industrial, office and retail vacancy rates vary widely across Tees Valley.
- Health benefits from removal of air pollutants worth £8 million to the Tees Valley economy every year.
- Attractions such as parks, beaches and paths in Tees Valley have an asset value of £3 billion and generate recreational visits worth £100 million of social benefits per annum.

- Significant investment in tidal flood prevention planned in the Tees Estuary area with a £120 million need identified by the Environment Agency over the next 30 years including £30 million earmarked by 2027.

3.2.3. Housing

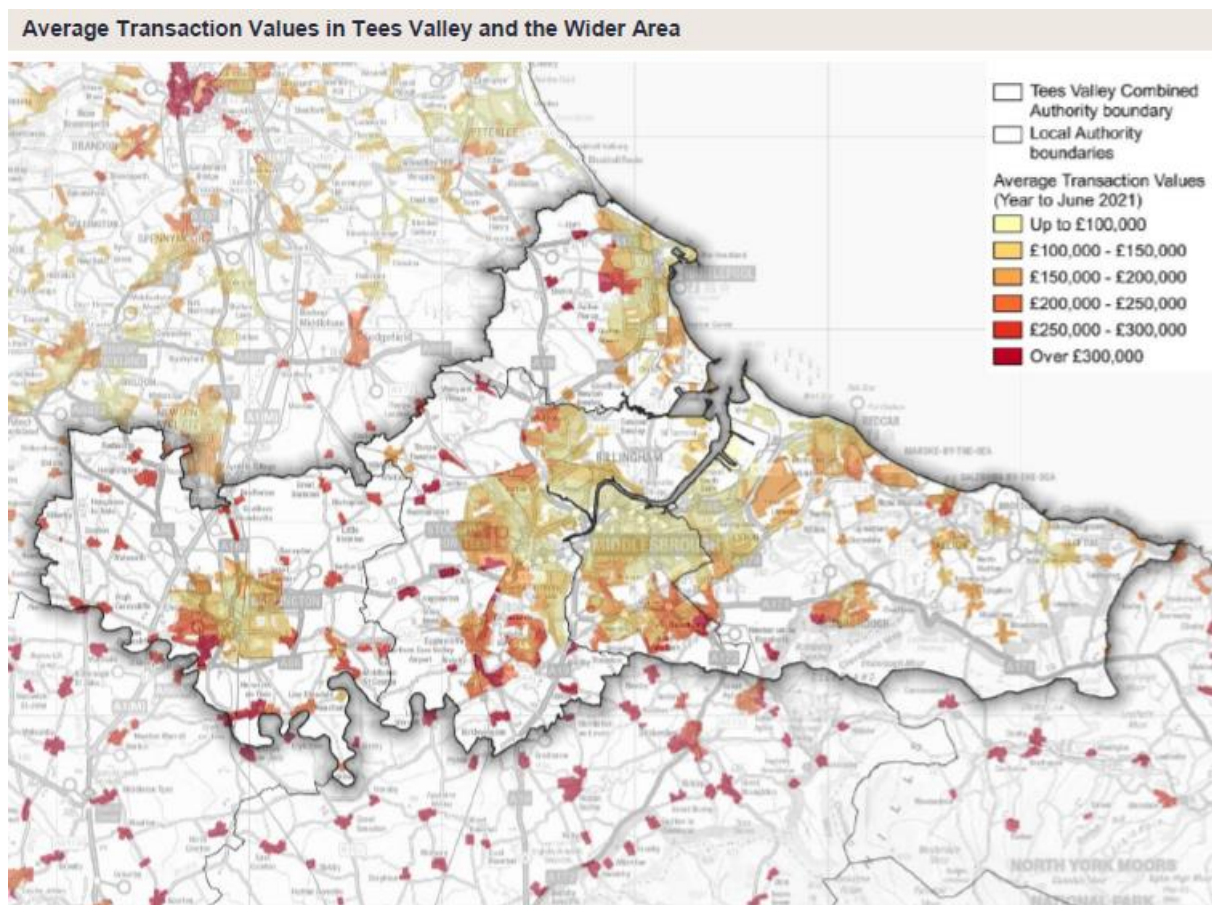
Transaction values

Overall, housing stock is much cheaper than in the North East and the rest of the country. Key reasons include lower incomes, lack of high-value employment growth, and less demand for housing.

Lower value housing stock in Tees Valley can be found in central urban locations. Middlesbrough and Stockton-on-Tees, the urban core of the Tees Valley, is home to the lowest value stock with large areas worth less than £100,000.

The trend can also be seen in areas with higher value stock such as Darlington and Hartlepool, where urban extensions and suburbs command higher prices than their town centre counterparts.

Looking at the wider map below, there are pockets of higher house prices across North Yorkshire bordering Tees Valley. These areas offer picturesque second-hand stock that is still well within commutable distance by car of the wider Tees Valley economy.



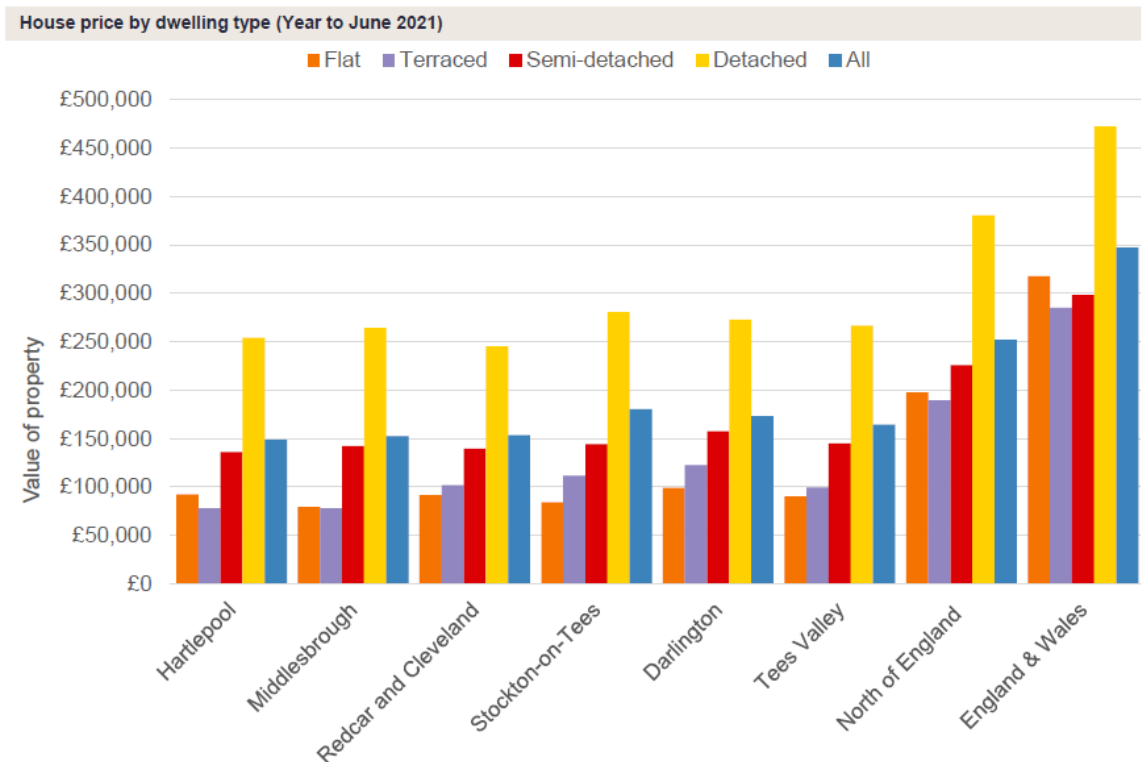
Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

House prices are similar across Tees Valley and lower than the North

Comparing like-for-like across the Tees Valley area, there is relatively little variation in average house prices across all sales. This is true across different property types of homes.

Overall, prices across Tees Valley are 35% lower than prices across the wider North of England. Detached homes are the closest being a 30% discount to the North of England.

Small homes such as terraces and flats are further away in terms of value being a 48% and 54% discount, respectively. This likely reflects a lack of demand for homes in more urban locations such as town centres where smaller homes are found.

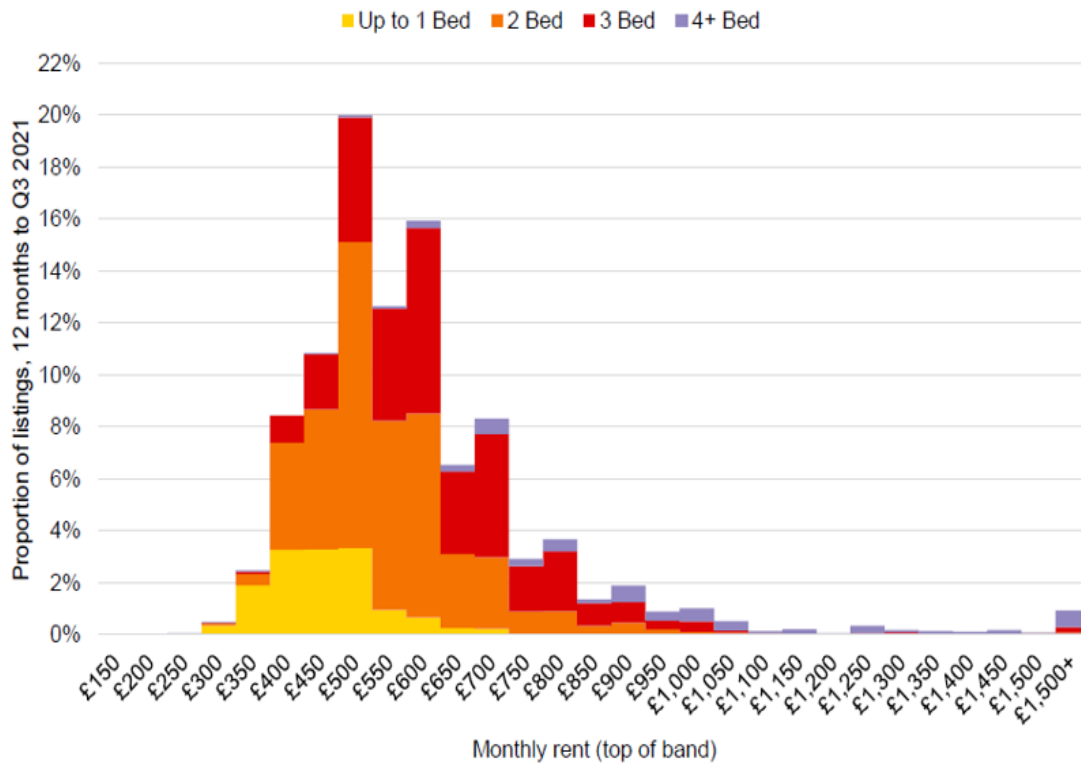


Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

Housing – rental market

In the year to Q3 2021, across the Tees Valley there were 7,472 properties listed for private rent according to Rightmove. A majority of those were two (45%) and three (35%) bed properties. The depth of the market of Rightmove listings across Tees Valley is shown in the graph below. The median and upper quartile rents in the 12 months to Q3 2021 are shown in the table below.

Share of Rightmove Listings by Number of Bedrooms and Monthly Rent



Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

Rightmove median, lower and upper quartile rents in Tees Valley, 12 months to Q3 2021

| Beds | LQ monthly rent | Median monthly rent | UQ monthly rent | No. of listings | % of listings |
|-------|-----------------|---------------------|-----------------|-----------------|---------------|
| 1 bed | £373 | £427 | £480 | 1,023 | 14% |
| 2 bed | £456 | £506 | £582 | 3,396 | 45% |
| 3 bed | £506 | £584 | £683 | 2,584 | 35% |
| 4 bed | £690 | £870 | £1,017 | 355 | 5% |
| Total | £457 | £531 | £632 | 7,472 | 100% |

Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

Rental affordability

In terms of affordability, Tees Valley rents are found to be affordable for both residents and workers with a lack of demand of private rented housing most likely due to the poor overall quality of housing stock. The tables below reflect numbers in the year to Q3 2021.

| Rents in Tees Valley and income needed | | | |
|--|-------------------|-------------|--|
| Beds | Median rent (pcm) | Yearly rent | Income needed (spending 30% of income on rent) |
| 1 Bed | £427 | £5,124 | £17,080 |
| 2 Bed | £506 | £6,075 | £20,250 |
| 3 Bed | £584 | £7,006 | £23,352 |
| 4 Bed | £870 | £10,444 | £34,814 |

| Affordability of rents to residents in Tees Valley | | | | | |
|--|------------------------|---|-------|-------|-------|
| Household | Median resident income | Proportion of listings affordable, 12 months to Q3 2021 | | | |
| | | 1 bed | 2 bed | 3 bed | 4 bed |
| 1 resident | £23,277 | 94% | 75% | 49% | 8% |
| 1.5 residents | £34,915 | 100% | 99% | 95% | 46% |
| 2 residents | £46,554 | 100% | 100% | 99% | 76% |
| 2.5 residents | £58,192 | 100% | 100% | 99% | 88% |

| Affordability of rents to workers in Tees Valley | | | | | |
|--|----------------------|---|-------|-------|-------|
| Household | Median worker income | Proportion of listings affordable, 12 months to Q3 2021 | | | |
| | | 1 bed | 2 bed | 3 bed | 4 bed |
| 1 resident | £28,288 | 99% | 94% | 80% | 26% |
| 1.5 residents | £42,431 | 100% | 100% | 99% | 73% |
| 2 residents | £56,575 | 100% | 100% | 99% | 87% |
| 2.5 residents | £70,719 | 100% | 100% | 100% | 93% |

Median rents across Tees Valley for three beds are £584pcm. Someone with an income of £23,352 could afford this spending 30% of their income on rent. This is around the median income of a full time resident and far below the median worker income in Tees Valley.

As the tables on the left show a median resident could afford 94% of the 1 beds listed on Rightmove in the 12 months to Q3 2021. They could afford 75% of the two beds and nearly half of the three beds. 1.5 residents could afford 95% of the three beds. Incomes of people who work in Tees Valley are even higher, therefore they could afford a higher proportion of each property size.

This backs up both the 'Tees Valley Local Housing Markets' and 'Tees Valley Strategic Economic Plan' documents by revealing the lack of demand of private rented housing. This is likely due to the poor quality of housing stock.

It is also likely that good quality private rented housing could realise higher values than is currently being achieved by the market.

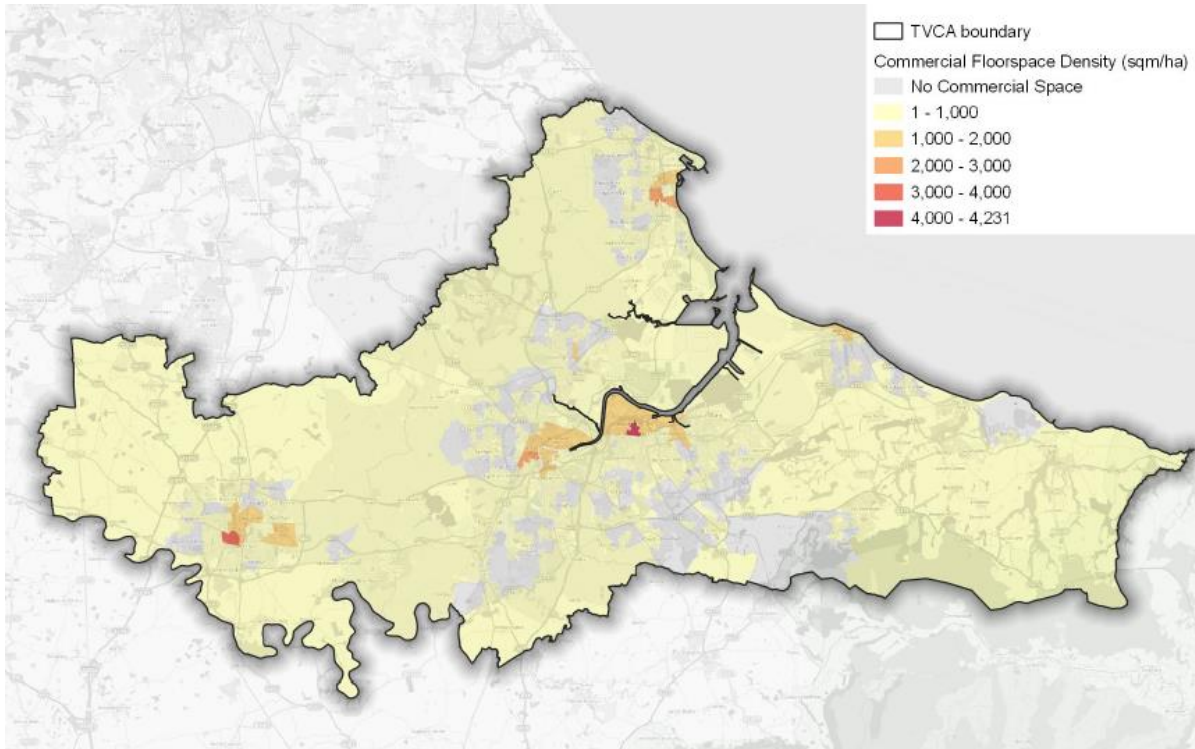
Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

3.2.4. Business employment floorspace

Tees Valley has an attractive and competitive offer for doing business. This includes the availability and cost of floorspace.

In 2021, Tees Valley office rents are some of the lowest in the country ranging from £9 per sq.ft in Hartlepool up to Stockton's £11 per sq.ft. Similarly, industrial rents range from just £3.90 per sq.ft in Redcar & Cleveland to £5.40 per sq.ft in both Middlesbrough and Stockton.

The map below shows the quantum of floorspace (sq.m per hectare) at the lower super output area (LSOA) level. Commercial floorspace is located primarily in town centres with Darlington and Middlesbrough seeing the highest concentrations.



Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

Industrial rents

More recent data for the second half of 2022 from Colliers suggest that for Teesside as a whole, prime rents (new accommodation) were £6.25 per sq.ft for Big Sheds and £6.50 per sq.ft for Small Sheds. Land values for both size sheds was £350,000 per acre. These are some of the most price competitive rates in the country.

Source: [Colliers | UK Industrial Rents Map](#)

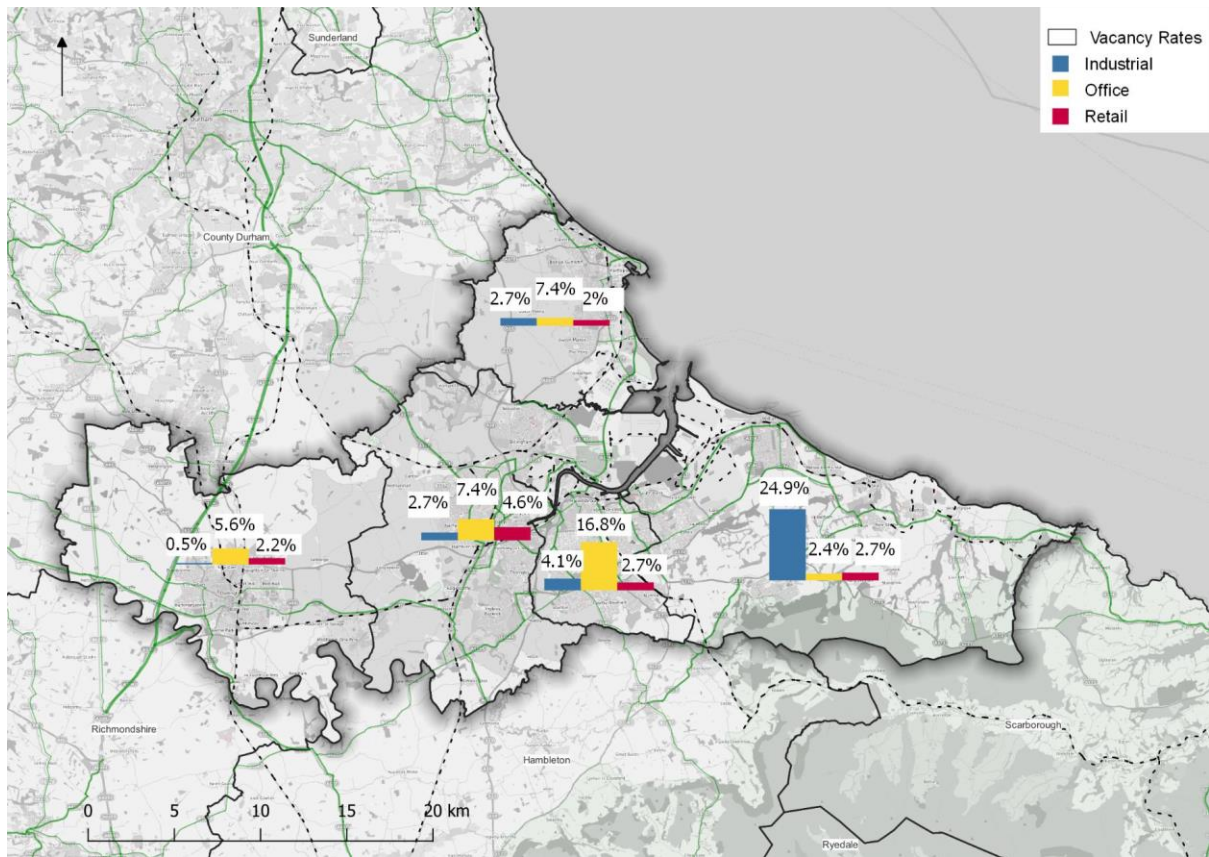
3.2.5. Industrial, office and retail vacancy rates

All five local authorities have similar retail space vacancy rates, ranging from 2.0% in Hartlepool to 4.6% in Stockton. This yields an average of 3.0% across Tees Valley.

In contrast, industrial and office vacancy rates vary greatly. Industrial vacancy rate is very low in Darlington, at 0.5%, indicating a lack of supply, compared to 24.9% of in Redcar and Cleveland. Vacancy rates of industrial floorspace averages 6.2% in Tees Valley, due to low rates in all LAs except Redcar & Cleveland.

Office vacancy rates average 8.5% in Tees Valley. The highest vacancy is found in Middlesbrough, where 16.8% of floorspace is vacant. It is lowest in Redcar & Cleveland, at 2.4%.

The map below shows the vacancy rates of industrial, office and retail properties in TVCA.



Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

3.2.6. Natural Capital

The Natural Capital Committee (NCC) has defined natural capital as “the elements of nature that directly or indirectly produce value to people, including ecosystems, species, freshwater, land, minerals, the air and oceans, as well as natural processes and functions”.

This section examines natural capital in Tees Valley. This data will help support the requirements for biodiversity net gain (BNG) in planning processes as outlined in the Environment Act 2021. BNG is an approach to development, and/or land management, that aims to leave the natural environment in a measurably better state than it was beforehand.

Benefits

A natural capital approach sees the natural environment as a stock of assets – ecosystem assets. These assets enable a flow of ecosystem services to people, who benefit from them, and therefore value them.

Natural Capital delivers multi-benefits through performing many functions at the same time. For example, a new woodland can reduce flood risk, enhance biodiversity, improve water quality, prevent land erosion, remove air pollution, sequester carbon dioxide, increase cultural opportunities and improve health and wellbeing.

Ecosystem services – contributions that ecosystems make to human well-being include:

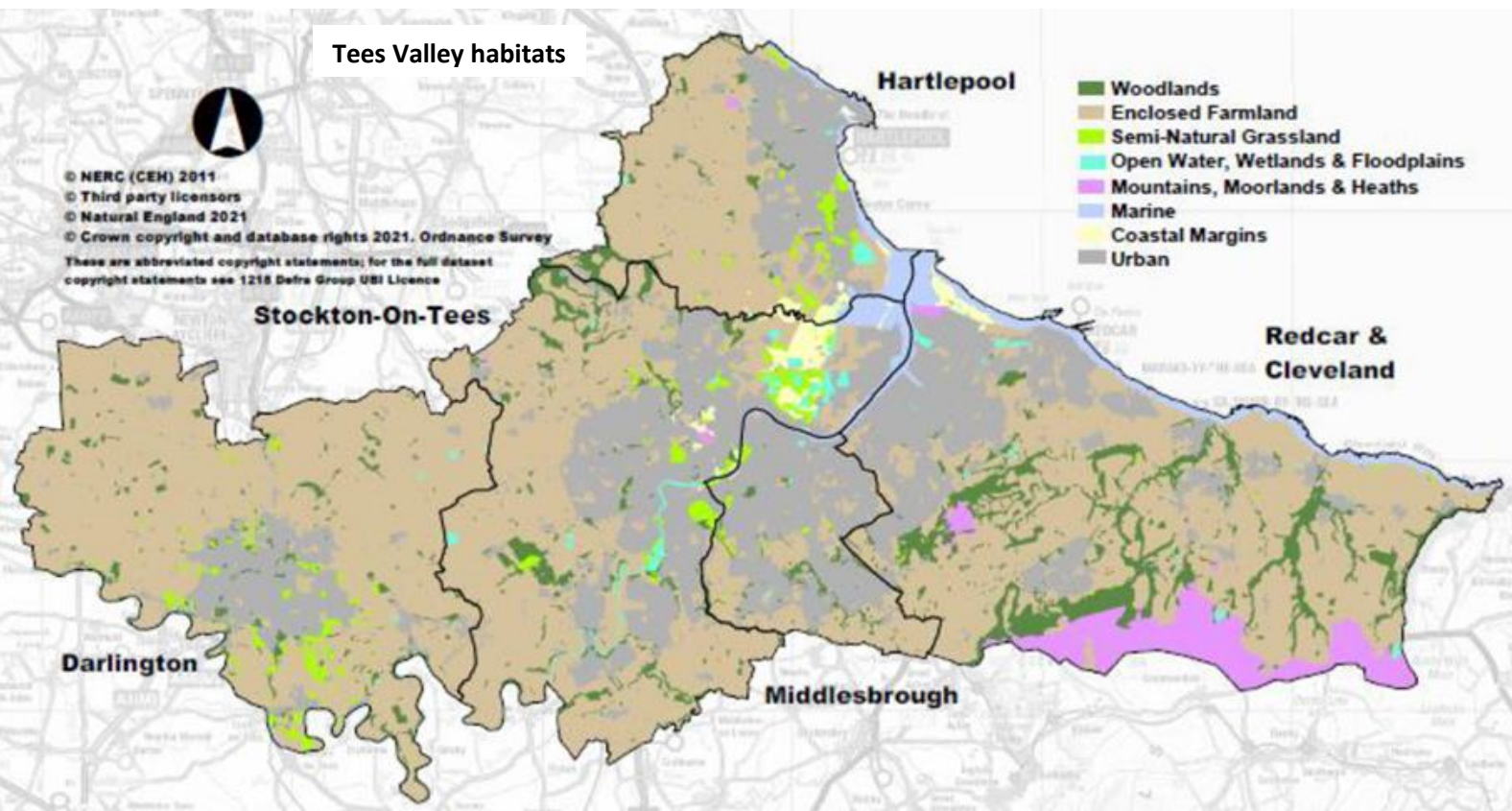
- **Supporting Services** - providing the basic infrastructure required for life e.g. the cycling of water or the formation of soils.

- **Regulating services** - ensuring the environment is in a fit condition for life e.g. the removal of pollutants from the air, water or land.
- **Provisioning services** - e.g. providing food and timber etc..
- **Cultural services** - providing value to human society e.g. through recreation, tourism, and benefits on health and wellbeing.

Tees Valley Natural Capital Account

The Tees Valley Natural Capital Account produced by Natural England in September 2021 (NERR096) details both the monetisable and non-monetisable benefits that flow from our natural assets and related ecosystem services.

In Tees Valley the main land cover types are enclosed farmland at 59% (44,500 ha), urban areas at 27% (20,600 ha) and woodland at 6% (4,800 ha). This is below the national woodland cover in England of 10%. Although only covering a small total area, there is an important area of moorlands and heaths found in the south east of the area where the North York Moors crosses the boundary of Redcar and Cleveland.



Source: A Natural Capital Account for The Tees Valley, Natural England

Benefits and value

In Tees Valley the monetary value of quantifiable benefits from Natural Capital in Tees Valley is in excess of £100 million p.a. with a capital asset value of £2.8 billion. Whilst the vast majority of the quantifiable benefit arises from recreational visits and clean air, the non-quantifiable benefits are extensive as shown below.

| Benefit | Significance (1 small, 3 large) | Indicator | Annual benefit | Asset value |
|--|---------------------------------------|--|-------------------|----------------|
| Timber, hay and other materials | 1 | Timber and wood products, stumpage value | n/a | n/a |
| Food | 1 | Net income from fisheries | £360,000 | £11 million |
| | 1 | Resource rent from crop and livestock production | ~ £0 | ~ £0 |
| Clean and plentiful water | 3 | Value of water abstraction | n/a | n/a |
| Clean air | 3 | Health benefits from PM2.5 removal | £8 million | £235 million |
| Protection from floods and other hazards | 3 | Value of flood protection benefits provided by natural capital | n/a | n/a |
| Pollination and pest control | 1 | Value of pollination and pest and disease control | n/a | n/a |
| Biodiversity | 2 | | n/a | n/a |
| Equable climate | 3 | Social cost of carbon emission (natural capital) | (£5 million) | (£395 million) |
| Cultural wellbeing | 3 | Social benefit of recreational visits (parks, beaches & paths) | £100 million | £3.0 billion |
| | 3 | Physical and mental health and other benefits | n/a | n/a |

Source: Natural England, *A Natural Capital Account for Tees Valley*. Note: Significance ratings based on exploratory exercise conducted with a small group of Tees Valley stakeholders.

3.2.7. Flood risk

Flood risk can result from a number of causes including rivers, the sea, groundwater, reservoirs and surface water. The focus of this section is on the Tees Estuary and coastal flooding.

The Tees Valley's main industrial and manufacturing area is centred on the Tees Estuary. There has been on-going investment to tackle the risk of flooding in this area, resulting in good quality defences in many places but other defences are considered to be in a poor condition with a limited life span. The Environment Agency is progressing a number of improvement schemes although some of these may not qualify for 100% funding from Central Government, resulting in the need for third party contributions.

However, parts of the Tees Valley remain at some risk from fluvial, surface water and (in particular) tidal flood risk. Events both locally and nationally have exposed the risk and impact of flood events, and the investment required to reduce the risk for existing and future development.

The Tees Valley is a critical location for inward investment and development, including Teesworks. The area is home to a number of important industries and supply chains, including chemical processing, steel, manufacturing and logistics. Investment in flood defences and mitigation activity are therefore a critical elements of infrastructure planning.

The figure below from the government's flood risk website shows the main at-risk areas in the Tees Valley (a darker shade of blue indicates a higher probability of flooding).

Figure 3.2.1. Tees Estuary Flood Risk



Source: <https://check-long-term-flood-risk.service.gov.uk/map>

Environment Agency, Teesside Investment Plan – Stage 1 Output, Arup, April 2021

Whilst flood risk is forecast to increase in many parts of the Tees Valley over the coming years, there are four locations of concern where current-day flood risk exists – Portrack Lane, Billingham, Middlehaven and Seal Sands / North Tees. Appropriate investment can mitigate the risks significantly. However, key sectors and sites impacted, perhaps only across non-critical parts of the site, could include:

- **Chemical Process.** Seal Sands / North Tees and Billingham Chemical Complex.
- **Advanced Manufacturing.** The Tees Advanced Manufacturing Park (TeesAMP), Portrack Lane / North Tees Industrial Estate and Middlesbrough College’s £20 million STEM (science, technology, engineering and maths) training centre.
- **Steel.** ‘Corus Corridor’ south of the Tees / Teesworks.
- **Logistics.** Teesport, Tees Offshore Base, Able Seaton Port and Billingham Riverside and Reach.

Economic impacts and tipping points

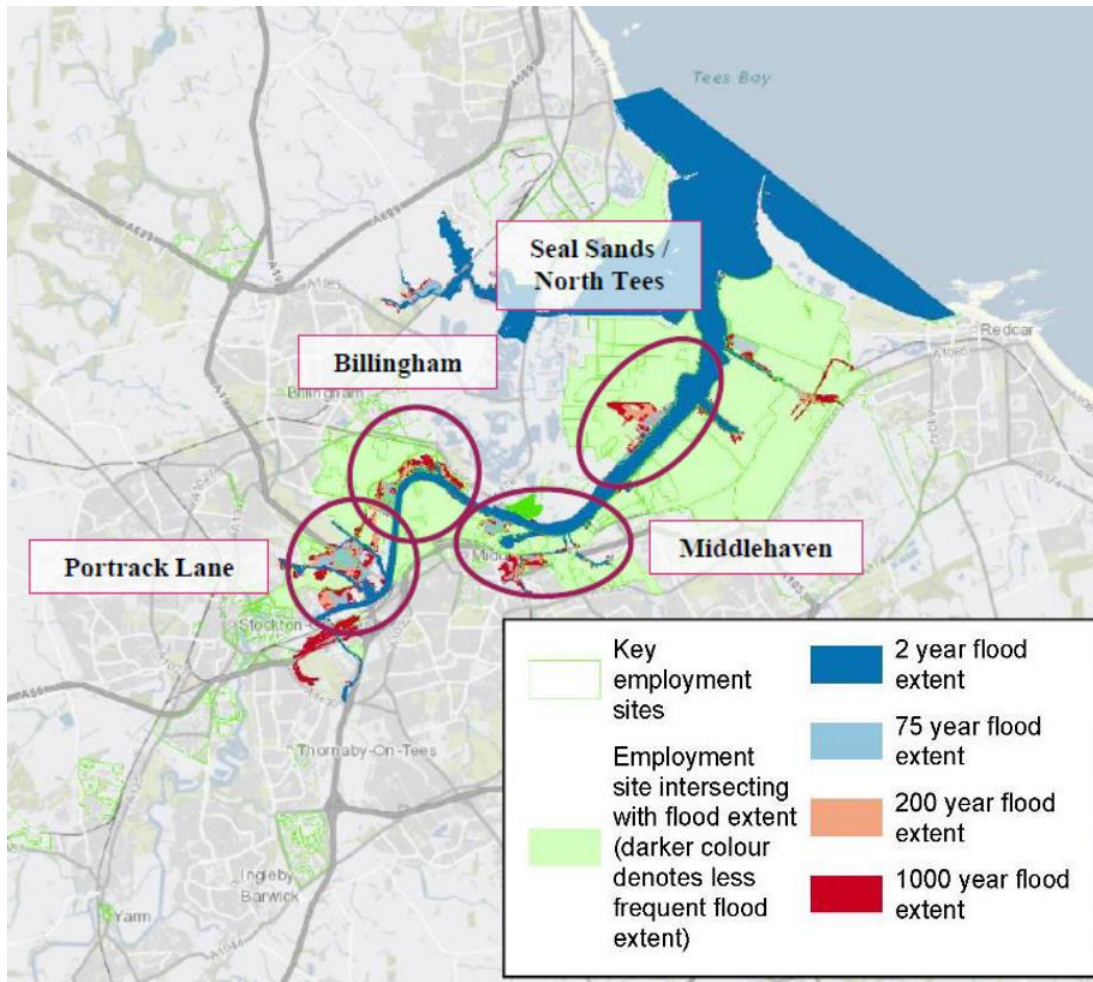
Portrack Lane. Risk already exists across the site in a 75 year event. The key change in flood risk at Portrack occurs in the medium term, between 2051 and 2071.

Billingham. Areas of Billingham Reach are already at risk and by 2031 we see additional risk at Riverside Terminal and Billingham Riverside.

Middlehaven. Areas to the north Middlehaven dock already at risk in a 75 year event with slightly lower risk at the A172 / Borough Road interchange. Middlesbrough College is at risk in the medium to long term.

Seal Sands and North Tees. At Seal Sands, we can see present day risk from a 200 year event at the BOC Teesside Hydrogen site. By the end of the century Sabic Petrochemicals and Aromatics Number 1 Plant are in the 75 year event extents and insurance constrain tipping point. By 2121 the majority of the site, including Conoco Phillips and Fine Organics, is also at risk.

Figure 3.2.2. Teesside Key Employment Sites and Flood Risk



Source: Environment Agency, Teesside Investment Plan – Stage 1 Output, Arup, April 2021

Investment Update

The Environment Agency are leading the Tees Tidelands sub-programme to tackle the tidal flooding in the estuary. This will require sustained investment of at least £120 million over the next 30 years to achieve the highest standards of protection. In the current 6-year investment cycle up to 2027, the Environment Agency are planning £30 million of investment made up of government grant and contributions from business. Milestones in 2022 include: in the Middlehaven area, the removal of redundant tidal structures on Ormesby Beck improving the environment; and in the Seal Sands Area, the largest scheme in the sub-programme, Greatham Northeast has passed outline business case stage. Detailed design is continuing and the application for planning permission is expected in Summer 2023.

3.2.8. Natural and Built Environment SWOT analysis

| Strengths | Weaknesses |
|---|--|
| <p>An attractive and healthy place to live with outstanding and easily accessible coast and countryside.</p> <p>Great value housing costs with some of the lowest house price to earnings ratios of anywhere in the country.</p> <p>A wide range of affordable and readily available office and industrial space.</p> | <p>Sluggish house price change year on year over the Tees Valley as a whole. House price growth constrained by highly polarised housing offer.</p> <p>Pockets of high office vacancy rates linked to variable demand.</p> |
| Opportunities | Threats |
| <p>With such high value economic assets on land that is liable to increased coastal flooding going forwards, there exists a huge opportunity for realising large economic returns from appropriate investment in coastal flooding mitigation measures. This is now being addressed by the Environment Agency who are leading the £120 million Tees Tidelands sub-programme.</p> <p>Excellent natural assets and green infrastructure offer in such a compact geography provides a significant opportunity to position Tees Valley as an attractive location that delivers a high quality of life. This is particularly important following the pandemic and the trend towards more outdoor activities. These natural assets complement the area's varied cultural attractions.</p> <p>Great opportunity to generate significant benefits from enhancing and improving the area's natural capital assets. Potential areas of benefit include reduction of flood risk, lower air pollution, enhanced biodiversity, improved health and wellbeing, active transport solutions and lower CO2 emissions.</p> | <p>Increasing coastal flooding threat to Tees Valley's nationally and internationally important chemical, refining and processing sector.</p> <p>Following on from a number of interest rate increases over the previous 12 months, The Bank of England increased the base rate to 3.5% in December 2022, well above the 0.1% low point seen as recently as 15th December 2021. This has increased mortgage costs and is now impacting negatively on demand and prices in the housing market.</p> |

Section 3.3. Creative Place

3.3.1. Introduction

This section provides an overview of the composition, business base and workforce in the cultural and creative industries sector in Tees Valley.

A thriving cultural landscape helps to create places that attract and retain people, businesses, and business leaders. 'Digital and Creative' and 'Culture and Leisure' have been identified as key growth sectors in the region's Strategic Economic Plan, which are critical to "boosting competitiveness and diversification, improving economic resilience and providing the range of jobs needed to ensure that growth is both widespread and inclusive".

Since 2017, the Combined Authority has invested in support for the sector and locally developed festivals, as well as attracting high profile events, such as BBC Radio 1's Big Weekend and the Great North CityGames to the region. This investment, contributed to growth of the visitor economy, attracting 20.24 million people in 2019/20 with visitor expenditure reaching £1.018 billion, which was a 2% and 10% increase respectively compared to 2017. This increased activity also created new opportunities for local residents to explore and enjoy the region, benefitting from the skill of cultural practitioners as they connected with local stories, celebrated local talent, and developed their own skills and creativity.

Now, the Combined Authority's 'Growth Programme for the Creative & Visitor Economies' will invest £20.5 million between 2021 - 2026 through interventions targeted to enhance the region's cultural, creative and hospitality sectors, and its destination marketing operations. It will stimulate and support the sustainable development of the region's creative economy and help boost the Tees Valley's creative and cultural offering, supporting long-term economic and social prosperity.

A cornerstone of our approach is our ongoing work to enhance our screen industries (television and film) offer, building on a 2021 MOU with the BBC and other authorities across the wider North East. [The North East Screen Industries Partnership](#) is taking a strategic and coordinated approach to catalysing Screen Industries growth across the wider region, levelling-up on-screen representation and creating a dynamic, nurturing, talent-filled and competitive environment for broadcasters and independent productions looking to work in the North East. The majority of this work is being delivered by the North East region's screen agency [North East Screen](#).

In summary, the TVCA Growth Programme for the Creative & Visitor Economies will:

- Create the conditions for cultural industry cluster growth – enabling a mature and sustainable cultural offering, resulting in wider reach, relevance and impact.
- Help improve perceptions of Tees Valley as a vibrant and authentic destination to live, study, work and visit.
- Provide a strategic and coordinated approach to destination development, management and marketing to attract more visitors from further afield while giving local communities a higher quality creative and cultural proposition.

- Use the inherent creativity of the sector as a catalyst for innovation in other target clusters within the region.
- Increase diversity of the workforce to ensure that creative works and opportunities are more relevant and accessible to wider audiences and consumers across Tees Valley.
- Ensure that the Tees Valley cultural and destination offer is exemplary in its accessibility and inclusivity and that the creative & visitor economies grow through environmentally conscious development and investment which contributes to the region's Net Zero objectives.

The approach TVCA is taking is evidence-led. Below is a summary of that evidence. Read the Executive Summary of our Baseline Research [here](#).

The TVCA Growth Programme for the Creative and Visitor Economies has five pillars and you can read the Pillar Frameworks here;

- [Sector Growth and Sustainability](#)
- [Recovery Programme for the Visitor Economy and Cultural Industries \(Delivered\)](#)
- [Festivals and Events](#)
- [Destination Product Development](#)
- [Profile Raising](#)

3.3.2. Key messages

- Tees Valley Cultural and Creative organisations generate annual turnover of £376 million.
- A Cultural and Creative workforce of around 13,000 across Tees Valley.
- Low levels of cultural engagement with all five local authority areas in bottom quintile nationally.
- Pre-pandemic visitor economy employing 12,400, down to 5,000 in 2020 but back up to 7,600 in 2021. Upward employment trend pre-pandemic and strong potential to surpass pre-pandemic level in the coming years.
- Staying visitor numbers more than doubled (up 141%) in 2021, with day visitors up by over one-third (35%). However, both measures are still well below pre-pandemic levels.

THE SIZE OF THE TEES VALLEY CULTURAL SECTOR

Creative enterprises with turnover of less than £1m make up 98% of the sector and generate revenues of £195 million per annum – 56% of the sector total (2019).



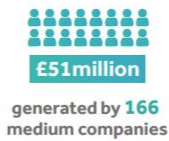
However, data scraping and analysis from LinkedIn shows 12,856 individuals located in Tees Valley working within or actively seeking employment in the cultural, creative and digital industries is **more than three times larger** than the total creative industries employment figure given by BRES. This is a result of a high proportion of freelancers in this sector.



The annual turnover of cultural and creative organisations in Tees Valley is **£376m** (when augmenting Companies House data with Dun & Bradstreet estimates and Charities Commission data)



The average creative company employed three people in 2016 analysis - the figure has rose slightly to 3.5 in 2021.



Employment within digital sectors has grown consistently, reflecting increasing convergence between "traditional" sectors such as film and other forms of digital content.



Employment in digital creative industries (including games and animation) has grown since 2016 and has even shown growth through the pandemic.

Official figures state that total creative industries employment in Tees Valley as 3,965 – a fall of 20% from the 4,930 jobs recorded in 2019, and 34% from 2015's total of 6,015.



3.3.3. TVCA Festival Recovery Programme

The TVCA Festivals 2021 Recovery Fund (FRF) aimed to sustain and support the recovery of festival businesses and their wider supply chains, to help them to keep going and comply with changing COVID restrictions, while also bringing Tees Valley's communities together and attracting visitors to the area. In total, the TVCA FRF was accessed by 10 festival organisers and subsequently provided the financial support necessary to plan 17 live events across the Tees Valley. Although 17 events were planned, only 15 were able to go ahead.

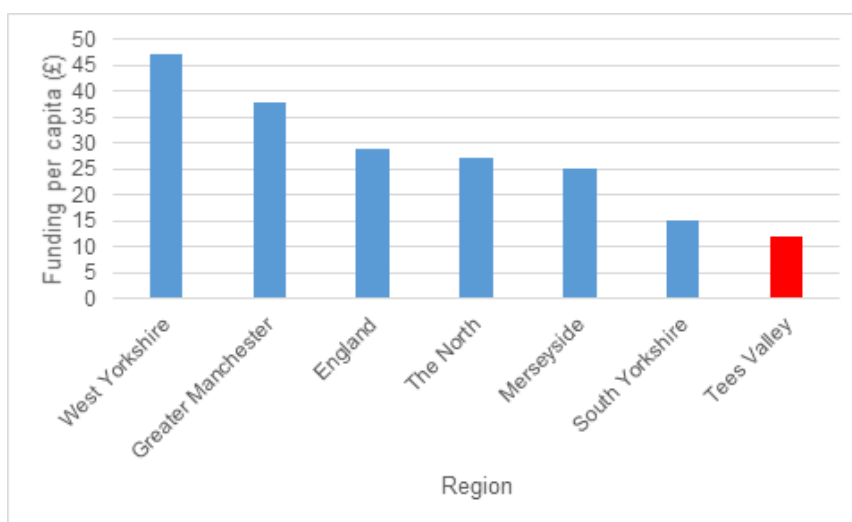
Estimated net economic impacts associated with FRF festivals are significant, with an estimated £2.8 million of GVA to the Tees Valley economy and supporting 56.6 FTEs through festivals delivery activity, procurement spend, and additionally visitor spending. This comprises of £2.0 million of GVA and 32.8 FTEs supported directly through festival organisations' operational activity and a further £817,000 of GVA and 23.8 FTEs supported by festival visitors spending in the local economy. Although the initial investment was to be £350,000, actual final investment total led just over £308,000. This was as a result of reduced development costs for Saltburn food festival and reduced

investment in Hartlepool Folk Festival due to them scaling back the festival. Given the total FRF investment of £308,000 in supporting these festivals and the generation of £2.8 million local GVA benefits, a return-on-investment figure of 9.0 is estimated. This represents an additional return of £9 of benefits for every £1 invested through the TVCA FRF.

3.3.4. Investment and funding

The critical point in this analysis is that Tees Valley currently receives levels of funding from ACE and other Lottery distributors lower than the national average, and lower than comparable areas elsewhere in the country.

Figure 3.3.1. Per capita NPO funding agreements (2019/19 to 2021/22)



Source: Arts Council England | National Portfolio dataset

Tees Valley has had a lack of investment by national funders such as Arts Council England (ACE) and Heritage Lottery when compared with other regions and the UK average.

- Total ACE investment across three key funding streams for TVCA in 2019-20 was £2,991,895. If levelled up to the all-England average using a per capita spend of £8.49 this would become £5,888,078 – an annual increase of £2,896,183. This would almost double monies received from ACE into TVCA.
- NHLF funding into TVCA averaged £754,250 across the two years of 2017-18 and 2018-19. The England average is £2.84 per capita. If levelled up this would increase the TVCA funding to £1,968,458 – an annual increase of £1,214,208 and more than double the current level of funding.

Together, these represent an annual increase in requirement of over £4.1 million in order to ‘level up’ to the national funding average.

In November 2022 Arts Council England confirmed that all six existing Tees Valley NPOs had successfully retained their designation, with three receiving uplifts in funding (ARC, Tees Valley Museums Group, Mima, Theatre Hullabaloo, SIRC and Middlesbrough Town Hall). Arts Council also

announced three new Tees Valley National Portfolio Organisation designations and two new Investment Principles Support Organisations (IPSOs) based in the region: Tees Valley Arts, Festival of Thrift and The Auxiliary (NPOs) and Future Arts Centres and Family Arts Campaign (IPSOs).

This new round of funding will offer £3.3 million to the region’s portfolio annually – a rise of 66%. The significant uplift to Tees Valley is an encouraging indicator that our designation as a Priority Place i.e. an area recognised by Arts Council England as a place in which their investment and engagement is too low and which provide a good opportunity for them to effectively increase investment and engagement, will be a genuine catalyst for re-balancing and growth.

3.3.5. Visibility and Visitor and Audience Perceptions of Tees Valley

Destination development experts were appointed to provide baseline insights into the region’s visitor economy proposition and performance and support development of a new Destination Management Plan for Tees Valley. Their 2021 Baseline Report identified the following:

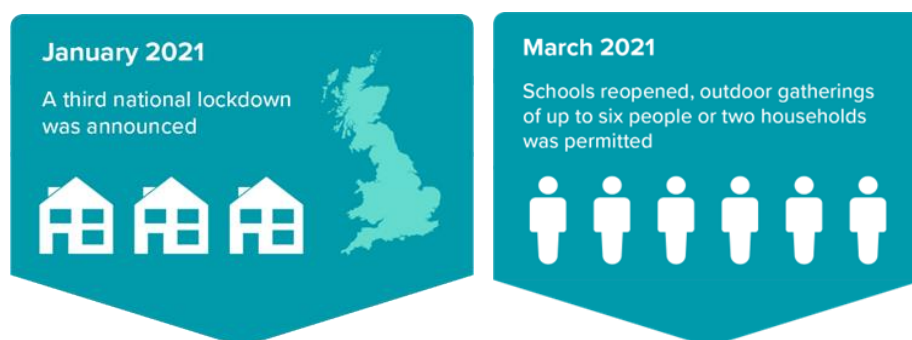
The destination website is good quality with well-written copy and strong images, but there is no proposition. However, the Tees Valley is largely invisible in online searches. Some persistence is required to find it (beyond the Enjoy Tees Valley site) and there appears to be a lot of confusion over where it is, as it is variously merged into Durham or North Yorkshire.

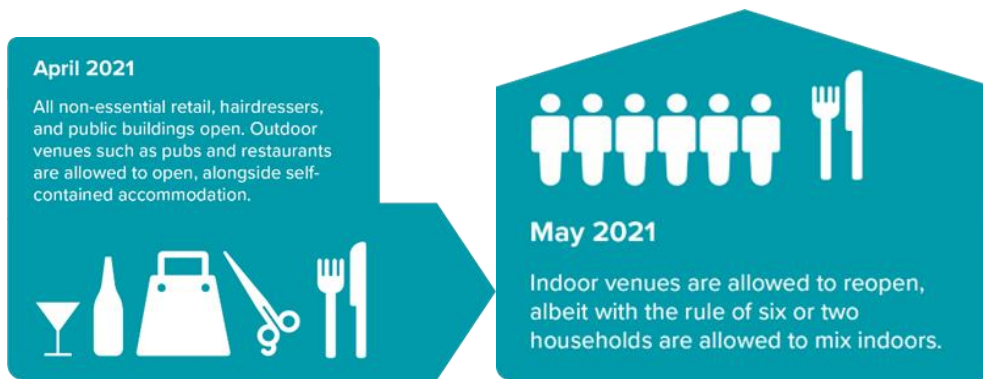
Tees Valley businesses follow this pattern too associating themselves with Co Durham countryside, North Yorkshire Moors and Coast, Durham City and York.

Bluegrass Destination Management Plan Consumer Research, Aug 2021 found that residents are most familiar with the Tees Valley as a visitor destination. Despite an openness to visiting, the vast majority of non-visitors are unfamiliar with what the Tees Valley has to offer.

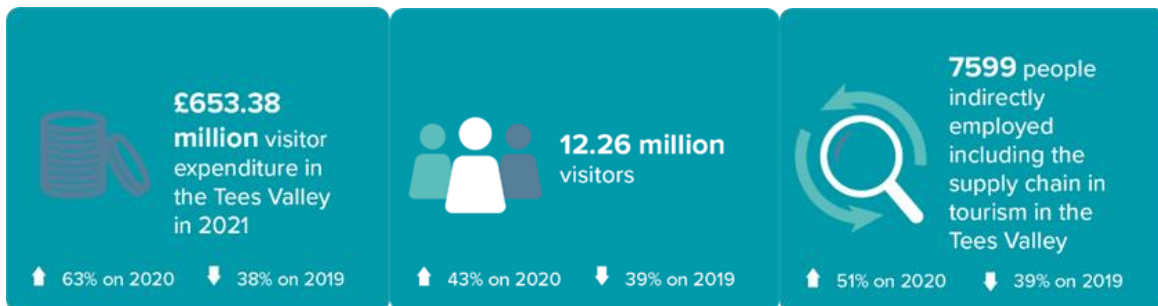
3.3.6. Visitor Economy – STEAM data

2021 began with most regions in the UK already facing strict restrictions due to the tier system introduced in 2020 in response to evolving context of the pandemic, meaning most businesses in the tourism and hospitality sector were either closed entirely or could only offer takeaway services.





Although a tough start to the year again for the industry, visitor numbers improved on 2020, although levels were still not at those pre pandemic (2019) start.

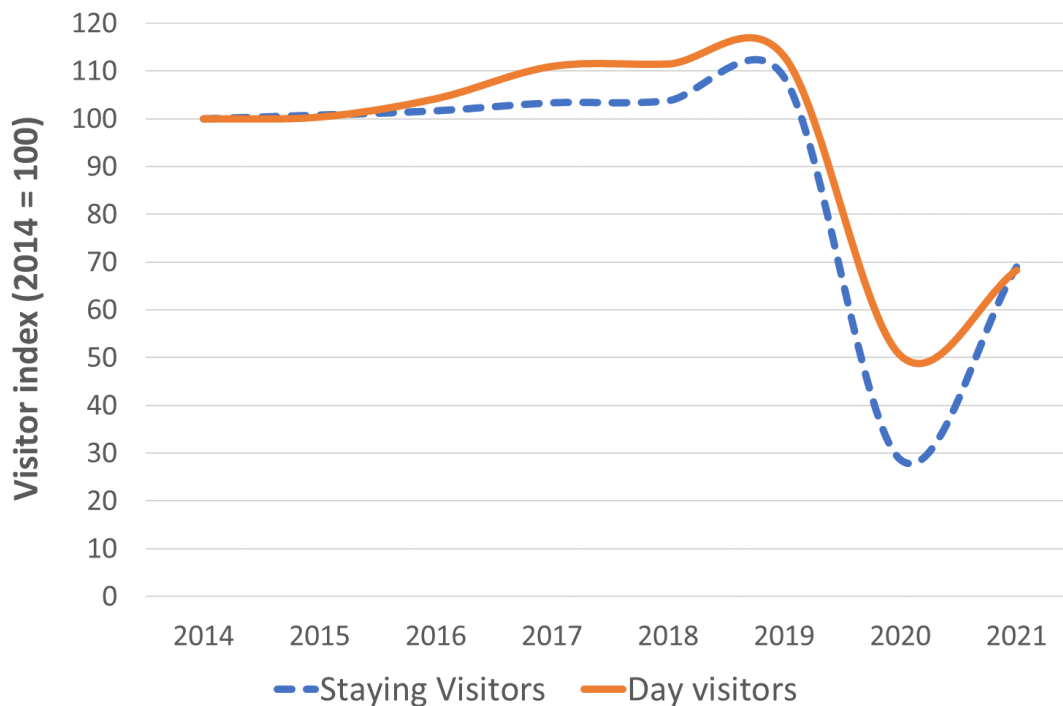


In 2021, visitor expenditure supported an estimated 7,599 full time equivalent jobs in the local economy. As in 2019, 89% of all visits were day visits with these visitors accounting for 65% of expenditure (66% of expenditure in 2019).

Between 2014 and 2019, visitor numbers to Tees Valley increased by 13% for day visitors and staying visitors by 9%. However, the pandemic led to a sharp fall in visitor numbers in 2020 with staying visitors impacted to a greater degree than day visitors. However, staying visitors recovered more quickly than day visitors in 2021.

Staying visitor numbers more than doubled (up 141%) in 2021, with day visitors up by over one-third (35%). However, both measures were still only around 70% of 2014 levels.

Figure 3.3.2. Visitor number trend indices, Tees Valley, 2014 to 2021



Source: STEAM, TVCA

Covid-19 continued to have an impact during 2021, however a relaxation of major restrictions during the year meant visitor numbers during the year were up by 43% on 2020.

Key points

- 12.26 million people visited Tees Valley in 2021. This was up by 43% on 2020. However, when compared to pre-covid (2019) visitor numbers, this is still down 39%.
- The number of days visitors spent in the destination stands at 14.14 million, down 39% compared to pre-covid (2019) levels.
- In 2021, visitor expenditure in Tees Valley totalled £653.38 million – down 38% compared to 2019 visitor expenditure.
- The number of people directly employed in tourism in Tees Valley in 2021 was 5,968, a fall of 38% compared to 2019.
- When indirect employment in the supply chain is taken into account total employment stands at 7,599 in Tees Valley, down by 39% on 2019.
- The number of overnight visitors to Tees Valley in 2021 was 1.392 million – down by 37% on 2019. Overnight visitors spent £228.37 million in 2021, down by 36% on 2019.
- There were 10.87 million day visitors to Tees Valley in 2021, down by 40% compared to 2019. Day visitors spent £425.01 million in 2021, down by 40% on 2019.
- The Food and Drink sector accounts for 34% of all expenditure and 35% of all employment.
- As in 2019, 89% of all visits were day visits with these visitors accounting for 65% of expenditure (66% of expenditure in 2019).

Table 3.3.1. Visitors spend rates, Tees Valley, 2021

| <i>Tees Valley 2021</i> | <i>Spend per person per day</i> £ | <i>Spend per person per trip</i> £ |
|------------------------------------|--|---|
| Serviced Accommodation | £ 95.53 | £ 169.20 |
| Non-Serviced Accommodation | £ 54.93 | £ 381.40 |
| Staying with friends and Relatives | £ 39.04 | £ 91.53 |
| All Overnight Visitors | £ 52.65 | £ 123.73 |
| Day Visitors | £ 28.36 | £ 28.36 |

Source: STEAM

3.3.7. Creative Place SWOT analysis

| Strengths | Weaknesses |
|--|--|
| <p>Research by Fifth Sector (2021) shows that the creative workforce in Tees Valley is three to four times larger than the official count of creative employment in ONS data (12.4K vs. 3.2K).</p> <p>Diverse and rich range of cultural assets across Tees Valley, such as MIMA, The Globe, Theatre Hullabaloo, National Museum of the Royal Navy, Kirkleatham Walled Garden.</p> <p>In November 2022 and in addition to the six existing Tees Valley NPOs successfully retaining their designations, Arts Council announced three new Tees Valley National Portfolio Organisation designations and two new Investment Principles Support Organisations (IPSOs) based in the region: Tees Valley Arts, Festival of Thrift and The Auxiliary (NPOs) and Future Arts Centres and Family Arts Campaign (IPSOs).</p> <p>NESIP and committed £25 million investment of the BBC in screen industries development.</p> <p>Regional commitment to the sector recognised by ACE in decision-making process for Priority Place.</p> <p>Some nationally significant and recognised festivals, visual arts and theatre organisations.</p> <p>Diverse, ambitious and creatively excellent independent sectors in music, performing arts and visual arts.</p> <p>Long standing levels of commitment, investment and leadership by Local Authorities and TVCA.</p> <p>Positive initiatives already underway to develop talent (e.g., Tees Valley New Creatives Programme and North East Screen).</p> <p>Established and growing visitor base pre-COVID in 2019 with 20 million visits & £1 billion spend supporting 12,400 jobs.</p> | <p>Lack of large and medium-sized creative businesses to act as ‘anchors’ for growth.</p> <p>Lack of connectivity between emerging clusters and within creative sectors across Tees Valley.</p> <p>Freelance talent is dispersed and not connected into professional networks.</p> <p>Limited opportunities for career progression / development.</p> <p>Gaps in skills provision and progression routes for creative industries and hospitality (Fifth Sector, Baseline Report 2021).</p> <p>Lack of consistent and accurate careers advice and access to networks, stifling talent pipeline.</p> <p>Lack of diverse representation at leadership levels and elsewhere within the workforce</p> <p>No critical mass within subsectors. Cluster development is all at Preformation stage (Fifth Sector, Baseline Report, 2021).</p> <p>Lack of infrastructure, networks, and collaboration opportunities to support R&D and Innovation projects.</p> <p>Low profile and lack of distinctive image of Tees Valley amongst all audiences, local, regional, national, and international (Blue Sail Destination Management Plan Baseline Report 2021 and Bluegrass Consumer Research 2021).</p> <p>The data shows that the Tees Valley’s current visitor market is primarily local, visiting regularly for a day out. Encouragingly both day and staying visits showed pre-Pandemic but spend is lower for both than the English</p> |

| | |
|---|---|
| <p>Assets – new Northern Film Studios in Hartlepool offer state-of-the-art facilities and are the biggest studios north of Manchester and new School of Art building in Middlesbrough</p> <p>Strong digital capabilities and leading talent in animation, VR/AR.</p> <p>Tees Valley has a varied landscape with coast, rural, nature with some attractive market towns in close proximity to urban centres.</p> <p>Tees Valley has a wide range of food and drink establishments populated by a number of independents.</p> <p>Tees Valley is well connected and easily accessible from other regions with significant investment being made in Tees Valley’s transport infrastructure. (i.e., Teesside International Airport, national train connections, major motorways).</p> <p>Tees Valley has a broad and affordable visitor offer with investment plans to develop products.</p> <p>Focused DMP for the next 4 years – investing in the product offer and profile raising.</p> | <p>average and overnight visitors do not stay as long.</p> <p>Potentially poor first impressions for visitors to Tees Valley and lack of knowledge of the area may act to reduce the number of future visits.</p> |
|---|---|

| Opportunities | Threats |
|---|--|
| <p>Capital investments such as, Northern Studios, Northern School of Art Middlesbrough Campus, Darlington Rail Heritage Quarter are driving growth across the sector.</p> <p>BBC investment in the North East, with commitment to Tees Valley, can catalyse screen production sectors.</p> <p>Develop sector support organisations to grow capacity and reach for targeted skills, business development and investment support within sectors with potential for growth.</p> <p>Realising full potential of national partnerships and programmes e.g. only Combined Authority to receive Arts Council England Priority Place designation; connected discussions with ALBs</p> <p>Emerging micro clusters in town centres and opportunity to develop more diverse new entrants, producers and audiences.</p> | <p>Failure to recognise the value of culture and creative industries in wider regeneration.</p> <p>Young people and diverse communities do not identify themselves within current cultural offer.</p> <p>Cost of living crisis / heightened supply chain costs put unmitigable strain on businesses already struggling with capacity.</p> <p>Siloed’ approach to development of IP and audiences within individual businesses and creative sectors limits opportunities for collaborative R&D.</p> <p>High levels of delivery by LAs suppresses opportunities for enterprise / business growth.</p> <p>Ability to secure a post-production company at the Northern Film Studios.</p> |

| | |
|---|---|
| <p>Prepare for future audiences through stronger integration of digital innovations into cultural offer.</p> <p>Opportunity to embed creative education through strategies developed by the Tees Valley Creative Education Partnership.</p> <p>Vibrant and emergent independent scene with artists producing diverse work of international quality. This represents an opportunity to stimulate regeneration of key locations in towns across the region and in the process to promote a more contemporary and diverse identity that builds upon the Tees Valley's heritage of innovation.</p> <p>Grow Tees Valley Young Creative Network and add new (more diverse) mentors from all sectors of the creative economy.</p> <p>Opportunity to develop and buy in high profile/signature events and festivals for Tees Valley building on existing expertise and portfolio into a year-round offer.</p> <p>Market the Tees Valley and River Tees to boost awareness of the area as a potential visitor destination. This creative place offer complements the area's attractive natural environment and high quality of life.</p> <p>Whilst the pandemic severely impacted visitor numbers, the strongly growing visitor base trajectory pre-pandemic provides an opportunity to quickly get back to 2019 numbers and subsequently continue to rise on its pre-pandemic upward trend.</p> <p>Develop business tourism in tandem with economic growth.</p> <p>Further Airport development and expanded domestic and international links.</p> <p>Build on increased appetite for staycations (post-covid) including promoting independent food and drink offer.</p> | <p>International travel opening up again potentially resulting in a reduction of 'staycations'.</p> <p>A lack of critical mass with associated lack of local demand in the sector compared to some other areas may jeopardise the sectors' development.</p> <p>Make up of sector includes high number of micro businesses and freelancers with low reserves who may not have the capacity to forward plan and build resilience.</p> <p>Focussing too narrowly on 'traditional' models and metrics of business growth risks missing opportunities to develop cultural and commercial potential within Tees Valley.</p> |
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Section 3.4. Transport

3.4.1. Introduction

This section details how people and goods move into, out of and around the Tees Valley by road, rail, sea, and air. It also summarises the air quality associated with transport emissions in Tees Valley.

Physical connectivity is a critical enabler for:

Residents - providing access to employment, training and social opportunities as well as having a significant impact on the wellbeing and economic outcomes for deprived communities.

Business - enabling companies to remain and become both nationally and internationally competitive.

To enable the full growth potential of Tees Valley to be unlocked, resilient and reliable connection across the region is required. Tees Valley businesses and organisations must be supported to access UK and European supply chains, particularly in the Northern Powerhouse, which in turn will enable Tees Valley residents to benefit fully from emerging job opportunities.

The Tees Valley has a number of locally and nationally significant transport assets. These include:

- The port of Tees and Hartlepool: The largest port in the UK in terms of outward tonnage. Provides a critical gateway to world markets for the Tees Valley industrial platform. The Ports are also part of the UK's first and biggest freeport, situated in Teesside.
- Major highways: The A1(M), A66, A19, A171, A174 and the A1053 provide fast commuting within the Tees Valley, as well as the wider North East and the rest of the country.
- Rail connections: Darlington Station acts as a critical rail 'gateway' into and out of the Tees Valley and is the main interchange hub for national and inter-regional rail connections. A new direct train service from Middlesbrough to London also commenced in December 2021, enhancing national connectivity. Transport plans for Tees Valley take account of Transport for the North activities, as well as the need for efficient freight and passenger transport corridors running both north and south, east and west.
- Teesside International Airport: The airport provides passengers with the opportunity to travel both domestically and internationally to a range of destinations, whilst also offering businesses an alternative option to import/export goods to and from the Tees Valley.

3.4.2. Key messages

- Lower levels of congestion based on road speeds.
- Regional daily road traffic car counts are around 20% down on pre-pandemic levels.
- In 2021, 71.5% of employed residents travelled to work by car or van. However, in numerical terms this was down by nearly 22,000 on 2011.
- Coronavirus has temporarily reduced demand for public transport.
- No part of Tees Valley is more than 30 minutes away from an employment centre.
- Passenger numbers at TIA picked up in 2021 to reach 72,000. Whilst these numbers remain some 51% below where they were pre-pandemic, they have recovered faster than the national average which in 2021 were still 79% below where they were in 2019.

- Roadside air quality is improving and is better than nationally.
- Planned improvements and ongoing expansion in infrastructure including rail, air, cycling and walking routes.
- Planned Improvements to bus infrastructure and services under the Bus Service Improvement Plan.

3.4.3. Travel to Work

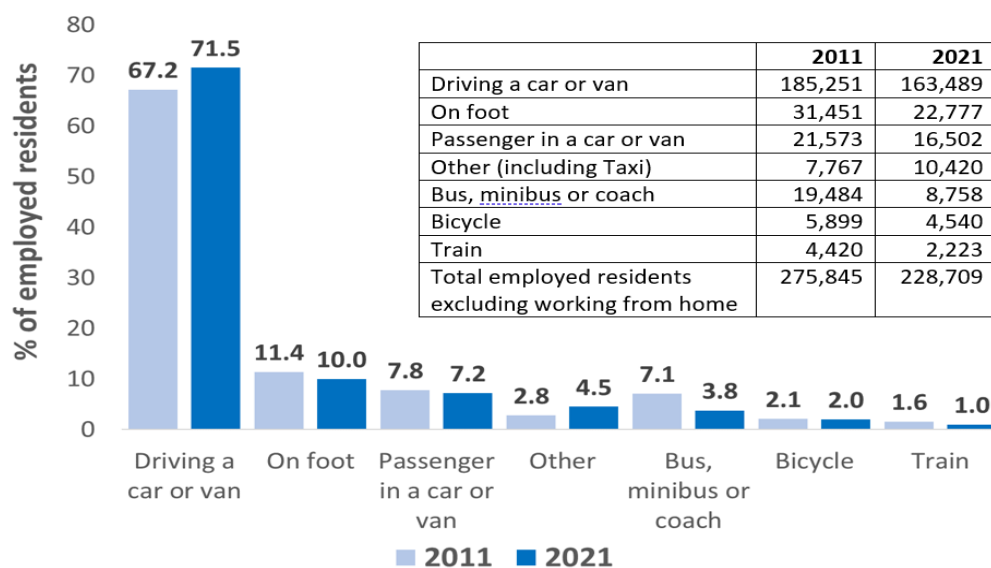
When comparing to other areas, commuting in Tees Valley is relatively self-contained (one definition of a functional economic area). Around 87% of the working residents (247,700 people) live and work in Tees Valley, with 38,100 residents commuting to surrounding areas for employment and 34,700 residents of surrounding areas choosing to work within Tees Valley (Source: Census 2011). These surrounding areas include County Durham, North Yorkshire, and Tyne & Wear. Reflecting the area’s relatively self-contained economic nature, travel-to-work distances are fairly low, with over two-thirds of employed residents with a recorded travel-to-work distance enjoying commuting distances of 10km or less.

The below provides a breakdown of means of travel to work used in Tees Valley (excluding those who primarily work from home); the overwhelming majority (71.5%) of those in employment drive a car or van, although a substantial proportion (10.0%) also walk to work. A small percentage (1.0%) utilise the train or equivalent to travel to work.

Whilst, for example, the proportion of those travelling to work by car / van has increased, it fell in numerical terms. This also applies to all other forms of travel except Other e.g. Taxis. This reflects the fact that Census 2021 was undertaken in March 2021 during Coronavirus lockdown conditions. This will of course skew the results to some extent but the underlying ongoing trend towards more homeworking is robust and was accelerated by the pandemic.

In 2011 just 8,959 Tees Valley residents worked from home compared to 56,838 in 2021. The figure below shows how commuters travelled to work and excludes those working from home. Note the total number of employed residents in 2021 (285,547) was very similar to 2011 (284,804).

Figure 3.4.1. Means of travelling to work in Tees Valley (by % of employed residents – excluding those who primarily work from home)



Source: ONS, NOMIS, Census 2011 and Census 2021

Travel to work flows for each Tees Valley local authority area are detailed in the table below. Based on the Census 2011 data there is a net outflow from Tees Valley for work, with many individuals travelling to surrounding areas such as North Yorkshire, Durham, and Newcastle. Redcar & Cleveland has the largest *outflow* to areas outside Tees Valley and also to areas within Tees Valley, whereas Middlesbrough has the highest net *inflow* of workers from outside Tees Valley and from areas within Tees Valley.

Table 3.4.1. Tees Valley travel to work flow summary

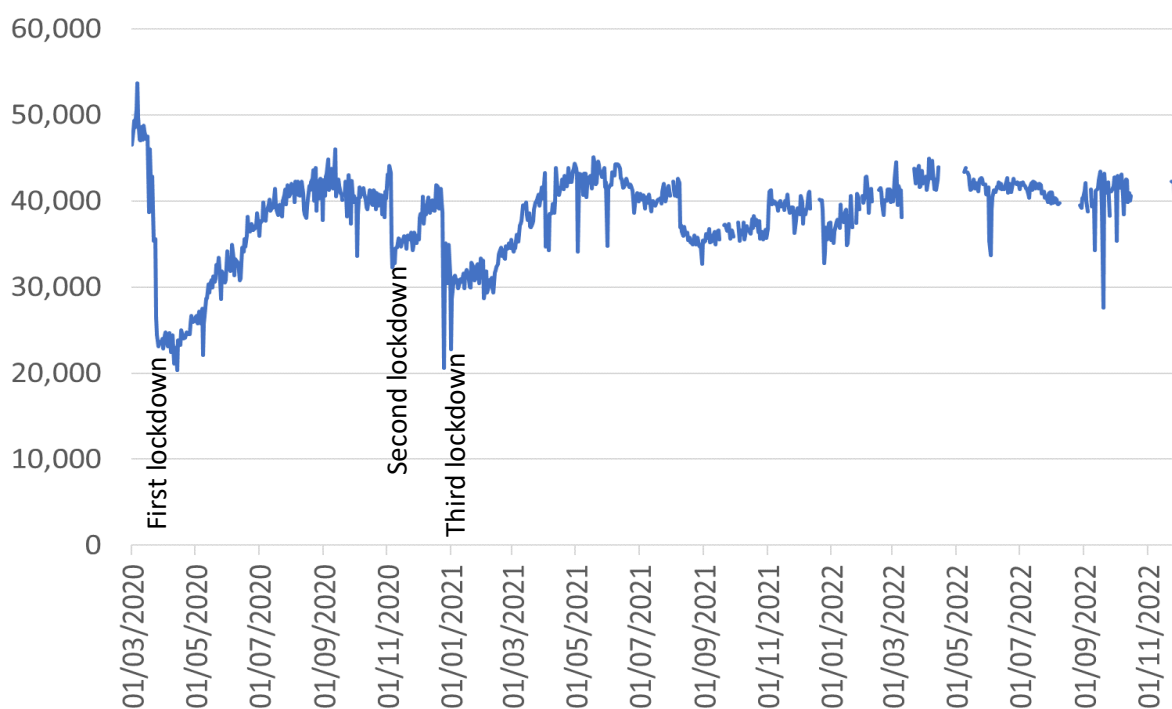
| | Within LA | Outflow | | Inflow | | Net inflow (-ve=outflow) | |
|--------------------|----------------|----------|---------------|----------|---------------|--------------------------|---------------|
| | | TV | Other | TV | Other | TV | Other |
| Darlington | 33,900 | 5,000 | 15,400 | 4,200 | 18,500 | -900 | 3,000 |
| Hartlepool | 26,000 | 6,400 | 11,900 | 4,400 | 8,400 | -2,000 | -3,600 |
| Middlesbrough | 33,000 | 16,000 | 21,700 | 24,200 | 30,100 | 8,200 | 8,400 |
| Redcar & Cleveland | 33,300 | 17,200 | 23,300 | 9,800 | 12,800 | -7,400 | -10,500 |
| Stockton-on-Tees | 56,600 | 20,300 | 30,800 | 21,200 | 30,000 | 800 | -800 |
| Tees Valley | 247,700 | - | 38,100 | - | 34,700 | - | -3,300 |

Source: Census 2011

In terms of average travel to work time, Tees Valley commuters enjoy the shortest time spent getting to work of any North of England Local Enterprise Partnership (LEP) area with the exception of Lancashire. In 2016, the typical commuting time for Tees Valley was 25 minutes compared to the LEP average of around 27 minutes.

ONS' faster indicators data contains daily counts of different types of road traffic as measured by traffic cameras. The data for the North East region is presented below.

Figure 3.4.2. Daily road traffic car counts in the North East, seasonally adjusted figures and national COVID lockdown timings



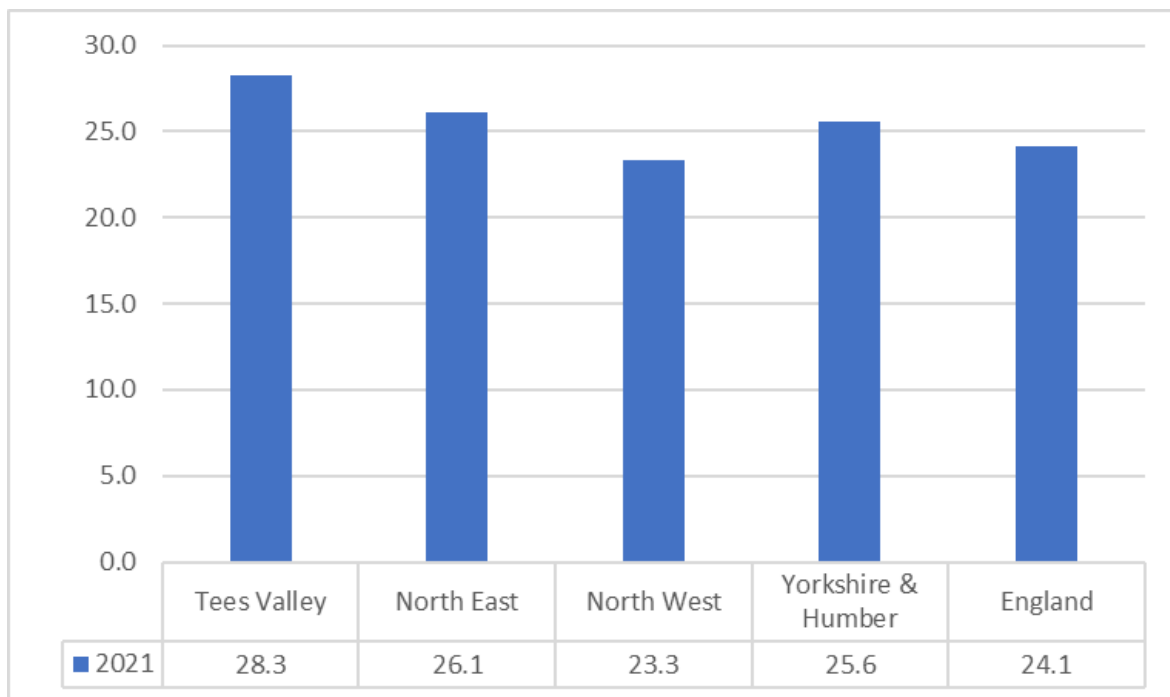
Source: ONS faster indicators: traffic camera data.

Since the country moved out of the third lockdown and with the exception of minor drops, coinciding with public bank holidays, there have been no sharp falls as witnessed in 2020 and early 2021 during the pandemic. However, car usage peak flows remain significantly lower than volumes seen pre-pandemic.

3.4.4. Road Safety and Congestion

The Department for Transport’s average A road speed statistics can act as an indicator to the ease of travel within the Tees Valley. With an average A road speed of 28.3 miles per hour (mean average of the five LAs average A road speeds), the Tees Valley performs favourably compared to the North East and the wider North of England. Additionally, Tees Valley road speeds are 17% faster than the English average of 24.1 mph.

Figure 3.4.3. Average speed on local A roads (miles per hour) by geographical area, 2021



Source: DfT Average speed on local ‘A’ Roads by Local Authority in England

The Department for Transport release data relating to road usage. The below table illustrates the total road traffic as measured by vehicle miles from 2018 to 2021. There was a steady increase across each of the five LAs, alongside the whole of Tees Valley and across England, prior to 2020. This reflected an increased number of people travelling to work as well as growing rate of car ownership.

However, this increase was reversed in 2020, with a 18% fall from the previous year. This sharp drop demonstrates the heavy impact of the pandemic, lockdowns, and social distancing constraints on travel around the Tees Valley during 2020. The latest figures suggest recovery has begun but has not yet recovered reached pre-pandemic levels.

Table 3.4.2. Total road traffic in million vehicle miles, Tees Valley LAs, and England (2018-2021)

| | 2018 | 2019 | 2020 | 2021 |
|----------------------|----------------|----------------|----------------|----------------|
| Darlington | 502 | 517 | 471 | 465 |
| Hartlepool | 390 | 398 | 316 | 356 |
| Middlesbrough | 729 | 752 | 590 | 663 |
| Redcar and Cleveland | 569 | 587 | 494 | 543 |
| Stockton-on-Tees | 869 | 936 | 716 | 810 |
| Tees Valley | 3,059 | 3,190 | 2,587 | 2,837 |
| England | 281,141 | 285,198 | 224,917 | 250,663 |

Source: DfT Road traffic statistics by local authority in England

Alongside the ease of travel, the safety of road users is another important factor when studying the success of transport links. The table below presents the number of road accidents for each LA, the whole of the Tees Valley and England for the years, 2018 to 2021. There has been an overall decrease of 58 road accidents from 2018 to 2021, which equates to a fall of 7%, which is less than half of the percentage fall across the whole of England. The largest yearly fall in reported road accidents was from 2019 to 2020, which saw a fall of 156. This matches to the fall in vehicle miles due to the pandemic.

Table 3.4.3. Reported Road Accidents, Tees Valley LAs and England (2018-2021)

| | 2018 | 2019 | 2020 | 2021 |
|----------------------|----------------|----------------|---------------|---------------|
| Darlington | 195 | 167 | 103 | 122 |
| Hartlepool | 78 | 105 | 100 | 116 |
| Middlesbrough | 220 | 190 | 177 | 172 |
| Redcar and Cleveland | 126 | 128 | 116 | 134 |
| Stockton-on-Tees | 184 | 239 | 177 | 201 |
| Tees Valley | 803 | 829 | 673 | 745 |
| England | 112,016 | 107,535 | 84,489 | 93,884 |

Source: DfT Reported Road accidents by Local Authority in England

Parallel to the increase in total road traffic between 2016 and 2019, has been a decline in bus patronage figures, with 2.3 million fewer journeys made in 2018/19 compared to 2014/15. The most recent data (2020/2021) for Tees Valley represents an eleventh consecutive year of decline, with numbers being heavily impacted by the Coronavirus pandemic and the consequential lowering of confidence in shared transit. The latest data saw a fall of 17.1 million journeys when compared to the previous year, which is over three times the fall over the previous four years combined. However, this is in line with the broader regional and national trend towards lower bus usage, as shown in the table below. It is, however, important to note that passenger journeys were falling prior to the Coronavirus pandemic.

Table 3.4.4. Passenger journey on local bus services (millions), Tees Valley LA, North East & England

| Local Authority | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
|----------------------|----------------|----------------|----------------|----------------|----------------|
| Darlington | 6.3 | 6.0 | 5.7 | 5.5 | 1.7 |
| Hartlepool | 4.4 | 4.3 | 4.4 | 4.0 | 1.6 |
| Middlesbrough | 8.8 | 7.3 | 7.4 | 6.8 | 2.5 |
| Redcar and Cleveland | 3.9 | 4.4 | 4.2 | 3.4 | 1.2 |
| Stockton-on-Tees | 8.3 | 8.2 | 8.2 | 7.4 | 3.0 |
| Tees Valley | 31.7 | 30.2 | 29.9 | 27.1 | 10.0 |
| North East | 177.0 | 169.6 | 172.3 | 162.3 | 61.8 |
| England | 4,438.7 | 4,348.1 | 4,306.1 | 4,072.7 | 1,574.5 |

Source: DfT Bus passenger journeys by local authority in England, Table BUS0109a

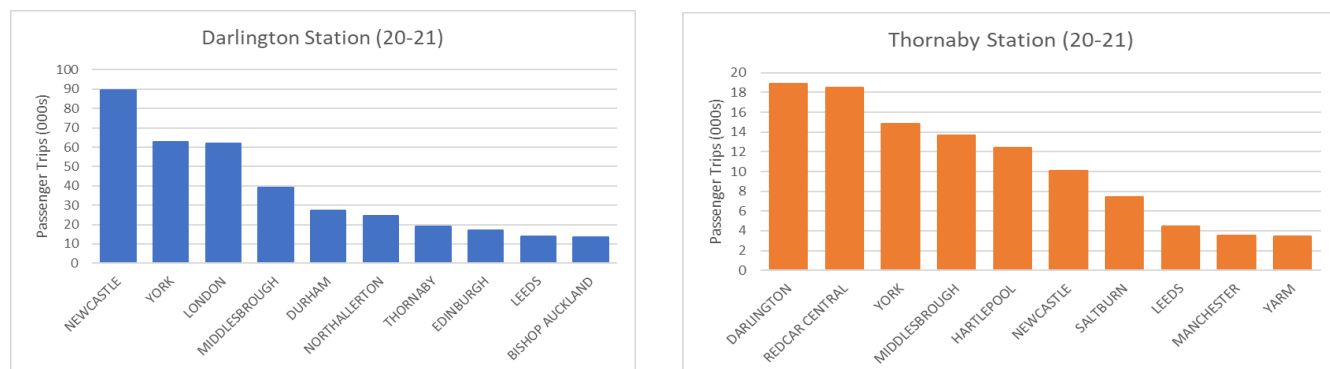
3.4.5. Rail Demand

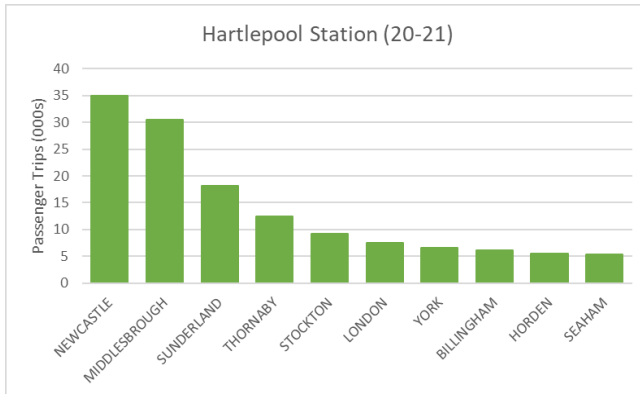
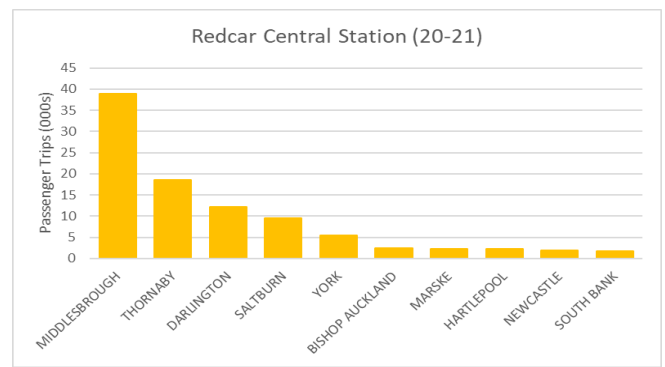
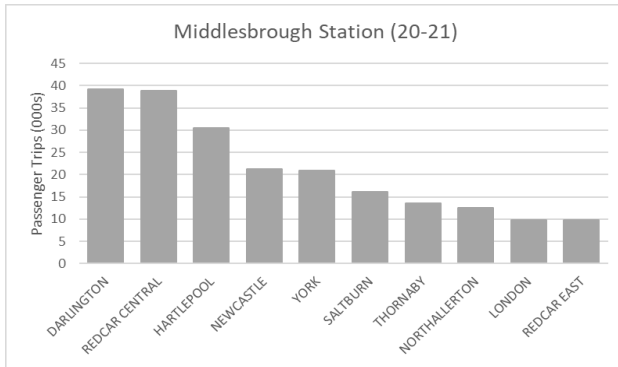
In terms of aggregate Tees Valley rail station usage, boardings and alightings totalled 1.61m across all stations during 2020/21, a decrease from 6.72m in 2019/20. The 76.1% decrease from the previous year can be attributed to the Coronavirus Pandemic, which resulted in large falls across all forms of public transport.

The five busiest stations in the Tees Valley – Darlington, Middlesbrough, Hartlepool, Thornaby and Redcar Central accounted for 1.29 million boardings and alightings in 2020/21. While this figure has fallen from 5.29 million in 2019/20, its share in aggregate Tees Valley station usage increased slightly from 79% to 80%.

Across Tees Valley, the East Coast Mainline station (Darlington), had the highest station usage in terms of total boardings and alightings with 517,000 in 2020/21. Middlesbrough was second with 339,000, Hartlepool was third with 167,000 and Thornaby fourth with 154,000. Redcar Central was fifth busiest with 114,000 boardings and alightings. Around 392,000 journeys were made through other Tees Valley stations, which represents 24% of journeys. This represents an increase in the proportion of local journeys, up 4 percentage points from 20%. Of the other stations, Saltburn was the busiest with 60,000 boardings and alightings (a decrease from the previous year’s figure of 258,00), the Teesside International Airport station had the lowest number of boardings and alightings with only 10 during 2020/21.

Figure 3.4.4. Most common journeys to/from Tees Valley stations, 2020/21





Key findings:

- Newcastle was the most popular journey to/from both Darlington and Hartlepool.
- Darlington saw more journeys to destinations outside Tees Valley.
- By contrast, Middlesbrough, Thornaby and Redcar’s journeys were mainly to other stations within Tees Valley, the North East and Yorkshire.

This year also saw the establishment and continued growth of some key new train services for the Tees Valley. Following its introduction in December 2021, LNER’s first direct rail service from Middlesbrough to London in more than 30 years is now operating very successfully. Currently two trains per day run, one in each direction but plans are in place to extend this to 6 trains per day in each direction to further improve rail connectivity with the capital. In addition, the TransPennine Express service to Redcar Central was extended to Saltburn in May 2022 and now runs an hourly service therefore providing greater direct connections to places outside of Tees Valley, including York, Leeds, and Manchester. The expansion in services comes as plans have been approved and work has started on the £100 million plus transformation at Darlington station. Good progress also continues on a £34 million upgrade for Middlesbrough station, a £12 million upgrade at Hartlepool station and a £4 million upgrade at Billingham station while plans for major improvements at Eaglescliffe station are also well in development.

3.4.6. Teesside International Airport

Teesside International Airport passenger numbers was climbing steadily pre-pandemic to a six year high of 148,000 in 2019. During 2020, passenger numbers fell to 37,000 due to the impacts of the COVID-19 pandemic, however a strong growth was experienced during 2021 with a 95% growth as travel restrictions began to be eased. The table below presents passenger number for Teesside International Airport, as well as two competitor airports (Newcastle airport and Leeds Bradford airport) and all UK airports.

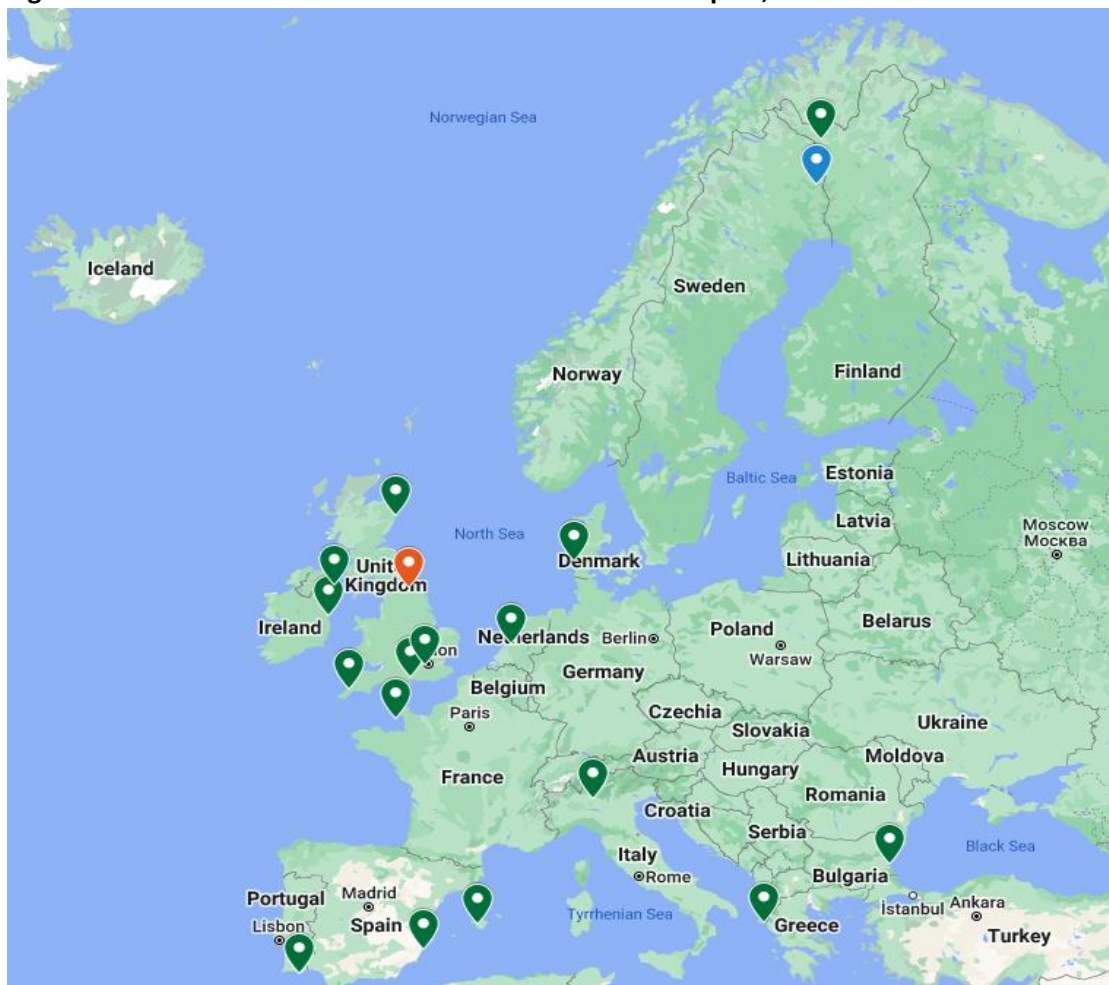
Table 3.4.5. Terminal passenger numbers by airport, Teesside International and all UK airports (2018-2021)

| | 2018 | 2019 | 2020 | 2021 |
|-------------------------------|----------------|----------------|---------------|---------------|
| Teesside International | 140,000 | 148,000 | 37,000 | 72,000 |
| Newcastle | 5,332,000 | 5,199,000 | 1,061,000 | 1,022,000 |
| Leeds Bradford | 4,038,000 | 3,992,000 | 751,000 | 735,000 |
| All UK Airports | 292,090,000 | 296,681,000 | 73,685,000 | 64,263,000 |

Source UK CAA

From 2018 to 2021, passenger numbers at Teesside International Airport fell by 76,000 or 49%, which is a smaller percentage decrease than experienced for all UK airports (78%). Moreover, the decrease is less than that observed at the two competitor airports, which both fell approximately 80% over the same time period. Additionally, provisional passengers' figures 2022 have a forecasted figure of approximately c.150,000 following an expansion in available flights and an increase in travel following pandemic restrictions.

Figure 3.4.5. Destinations from Teesside International Airport, 2022

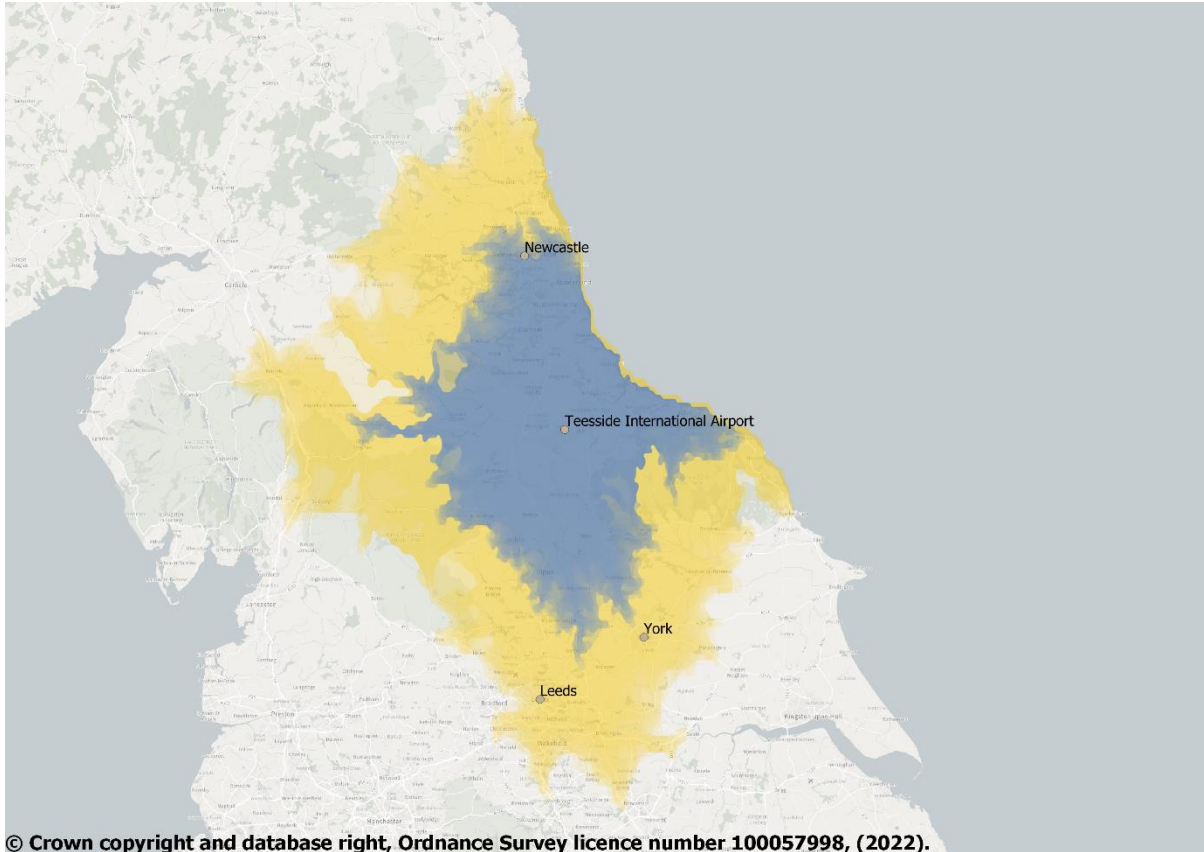


Source Teesside International Airport. Note: Red pin is Teesside International Airport, blue pins are new destinations for 2022 and green pins are all other destinations.

To help further boost passenger numbers coming through Teesside International Airport, new routes have already been announced for 2023, including to Dalaman and additional flights to Palma. To be able to attract new routes to the airport, a key factor is the potential passengers that would utilise the airport. The below map highlights the vast catchment area of Teesside International Airport,

which covers locations North of Newcastle and as far south as parts of Leeds. This catchment area is all within a 90-minute drive of TIA, with approximately 5.2 million people living within this area. Moreover, there are over 2.5 million people living within a 60-minute drive of Teesside International Airport.

Figure 3.4.6. Teesside International Airport: 60 and 90 minute travel time



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Source: QGIS/HQGIS Plugin, 2022. Note: Blue = 60 minute catchment area, Yellow = 90 minute catchment area.

Alongside the growth in passenger numbers, further developments have been progressing across the airport site. This includes the completion of the Skybar as well as other terminal improvements to enhance the visitor experience. Additionally, ground was broken in the development of Teesside Airport's £200 million business park on the southside of the site. Work has commenced to connect the development site, which covers 270 acres, to the A67. Once complete the logistics, manufacturing and commercial space has the potential to create 4,400 jobs and deliver £3 million per year to reinvest into the airport.

Finally, 2022 saw the expansion and addition of businesses located at Teesside International Airport. Global aviation giant Willis Lease Finance Corporation and its wholly owned subsidiary, Willis Aviation Services Limited, lodged planning documents for a maintenance facility and a Jet Centre at Aviation Village. This investment will be worth £25 million and is set to bring a significant number of jobs to the region.

Draken have been able to grow their fleet of jets stationed at the airport, following the completion of a second state-of-the-art hanger. These jets have been specifically tailored to improve the capability and survivability of the RAF's Lightning and Typhoon fighter pilots; this is the UK MOD's first-ever privately contracted training service of its kind. Serco have signed a new 10-year deal to keep their world class centre of excellence, International Fire Training Centre (IFTC) located at the

airport, which will safeguard more than 50 jobs. 2Excel have also relocated a pair of Boeing 727s to Teesside Airport, which conduct oil spill response operations and will further boost the number of jobs at the airport site.

3.4.7. Air Quality

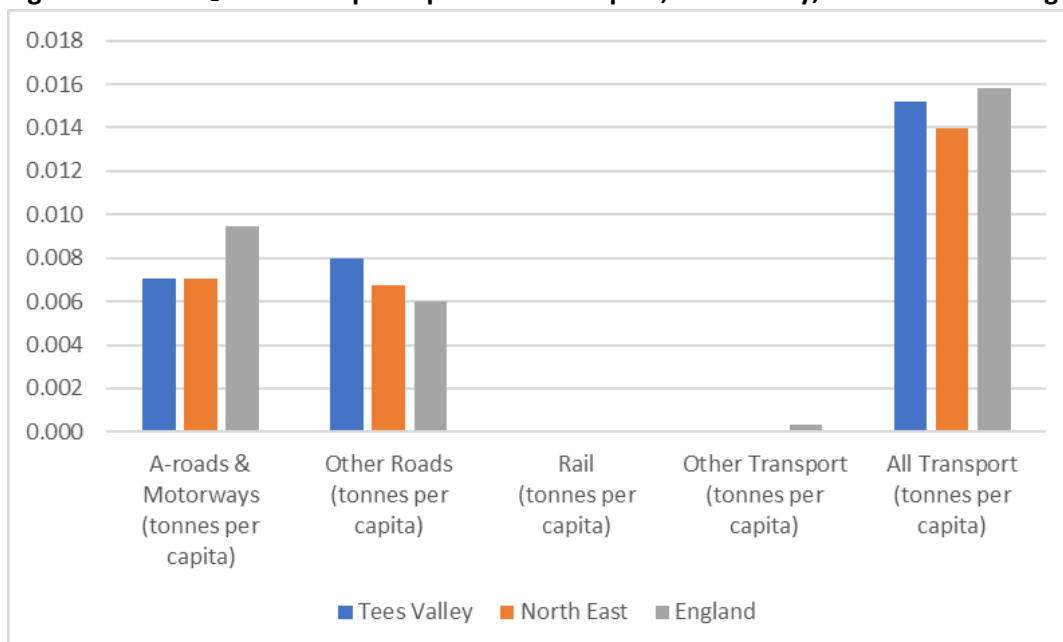
Air Quality is an important determinant of public health within the Tees Valley, with poor air quality being the largest environmental risk to public health. This is due to the increased probability of chronic conditions and reduced life expectancy in those exposed to air pollution in the long-term. It is therefore important to monitor the air quality within the Tees Valley, in order to improve the wellbeing of the public. The effects of emissions on the Natural and Built Environment in Tees Valley is presented in Section 3.2.6.

Air quality is affected by the release of air pollutants, with the most significant pollutants being nitrogen dioxide (NO₂) and particulate matter (PM). Other forms of pollutants are sulphur dioxide (SO₂), ammonia (NH₃), ozone (O₃) and carbon monoxide (CO).

To determine the air quality within the Tees Valley, statistics from the Department for Business and Industrial Strategy can be utilised to form a picture on how the Tees Valley compares versus the UK. The first air pollutant to be studied is nitrogen dioxide (NO₂), and is formed during combustion processes, mostly commonly located in transport vehicles.

As illustrated from the following figure, Tees Valley overall transport emissions are below the national average.

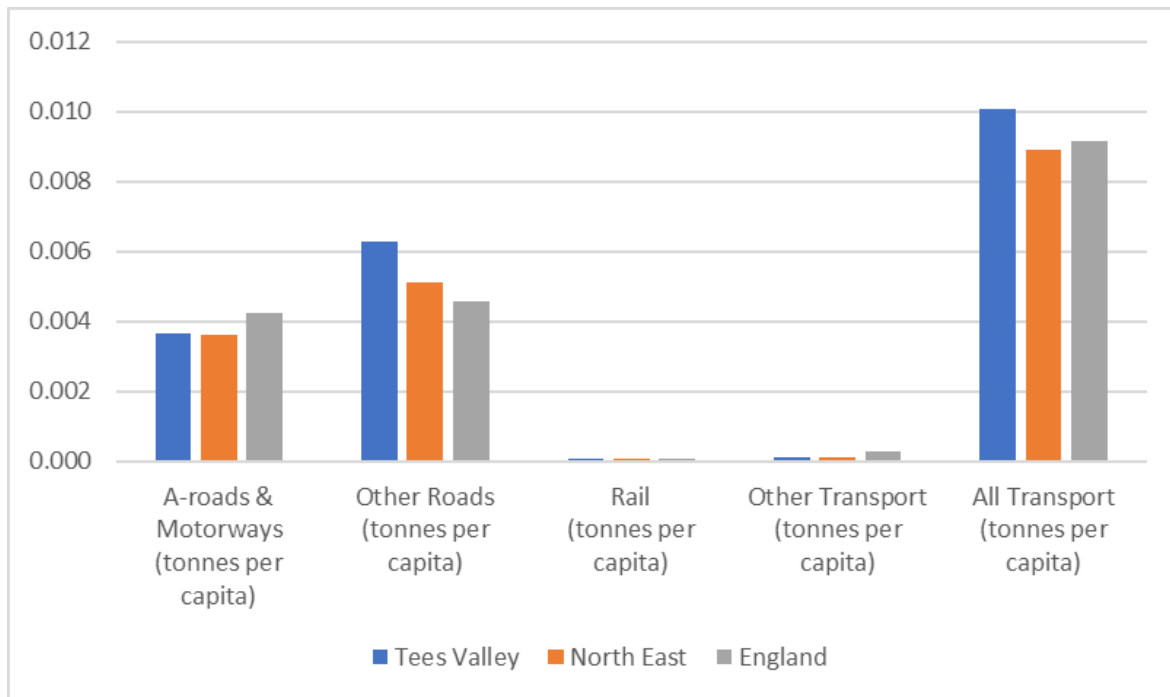
Figure 3.4.7. NO₂ emissions per capita from transport, Tees Valley, North East and England (2020)



Source: UK local authority and regional greenhouse gas emissions national statistics, Department for Business, Energy & Industrial Strategy (BEIS)

Another component of GHG emissions is hydrocarbons, generally measured as CH₄ and created from the incomplete combustion of fossil fuel. As shown in the graph below transport emissions across Tees Valley are above the national average. Given this is the opposite of the trends seen for the other Greenhouse gas emissions in this paper, this is likely down to the vehicle mix between petrol and diesel vehicles or the age profile of vehicles on the region's roads.

Figure 3.4.8. CH₄ emissions per capita from transport, Tees Valley, North East and England (2020)

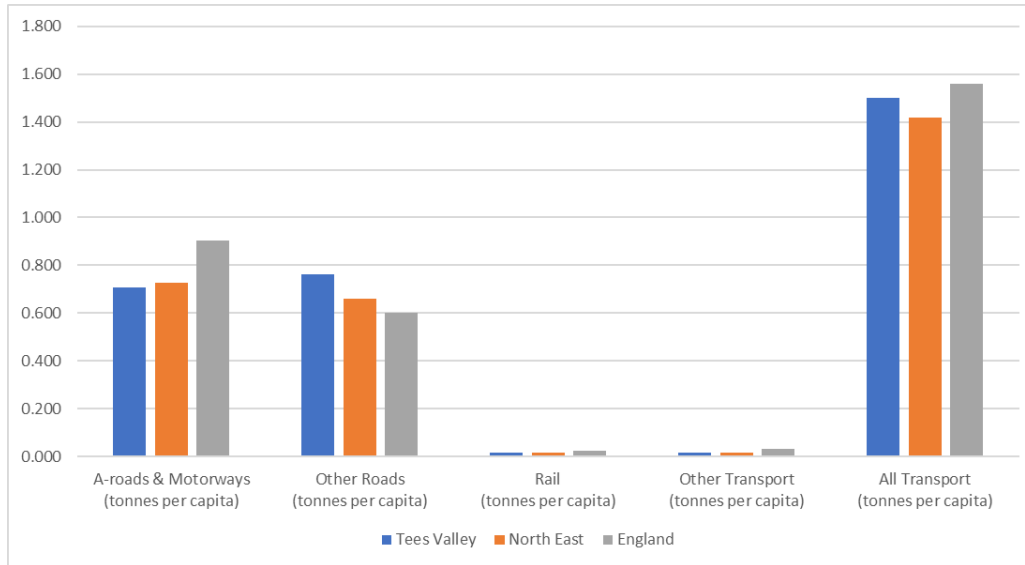


Source: UK local authority and regional greenhouse gas emissions national statistics, Department for Business, Energy & Industrial Strategy (BEIS)

The final consideration of air quality in the Tees Valley is the CO₂ emissions per capita from transport, which will be a useful highlight of the levels of emissions produced from transport in the region. Tees Valley has a total CO₂ emission per capita of 1.50 tonnes from transport, which is below the England total of 1.55 tonnes but above the North East total of 1.42 tonnes.

The primary reason that Tees Valley is below the English figure is that the Tees Valley has lower per capita emissions for A-roads & motorways (0.71t versus 0.90t). This is likely to be due to the reduced long distance traffic compared to more central parts of the UK. On the other hand, the Tees Valley has higher emissions per capita than the English total for other minor roads (0.76t versus 0.69t). In terms of diesel railways per capita emissions, the Tees Valley total is in line with the North East and England totals.

Figure 3.4.9. CO₂ emissions per capita from transport, Tees Valley, North East and England (2020)



Source: UK local authority and regional greenhouse gas emissions national statistics, Department for Business, Energy & Industrial Strategy (BEIS)

3.4.8. Cycling Flows

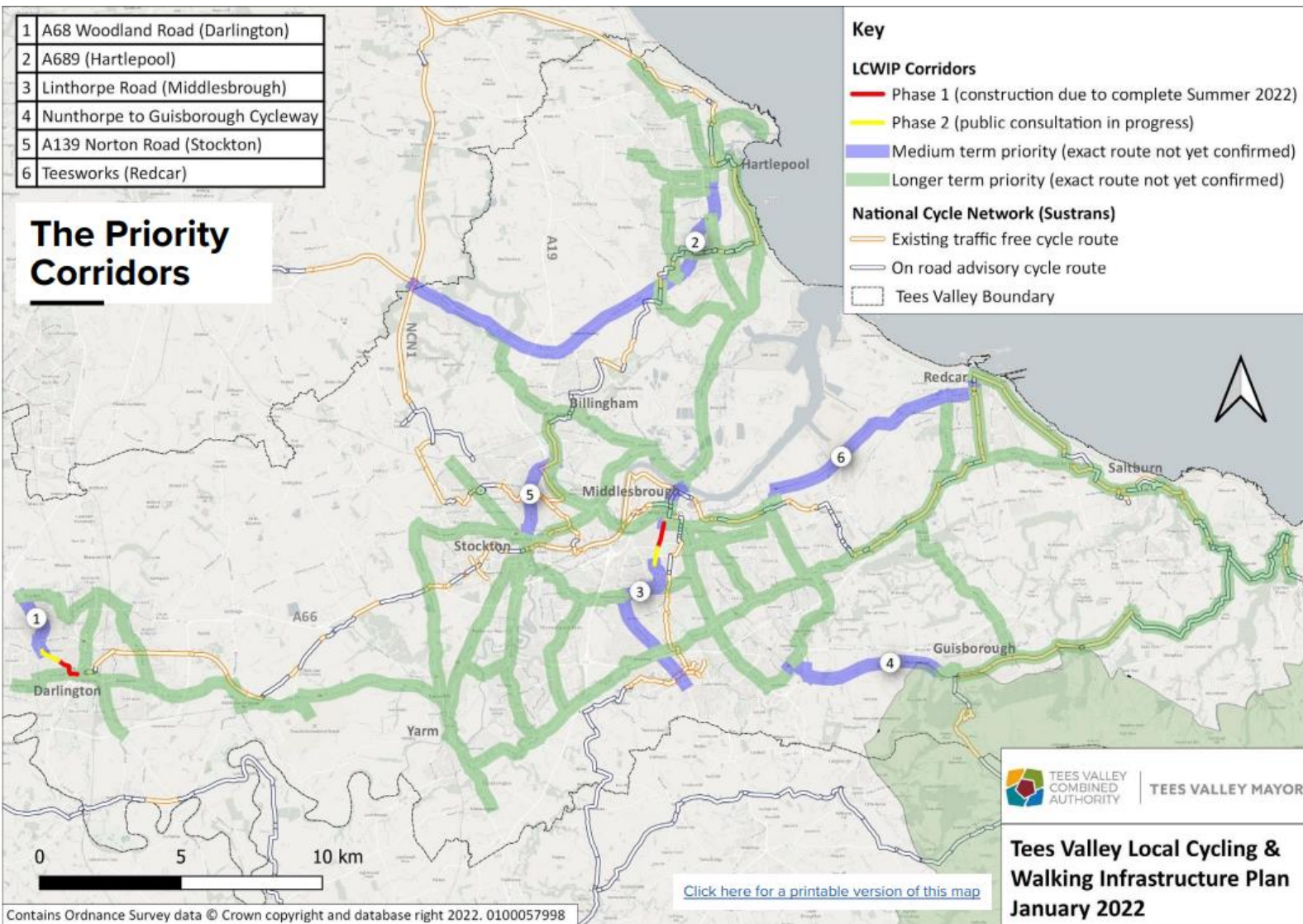
Prior to the Coronavirus pandemic it was stated that 70% of respondents in the Tees Valley Strategic Transport Plan consultation regularly walked as part of their journey and 27% regularly cycled. This highlighted the importance of supporting the development of cycling and walking routes, with 79.6% identifying the delivery and maintenance of safe cycling and walking routes as a high or very high priority. This need was exacerbated since the beginning of the pandemic, with 55% of respondents of a survey stating that they walked more during lockdown and 38% cycled more. Moreover, 41% of respondents intended to continue walking more after lockdown and 33% intended to continue to cycle more. 40% of people who rarely or never cycled before lockdown had started cycling in the first lockdown, and 73% want better walking and cycling infrastructure.

There are already strong foundations in the Tees Valley, which can be built upon to expand the capabilities of the walking and cycling network. National cycle routes have been incorporated throughout Tees Valley, and the Hub in Stockton-on-Tees is the UK's first active travel and cycle parking centre offering free information on all aspects of walking and cycling. Sustrans, who already operate the Hub in Stockton-on-Tees, have now been appointed to deliver Active Travel Hubs in each local authority area. Furthermore, free personal travel planning is available to Tees Valley residents, with 4,000 Tees Valley households and over 450 college students and staff being engaged with travel advisors during 2019/20. School children are also benefiting from pedestrian and cycle training, with 1,838 children receiving pedestrian training and 1,301 given Bikeability training in 2019/20. The 2020/21 figures have not been outlined here due to the effect of COVID-19, during which time many schools and households could not access these projects.

The 2011 Census showed that cycling made up just 2.1% of travel to work trips in Tees Valley, with walking accounting for just 11%. Therefore, the Local Cycling and Walking Infrastructure Plan highlighted the recognition that further investment was required to help facilitate a step-change in the number of people walking and cycling.

The map below illustrates the current cycling network within Tees Valley, which highlights the various routes within both the Primary and Secondary networks. Additionally, it signals the location of priority corridors and phase 1 delivery objectives as part of the Local Cycling and Walking Infrastructure Plan. The six priority corridors are the A68 Woodland Road (Darlington), A689 (Hartlepool), Linthorpe Road (Middlesbrough), Guisborough to Nunthorpe Cycleway, the A139 Norton Road (Stockton town centre) and Teesworks (Redcar). Construction has now completed on Linthorpe Road Phase 1 and will soon complete on A68 Woodland Road Phase 1.

Figure 3.4.10. The Local Cycling and Walking Infrastructure Plan Priority Corridors



Source: Tees Valley Local Cycling & Walking Infrastructure Plan, January 2022

The map shows the aspirational network, some of which is already in place. This is an ambitious plan and will take a number of years to deliver each section of the entire network, therefore the six corridors have been prioritised to be delivered first. Work has now completed on the Linthorpe Road Phase 1 corridor in Middlesbrough, and the Woodland Road Phase 1 corridor in Darlington is currently in delivery. The remaining corridors in TVCA’s City Region Sustainable Transport Settlement (CRSTS) programme are expected to be completed by March 2027.

3.4.9. Transport barriers to accessing employment

Transport barriers to accessing employment can be a particular problem for those on low incomes.

Transport can be a major barrier to finding work. Public transport is all too often seen as something that constrains rather than enables a return to work, because of a lack of affordable and reliable transport that gets people to locations where there is suitable work.

Source: IRF, Tackling transport-related barriers to employment in low-income neighbourhoods, August 2018

Key transport barriers faced by low income households include:

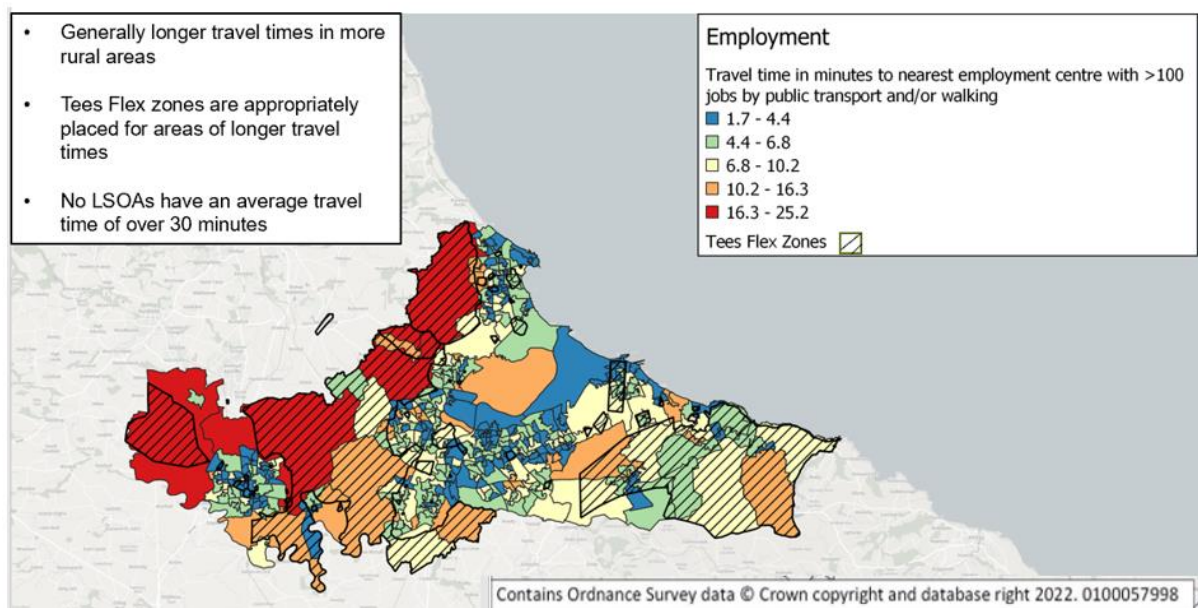
- Limitations in the provision of transport services, particularly buses.
- Resource constraints on using transport i.e. expensive, often meaning taking up employment actually means a reduction in income.
- Travel times and their interaction with caring responsibilities.

Source: Sheffield Hallam University, Addressing transport barriers to work in low income neighbourhoods, June 2017

Key findings

- 90.65% of households currently within beneficial employment. The households of Tees Valley where taking part time minimum wage employment (at centres of minimum wage activity) is accessible (by public transport) without losing income/time compared to being on benefits when wider travel costs are taken into consideration.
- 90.64% of households <1hr access to skills. Households with public transport access of Tees Valley higher education facilities.

In terms of travel time to the nearest employment centre, whilst rural areas tend to have generally longer travel times than urban areas, no LSOA area has an average travel time of over 30 minutes as shown below (Source: TVCA).



3.4.10. Transport SWOT analysis

| Strengths | Weaknesses |
|--|---|
| <p>Low levels of congestion together with some of best digital connectivity in the country providing an investment ready environment with minimal growth constraints.</p> <p>The Teesside Freeport increases investment potential in the area.</p> <p>Busy rail gateway hub at Darlington – 2hrs 30minute journey time to London.</p> <p>Increasing rail connectivity with a number of additional routes being announced to destinations outside the region.</p> <p>A wide range of sectoral training provision e.g. Stockton Riverside College’s Logistics Academy.</p> <p>Major logistics and infrastructure investments e.g. Amazon in Darlington and Wynyard, Middlesbrough’s Centre Square office development, TeesAMP and the digital and creative hub, Boho Zone.</p> <p>Polycentric nature creates numerous benefits e.g. shorter commute times, promoting sustainable transport forms.</p> <p>Active travel hubs helping local people to walk and cycle more often.</p> | <p>Limited east-west rail connectivity.</p> <p>Existing River Tees crossing points acting as bottlenecks.</p> <p>Poor connectivity between dispersed and multiple concentrations of housing and industry.</p> |
| Opportunities | Threats |
| <p>An established international airport with the potential for rapid expansion supporting wider economic growth, including the development of a new logistics park.</p> <p>Ideal compact and low-lying valley geography for a programme of cycling, walking and other sustainable transport measures.</p> <p>Potential productivity improvements from investing in improving all forms of connectivity between settlements and employment centres including a new Tees crossing, the Portrack Relief Road, and A689 improvements.</p> | <p>A need for behaviour changes and encouraging a shift towards public transport, active travel, and clean energy transport solutions.</p> <p>Large declines in patronage on public transport services since the start of the pandemic could pose liquidity problems to local operators.</p> <p>Changing behaviour especially relating to public transport resulting from the pandemic.</p> <p>Slow return to pre-pandemic travel patterns affecting passenger numbers at</p> |

| | |
|---|---|
| <p>Road and rail freight is playing an increasingly important role in facilitating the movement of goods beyond Tees Valley's borders.</p> <p>Potential supply chain opportunities for electric and self-driving vehicles.</p> <p>Increasing use of alternative forms of transport.</p> <p>Potential to invest in intelligent transportation systems using the latest technology.</p> | <p>Teesside International Airport in the long-term.</p> |
|---|---|

Section 3.5. Digital

3.5.1. Introduction

This section covers metrics relating to digital infrastructure, digital innovation, and digital inclusion and skills, each of which are key to assisting in the Government’s levelling up agenda and fundamental to achieving the Tees Valley’s ambition to be **the UK’s first truly Smart Region by 2032, using world-leading digital infrastructure and innovation to create opportunities for all residents and businesses.**



Digital technology is increasingly becoming a key driver of employment and productivity growth. The coronavirus pandemic has rapidly accelerated digital transformation around the world, with digital solutions being central to safeguarding supply chains, maintaining public services, and ensuring continuity in business and education. Digital infrastructure has become fundamental to the functioning of an economy.

Digital infrastructure, innovation and inclusion and skills are woven throughout the work of the Combined Authority including Employment and Skills, Transport, Creative Place, Business Support and Innovation and Clean Growth.

3.5.2. Key Messages

- Tees Valley is above the nation average for all speeds of broadband, but below the national average for full fibre roll out.

| | Tees Valley | UK |
|------------|-------------|-----|
| Superfast | 97% | 95% |
| Ultrafast | 90% | 66% |
| Gigabit | 89% | 65% |
| Full Fibre | 19% | 38% |

- Three of the CA local authorities are in the top ten for median download speeds in the UK.
- Digital innovation strengths include the world’s first Centre for Digital Trade and Innovation, BoHo, the Industrial Digitisation Technology Centre, Digital City, and the Net Zero Innovation Centre.
- There is a lack of digital skills in the region, leading to a skills gap which was exacerbated during the pandemic.

- Digital exclusion among deprived communities, with lack of access to devices and affordable connectivity.

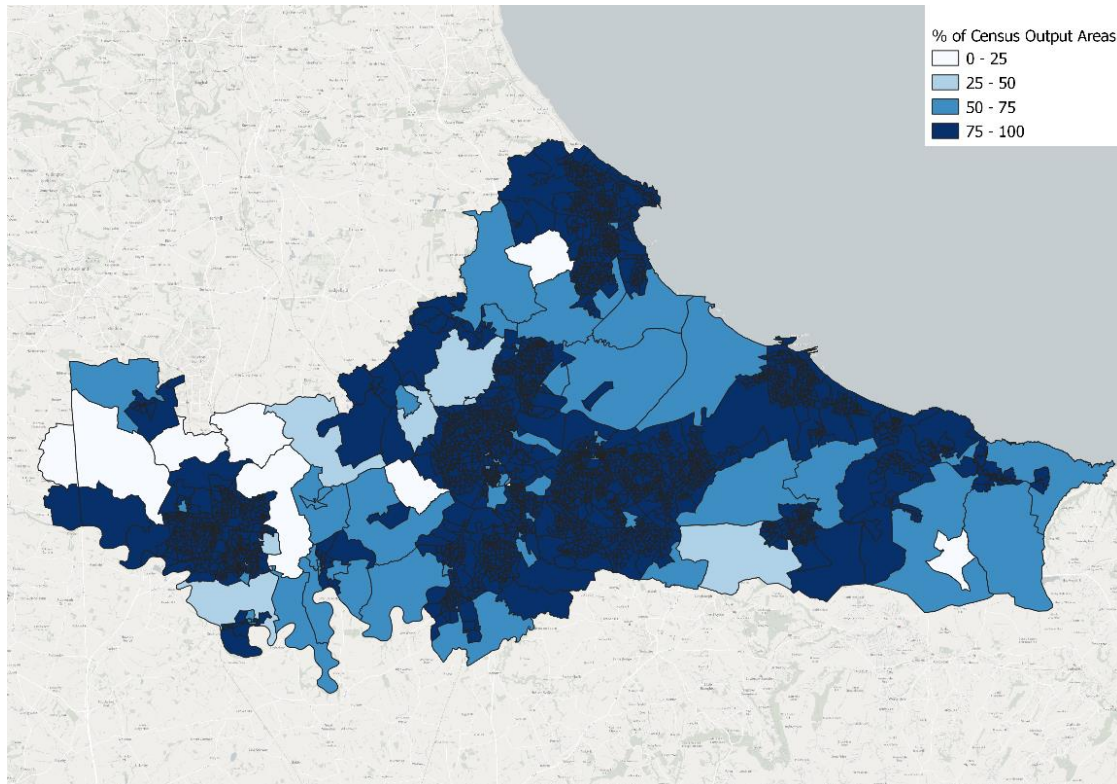
Detailed information on digital infrastructure, innovation and inclusion and skills can be found in the [Tees Valley Digital Strategy](#), published in January 2022.

3.5.3. Infrastructure

High-quality resilient digital infrastructure is crucial for economic growth as well as boosting productivity and competitiveness. Digital infrastructure helps connect people to each other, people to businesses, and businesses to markets, forming a foundation for economic activity and community prosperity. As future projects and opportunities across Tees Valley come to fruition, the digital infrastructure will continue to increase in prominence and therefore the capabilities of the region’s infrastructure will advance in parallel.

Tees Valley is generally a well-connected region through broadband service, with £3.8 million of investment aimed at improving Superfast broadband delivered through the Tees Valley Superfast Broadband programme. In 2022, Superfast broadband coverage from fixed broadband expanded to encompass 97% of premises in Tees Valley, an increase from 96% the previous year. Additionally, this remained above the national average of 95% and is increasing at a fast rate. However, pockets of poor broadband provision still exist within Tees Valley, primarily in rural areas and can be linked to the lack of commercial attraction for suppliers.

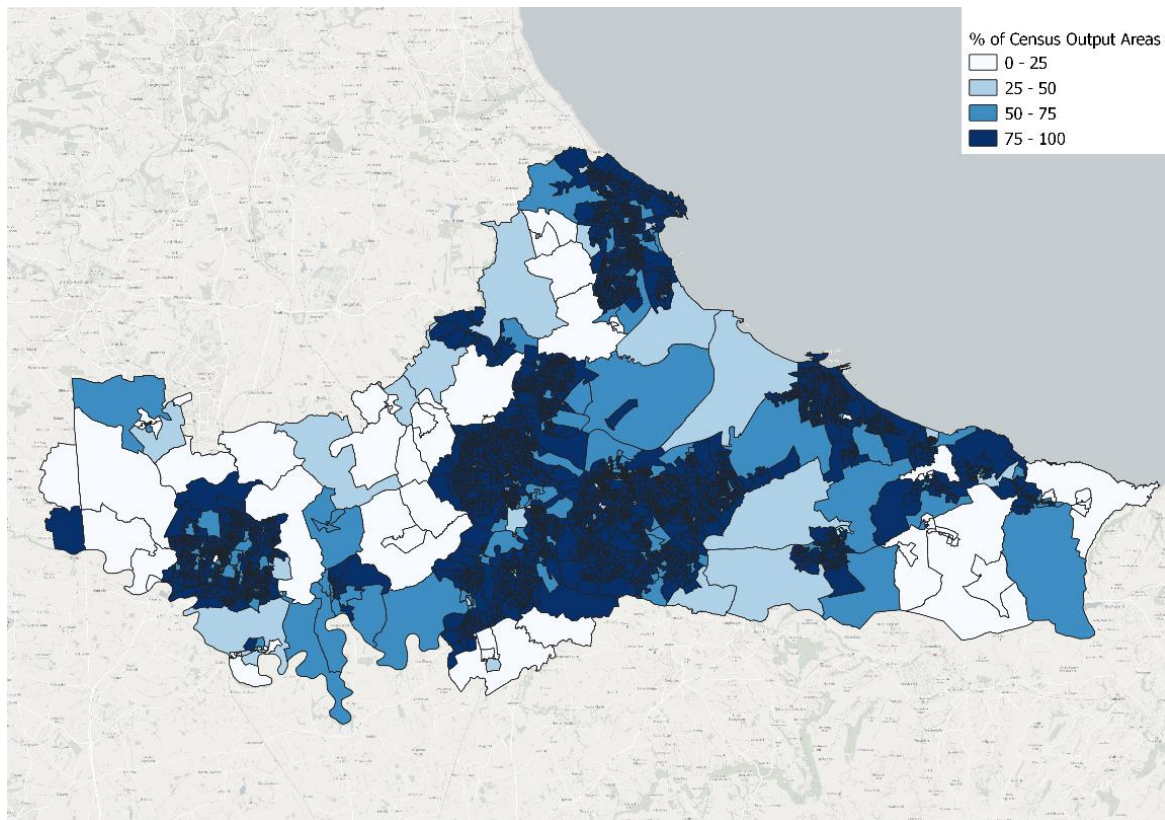
Figure 3.5.1. Percentage of Tees Valley premises that have Superfast Broadband from fixed broadband, 2022



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Source: Ofcom Data

Access to Ultrafast broadband is lower than Superfast broadband in the Tees Valley (90% coverage compared to 97% coverage). Of the premises in the Combined Authority, 90% currently have access to Ultrafast Broadband coverage from fixed broadband, which is an increase of 2 percentage points the previous year (90% from 88%). Furthermore, this is significantly above the national average of 66% coverage, however challenges still remain with disparities evident between urban and rural connectivity for the coverage of Ultrafast Broadband.

Figure 3.5.2. Percentage of Tees Valley premises that have Ultrafast Broadband coverage from fixed broadband, 2022

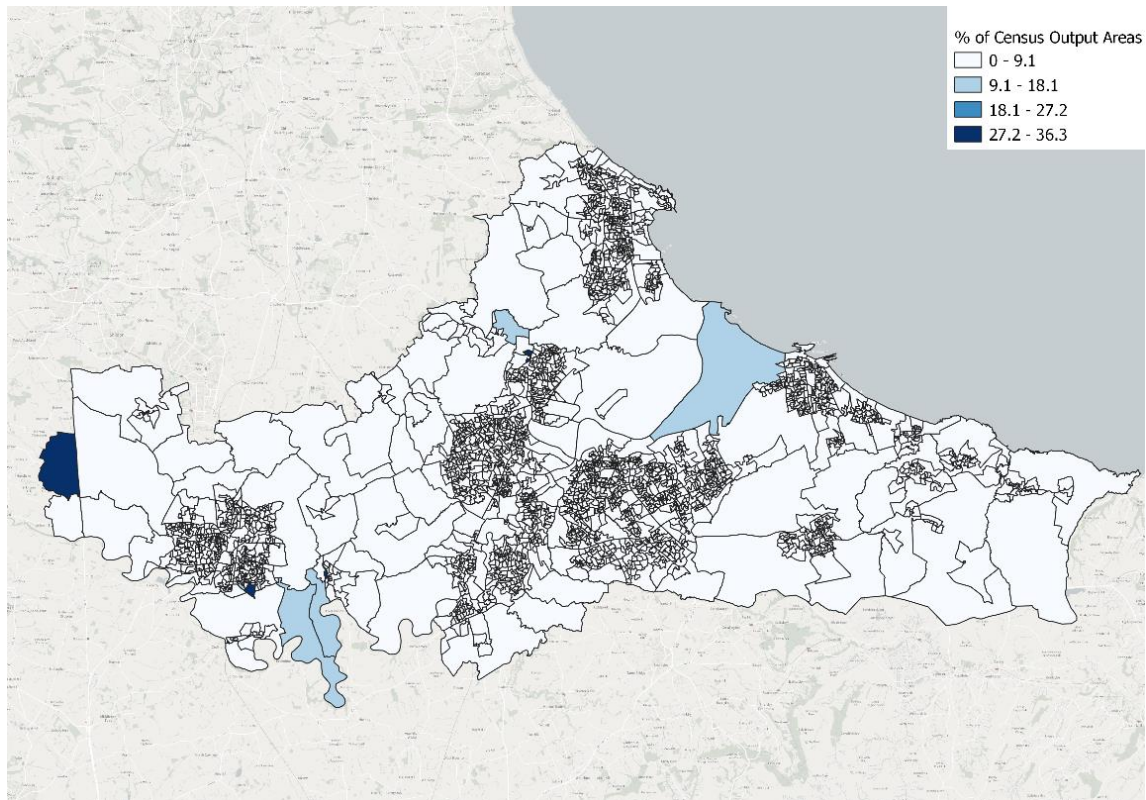


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 Source: Ofcom Data

The Universal Service Obligation (USO) is a legal right to request a decent broadband connection. It is a UK-wide measure intended as a “safety net” to deliver broadband to premises that do not have access to a decent and affordable connection. To be below the USO a premises that do not have access to a connection that can deliver 10 megabits per second (Mbps) download speed, as well as other quality parameters, including upload speed and latency). Additionally, the cost of the broadband must be less than £45 per month.

The percentage of premises within Tees Valley that are below the USO is negligible (less than 0.5%). However, as highlighted in the below map, there are rural areas within Tees Valley that do have premises below the USO levels and therefore may cause issues for local residents.

Figure 3.5.3. Percentage of Tees Valley premises that have broadband coverage below the Universal Service Obligation (USO) from fixed broadband, 2022

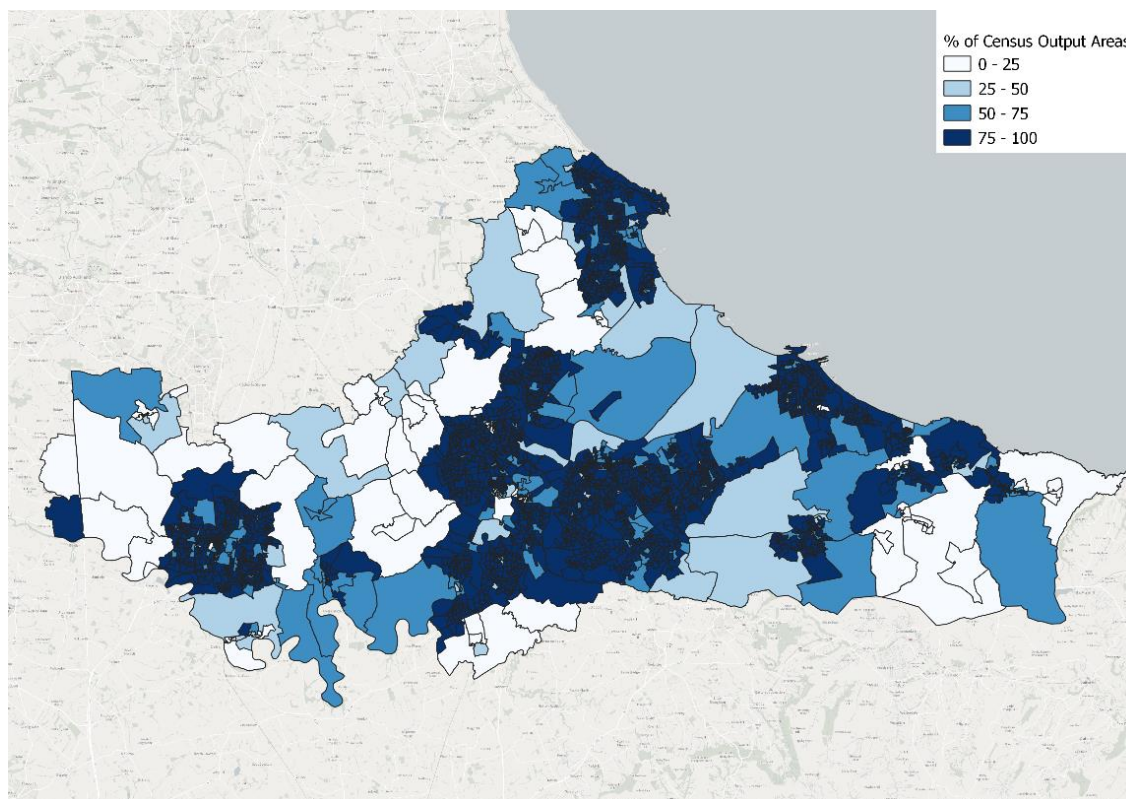


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Source: Ofcom Data

The future infrastructure capabilities for the nation will be driven by a UK government £5 billion infrastructure project '**Project Gigabit**', which aims to deliver nationwide coverage of gigabit-capable broadband to 85% of the country by 2025, with as close to 100% thereafter. As of 2022, 89% of premises in Tees Valley have Gigabit services from fixed broadband, compared to only 5% the previous year. Additionally, this is above the national level for Gigabit capable services of 65%. It is worth noting however, that a disparity remains between urban and rural levels of Gigabit capable services from fixed broadband.

The large rise in Gigabit capable services within Tees Valley has been driven by large investments across the Local Authorities from Virgin, CityFibre and Netomnia. This has enabled a rapid increase in gigabit connectivity over the last year.

Figure 3.5.4. Percentage of Tees Valley premises that have Gigabit capable services from fixed broadband, 2022



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Source: Ofcom Data

Data released by Ofcom that was a snapshot from May 2022 showed that Tees Valley accounts for three of the top ten UK local authorities for median download speed of broadband users' connections (Hartlepool, Middlesbrough, and Redcar & Cleveland). Additionally, Stockton-on-Tees was 11th and Darlington was 18th out of 374 local authorities.

Table 3.5.1 Median Download Speeds (Mbit/s)

| Local Authority | Median Download Speed (Mbit/s) |
|----------------------------|--------------------------------|
| City of Kingston Upon Hull | 185 |
| Belfast | 100 |
| Birmingham | 100 |
| City of Bristol | 100 |
| Harlow | 100 |
| Hartlepool | 100 |
| Middlesbrough | 100 |
| North East Lincolnshire | 100 |
| Nottingham | 100 |
| Redcar & Cleveland | 100 |

Source: Ofcom Connected Nations 2022

3.5.4. Innovation

Innovation is a vital element of economic growth through the development of new ideas, products and processes and their adoption and diffusion across the economy, bringing benefits for the whole of society. By incorporating new technologies and practices, UK businesses can lower costs and become more internationally competitive. Many companies are now making investments in long lasting digital solutions to stay competitive with businesses recognising the strategic importance of digital technology.

Business

The Tees Valley Covid-19 and EU Transition Business Survey 2021 found that of those businesses surveyed 63% had undertaken or were planning to undertake investment in information systems. This investment included cloud-based systems as well as remote working. Additionally, 71% of Tees Valley businesses had undertaken or were planning to undertake investment in e-commerce and marketing and 62% had undertaken or were planning to undertake investment in cyber and data security.

The Tees Valley is host to numerous digital innovation strengths including:

- Industrial Digitalisation Technology Centre (IDTC) – based at Teesside University and supporting local SMEs to explore and utilise digital technology.
- Digital City – a long standing Teesside University led initiative, working with the digital sector on start-ups, scale-up and digital innovation.
- Net Zero Innovation Centre – a £13.1 million innovation facility supporting the ongoing drive for clean energy and sustainability, which digital capability will be central to achieve.
- BoHo - The £30 million Boho development in Middlesbrough provides the opportunity to design, enable, create, and grow new digital talent.
- Teesside University's digital research and development - providing a strong platform for industry/public sector collaboration and knowledge transfer.
- Made Smarter - supporting local manufacturing SMEs with digital transformation.

A number of these strengths have close links with Teesside University, emphasising the important role that the Higher Education sector plays in helping to facilitate local R&D and digital innovation activity. A broad measure of innovative research activity led by universities is the Higher Education Research & Development (HERD), which was estimated to be approximately £222 per FTE job for the Tees Valley region. This measure was 6% higher than the national LEP average.

However, the strengths observed through Higher Education is not transferred over to the private sector. Tees Valley is ranked last out of all LEPs for the percentage of firms with product innovations, with only 11.7% of firms having recorded a new or significantly improved goods or services introduced in the Enterprise Research Centre (ERC) Benchmarking report released in 2021.

World leading Centre for Digital Trade and Innovation

The Centre for Digital Trade and Innovation (C4DTI) is an ICC United Kingdom-led, global initiative based in the Tees Valley. C4DTI is a public, private partnership led by industry and supported by government. Its core mission is to accelerate the digitalisation of UK trade, the implementation of open systems based on common international standards and a digital trade system that is paperless,

sustainable and secure. Digitalisation of trade could cut trade costs by 80% and generate £25bn of SME export growth and an additional £1bn in SME trade finance, halving the country's trade finance gap¹.

The Centre will work closely with innovation clusters across the UK's freeports such as the Teesside Freeport. The C4DTI is impartial and technology agnostic in approach and has the capability to engage industry of all sizes and sectors, identify and remove policy barriers and pilot practical solutions to help drive innovation, technology solutions and standards adoption at scale across the whole trading system.

Tees Valley Smart Region

The Tees Valley currently has a lack of region-wide data platforms collecting smart data and has an ambition to change this to become a 'Tees Valley Smart Region'. A Smart Region would make active use of the Internet of Things (IoT) and open data to optimise the flow of energy, people, and data. IoT refers to the network of physical objects that contain, for example, software or sensors that allows the objects to be connected to the Internet and each other. The objects can thereby interact and exchange data, as well as be remotely controlled or automated. IoT solutions may also involve cloud services and artificial intelligence (AI). This would be used to collect data from across the Tees Valley region, bringing it together in a smart data platform which would be used to improve operational efficiency, share information with the public and provide a better quality of government service. This would be known as a Tees Valley Smart Region and would place the concept of a 'Smart City' over the unique geographic, political, and economic background of the Tees Valley.

Moreover, a Tees Valley Smart Region would enable the Combined Authority and the five Local Authorities to interact directly with communities and local town infrastructure to monitor evolutions in the region's towns and local areas. Therefore, enhancing the quality, performance and interactivity of urban services and consequently reducing costs and use of resources.

Digital Innovation across key sectors

With the development of Teesworks and the success of obtaining the largest freeport in the UK, the Tees Valley has the opportunity to place these key industrial assets at the global forefront of digital innovation in industrial sites. Additional opportunities will present themselves through the fourth industrial revolution (Industry 4.0) with changing industrial practices and standards.

Furthermore, key industry sectors such as Transport, Energy and Culture & Heritage have been implementing digital innovation into their practices. Tees Valley has an aspiration to deliver a world-class transport system to underpin our economic transformation. This includes investing in intelligent transportation systems, using the latest technology to provide innovative services relating to different modes of transport and traffic management, enabling users to be better informed and make safer, more coordinated, and smarter use of transport networks.

Digital technology is being used increasingly within culture and tourism to enhance culture and heritage experiences, with technology ranging from digital preservation to assist cultural heritage to augmented reality and immersive virtual reality to enhance the tourism experience.

Digital technologies will be an essential tool in achieving the central government target of reaching Net Zero by 2050 as well as the implementation of projects such as CCUS and hydrogen production

¹ Creating a Modern Digital Trade Ecosystem – Research commissioned by ICC United Kingdom in partnership with ICC Germany

in Tees Valley. Digital technology innovation will enable a better understanding of energy usage as well as increasing efficiencies within the sector.

3.5.5. Inclusion and Skills

Digital inclusion is the enablement of society as a whole to access the benefits of the internet and digital technologies. Digitally excluded individuals can lack skills, confidence, and motivation, along with having limited or no access to digital equipment and affordable connectivity.

The fulfilment of digital inclusion is central to the Levelling Up initiative, primarily through the improvement of digital skills across qualification levels, especially with the difference in skill levels linked to differing outputs and wages across regions. Moreover, there is currently 80% of the workforce of 2030 in work today. Thus, opportunities for these individuals to upskill and reskill over their careers and adapt to digital technology changes such as AI and automation is critical to the capabilities of the future workforce.

Furthermore, digital inclusion is continuously growing in importance, as digital technologies play a larger role in individuals' day to day lives. The requirement for good internet connectivity, appropriate digital tools, and digital skills to utilise those tools is apparent and enables individuals to fulfil activities related to work, education, health care, shopping, and socialising to name a few activities that have shifted to the virtual world and away from the physical.

Between 2017 and 2020, the proportion of internet non-users in the North East region declined, however the rate of non-internet users in the North East region remains above all other English regions. In 2020, 11.1% of North East residents are internet non-users, which is significantly above the next English region (Yorkshire and the Humber – 9.2%). However, this figure has fallen greatly from the 2017 levels, which saw 16% of North East residents being internet non-users. Furthermore, of Tees Valley residents aged 16+, 10.5% had not used the internet in the last three months in 2020, compared to 7.8% nationally (ONS).

Additionally, the disparity in digital inclusion between households with different levels of income was exemplified when the pandemic hit in March 2020. For households earning between £6,000 to £10,000 only 51% had home internet access, whereas for those households with an income in excess of £40,000, 99% had home internet access².

The Tees Valley has some of the most deprived areas in the country, which is further explored in **Section 3.1** through analysis of the regions area profiles. The high levels of deprivation in pockets across the Tees Valley ties into the ability of school children to transition to home learning during the Covid-19 pandemic. The UK government brought in schemes during lockdowns to assist education providers distribute laptops, tablets, 4G routers and free mobile data for vulnerable and disadvantaged children and young people to continue learning.

Digital Skills

Tees Valley is also underperforming the national average in basic digital skills, with 71% of the North East population trained in basic digital skills, compared to the UK average of 79%. Moreover, the proportion of the population with zero basic digital skills is higher than that of all other English

² State of the Nation 2020-21: Social Mobility in Great Britain July 2021

regions at 12% compared to 8% nationally³. This under-skilling is only set to be exacerbated, with the UK Industrial Strategy Council predicting that basic digital skills will be the most widespread under-skilling in 2030, unless action is taken.

Access to high level skills is an issue for businesses both locally and nationally, with a high number of skills shortage vacancies in digital roles. This 'digital skills gap' existed prior to the Covid-19 pandemic but during the pandemic the demand for digital skills has been heightened. Based upon statistics from Lightcast⁴ of the 47,250 unique job postings during 2022 in Tees Valley, 13.6% (6,445 unique vacancies) required some form of digital skill. Additionally, 5.8% (2,760 unique vacancies) were for digital occupations, which further signals the strength of the sector and the skills required to facilitate the sector needed to be expanded in the workforce.

The digital requirements for businesses are further emphasised by the fact that 36% of Tees Valley employers stated that digital skills were difficult to obtain and 42% anticipated the need to develop digital skills within their workforce over the next 12 months⁵.

To combat the gap in digital skills, the DfE announced a new wave of digital skills bootcamps in January 2021 as part of their Lifetime Skills Guarantee. The skills bootcamps are developed in partnership with employers, colleges, and local authorities to provide the opportunity for individuals to build the skills that are in demand in their local area and get a better job. These bootcamps include a range of digital courses and technical skills courses.

As part of the devolution deal for the Tees Valley, the Combined Authority has been able to direct adult education provision to target specific skills gaps in local businesses, including digital skills. This support includes the legal entitlements to full funding for eligible adult learners for 'essential digital skills qualification, up to and including level 1, for individuals aged 19 and over, who have digital skills assessed at below level 1'.

Teesside University also provides all full-time undergraduates enrolling on year 0, 1 or 2 with an iPad and £100 at the start of each academic year. This is through their 'Teesside Advance Scheme' and is to spend on key course texts, mobile data and learning resources. The university is also an Adobe Creative Campus, partnered with Adobe to promote digital literacy across all areas of study.

Diversity and Inclusion

Finally, there is a local and national diversity challenge in digital and technology. The under-representation of women in the industry is a challenge that is highlighted by the statistic that only 17% of digital occupations in England were held by females in 2018⁶. There is no equivalent data for Tees Valley, but we note that only 17% of higher education students in the region that qualified in a digital course during 2020/21 were female⁷. In addition, 96% of respondents to a recent North East Digital Skills Audit⁸ were of white ethnicity, 6% higher than the national average. This suggests there is a need to 'open up' the sector to ensure wider opportunities are created throughout the key industry.

³ ONS Exploring the UK's Digital Divide March 2019

⁴ Lightcast 2022

⁵ DfE Employer Skills Survey 2019

⁶ Lightcast 2022

⁷ HESA Data

⁸ Digital Skills Audit – North East 2021 (Sunderland Software City)

3.5.6. Digital SWOT analysis

| Strengths | Weaknesses |
|---|---|
| <p>Excellent superfast broadband coverage in key urban centres. Tees Valley accounts for no fewer than three out of the top ten UK local authorities for median download speed of broadband users' connections.</p> <p>Specialisms in games development, mobile application and web development, IT support for the advanced manufacturing sector, IT consultancy and business application development. This is supported by the area profiles located in Section 3.1.</p> <p>Large employers include, Double Eleven, Visualsoft and Merlin Flex. in addition to companies in related digital sectors such as EE, Virgin Media, MAP Group and Cubic.</p> <p>Investment from various Alternative Network Providers e.g., CityFibre £42 million gigabit investment in Middlesbrough and £32 million investment in Redcar and Cleveland and Hartlepool, alongside Netomnia's £15 million gigabit investment in Stockton and £14 million in Darlington.</p> <p>A strong heritage in computing with Teesside University's School of Computing, Engineering and Digital Technology one of the best-equipped in the country and a network of FE colleges and training providers supporting digital skills delivery.</p> <p>Key digital innovation strengths including the world's first Centre for Digital Trade and Innovation, the Industrial Digitisation Technology Centre, Digital City, BoHo and Teesside University R&D.</p> | <p>Pockets of poor digital connectivity still exist in rural areas, which are deemed commercially unattractive to suppliers.</p> <p>The roll out of Full Fibre is low within Tees Valley.</p> <p>North East has the highest rate of non-internet users in England.</p> <p>The challenge of finding experienced skilled people to fill jobs continues to be a key barrier to growth for the digital sector in the Tees Valley.</p> <p>Tees Valley is ranked amongst the bottom LEPs nationally for the percentage of firms with product innovations, process innovation and blue-sky thinking.</p> |
| Opportunities | Threats |
| <p>Continued proactive support and enabling of commercial investment in digital infrastructure is key to speeding up local connectivity rollout. The increase in commercial investment needs to be supported at a local level, with local authorities encouraged to proactively engage with infrastructure providers to assist in any barrier busting, for example wayleave issues and access to municipal assets for deployment of wireless connectivity.</p> <p>Improving digital infrastructure across the Tees Valley would pave the way for digital innovation across private, public, and voluntary industry sectors, enabling high-tech business start-up and growth and</p> | <p>It is expected that there may be a number of areas in the Tees Valley which may still be outside the scope of Project Gigabit for the next few years.</p> <p>Migration of the Public Switched Telephone Network (PSTN) to Internet Protocol (IP) technology and the withdrawal of traditional analogue telephony will mean all residents and businesses will need a reliable internet connection in place by December 2025 to make and receive calls.</p> <p>Although there are a number of digital inclusion activities taking place across the Tees Valley, access to digital devices and connectivity is still an issue for</p> |

| | |
|---|--|
| <p>attracting inward investors to the area increasing productivity gains, jobs, and training opportunities.</p> | <p>Tees Valley residents with some interventions being disparate and short-term.</p> |
| <p>The development of a Tees Valley Smart Region - would improve operational efficiency of businesses, enable the sharing of information with the public and provide a better quality of service.</p> | |

Section 4: People and Skills

Introduction

This section of the report outlines the performance of Tees Valley in relation to educational quality and attainment and provides skills supply and demand analysis. It also summarises the employment landscape and provides information relating to the local labour market.

The Tees Valley labour market is recovering strongly, with job vacancies increasing over the last year. The increase in job vacancies is resulting in increased demand from employers for workers, but we are finding many employers unable to fill vacancies, including apprenticeship vacancies, highlighting a significant mismatch in demand and supply.

Tees Valley currently performs above the national average at Key Stage 2, but below the national average on labour market participation and skill levels of the working age population (16-64). Local analysis undertaken in relation to the Levelling-up capitals highlighted particular challenges in relation to 'Human Capital' in Tees Valley.

However, the area also performs below the national average on business density, job density and GVA, highlighting that some of the challenges we face under people and skills are intrinsically linked to challenges which also fall under 'Supporting Local Business'.

Furthermore, where we have examined inequality, well-being, and health metrics under 'Communities and Place', this highlights that the area continues to experience high levels of deprivation and comparatively weak health outcomes, resulting in many more Tees Valley residents being economically inactive due to long-term sickness compared to England, creating economic challenges and distributional imbalances, many exacerbated by the impact of Coronavirus.

Key messages

- Tees Valley's population growth is slower than the national average since the last census in 2011.
- Quality and Key Stage 2 attainment in Tees Valley Primary schools is above average, with 61% of KS2 students reaching an expected standard in 2021/22 (58% Nationally) and Ofsted rating 92% of primary schools as good or outstanding (89% nationally).
- Quality and attainment levels at Tees Valley secondary schools are below the national average, with 46.4% of pupils achieving a 9-5 pass in English and Maths in 2021/22 (59.8% nationally) and below the national average in all English Baccalaureate subjects. Average Attainment 8 score per pupil and Progress 8 scores are lower in Tees Valley than nationally. 70% of Tees Valley Secondary schools are rated as good or outstanding by Ofsted compared to 80% nationally.
- 91.9% of Key Stage 4 students were in sustained education, apprenticeships or employment compared to 93.9% nationally. Destinations for 16-18 year olds were above national average with 87% of Tees Valley Key Stage 5 students from state-funded mainstream schools were in sustained education, apprenticeships or employment, compared to 85.7% nationally.
- Tees Valley has a higher percentage of 16-17 year olds known to be NEET (Not in Education, Employment or Training) than nationally.
- Participation in Higher Education remains above national average, with over half of HE students remaining in the Tees Valley to study and achievement rates continuing to be below average.

- The percentage of Tees Valley graduates in employment 15 months after graduating was higher than the national rate (84% compared to 81%), however over a quarter of Tees Valley graduates were in non-professional roles, compared to 22% nationally and 56% found employment within Tees Valley.
- Tees Valley has a higher rate of residents starting an apprenticeship than nationally, however this has fallen from a high of 2,196 per 100,000 population in 2016/17 to 1,293 in 2021/22. Apprenticeship achievement rates are consistently higher than the national average at 492 per 100,000 population in 2021/22 compared to 389 nationally, this has also fallen from a high of 1,287 in 2016/17. 90% of apprenticeship learners were in sustained employment matching the national average, whilst a higher rate (21%) were in sustained learning compared to 17% nationally.
- Tees Valley has a higher rate for participation and achievements in further education for adults than nationally.
- The percentage of working age residents with higher level skills is below the national average with a 0.2 percentage point rise over the last year, compared to a 0.5 rise nationally. The percentage of working age residents with no qualifications is higher than nationally, however the gap has narrowed as the rate has fallen by 2.9 percentage points over the last year, compared to a 0.2 rise nationally.
- Tees Valley consistently has a lower than average job density (number of jobs per population) with a higher than average number of resident's unemployed and seeking work.
- Youth unemployment is an issue with a higher than average number of 16-24-year olds unemployed and claiming benefits.
- Tees Valley has a high number of people classed as economically inactive (neither "employed" nor "unemployed", for example those who are long-term sick, students or retired). In particular, it has high numbers of those both long term and temporarily sick.
- Employment is high in Health and Social Care, Education, Retail, Professional and Business Services and Creative, Culture and Leisure. Tees Valley also has sectoral strengths in: Chemical and Process; Advanced Manufacturing; Health and Social Care; Public Services; Private Services and Construction.
- The largest number of job vacancies in Tees Valley in 2022 were for Carers, Nurses, Admin staff, Sales staff, Teachers, IT staff and Kitchen staff, with a rise in Teaching Assistants and Carers compared to 2021.
- Wages are lower than national average. Although this is attractive to investors, it can discourage workers from remaining in the area and the amount of disposable income available to households in Tees Valley is much lower than national.

4.1. People

The resident population in Tees Valley was 677,200 on census day, 21 March 2021. Tees Valley's population grew by 14,400 (2.2%) since the last census in 2011, compared to 6.3% nationally.

There were 346,400 (51.2%) women and 330,800 (48.8%) men in Tees Valley. The median age in Tees Valley was 41, compared to 40 nationally.

In 2021, there were 295,500 households in Tees Valley, up 4.4% from 283,100 in 2011, compared to a 6.1% rise nationally.

98.3% of Tees Valley residents lived in households and 1.2% lived in communal establishments, compared to 98.3% and 1.7% nationally.

The average household size in Tees Valley is 2.3 people per household, compared to 2.4 people per household nationally.

161,370 or 54.6% of households in Tees Valley were deprived in at least one dimension or measure of household deprivation, compared to 51.7% nationally.

186,450 or 63.1% of Tees Valley households were single family households (63.0% nationally), 96,900 or 32.8% were one person households (30.2% nationally) and 12,100 or 4.1% were multiple family or other household types (6.8% nationally).

Based on the 2021 Census results from Office for National Statistics (ONS), the majority, 92.1% (623,700) of the Tees Valleys population are white, with 29,900 of the population being Asian, Asian British or Asian Welsh (4.4%), 9,100 Mixed or Multiple ethnic groups (1.3%), 7,400 Black, Black British, Black Welsh, Caribbean or African (1.1%), and 7,200 (1.1%) being from other ethnic groups.

In the Tees Valley, the Census 2021 showed that 50.7% of residents (343,600) define themselves as Christian, 0.3% (1,800) as Buddhist, 0.5% (3,100) as Hindu, 0.0% (200) as Jewish, 3.8% (25,400) as Muslim, 0.3% (2,100) as Sikh, and 0.3% (2,200) as other. 39% of residents (264,000) define themselves as having no religion and 5.2% (34,900) of people in the Tees Valley did not state their religion.

The percentage of Tees Valley residents aged 16 years and over who were married or in a civil partnership was 43.3%, compared to 44.6% nationally. Of those who were married or in a civil partnership, 0.8% of individuals were in same-sex couples, compared with 99.2% in opposite-sex couples.

Sexual Orientation was a voluntary question in the 2021 Census. In total, 93.8% of Tees Valley population aged 16 years and over answered the question. 91.0% identified as straight or heterosexual, 2.7% identified with an LGB+ orientation ("Gay or Lesbian", "Bisexual" or "Other sexual orientation") and 6.2% did not answer the question.

The 2021 Census asked the voluntary question; "Is the gender you identify with the same as your sex registered at birth?". Overall, 94.9% of the Tees Valley population aged 16 years and over answered the question. In total, 94.5% answered "Yes", 0.5% answered "No" and 5.1% did not answer the question.

The 2021 Census looks at disability. The Tees Valley has a higher percentage of people who are disabled at 20.9%, higher than the average of 17.7% nationally.

For more details on population in Tees Valley, see [Area Profile](#).

4.2. Education

4.2.1. Educational Attainment and Quality

Primary School Attainment

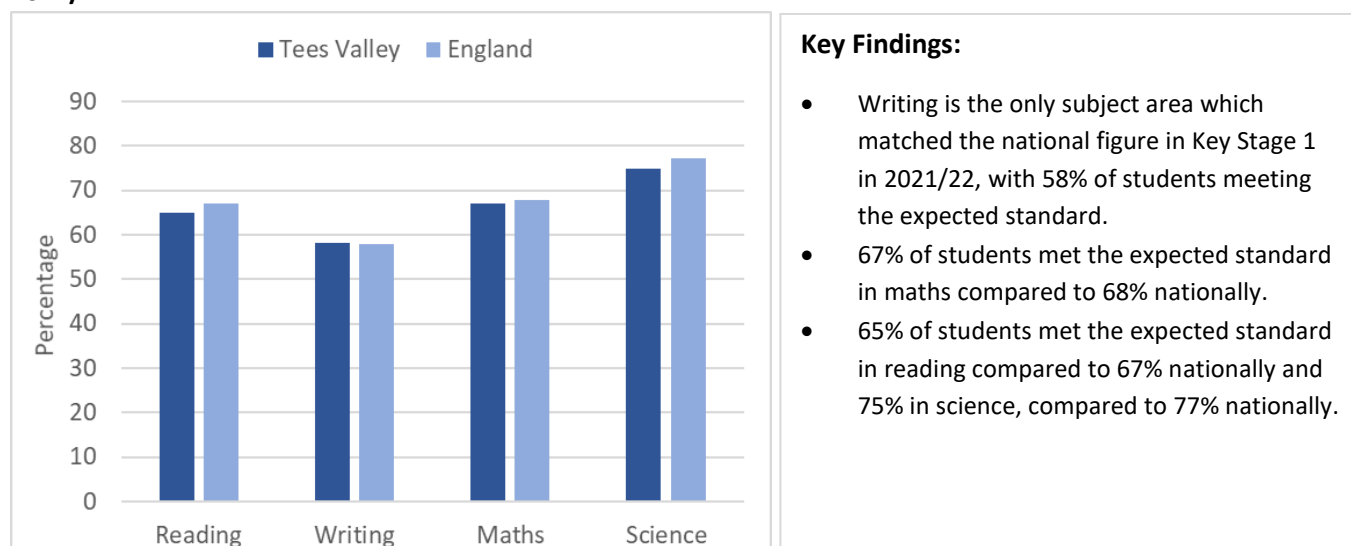
There are currently 204 state funded primary schools in Tees Valley. Primary school deprivation is above average with 24% of pupils eligible for and claiming free school meals in 2021/22 compared to 18% nationally.

Key Stage 1

Key Stage 1 assessments are Teacher Assessments. Data is not available for 2020 and 2021 as assessments were cancelled in these years due to the COVID-19 pandemic.

Attainment at Key Stage 1 is slightly below national average with 66% of Key Stage 1 students meeting the expected standard in reading, writing, maths and science in 2021/22, compared to 68% nationally. 12% are meeting the higher standard compared to 14% nationally.

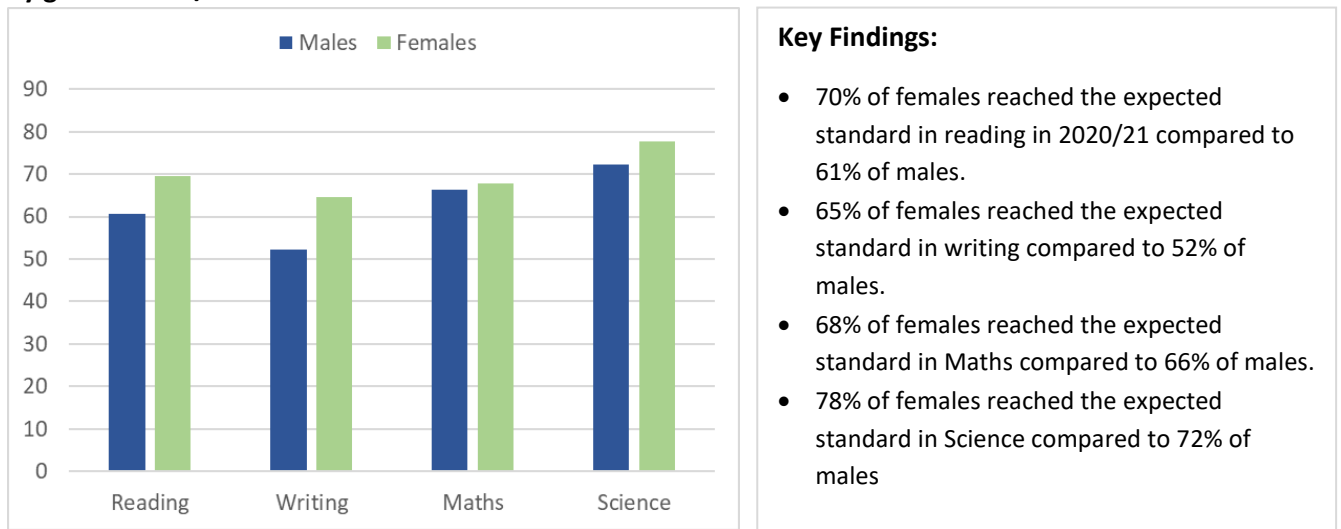
Figure 4.2.1. % reaching expected standard in Key Stage 1 for reading, writing, maths and science 2021/22



Source: Department for Education

Figure 4.2.2. shows that females outperform males in all areas in Key Stage 1, with a higher percentage of females reaching the expected standard for reading, writing, maths and science.

Figure 4.2.2. % reaching expected standard in Key Stage 1 for reading, writing, maths and science by gender 2021/22



Source: Department for Education

Key Stage 2

Data is not available for 2020 and 2021 as assessments were cancelled in these years due to the COVID-19 pandemic.

Figures 4.2.3. and 4.2.4. illustrate that Tees Valley primary schools are above the national average for Key Stage 2 expected attainment, whilst are below the national average for the percentage reaching a higher standard.

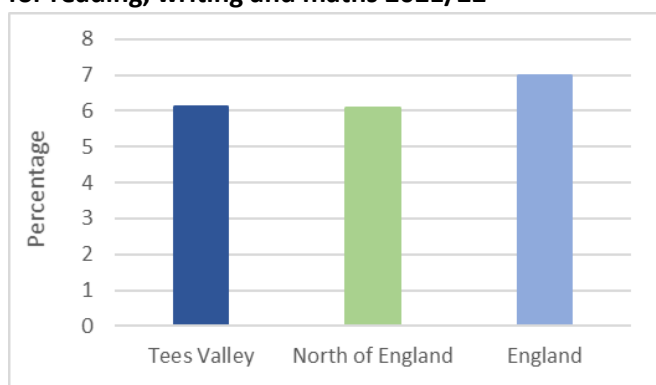
Figure 4.2.3. % reaching expected standard in Key Stage 2 for reading, writing and maths 2021/22



Key Findings:

- 61% of Key Stage 2 students are reaching an expected standard in reading, writing and maths in 2021/22 compared to 58% nationally.
- This has risen 7 percentage points since 2015/16 compared to a 4 percentage point rise both nationally and across the North of England.
- However, since the last assessments in 2018/19 there has been a 7 percentage point fall both in Tees Valley and nationally, and a 6 percentage point fall across the North of England.

Figure 4.2.4. % reaching higher standard in Key Stage 2 for reading, writing and maths 2021/22

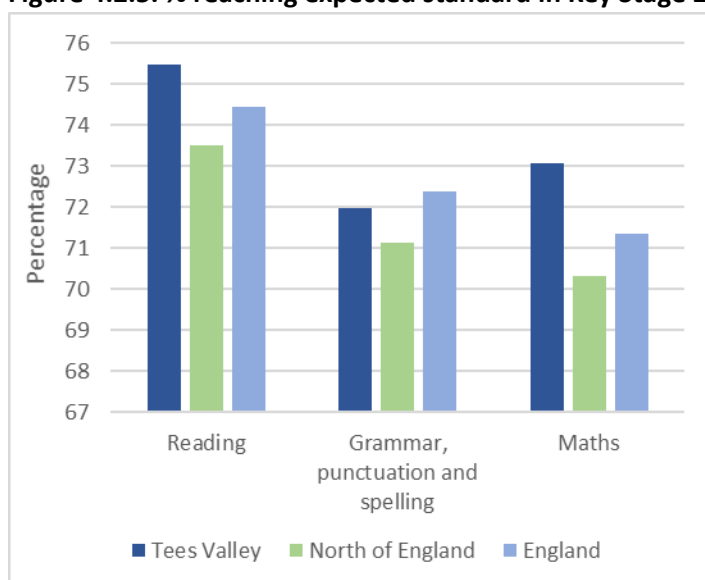


- 6% of Key Stage 2 students are reaching a higher standard in reading, writing and maths in 2020/21, which matches the figure across the North of England and compared to 7% nationally.
- This has risen 1 percentage point since 2015/16 in Tees Valley and across the North of England compared to a 2 percentage point rise nationally
- Since the last assessments in 2018/19 there has been a 4 percentage point drop in Tees Valley, across the North of England and nationally.

Source: Department for Education

Figure 4.2.5. shows that Tees Valley outperformed the national in all subject areas for the percentage reaching the expected standard in Key Stage 2 in 2020/21.

Figure 4.2.5. % reaching expected standard in Key Stage 2 by subject – 2021/22



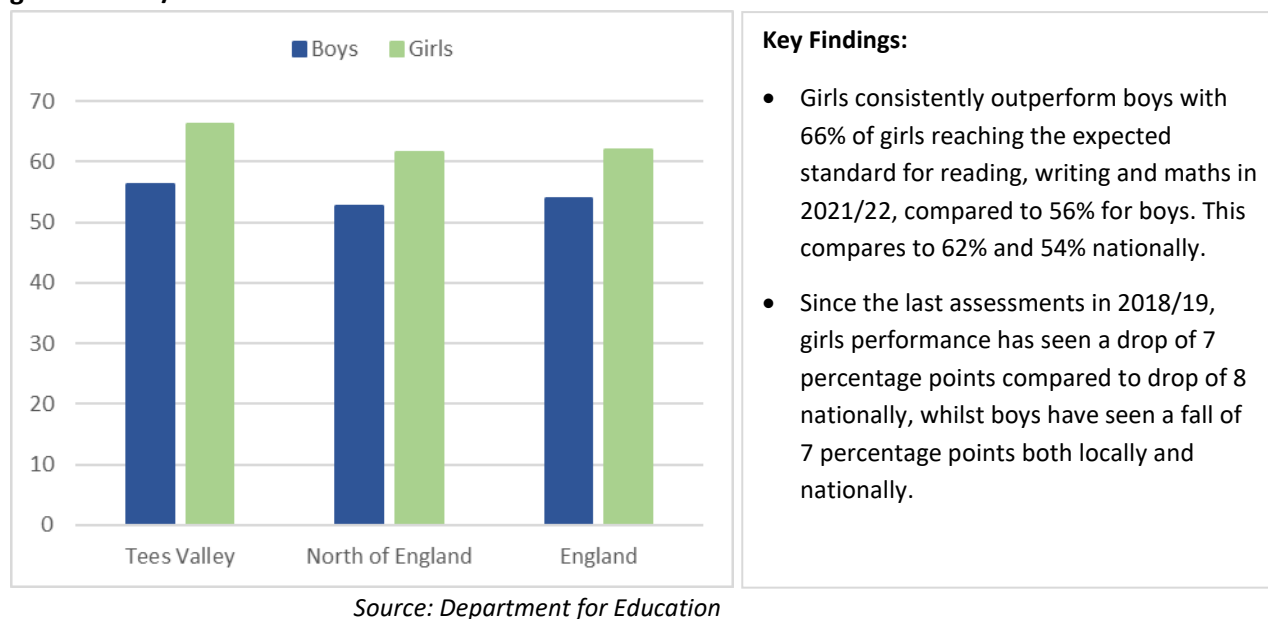
Key Findings:

- 75% of students reached the expected standard for Reading, compared to 74% nationally.
- 72% reached the expected standard for Grammar, punctuation and spelling, matching the figure nationally.
- 73% reached the expected standard for maths, compared to 71% nationally.

Source: Department for Education

Figure 4.2.6. shows that girls consistently outperform boys in Key Stage 2 with a higher percentage of girls reaching the expected standard for reading, writing and maths.

Figure 4.2.6. % reaching expected standard in Key Stage 2 for reading, writing and maths by gender 2021/22



Secondary School Attainment

ONS note: This academic year saw the return of the summer exam series, after they had been cancelled in 2020 and 2021 due to the impact of the COVID-19 pandemic, where alternative processes were set up to award grades (centre assessment grades, known as CAGs, and teacher assessed grades, known as TAGs). As part of the transition back to the summer exam series adaptations were made to the exams (including advance information) and the approach to grading for 2022 exams broadly reflected a midpoint between results in 2019 and 2021. More information on these changes can be seen in the [Guide to GCSE results for England, summer 2022](#).

Comparisons are made with 2018/19, because it is more meaningful to compare to the last year summer exams were sat. Given the unprecedented change in the way GCSE results were awarded in the summers of 2020 and 2021, as well as the changes to grade boundaries and methods of assessment for 2021/22, users need to exercise caution when considering comparisons over time, as they may not reflect changes in pupil performance alone.

There are currently 43 secondary schools in Tees Valley. Secondary school deprivation is above average with 20% of pupils eligible for and claiming free school meals in 2021/22 compared to 15% nationally.

Figures 4.2.7. and 4.2.8. show that attainment in Key Stage 4 is below the national average⁹ for headline accountability measures.

⁹ National figures are for state funded schools only as local authority data is for state funded schools only.

Figure 4.2.7. Average Attainment 8¹⁰ score per pupil 2021/22



Key Findings:

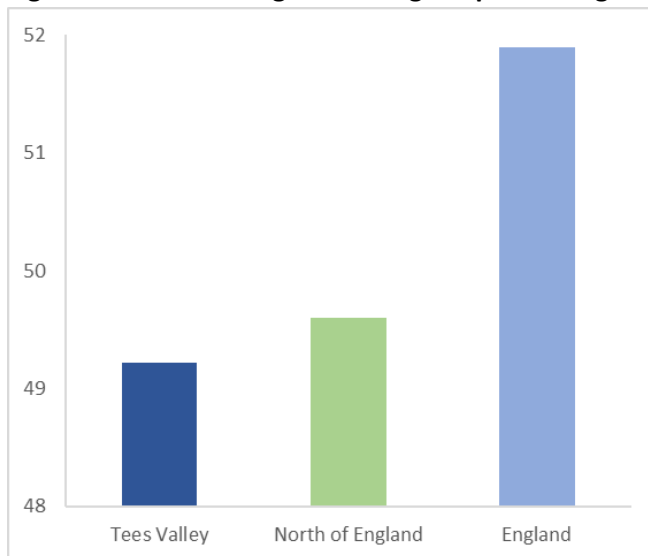
- The average Attainment 8 score per pupil in 2021/22 was 46.7 compared to 46.9 across the North of England and 48.8 nationally. This varies from 42.8 in Middlesbrough to 49.2 in Stockton-on-Tees.
- This score has risen by 2.2 from 44.5 in 2018/19 (when the last summer exams were sat), compared to a 1.6 rise across the North of England and 2.0 rise nationally.

Source: Department for Education

The average attainment 8 score per pupil eligible for free school meals was 35.3 in 2021/22, compared to 50.8 for those not eligible.

The average Progress 8¹³ score for Tees Valley secondary school pupils in 2021/22 was -0.30 compared to -0.17 for the North of England.

Figure 4.2.8. Percentage achieving 9-5 pass in English and Maths 2021/22



Key Findings:

- 46.4% of Tees Valley secondary pupils achieved a 9-5 pass in English and Maths in 2021/22, compared to 46.8% across the North of England and 59.8% nationally.
- There has been a rise of 5.9 percentage points from 40.5% in 2018/19 (when the last summer exams were sat), compared to a 6.4 rise nationally.

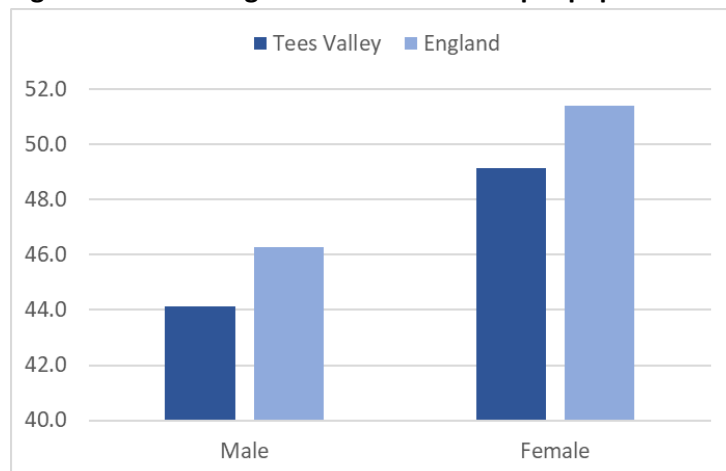
Source: Department for Education

¹⁰ Attainment 8 is a measure of a pupil's average grade across a set suite of eight subjects. Once calculated, this Attainment 8 score is compared to the average Attainment 8 score of all pupils nationally with the same prior attainment at KS2 in order to calculate a pupils Progress 8 score.

¹³ Progress 8 measures a student's progress between Key Stage 2 and Key Stage 4 across eight key subjects. The average Progress 8 score of all secondary schools nationally is 0. Schools with a Progress 8 score of below -0.5 are not achieving the minimum standard expected by the government. A score of +0.5 or above shows that pupils in that school are making well above the expected level of progress. Progress 8 data was not available in 2019/20 and 2020/21 due to the covid-19 pandemic.

Figures 4.2.9. and 4.2.10. show that females continue to outperform males throughout secondary school.

Figure 4.2.9. Average Attainment 8 score per pupil – Gender 2021/22



Source: Department for Education

Figure 4.2.10. % achieving 9-5 pass in English and Maths 2021/22



Source: Department for Education

Key Findings:

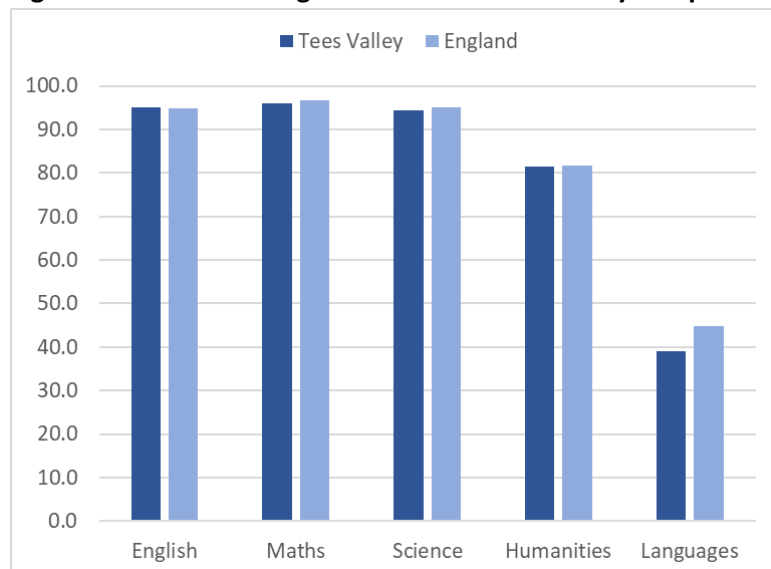
- The average Attainment 8 score for Females in 2021/22 was 49.1, compared to 44.1 for males.
- Nationally the Attainment 8 score for Females is 51.4, compared to 46.3 for males.
- The gap between Tees Valley and national for the average attainment 8 score is 2.2 percentage points below the national average for males and 2.3 below for females.
- 48.8% of females achieved a 9-5 pass in English and Maths in 2021/22, compared to 44% of males. Nationally 52.6% of females achieved a 9-5 pass in English and Maths, compared to 47.1% of males.
- The gap between Tees Valley and national is larger for females, with the percentage of females achieving a 9-5 pass in English and Maths 3.8 percentage points lower than national, compared to 3.1 lower for males.

Participation and achievement in English Baccalaureate (EBacc) components

34.1% of Tees Valley pupils entered the EBacc in 2021/22, compared to 38.8% nationally¹⁴. This is 1.6 percentage points higher than 2020/21 compared to a rise of 0.1 percentage points nationally. This is due to a 0.7 rise in entries to Science (0.9 drop nationally), a 0.5 rise in entries to Languages (0.2 drop nationally), whilst there was a 1.3 drop in entries to English (0.9 drop nationally), 1.0 drop in entries to Maths (0.7 drop nationally) and a 0.2 drop in entries to Humanities (0.6 drop nationally).

¹⁴ National data reported is for State Funded Schools only as Local Authority data covers state funded schools only.

Figure 4.2.11. Percentage entered for the Ebacc by component – 2021/22



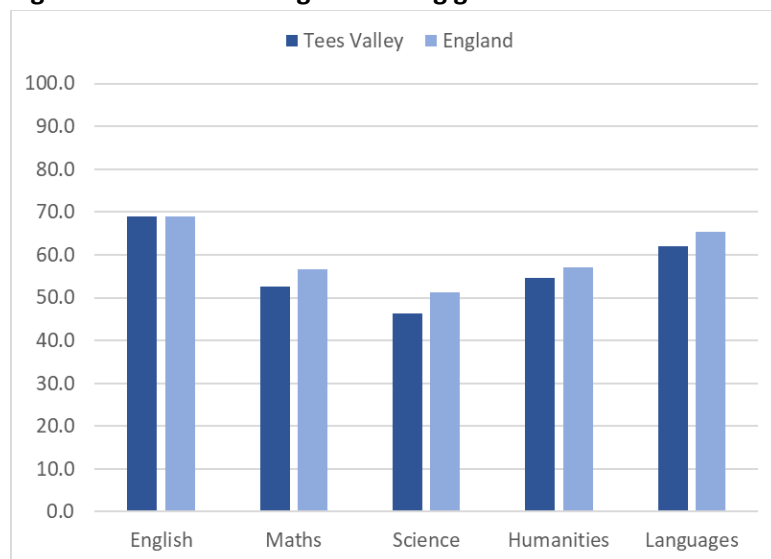
Source: Department for Education

Key Findings:

- Tees Valley has a higher than national percentage of pupils entered for English components of Ebacc:
 - 95.0% were entered for English, compared to 94.9% nationally.
- Tees Valley has lower than national percentage of pupils entered for Languages, Maths and Science components of Ebacc:
 - 39.1% were entered for Languages, compared to 44.8% nationally.
 - 96.1% were entered for Maths, compared to 96.7% nationally.
 - 94.4% were entered for Science, compared to 95.0% nationally.
- Tees Valley matches the national percentage of pupils entered for Humanities components of Ebacc at 81.6%.

17.7% of Tees Valley pupils achieved the Ebacc (grades 5 or above in English and maths, A*-C in unreformed subjects), compared to 20.2% nationally. This is up 6.1 percentage points from 11.7% in 2018/19 (when the last summer exams were sat), compared to 3.0 rise nationally. This is due to a 15.5 percentage point increase in Languages (11.1 rise nationally), a 7.5 rise in English (8.2 rise nationally), a 7.3 rise in Humanities (6.9 rise nationally) a 6.9 rise in Science (4.4 rise nationally) and a 4.5 rise Maths achievements (7.3 rise nationally).

Figure 4.2.12. Percentage achieving grade 5 or above in Ebacc by component – 2021/22



Source: Department for Education

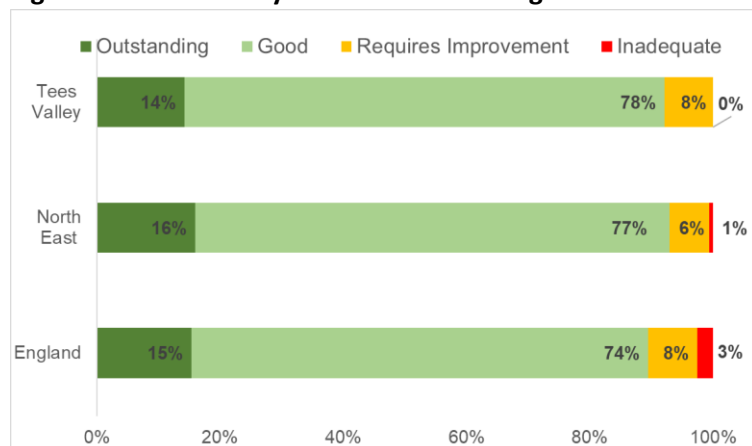
Key Findings:

- Tees Valley pupils are below the national average for the percentage of pupils achieving grade 5 or above in all components:
 - 68.9% of pupils achieved in English, compared to 69.0% nationally.
 - 52.5% of pupils achieved in Maths, compared to 56.6% nationally.
 - 46.3% of pupils achieved in Science, compared to 51.3% nationally.
 - 54.5% of pupils achieved in Humanities, compared to 57.1% nationally.
 - 62.1% of pupils achieved in Languages, compared to 65.3% nationally.

Quality

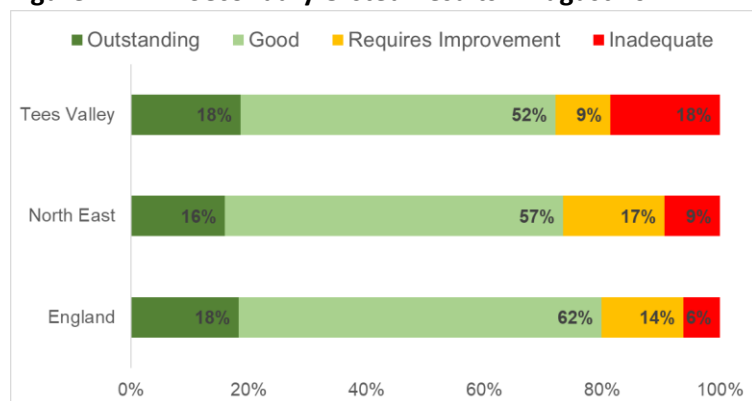
92% of Tees Valley primary schools are rated as good or outstanding by Ofsted compared to 89% nationally, with the Tees Valley average remaining above the national for the last 7 years. However only 70% of Tees Valley secondary schools are rated as good or outstanding by Ofsted, compared to 80% nationally. 27% are rated as “requires improvement” or “inadequate” by Ofsted.

Figure 4.2.13. Primary Ofsted Results – August 2022



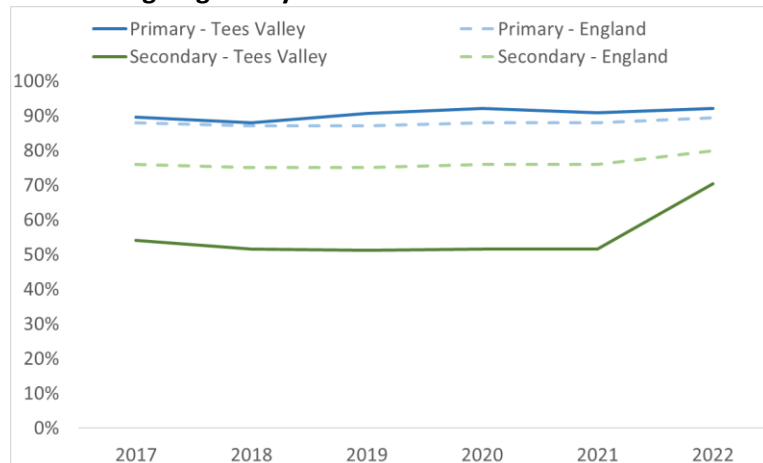
Source: Ofsted

Figure 4.2.14. Secondary Ofsted Results – August 2022



Source: Ofsted

Figure 4.2.15. Percentage of education providers rated as outstanding or good by Ofsted



Source: Ofsted

Key Findings:

- Tees Valley has a higher percentage of primary schools rated as both outstanding (14%) and good (78%) by Ofsted than national (15% and 74%)
- 8% of primary schools require improvement which matches the national figure, and no schools are inadequate, compared to 3% nationally.
- The quality of Tees Valley primary schools has remained fairly steady over the past 5 years, with a rise of 1 percentage point between 2021 and 2022.
- However, 27% of Tees Valley secondary schools require improvement or are inadequate, compared to 20% nationally.
- The percentage of Tees Valley secondary schools rated as outstanding or good has risen from 52% in 2021 to 70% in 2022, a rise of 19 percentage points compared to a 4.0 rise nationally.

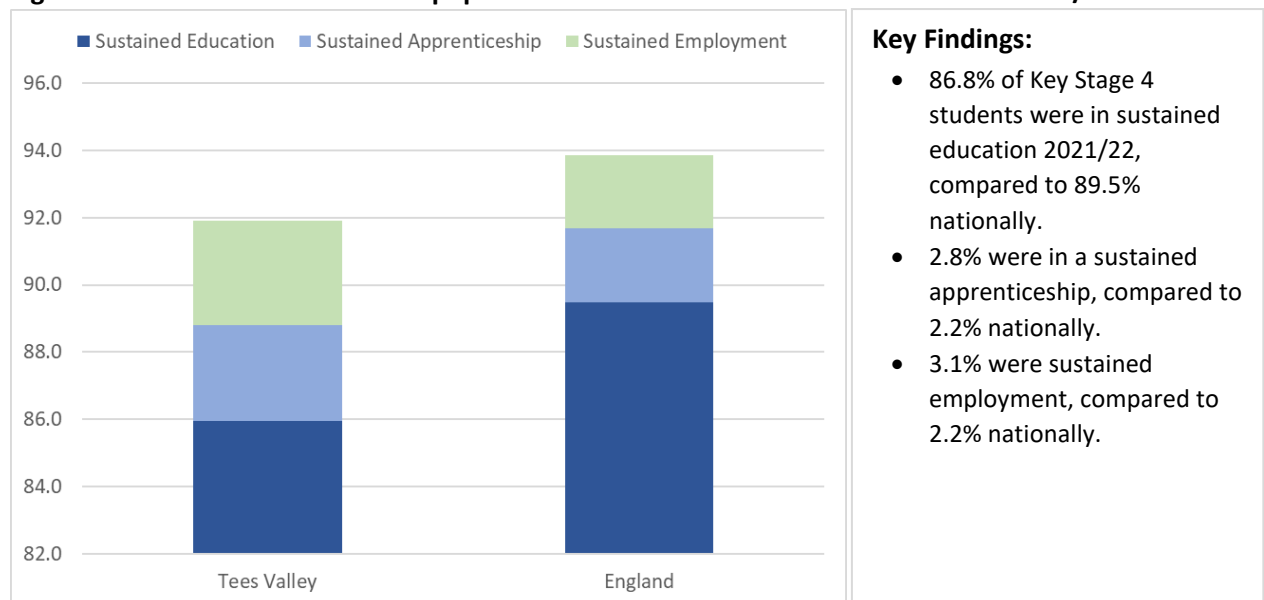
Post 16 Education

Tees Valley has five general Further Education Colleges situated in each of the towns of Darlington, Hartlepool, Middlesbrough, Redcar and Stockton (Stockton and Redcar are part of the Education Training Collective), as well as one specialist college (The Northern School of Art), all of which are rated as either Good or Outstanding by Ofsted. There are also five sixth form colleges along with a number of schools that contain a sixth form college. These colleges offer a range of education and training courses, including apprenticeships and full-time and part-time provision.

Key Stage 4 Destinations

91.9% of Tees Valley key stage 4 students were in sustained education, apprenticeships or employment in 2021/22 compared to 93.9% nationally. This has risen by 0.3 percentage points between 2018/19 and 2021/22, compared to a 0.4 drop nationally.

Figure 4.2.16. Destinations of KS4 pupils from state-funded mainstream schools – 2021/22

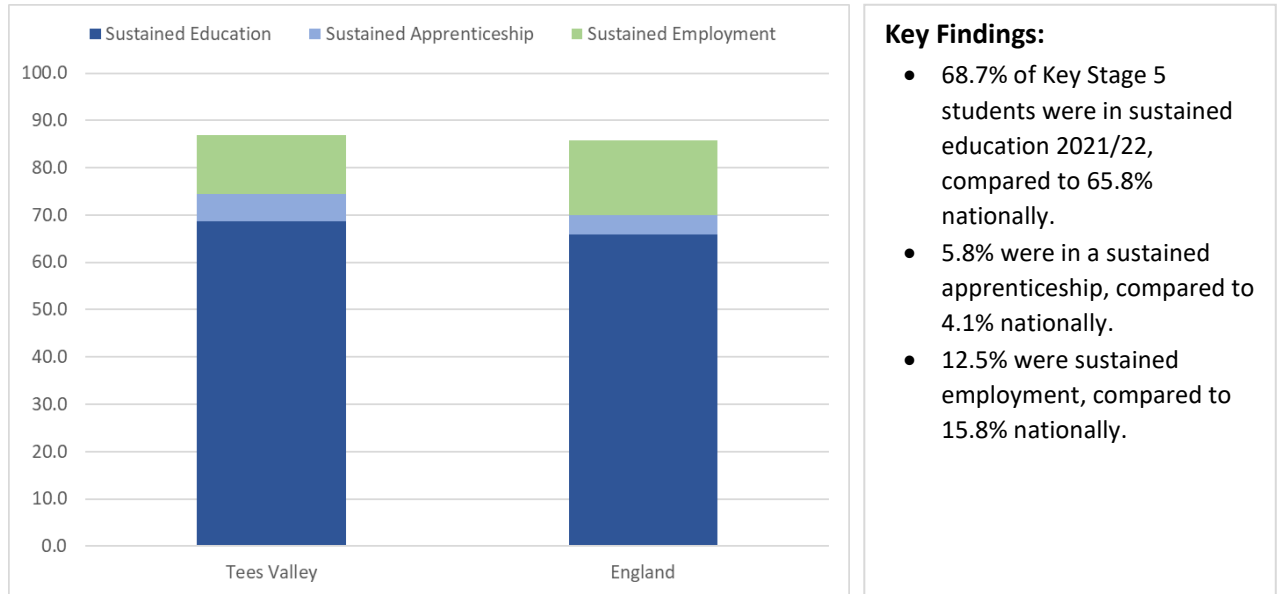


Source: Department for Education

16-18 Destinations

87.0% of Tees Valley Key Stage 5 Students were in sustained education, apprenticeships or employment, compared to 85.7% nationally.

Figure 4.2.17. Destinations of KS5 pupils from state-funded mainstream schools – 2021/22



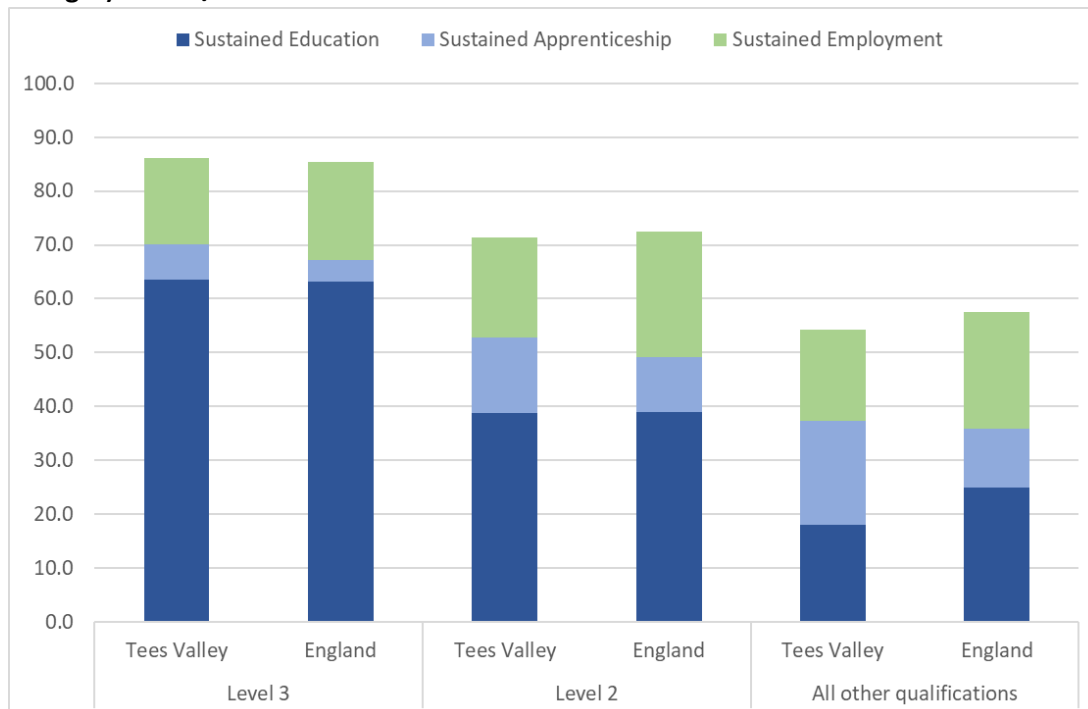
Key Findings:

- 68.7% of Key Stage 5 students were in sustained education 2021/22, compared to 65.8% nationally.
- 5.8% were in a sustained apprenticeship, compared to 4.1% nationally.
- 12.5% were sustained employment, compared to 15.8% nationally.

Source: Department for Education

71.5% of those who have gained a qualification at Level 2 are in sustained education, apprenticeship or employment, compared to 72.6% nationally. 86.2% of those who have gained a qualification at Level 3 are in sustained education, apprenticeship or employment, compared to 85.4% nationally. 54.2% of those who have gained 'All other qualifications' are in sustained education, apprenticeships or employment, compared to 57.6% nationally.

Figure 4.2.18. 16-18 destinations by main level studied (state-funded mainstream schools and colleges) – 2021/22



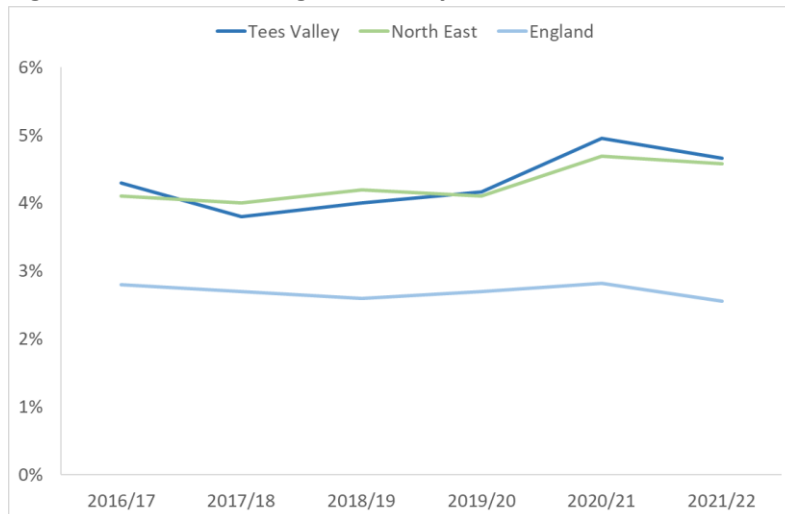
Source: Department for Education

Key Findings:

- 63.6% of those who gained a qualification at Level 3 were in sustained education 2021/22, compared to 63.3% nationally. 6.4% were in a sustained apprenticeship, compared to 3.8% nationally and 16.2% were sustained employment, compared to 18.3% nationally.
- 38.8% of those who gained a qualification at Level 2 were in sustained education 2021/22, compared to 39.0% nationally. 14.0% were in a sustained apprenticeship, compared to 10.2% nationally and 18.6% were sustained employment, compared to 23.3% nationally.
- 18.0% of those who gained 'All other qualifications' were in sustained education 2021/22, compared to 24.9% nationally. 19.3% were in a sustained apprenticeship, compared to 11.0% nationally and 17.0% were sustained employment, compared to 21.7% nationally.

The figures below illustrates that Tees Valley has a higher than average number of 16-17 year olds known to be NEET (Not in Education, Employment or Training), however the number of 16-17 year olds NEET or not known is closer to the national average.

Figure 4.2.19. Percentage of 16-17 year olds known to be NEET

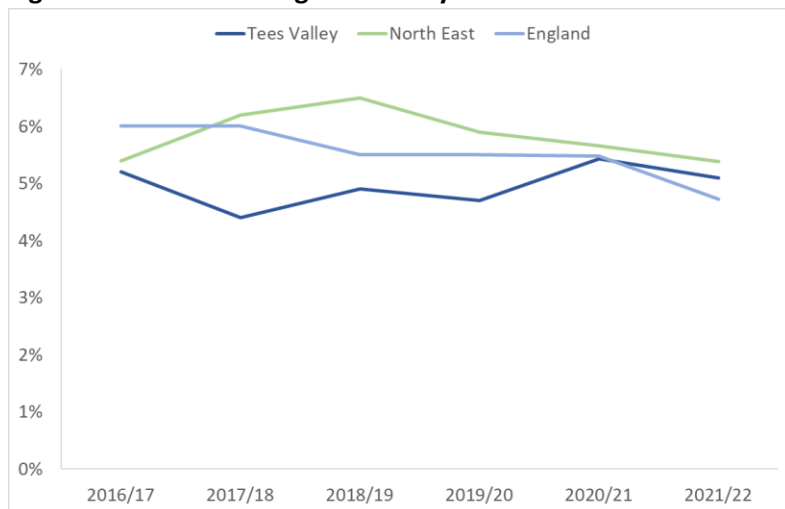


Source: Department for Education

Key Findings:

- 4.7% of 16-17-year olds are known to be NEET in Tees Valley in 2021/22, compared to 2.6% nationally.
- The percentage has fallen by 0.3 percentage points between 2020/21 and 2021/22, compared to a 0.3 drop nationally.
- This has risen 0.7 percentage points over the past 3 years from 4.0% in 2018/19, compared to no change nationally.

Figure 4.2.20. Percentage of 16-17 year olds NEET or Not Known



Source: Department for Education

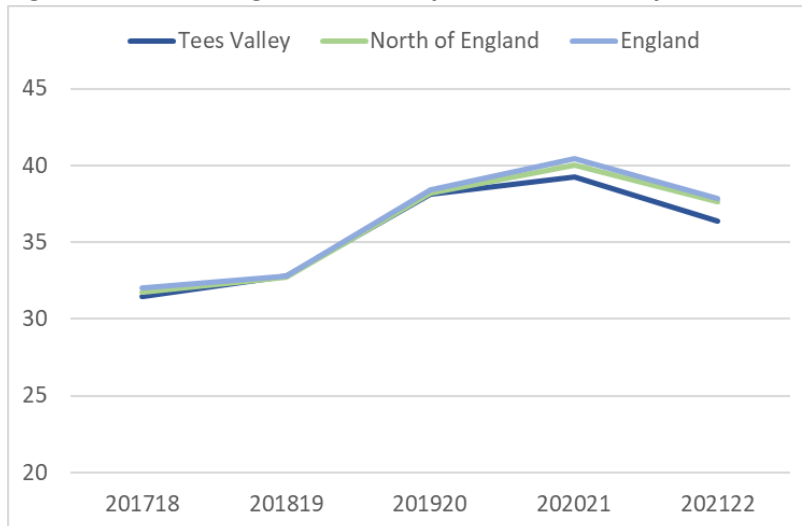
Key Findings:

- 5.1% of 16-17 year olds are NEET or Not Known in Tees Valley in 2021/22 compared to 4.7% nationally.
- The percentage has fallen by 0.3 percentage points between 2020/21 and 2021/22, compared to a 0.8 drop nationally.

Attainment

Note: Some data has been excluded from 2021/2022 measures due to alternative assessment arrangements in 2020 and 2021. For details see the following link: <https://explore-education-statistics.service.gov.uk/methodology/a-level-and-other-16-to-18-results-methodology>

Figure 4.2.21. Average Point Score per academic entry

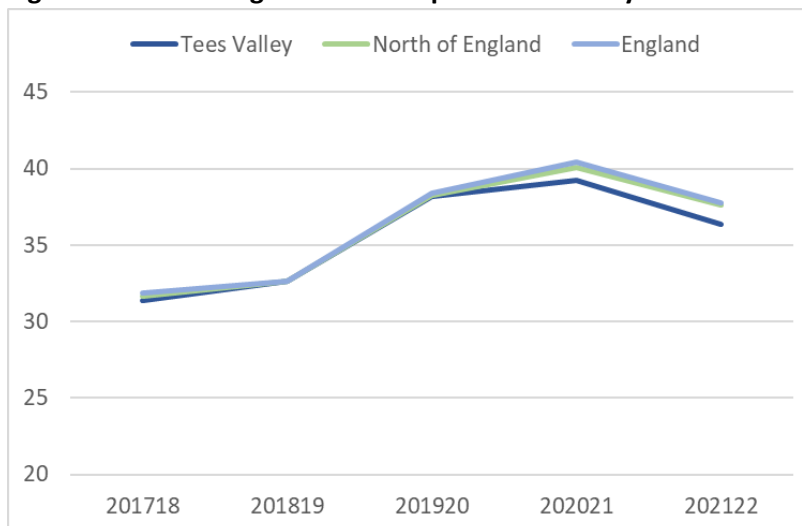


Source: Department for Education

Key Findings:

- The average point score (APS) per academic entry was lower for Tees Valley students in 2021/22 at 36.4, compared to 37.6 across the North of England and 37.8 nationally.
- The APS per academic entry has dropped 2.9 points between 2020/21 and 2021/22, compared to a 2.4 drop across the North of England and a 2.6 drop nationally.
- Compared to 2018/19, the APS per academic entry has risen by 3.6 points, compared to a 5.0 rise nationally and 4.9 rise across the North of England.

Figure 4.2.22. Average Point Score per A Level Entry

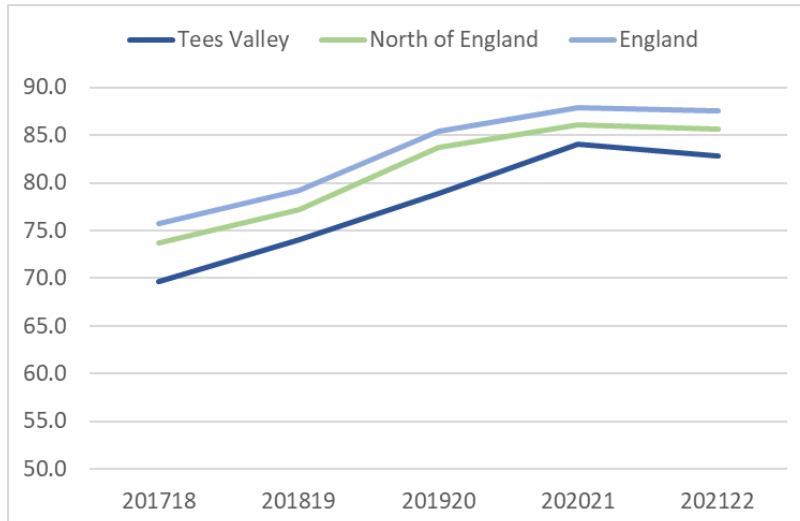


Source: Department for Education

Key Findings:

- The APS per A level entry in 2021/22 was 36.4, compared to 37.6 across the North of England and 37.8 nationally.
- Between 2020/21 and 2021/22 the average score has fallen 2.9 points, compared to a 2.4 fall across the North of England and a 2.6 fall nationally.

Figure 4.2.23. Percentage achieving at least two A levels

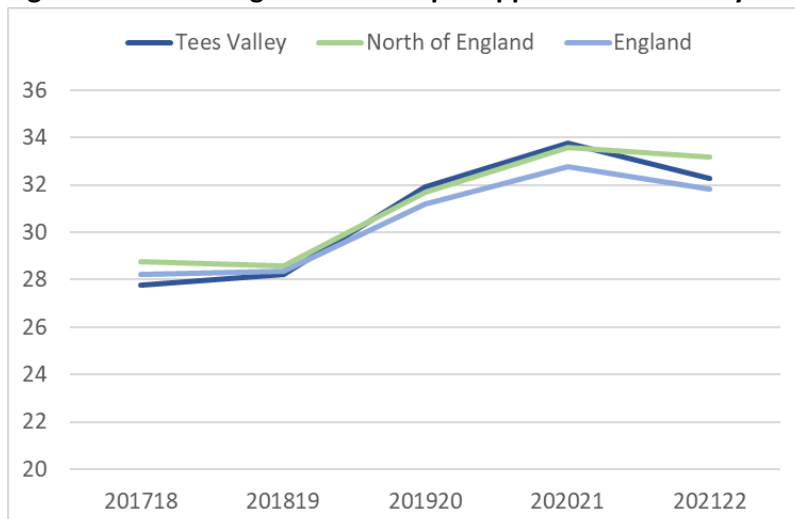


Source: Department for Education

Key Findings:

- 82.8% of Tees Valley students achieved at least two A levels in 2021/22, compared to 85.6% across the North of England and 87.5% nationally.
- The percentage of Tees Valley students achieving at least two A levels has risen by 8.7 percentage points between 2018/19 and 2021/22, compared to 8.4 rise across the North of England and 8.3 rise nationally.

Figure 4.2.24. Average Point Score per Applied General Entry

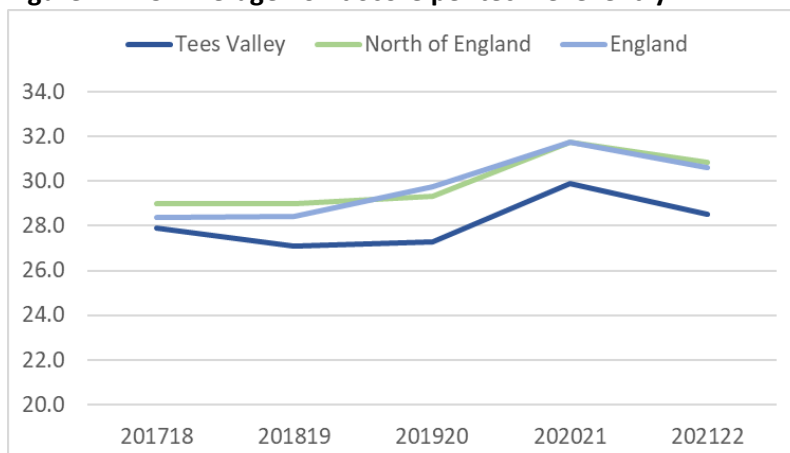


Source: Department for Education

Key Findings:

- The APS per Applied General entry for Tees Valley students in 2021/22 was 32.3, compared to 33.2 across the North of England and 31.8 nationally.
- The APS per Applied General entry has fallen between 2020/21 and 2021/22 by 1.5 points compared to a 0.4 fall across the North of England and 1.0 fall nationally.

Figure 4.2.25. Average Point Score per tech level entry

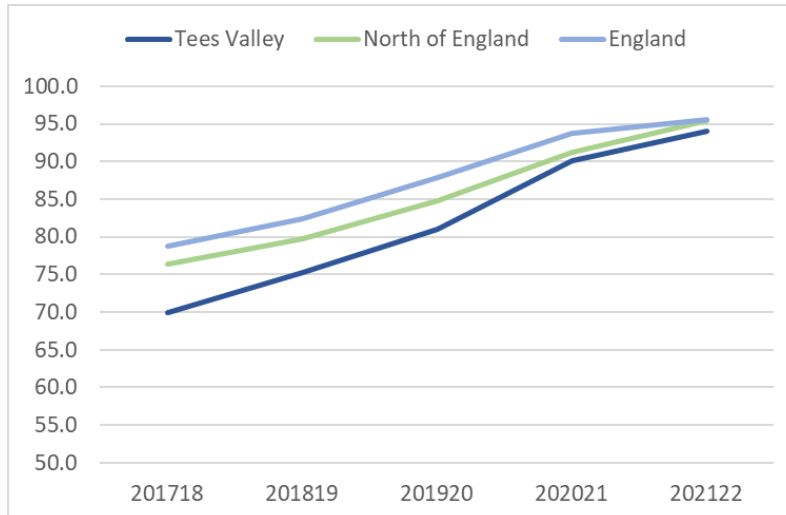


Source: Department for Education

Key Findings:

- The APS per tech level entry for Tees Valley students on 2021/22 was 28.5, compared to 30.8 across the North of England and 30.6 nationally.
- The APS per tech level entry across Tees Valley has fallen by 1.4 points between 2020/21 and 2021/22, compared to a 0.9 fall across the North of England and 1.1 fall nationally.
- APSs for Tees Valley students in 2020/21 have risen by 1.4 points since 2018/19, compared to a 1.8 rise across the North of England and a 2.2. rise nationally.

Figure 4.2.26. Percentage achieving 2 or more substantial level 3 results

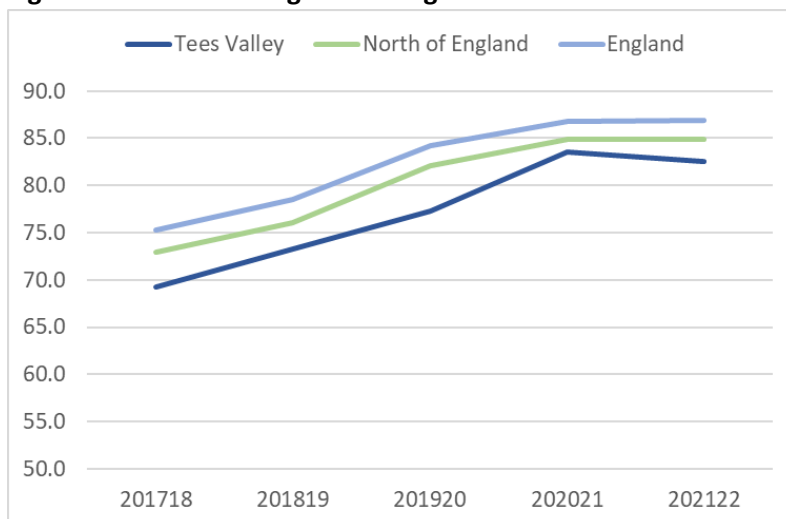


Source: Department for Education

Key Findings:

- 94.1% of Tees Valley students achieved 2 or more substantial level 3 results in 2021/22, compared to 95.5% both across the North of England and nationally.
- The percentage of students achieving 2 or more substantial level 3 results has risen 18.9 percentage points from 70.0% in 2017/18, compared to a 15.7 rise across the North of England and a 13.2 rise nationally.

Figure 4.2.27. Percentage achieving two or more level 3 academic results



Source: Department for Education

Key Findings:

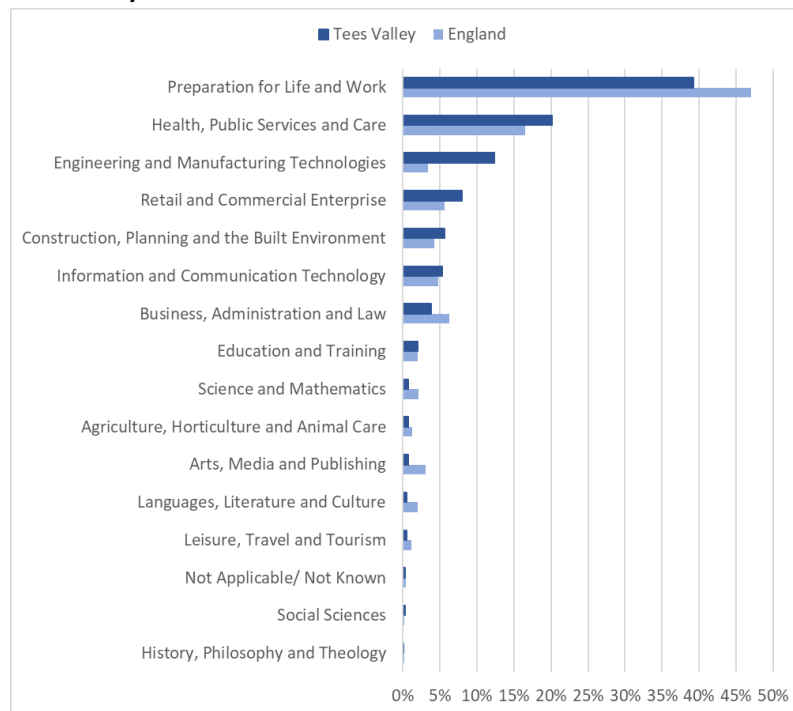
- 82.6% of Tees Valley students achieved at least two level 3 academic results in 2021/22, compared to 84.9% across the North of England and 86.9% nationally.
- This has fallen 1.0 percentage point from 2020/21, compared to a 0.1 rise nationally.
- The percentage of Tees Valley students achieving at least two level 3 academic results has risen 9.3 percentage points from 73.3% in 2018/19, compared to an 8.9 rise across the North of England and an 8.4 rise nationally.

Further Education and Skills

Tees Valley has a higher rate of Adults aged 19+ achieving a Further Education qualification in 2021/22 at 5,628 per 100,000 population, compared to 3,277 nationally.

Figure 4.2.28. shows the percentage of achievements gained in Further Education for adults by sector subject area in 2020/21.

Figure 4.2.28. Further education and skills achievements for adults (aged 19+) by sector subject area 2020/21



Source: DfE

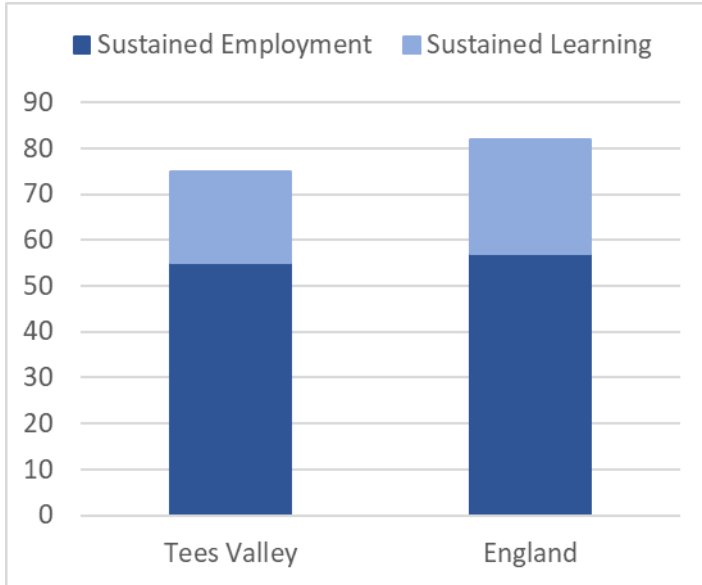
Key Findings:

- 39.2% of all FE achievements are in the sector subject area of 'Preparation for Life and Work', compared to 47.0% nationally.
- 20.2% of all achievements gained by Tees Valley residents are in Health, Public, Service and Care, compared to 16.5% nationally. Health Care is one of the priority sectors in Tees Valley, with high levels of employment.
- Tees Valley also has a higher percentage of achievements than national in Engineering and Manufacturing Technologies (12.3% compared to 3.4%), and Retail and Commercial Enterprise (7.9% compared to 5.6%).
- However, achievements are lower than national in a number of subjects, in particular Arts, Media and Publishing (0.7% compared to 3.1%), Languages, Literature and Culture (0.5% compared to 2.0%) and Science and Mathematics (0.7% compared to 2.1%).

Further Education and Skills Destinations

75% of Further education and skills learners were in sustained employment or education 2019/20, compared to 82% nationally.

Figure 4.2.29. Further education and skills destinations for adults (aged 19+) 2019/20



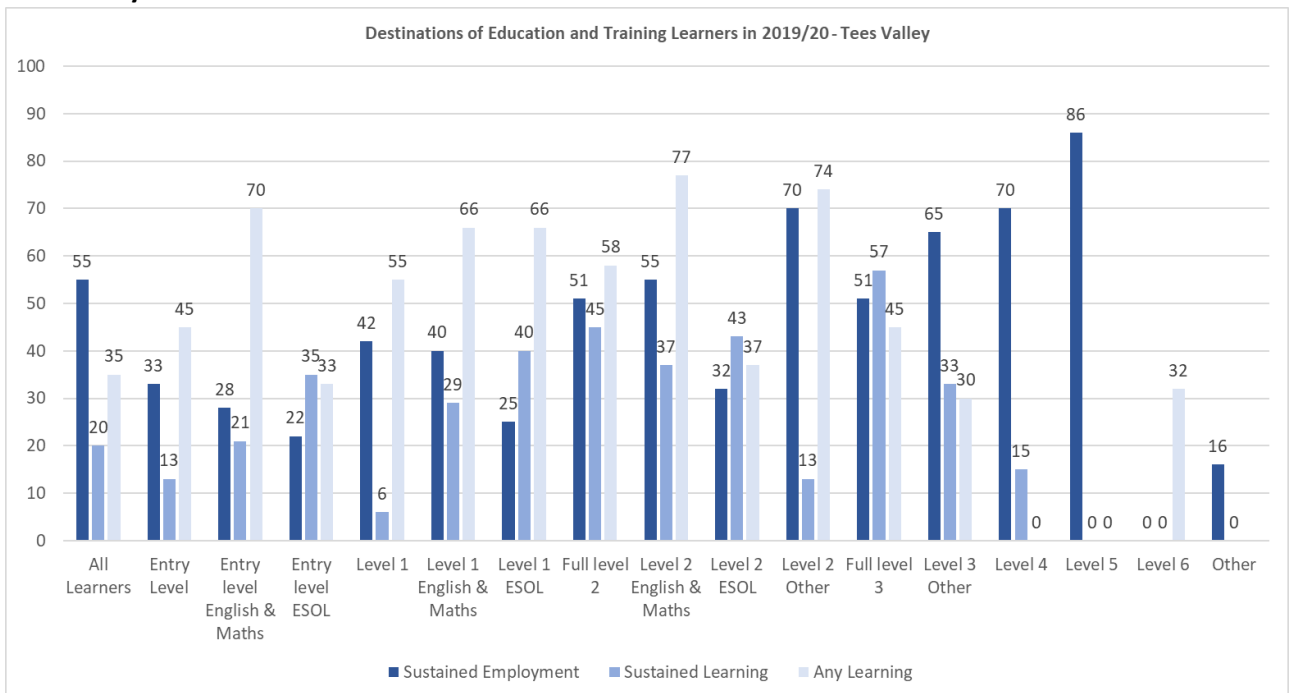
Key Findings:

- 55% of adult learners were in sustained employment, compared to 57% nationally.
- 20% of adult learners were in sustained learning, compared to 25% nationally.

Source: Department for Education

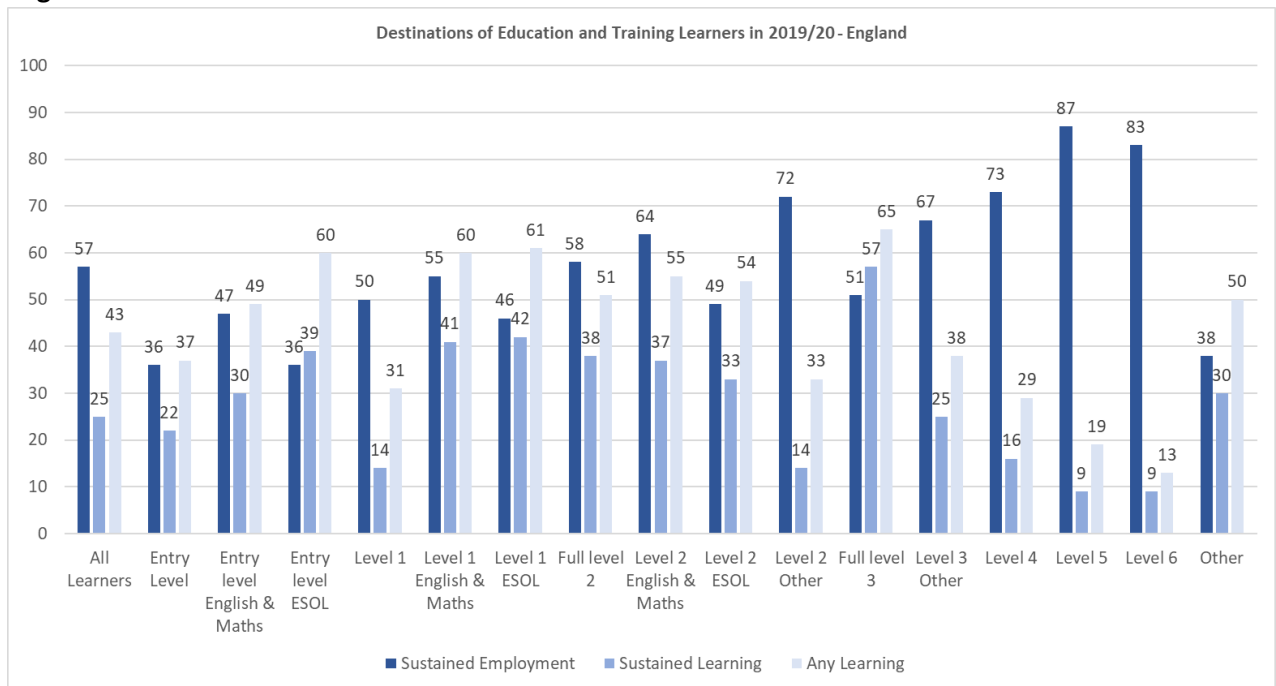
Figures 4.2.30. and 4.2.31. show the destinations for adult further education and skills by level of study.

Figure 4.2.30. Further education and skills destinations for adults (aged 19+) 2019/20 by level (%) – Tees Valley



Source: FE Outcome based success measures, DfE

Figure 4.2.31. Further education and skills destinations for adults (aged 19+) 2019/20 by level (%) – England



Source: FE Outcome based success measures, DfE

Key Findings:

- Tees Valley learners who undertook an Entry level – English & Maths qualification much less likely to be in sustained employment or learning, at 28% compared to 47% for sustained employment and 21% compared to 30% for sustained learning.
- Tees Valley learners who undertook a Level 1 – English & Maths qualification were less likely to be in sustained employment or learning, at 40% compared to 55% for sustained employment and 29% compared to 41% for sustained learning.
- Tees Valley learners who undertook a Level 2 were much more likely than national to be in sustained learning, at 45% compared to 38% for full level 2, 43% compared to 33% for Level 2 ESOL.
- Tees Valley learners who undertook a Level 3 Other qualification more likely than national to be in sustained learning at 33% compared to 25%, whilst learners who undertook a full Level 3 qualification matched the national figure at 57%.

Higher Education

Higher education provision in Tees Valley is focused on Teesside University and the University of Durham (Queens Campus), with FE colleges also offering HE courses.

Teesside University is described as the UK's leading higher education institution for working with business and received the Queen's Anniversary Prize for work at world-class level in the field of enterprise and business engagement.

The University of Durham, Middlesbrough College and The Northern School of Art were awarded a Gold standard Teaching Excellence Framework after a rigorous review of higher education standards judged that they provide teaching of the highest quality in the UK.

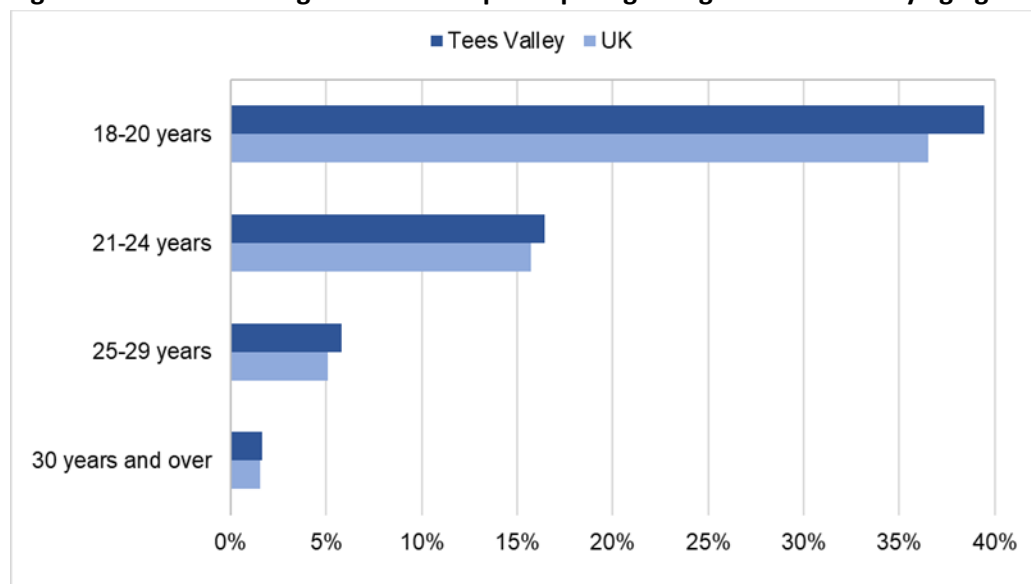
The figures below cover higher education level students registered directly with a HE provider. If a HE provider has a franchise / collaborative agreement with a Further Education college these students will be included in this analysis. However, if a student is registered directly with the FE college their data is not included.

Tees Valley higher education students and Tees Valley graduates are classed as those students whose permanent residence prior to commencement of study was in Tees Valley. They may have gained their higher education qualification anywhere in the UK.

Participation

Tees Valley has higher rates of participation in HE across all age groups as shown in Figure 4.2.32.

Figure 4.2.32. Percentage of residents participating in Higher Education by age group 2020/21

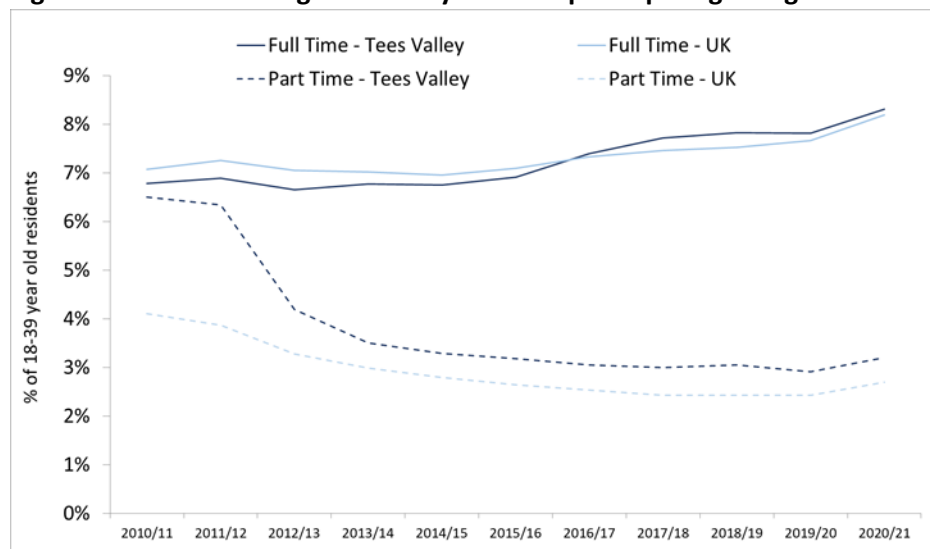


Source: HESA

Overall, 11.5% of 18-39-year-old Tees Valley residents were in higher education in 2020/21, compared to 10.9% nationally. This has dropped from 13.3% in 2010/11, a drop of 1.8 percentage points compared to a 0.3 drop nationally. However, the percentage of 18-39-year-old Tees Valley residents in full-time higher education has increased from 6.8% in 2010/11 to 8.3% in 2020/21, a rise of 1.5 percentage points compared to a rise of 1.1 nationally. The percentage of 18-39-year-old Tees

Valley residents in part-time higher education has fallen from 6.5% in 2010/11 to 3.2% in 2020/21, a drop of 3.3 percentage points compared to a drop of 1.4 nationally.

Figure 4.2.33. Percentage of 18-39 years olds participating in Higher Education by mode of study



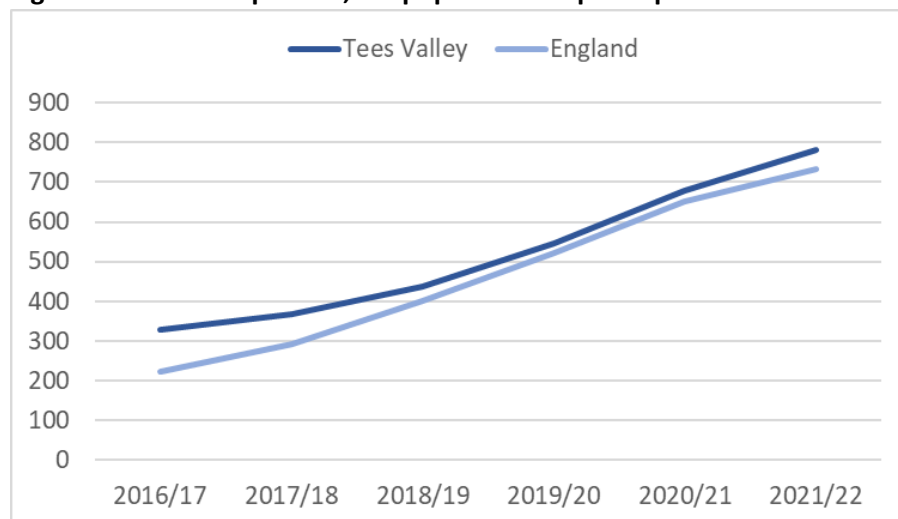
Key Findings:

- Participation in full time Higher Education is slightly higher in Tees Valley than nationally (8.3% compared to 8.2%)
- Participation in part time Higher Education has continued to fall both locally and nationally since 2010/11.

Source: HESA

Tees Valley has a higher rate of Adults aged 19+ participating in Higher Education (Level 4+) at Further Education establishments in 2021/22 at 781 per 100,000 population, compared to 734 nationally.

Figure 4.2.34. Rate per 100,000 population FE participation at Level 4+



Key Findings:

- Participation in FE at level 4+ has risen by 454 from 327 per 100,000 population in 2016/17 to 781 in 2021/22, compared to a rise of 510 nationally.
- Between 2020/21 and 2021/22 the rate of participation in FE at level 4+ has increased by 101, compared to a rise of 101 nationally.

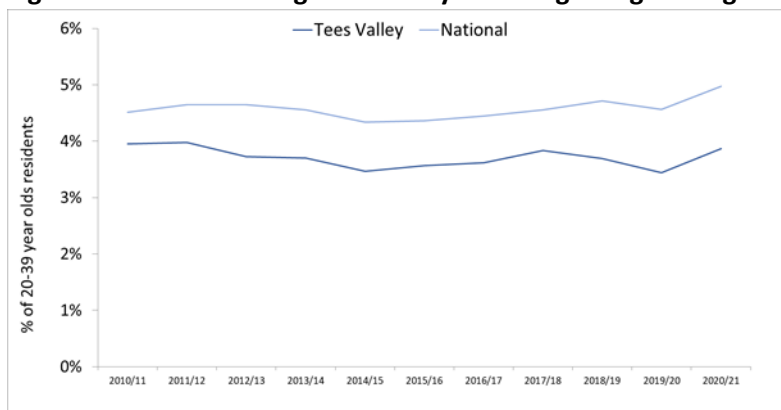
Source: DfE

Attainment

3.9% of Tees Valley Higher Education students¹⁵ aged 20-39 obtained an undergraduate or postgraduate qualification in 2020/21, compared to 5.0% nationally.

¹⁵ Students whose permanent residence prior to starting study was within Tees Valley

Figure 4.2.35. Percentage of 20-39-year olds gaining undergraduate or postgraduate qualifications



Key Findings:

- Since 2019/20 there has been a rise of 0.4 percentage points (580 extra qualifications) compared to a rise of 0.4 nationally.

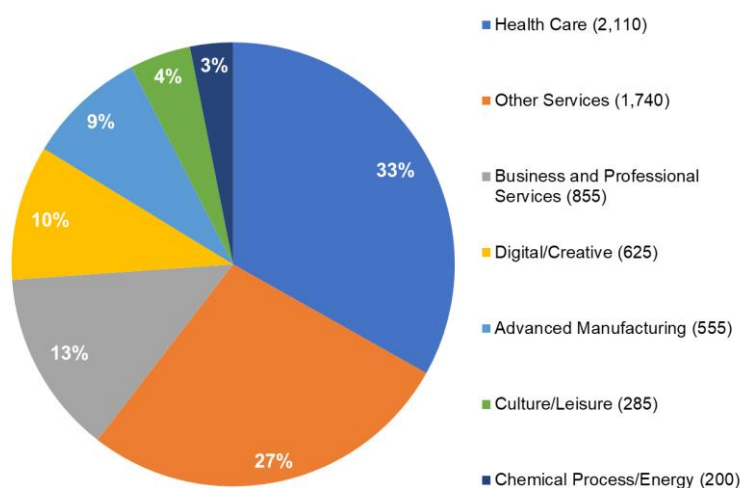
Source: HESA

49% of Tees Valley Higher Education students gained their undergraduate or postgraduate qualification at Teesside University in 2020/21, up 0.1 percentage points from 2019/20 and 3% of students gained their undergraduate or postgraduate qualification through The Open University, up 2.0 percentage points from 2019/20.

16% of qualifications gained by Tees Valley Higher Education students were obtained at Russell Group universities. This rises to 21% for those gaining postgraduate qualifications and falls to 14% for those gaining undergraduate qualifications, whilst qualifications gained at non-Russell group universities are more evenly split at 86% undergraduate and 79% postgraduate.

Nationally the percentage of 20-39-year olds obtaining a postgraduate qualification is double the Tees Valley figure with 1.0% obtaining a postgraduate qualification in 2020/21 compared to 2.0% nationally.

Figure 4.2.36. Undergraduate and Postgraduate qualification by Key Sector 2020/21



Key Findings:

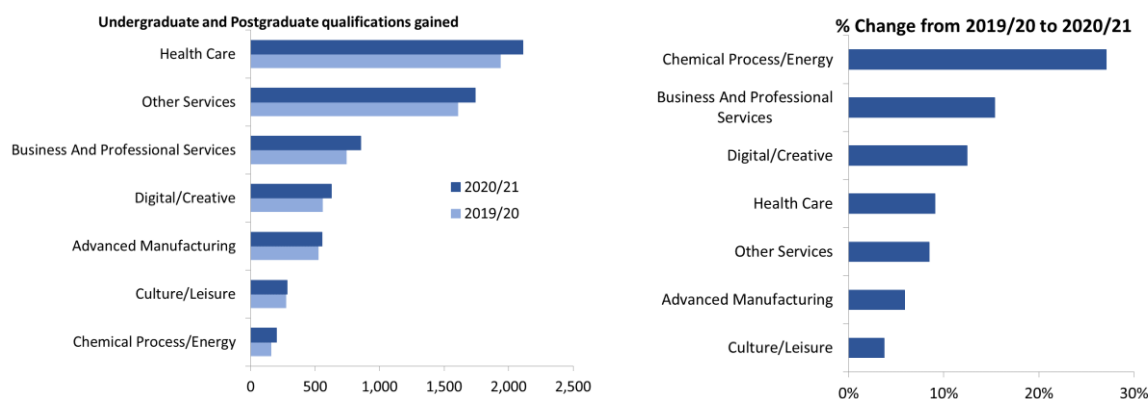
- Qualifications gained in the Health Care key sector accounted for the largest percentage of qualifications gained in 2020/21 (33%).
- The second largest sector for take up of qualifications is the Other Services⁷ sector with 27% of all passes.

Source: HESA

¹⁶ The Other Services sector includes qualifications gained in Education, Social Studies, Languages, Historical and philosophical studies, Architecture, Building & Planning, Forensic & Archaeological Sciences and Astronomy and Agriculture. Education qualifications make up over half of Other Services qualifications

Figure 4.2.37. shows the number of undergraduate and postgraduate qualifications gained in 2019/20 compared to 2020/21 alongside the percentage change over the last year by key sector.

Figure 4.2.37. Change in undergraduate and postgraduate passes by key sector 2019/20 to 2020/21



Source: HESA

Key Findings:

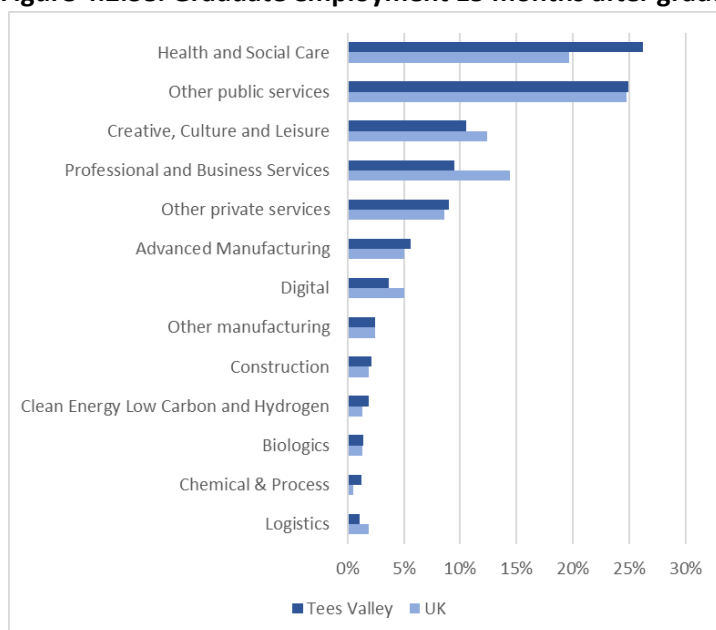
- The Chemical Process and Energy sector has seen the largest percentage increase in qualifications between 2019/20 and 2020/21, with a 27% increase and 45 extra passes.
- The Business and Professional Services sector has seen a 15% rise in undergraduate and postgraduate qualifications over the last year with 115 extra passes.
- This is followed by a 12% rise in qualifications in the Digital and Creative sector (70 extra passes) and a 9% rise in qualifications gained in the Health Care sector (180 extra passes).
- The Other Services sector saw an 8% rise in undergraduate and postgraduate qualifications between 2019/20 and 2020/21 with 135 extra qualifications.
- The Advanced Manufacturing sector saw a 6% rise in undergraduate and postgraduate qualifications over the last year with 30 extra passes and a 4% rise in qualifications gained in the Culture and Leisure sector (10 extra passes).

Graduate Outcomes

The Graduate Outcomes survey is taken by graduates 15 months after qualifying from their higher education qualification. Data is for the 2019/20 cohort, taken 15 months after the 2019/20 cohort had graduated and was published in 2022.

84% of Tees Valley graduates who obtained a higher education qualification in 2019/20 were in some form of employment or due to start employment 15 months after graduating, compared to 81% nationally. 56% of graduates found employment within Tees Valley with 69% finding employment within the North East region. Of the 56% finding employment within Tees Valley, 40% had studied their HE qualification outside of the Tees Valley, returning to the Tees Valley to find employment.

Figure 4.2.38. Graduate employment 15 months after graduating in 2019/20 by TVCA sector



Source: HESA

Key Findings:

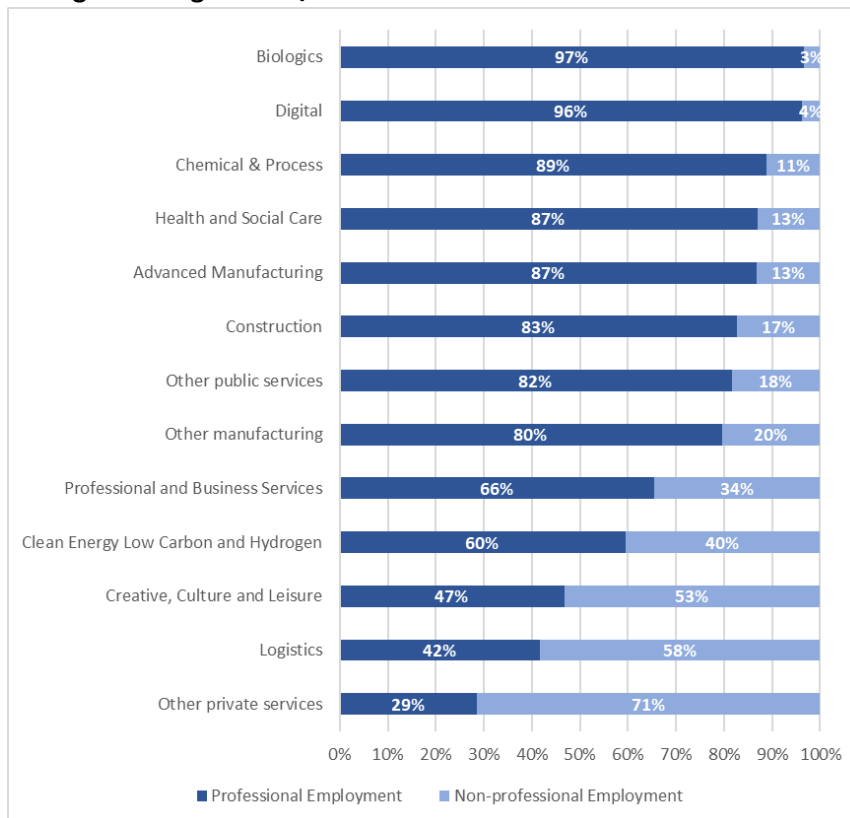
- The Health and Social Care sector employed the most Tees Valley graduates 26% of graduates finding employment in this sector 15 months after graduating in 2019/20, followed by Other Public Services sector which employed 25% of Tees Valley graduates. These sectors accounted for over half of all Tees Valley graduate employment.
- 67% of qualifications in the Other Public Services sector is in the Education sub sector.
- Graduate employment was higher in the Health and Social Care sector for Tees Valley graduates with 26% employed compared to 20% nationally.

Of the 84% of graduates who were in some form of employment or due to start employment 15 months after graduating 73% were in professional employment¹⁸. Over a quarter (27%) were in non-professional roles (assumed non-graduate) 15 months after graduating, compared to 22% nationally. This rises to 31% for those who found employment specifically within Tees Valley, suggesting there are fewer graduate level jobs available in Tees Valley. Figure 4.2.39. shows that the proportion of Tees Valley graduates in professional and non-professional roles by TVCA sector.

¹⁷ Other Public Services includes education, public admin, public defence and social security. Other Public Services includes education, public admin, public defence and social security.

¹⁸ Professional employment includes the SOC codes 1 – Managers, directors and senior officials, 2 – Professional Occupations and 3- Associate professional and technical occupations

Figure 4.2.39. Professional employment by TVCA key industry sector of employment - 15 months after graduating in 2019/20¹⁹



Key Findings:

- 97% of Tees Valley graduates were in professional employment followed by 96% of graduates employed in the Digital sector and 89% of graduates employed in the Chemical and Process sector.

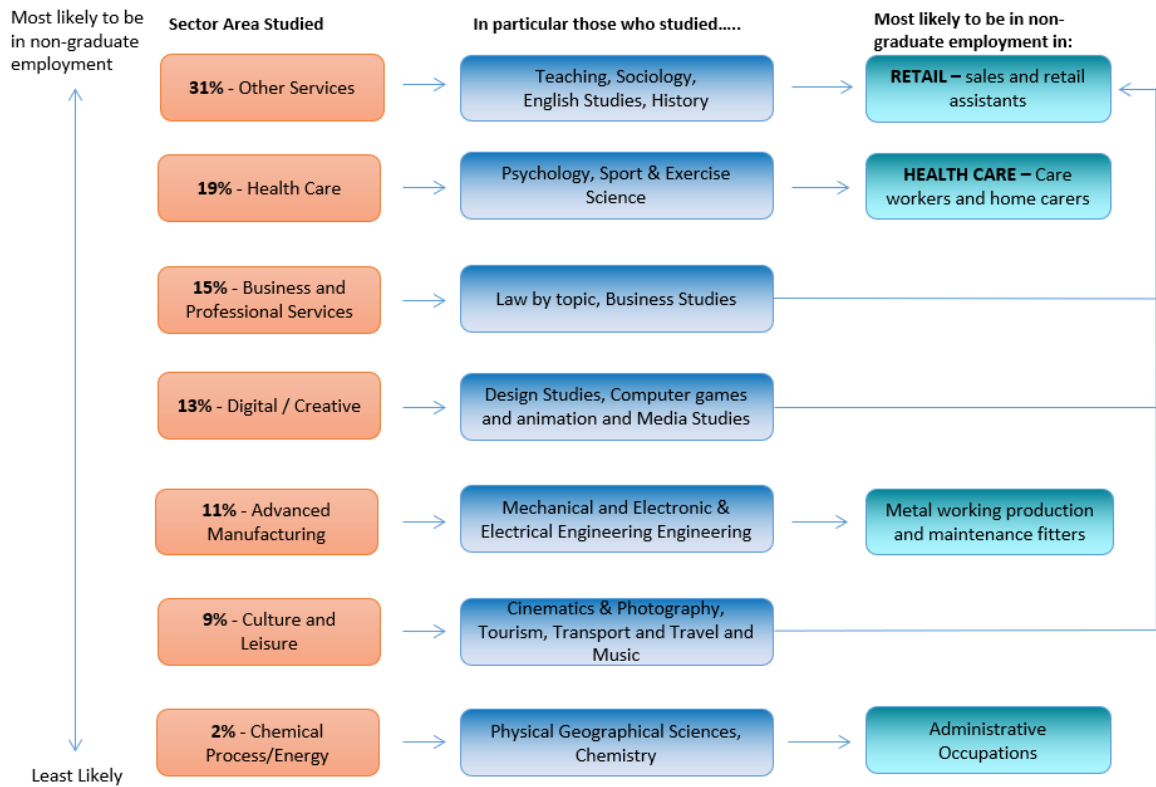
Source: HESA

Figure 4.2.40. illustrates the mismatch between graduate supply and demand. Tees Valley contains a number of easily accessible employment sectors, such as Retail and Food with graduate underemployment linked to sector demand. Graduates who gained qualifications in sectors with current low demand often end up filling this gap, it is no reflection of the quantity or quality of available higher education subjects.

¹⁹ The number of graduates employed within raw materials and agriculture was too low to report.

Figure 4.2.40. Tees Valley Graduate Underemployment

Graduate UNDER-EMPLOYMENT



Source: HESA

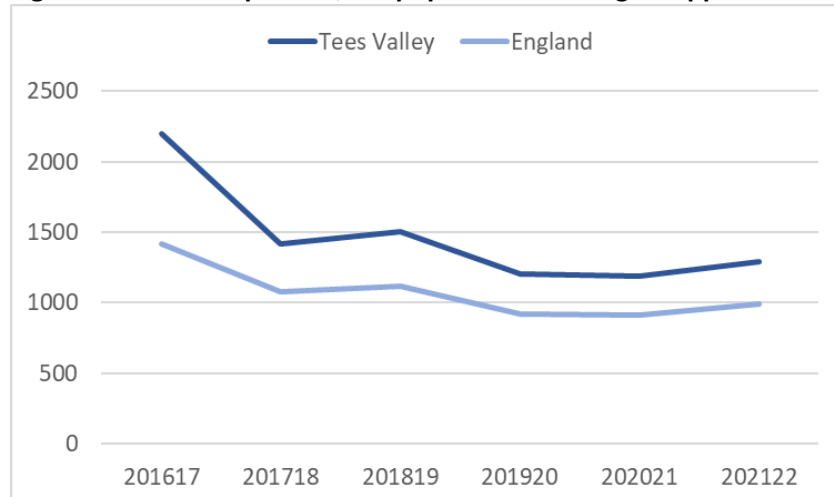
4.2.2. Apprenticeships

Apprenticeship Starts

5,350 people living in Tees Valley started an apprenticeship in 2021/22.

There has been a 15% rise in the number of Tees Valley residents starting an apprenticeship between 2020/21 and 2021/22, compared to a 9% rise nationally. However, figure 4.2.41. shows that Tees Valley consistently has a higher rate per 100,000 population starting an apprenticeship than nationally.

Figure 4.2.41. Rate per 100,000 population starting an apprenticeship



Key Findings:

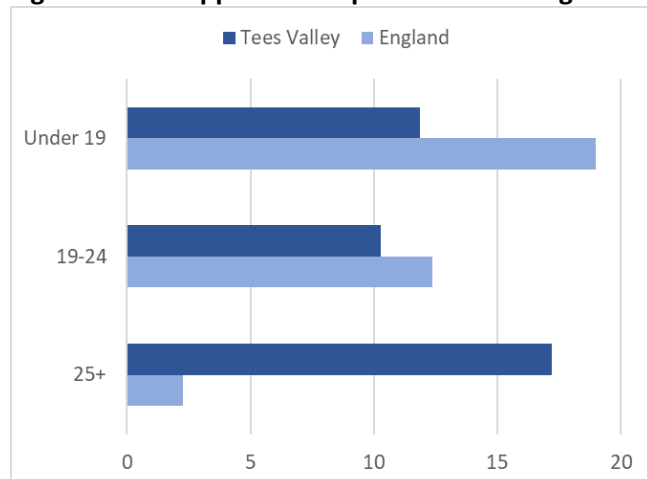
- 1,293 per 100,000 population started an apprenticeship in 2021/212 compared to 991 nationally.
- The rate of apprenticeships starts remains well below the high of 2,196 per 100,000 population in 2016/17 (3,810 fewer apprenticeship starts, 42% lower).
- Apprenticeship starts are 15% lower than three years ago (2018/19) compared to an 11% drop nationally.

Source: Education Skills Funding Agency (ESFA)

The majority (54%) of apprenticeships in 2021/22 were started by Tees Valley residents aged under 25, which matches the national figure. This can be broken down into:

- 16-18 – 25% compared to 20% nationally.
- 19-24 – 29% compared to 29% nationally.
- 25+ - 46% compared to 50% nationally.

Figure 4.2.42. Apprenticeship Starts Percentage Change by Age 2020/21 to 2021/22



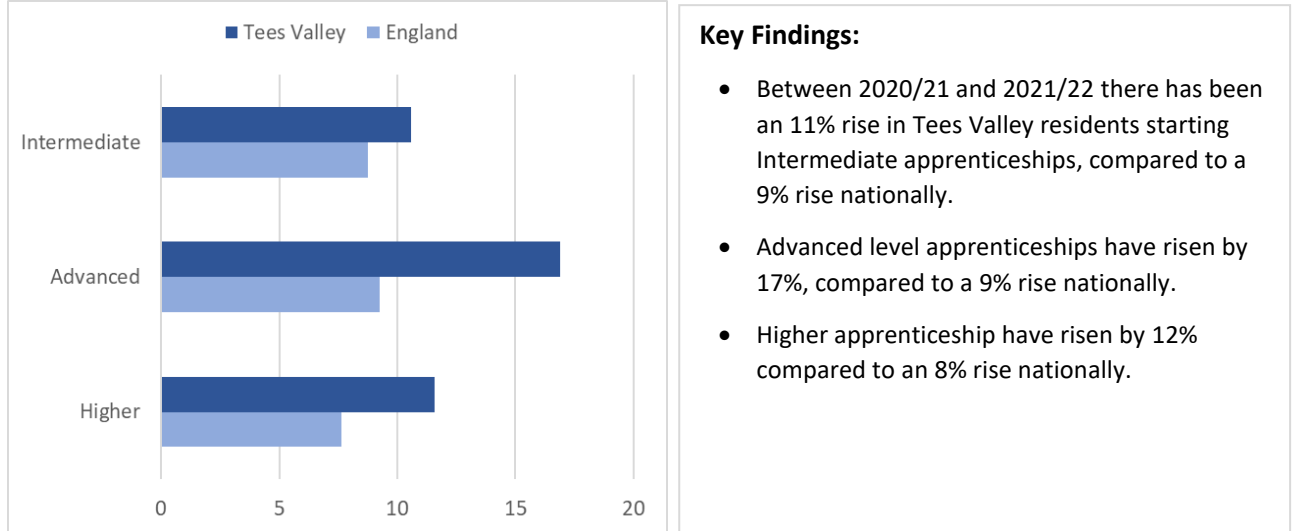
Key Findings:

- Between 2020/21 and 2021/22 there has been a 12% rise in the number of apprenticeships started by those aged 16-18, compared to a 19% rise nationally.
- There was a 10% rise in the number of apprenticeships started by 19-24 year olds compared to a 12% rise nationally.
- There has been a 17% rise in the number of residents aged 25+ year olds starting an apprenticeship, compared to a 2% rise nationally.

Source: ESFA

29% of apprenticeships started by Tees Valley residents in 2021/22 were intermediate level apprenticeships compared to 26% nationally. 46% were advanced level apprenticeships compared to 43% nationally and 25% were higher level apprenticeships compared to 30% nationally.

Figure 4.2.43. Apprenticeship Starts Percentage Change by Level 2020/21 to 2021/22

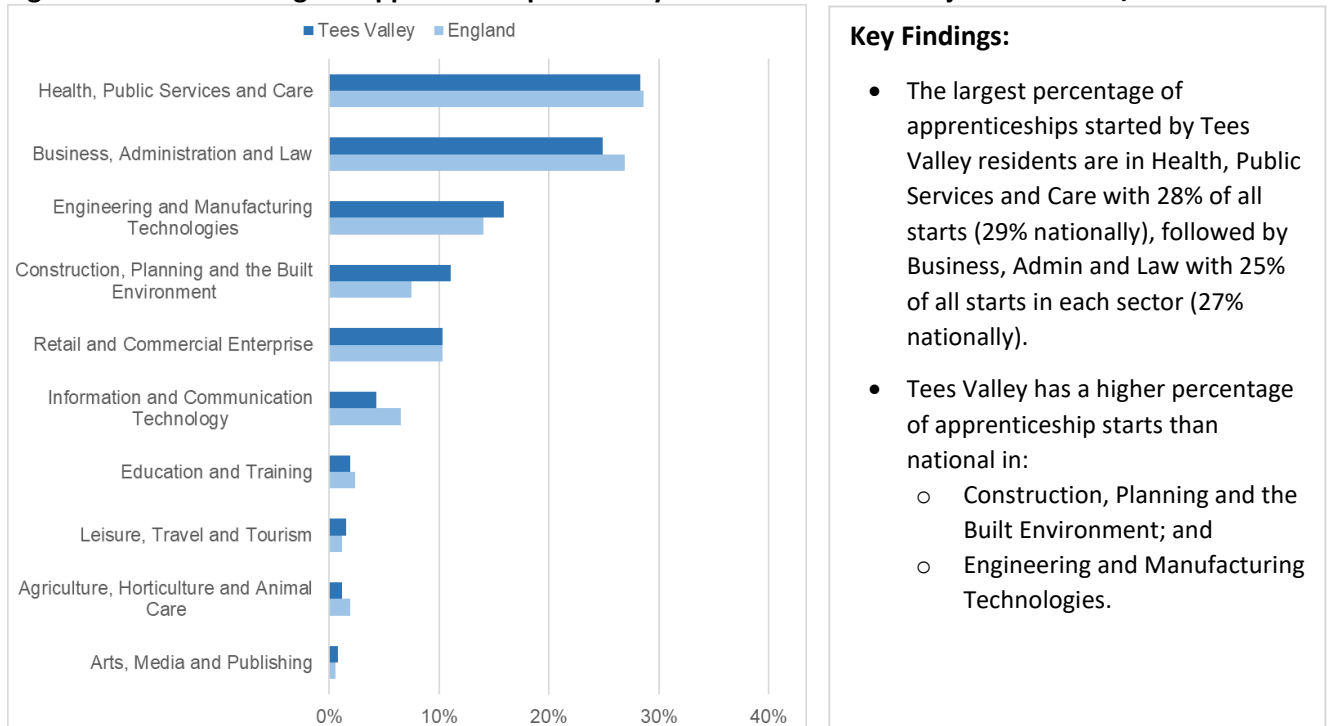


Source: ESFA

77% of Tees Valley residents started an apprenticeship which was delivered in Tees Valley²⁰, with a further 10% delivered in the North East.

Figures 4.2.44. and 4.2.45. uses the generic Framework Sector Subject Areas used by ESFA to compare apprenticeship starts against national figures:

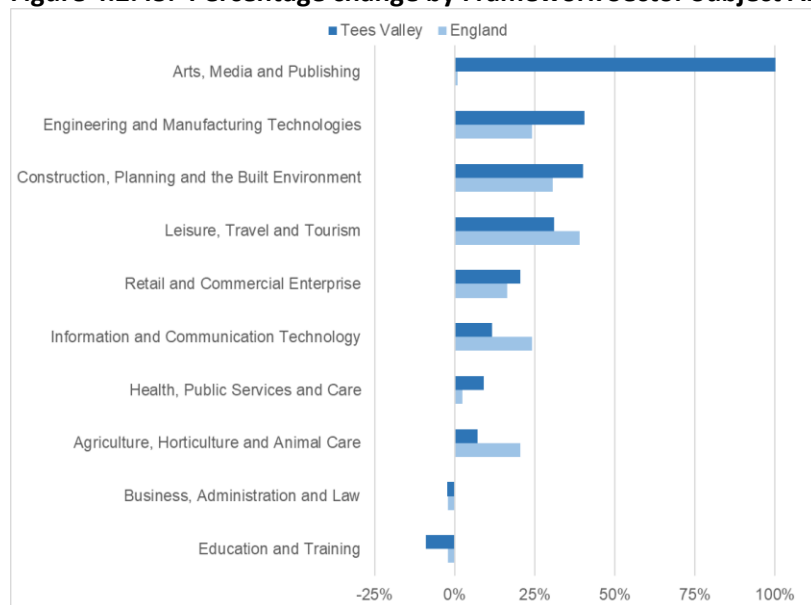
Figure 4.2.44. Percentage of apprenticeships starts by Framework Sector Subject Area 2021/22



Source: ESFA

²⁰ Delivered in Tees Valley by providers who may or may not be based in Tees Valley.

Figure 4.2.45. Percentage change by Framework Sector Subject Area 2020/21 to 2021/22



Source: ESFA

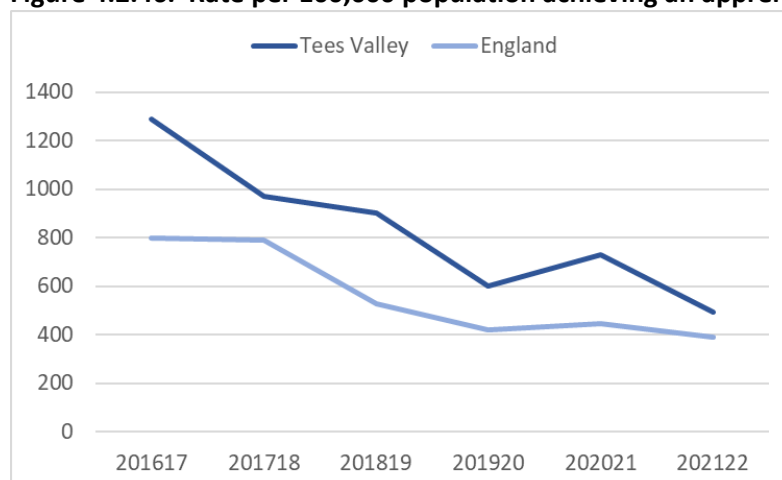
Key Findings:

- Between 2020/21 and 2021/22 there has been a 150% rise in starts in Arts, Media and Publishing, compared to a 1% rise nationally, however this only equates to 20 extra starts.
- There has also been a 40% rise in starts in both Engineering and Manufacturing Technologies starts (240 extra starts) and Construction starts (170 extra starts), compared to a 31% and 24% rise nationally.
- The largest percentage fall in apprenticeship starts has been in Education and Training, with a 9% fall (10 fewer starts), compared to a 2% drop nationally.
- There has been a 2% drop in Business, Administration and Law starts, with 30 fewer starts, which matches the national figure.

Apprenticeship achievements

There were 2,030 apprenticeship achievements for Tees Valley residents in 2021/22. Tees Valley consistently has a higher rate per 100,000 population achieving an apprenticeship than nationally, although the rate has fallen from a high of 1,287 in 2016/17 to 492 in 2021/22.

Figure 4.2.46. Rate per 100,000 population achieving an apprenticeship

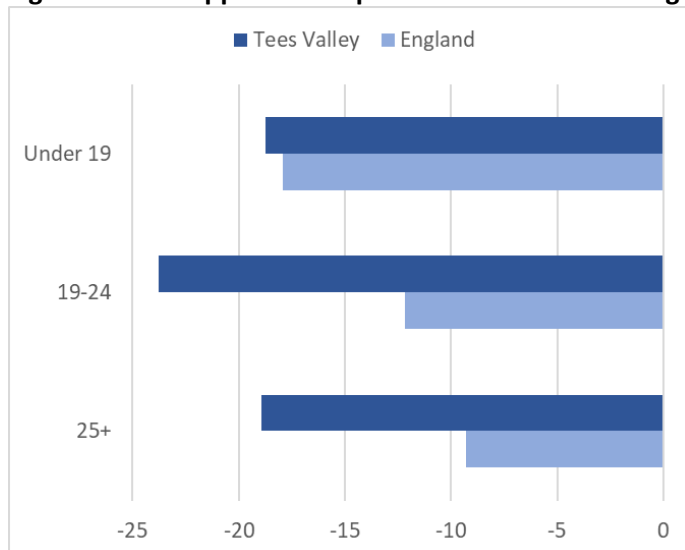


Source: ESFA

Key Findings:

- 492 per 100,000 population achieved an apprenticeship in 2021/22 compared to 389 nationally.
- The rate of apprenticeships achievements remains well below the high of 1,287 per 100,000 population in 2016/17 (3,500 fewer apprenticeship achievements, 63% lower).
- Apprenticeship achievements are 37% lower than three years ago (2018/19) compared to a 26% drop nationally.

Figure 4.2.47. Apprenticeship Achievements Percentage Change by Age 2020/21 to 2021/22

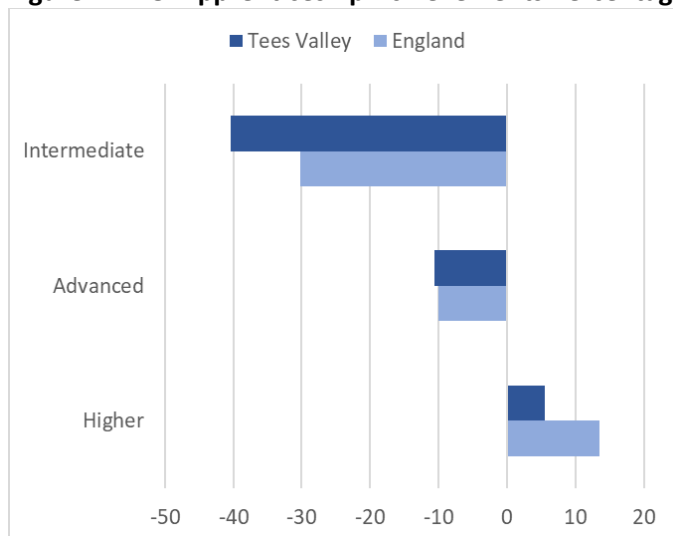


Source: ESFA

Key Findings:

- Between 2020/21 and 2021/22 there has been a 19% drop in the number of apprenticeships achieved by those aged 16-18, compared to an 18% drop nationally.
- There was a 24% drop in the number of apprenticeships achieved by 19-24 year olds compared to a 12% drop nationally.
- There has been a 19 drop in the number of residents aged 25+ year olds achieving an apprenticeship, compared to a 9% fall nationally.

Figure 4.2.48. Apprenticeship Achievements Percentage Change by Level 2020/21 to 2021/22



Source: ESFA

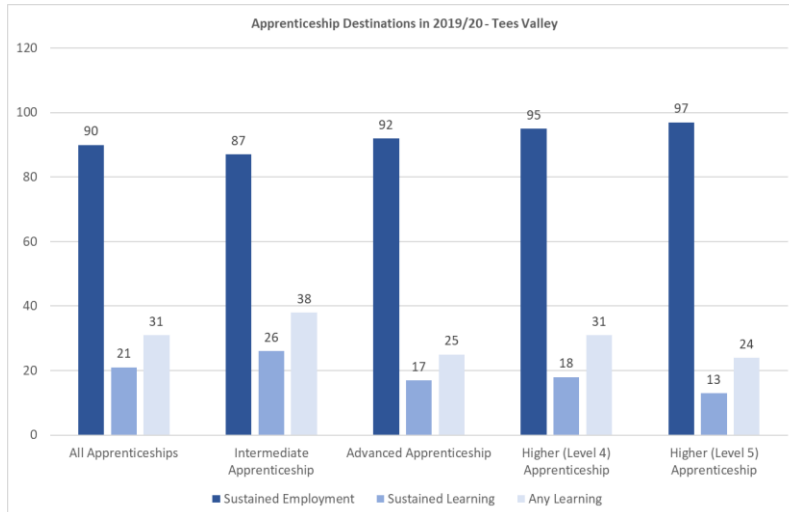
Key Findings:

- Between 2020/21 and 2021/22 there has been a 40% drop in the number of Tees Valley residents achieving Intermediate apprenticeships, compared to a 30% drop nationally.
- Advanced level apprenticeships have fallen by 11%, compared to a 10% fall nationally.
- Higher apprenticeship have risen by 6% compared to a 13% rise nationally.

Apprenticeship Destinations

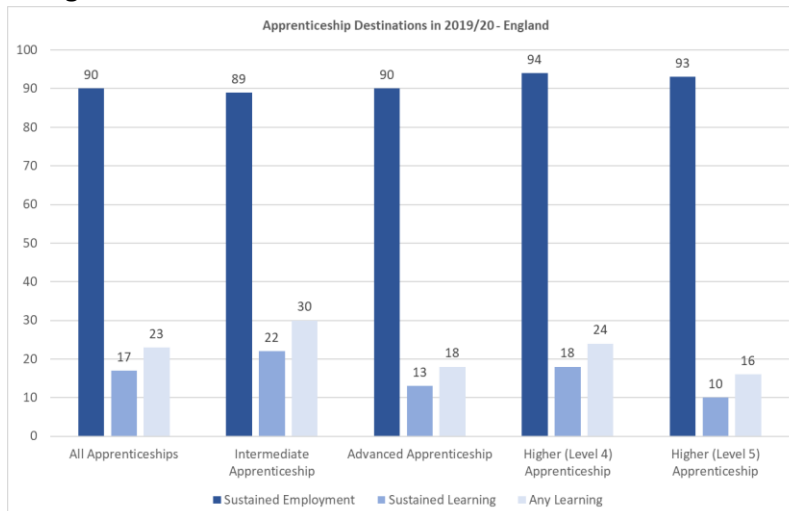
90% of Tees Valley apprenticeship learners were in sustained employment, which matches the national figure and 21% were in sustained learning, compared to 17% nationally.

Figure 4.2.49. Apprenticeship Destinations in 2019/20 by level (%) – Tees Valley



Source: FE Outcome based success measures, DfE

Figure 4.2.50. Apprenticeship Destinations in 2019/20 by level (%) – England



Source: FE Outcome based success measures, DfE

Key Findings:

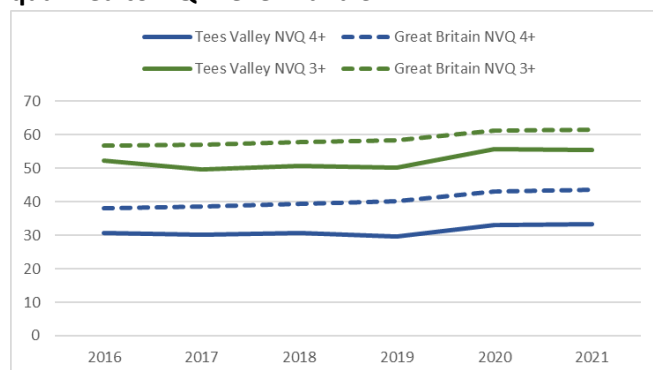
- Learning destinations for Tees Valley learners who undertook Advanced level apprenticeships are higher than the national.
- All destinations for Tees Valley learners who undertook a Level 5 Higher apprenticeship are higher than national.
- Sustained employment is lower than national for those Tees Valley learners who undertook an Intermediate level apprenticeship, whilst sustained learning and any learning destination was higher than national.
- Sustained employment and any learning is higher than national for those Tees Valley learners who undertook a level 4 Higher apprenticeship, whilst sustained learning destinations matched the national figure.

4.3. Skills

4.3.1. National Qualification Framework (NQF) Skills Levels

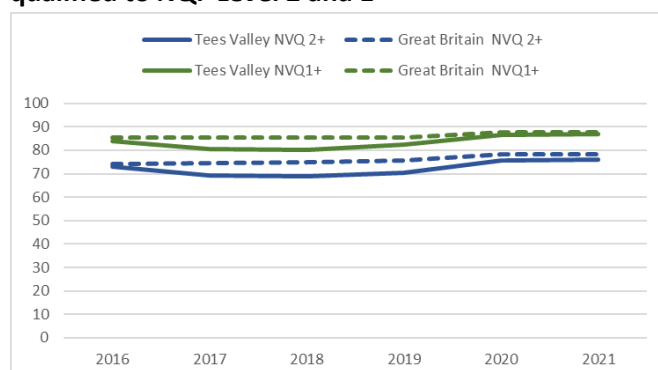
Between 2020 and 2021 there has been an increase in the percentage of the working age population with level 4, level 2 and level 1 qualifications, whilst there has been a fall in the percentage of the working age population with level 3 qualifications. The following figures 4.3.1. – 4.3.3. illustrate the change over the last five years.

Figure 4.3.1. Percentage of working age population qualified to NQF Level 4 and 3



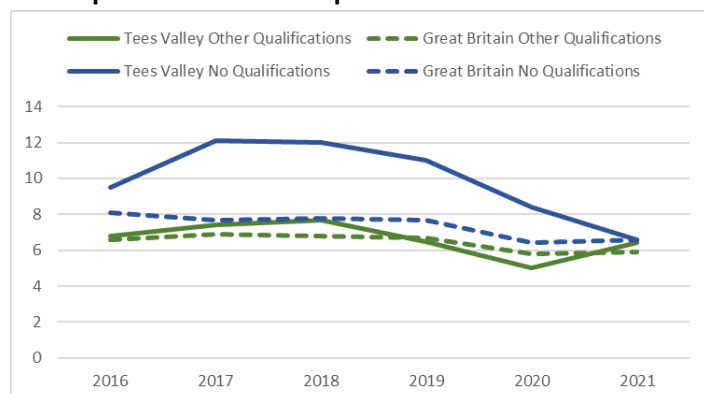
Source: ONS, Annual Population Survey

Figure 4.3.2. Percentage of working age population qualified to NQF Level 2 and 1



Source: ONS, Annual Population Survey

Figure 4.3.3. Percentage of working age population with other qualifications or no qualifications



Source: ONS, Annual Population Survey

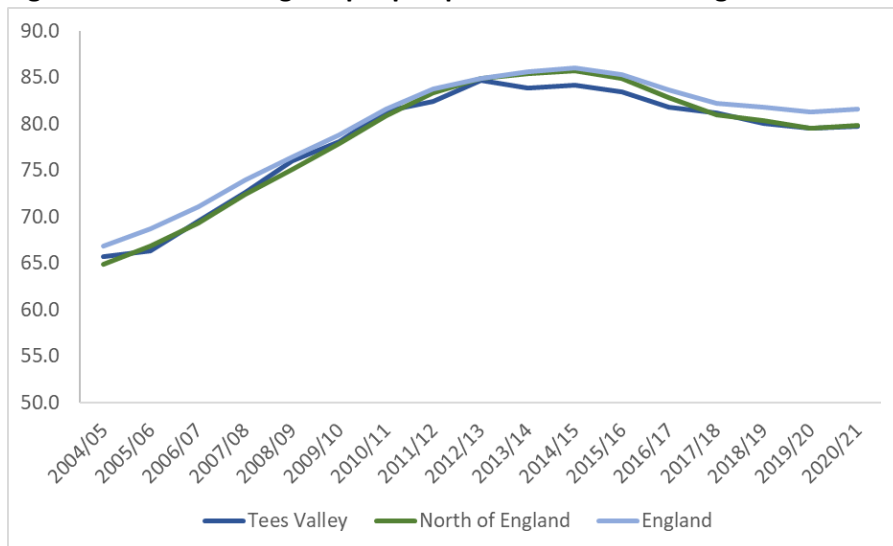
Key Findings:

- 33.4% of the Tees Valley working age population were qualified to at least a level 4 in 2021, compared to 43.6% nationally. This has risen by 0.2 percentage points over the last year compared to a rise of 0.5 nationally. Over the last 5 years the Tees Valley percentage has increased by 2.6 percentage points, compared to a rise of 5.5 percentage points nationally.
- 55.5% are qualified to at least a level 3 compared to 61.5% nationally. This has fallen by 0.2 percentage points over the last year compared to a rise of 0.1 nationally. Over the last 5 years this has increased by 3.1 percentage points compared to a 4.6 increase nationally.
- 75.9% are qualified to at least a level 2 compared to 78.1% nationally. This has risen by 0.3 percentage points over the last year compared to no change nationally. Over the last 5 years the percentage has increased by 2.7 percentage points compared to an increase of 3.8 nationally.
- 87.0% are qualified to at least a level 1 compared to 87.5% nationally. This has risen by 0.5 percentage points over the last year compared to a 0.3 drop nationally. Over the last 5 years the percentage has risen by 3.2 percentage points compared to an increase of 2.2 nationally.
- 6.6% of the Tees Valley working age population had no qualifications in 2021, matching the national figure. This has fallen by 1.8 percentage points over the last year compared to a 0.2 rise nationally. Over the last 5 years the percentage has fallen by 2.9 percentage points compared to a drop of 1.5 nationally.
- 6.4% of the Tees Valley working age population had 'other' qualifications in 2021, compared to 5.9% nationally. Over the last year this has fallen by 0.4 percentage points compared to a fall of 0.1 nationally. Over the last 5 years this has fallen by 0.4 percentage points, compared to a fall of 0.7 nationally.

4.3.2. Attainment by age 19

The percentage of Tees Valley residents qualified to level 2, level 2 including English and Maths and level 3 in the academic year they turned 19 has increased between 2019/20 and 2020/21. Figures 4.3.4. – 4.3.6. show the change since 2004/05.

Figure 4.3.4. Percentage of people qualified to level 2 at age 19

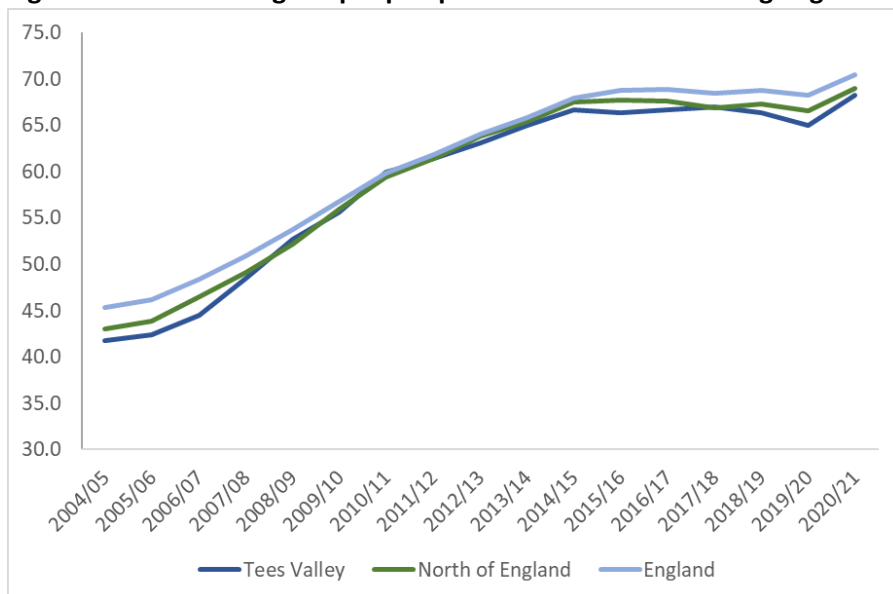


Source: DfE

Key Findings:

- 79.7% of people aged 19 in Tees Valley were qualified to level 2 in 2020/21, compared to 79.8% across the north of England and 81.6% nationally.
- This has fallen 4.9 percentage points from a high of 84.6% in 2012/13, compared to a fall of 3.3 nationally and a fall of 5.41 across the north of England.
- The rate of people aged 19 qualified to level 2 increased 0.2 percentage points between 2010/20 and 2020/21 from 79.5% to 79.7%.

Figure 4.3.5. Percentage of people qualified to level 2 including English and Maths at age 19

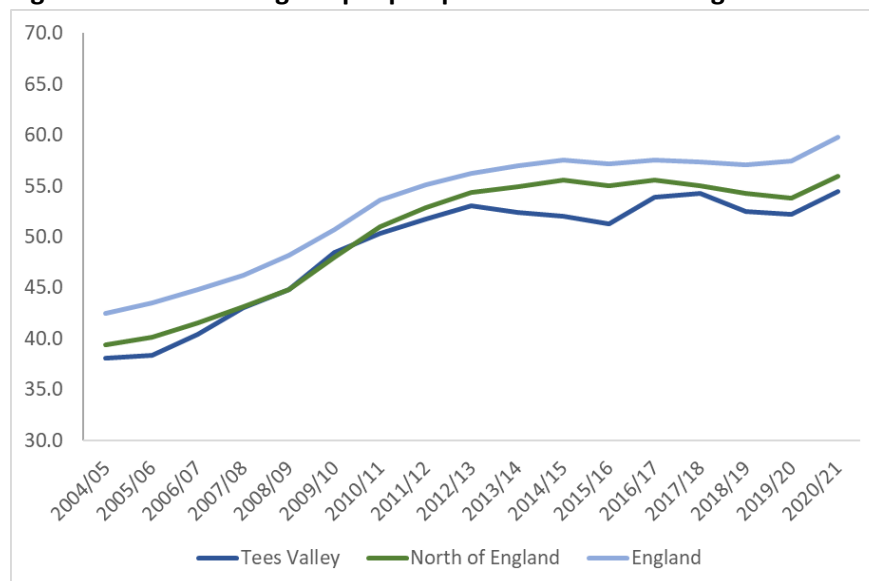


Source: DfE

Key Findings:

- 68.3% of people aged 19 in Tees Valley were qualified to level 2 including English and Maths in 2020/21, compared to 69.0% across the north of England and 70.4% nationally.
- This figure has increased 3.2 percentage points from 65.1% in 2019/20 compared to a 2.4 rise across the north of England and a 2.1 rise nationally.

Figure 4.3.6. Percentage of people qualified to level 3 at age 19



Key Findings:

- 54.4% of people aged 19 in Tees Valley are qualified to level 3 in 2020/21 compared to 56.0% across the north of England and 59.8% nationally.
- The rate in Tees Valley has increased by 2.3 percentage points from 52.2% in 2019/20 compared to a 2.1 rise across the north of England and a 2.4 rise nationally.

Source: DfE

4.3.3. Travel to learn

87% of learning undertaken by Tees Valley residents aged 16+²¹ in 2021/22 was undertaken within Tees Valley. This varies from 91% for Middlesbrough residents to 79% for Hartlepool residents.

The majority of learners started a learning aim which was based in their home district. This varies from 71% in Middlesbrough to 40% in Redcar and Cleveland.

Table 4.3.7. Percentage of learning aims started in 2021/22

| Location of learning | Home Local Authority | | | | | |
|---------------------------|----------------------|------------|---------------|----------------------|------------------|-------------|
| | Darlington | Hartlepool | Middlesbrough | Redcar and Cleveland | Stockton on Tees | Tees Valley |
| Darlington | 65% | 1% | 1% | 2% | 4% | 11% |
| Hartlepool | 1% | 63% | 2% | 3% | 4% | 12% |
| Middlesbrough | 9% | 8% | 71% | 39% | 26% | 35% |
| Redcar and Cleveland | 1% | 1% | 8% | 40% | 2% | 10% |
| Stockton on Tees | 4% | 6% | 8% | 5% | 52% | 19% |
| Tees Valley | 80% | 79% | 91% | 89% | 89% | 87% |
| Rest of North East | 7% | 7% | 2% | 2% | 4% | 4% |
| Other England | 13% | 14% | 6% | 9% | 8% | 9% |

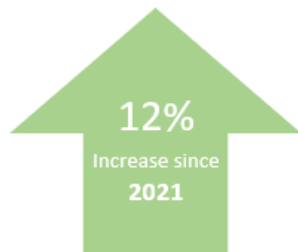
Source: ESFA

²¹ excludes information on learners at school sixth form.

4.3.4. Workforce demand

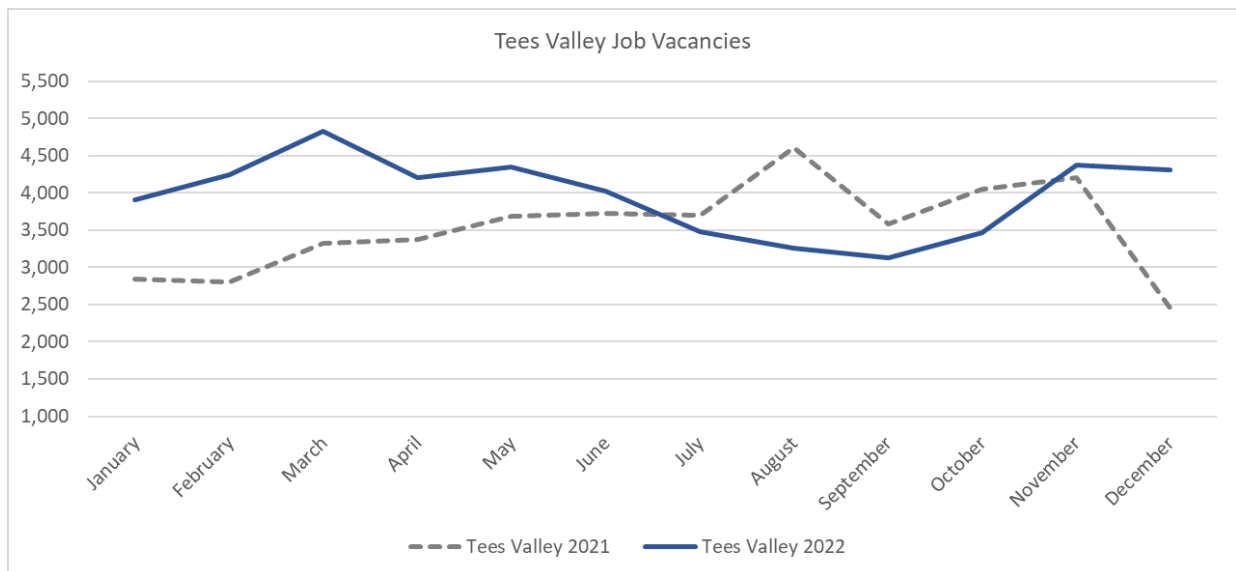
There were estimated to be around 47,570 job vacancies advertised online in Tees Valley between January 2022 and December 2022²².

Figure 4.3.8. Tees Valley Job Vacancies



Key Findings:

- This is a 12% rise when compared to the same period in 2021 (5,250 extra vacancies), in comparison to a 34% rise across the North of England and a 25% rise nationally.



Source: Lightcast 2022.2

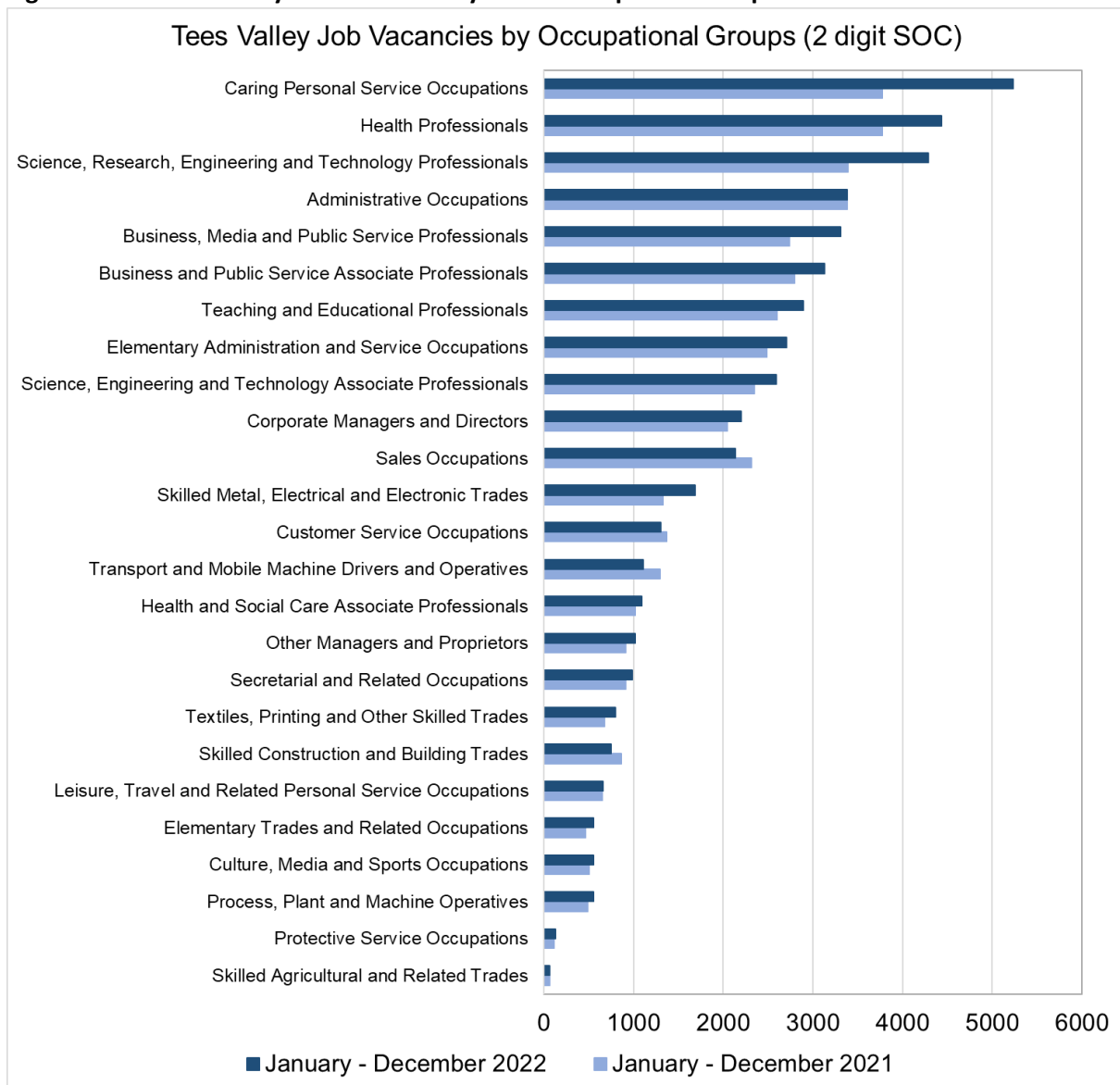
Key Findings:

- Vacancies were above 2021 levels throughout the first six months of 2022, with a downward trend in vacancies between May and September 2022. Vacancies increased between October and November 2022 with a slight drop in December 2022 (1.6% or 70 fewer vacancies).
- Vacancies were 76% higher than they were in December 2021 compared to a 42% rise nationally.

²² Source: Lightcast 2022.2. A fall in job vacancies does not necessarily indicate fewer jobs, it may be an indication of increased job stability or lower staff turnover.

Figure 4.3.9. shows the number of job vacancies in Tees Valley in 2022 by broad occupation group compared to 2021.

Figure 4.3.9. Tees Valley Job Vacancies by Broad Occupation Group



Source: Lightcast 2022.2

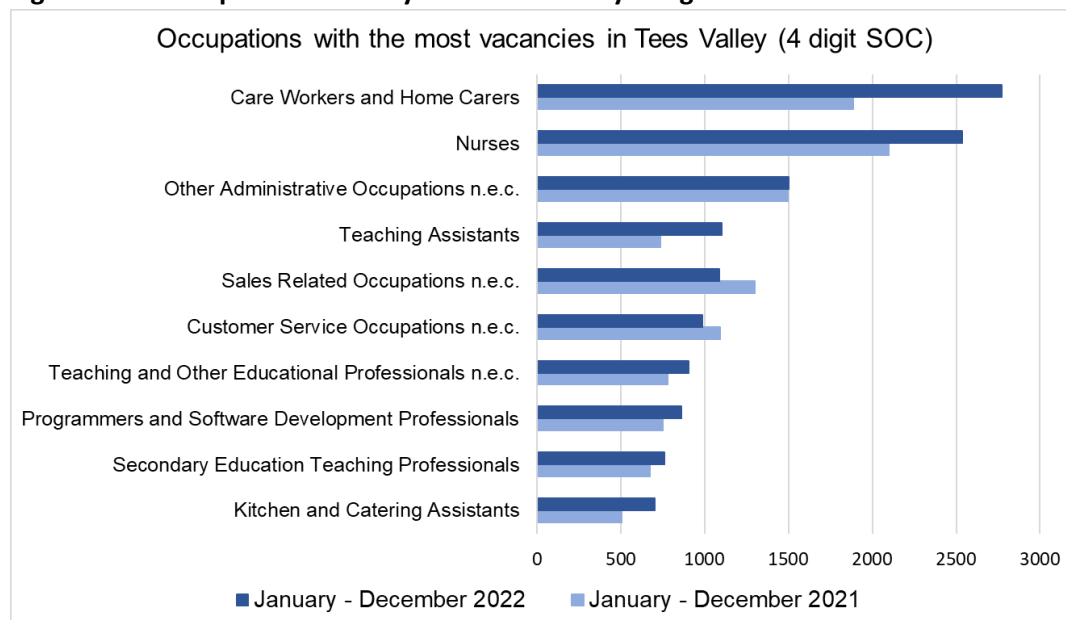


Key Findings:

- The largest rise in job vacancies when compared to 2021 was for Caring Personal Service Occupations, with a 39% rise and vacancies increasing from 3,775 to 5,235 (1,460 extra vacancies). There was a particular increase in vacancies for Care Workers and Home Carers, Teaching Assistants, Nursing Auxiliaries and Assistants and Educational Support Assistants.
- This was followed by a 27% rise in job vacancies for Skilled Metal, Electrical and Electronic Trades with vacancies increasing from 1,330 to 1,680 (350 extra vacancies). There was a particular increase in vacancies for Electricians and Electrical Fitters, Vehicle Technicians, Mechanics and Electricians and Electrical and Electronic Trades not elsewhere classified.

Figure 4.3.10. shows that if we break this down further 4-digit occupational code we can see that the largest number of job vacancies in Tees Valley in 2022 were for Carers, Nurses, Admin staff, Sales staff, Teachers, IT staff and Kitchen staff, with a rise in Teaching Assistants and Carers compared to 2021.

Figure 4.3.10. Top 10 Tees Valley Job Vacancies by 4-digit SOC



Source: Lightcast 2022.2

Key Findings:

- Care Workers and Home Carers was the occupation with the highest number of vacancies in 2022 at 2,771, a rise of 47% from 1,887 in 2021 (884 extra vacancies). This is followed by Nurses at 2,537, a rise of 21% year-on-year (438 extra vacancies).
- Teaching Assistants saw a significant increase in the number of job vacancies between 2021 and 2022 with numbers rising 49% from 739 in 2021 to 1,103 in 2022 (364 extra vacancies).
- There was also a 39% increase in vacancies for Kitchen and Catering Assistants over the last year from 504 in 2021 to 703 in 2022 (199 extra vacancies).
- There was a 16% fall in vacancies for Sales Related Occupations not elsewhere classified from 1,302 in 2021 to 1,089 in 2022 (213 fewer vacancies).

Occupational demand

Please note the Tees Valley Occupational Demand analysis was completed in March 2021 and this remains unchanged from the previous Economic Assessment.

The Tees Valley Occupational Demand analysis groups occupations into key occupational clusters and analyses skills supply, demand, and gap analysis for these clusters.

Speciality clusters in the Tees Valley include chemicals and hydrocarbons, metal work and electronics and electricals, which make up a higher proportion of jobs in the area than in the UK on

average resulting in the regions workforce having a stronger focus on physical rather than analytical skills

Larger and less specialised clusters such as sales, healthcare support and food and beverage services have been found to have more skill transferability, with lower levels of transferability in more specialised clusters (e.g. construction management and glass and ceramics).

The comparison against England shows that clusters such as sales and retail have a more aligned supply and demand position compared, while other clusters such as chemicals and hydrocarbons, metal work and healthcare delivery have a higher level of demand than supply, indicating that the supply of labour with the right skills to meet the needs of these clusters may require increasing to saturate demand. Clusters such as cleaning, maintenance and security, administration and support and electronics and electricals indicatively have more supply than required to meet demand.

Supply

Tees Valley has FE educational supply strengths in Engineering, with the majority of Full Time Learner Equivalent (FTLE) achievements and an SQ (Subject Quotient – similar to Location Quotient) of 2.36. Second and third are warehousing and distribution (SQ 2.04) and transport operations and maintenance (SQ 1.51).

Demand

Occupational demand could equate to 92,360 job openings between 2021 and 2028 (11,550 openings annually), with the highest numbers of job openings projected in the transport and distribution, food and beverage services and primary, secondary and further education.

Clusters may see small increases in skill requirements because of occupational structure changes. Improvements are more likely to be needed in analytical and interpersonal skills, with physical skills becoming less important.

Of those clusters that grew between 2015 and 2019, the largest absolute increases were in transport and distribution, administration and support and human resources. In comparison, policing, fire and prison services experienced a larger proportional increase. Some of the locally concentrated clusters such as chemicals and hydrocarbons and electronics and electricals experienced decreases in jobs.

Skills Gaps

Clusters such as metal work, chemicals and hydrocarbons, healthcare delivery and policing, fire and prison services face supply gaps, whilst others such as administration and support, cleaning, maintenance and security and electronics and electricals are oversupplied.

Production skills in principle are well-served, the production specialisms of the Tees Valley — mining and quarrying, marine and maritime, metal work and chemicals and hydrocarbon — are barely and sometimes not at all education specialisms. Compared to the rest of the country, the Tees Valley requires as many as two or three times these kinds of workers as other areas, but the FE and Apprenticeship system produces relatively similar numbers to those elsewhere.

The presence of substantial health service employment in the Tees Valley means a persistent high demand for healthcare skills, which given national trends — both long-term such as aging and then the last year's shock to public health will continue to be a source of job creation. The healthcare delivery occupation cluster stands out as an area where education supply does not correspond with the Tees Valley's employment strength in this field.

4.4. Employment

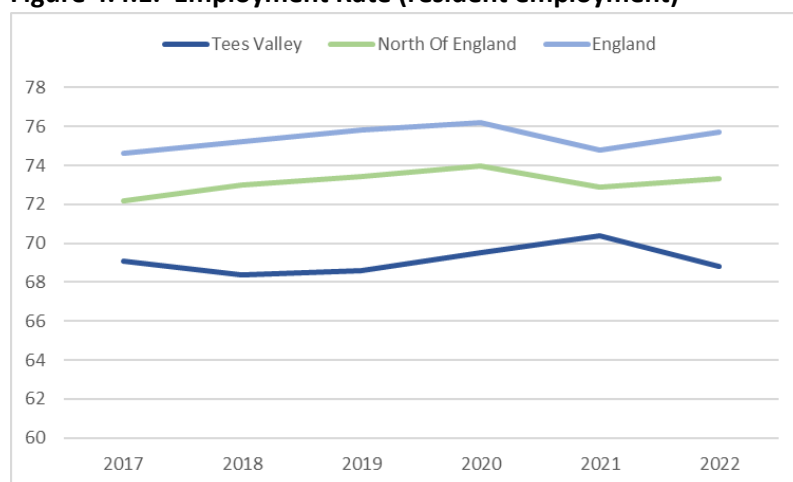
4.4.1. Current Employment

Overall resident employment

Note: Annual Population Survey (APS) responses are weighted to official population projections. As the current projections are 2018-based they are based on demographic trends that pre-date the COVID-19 pandemic. ONS are analysing the population totals used in the weighting process and may make adjustments if appropriate. Rates published from the APS remain robust; however, levels and changes in levels should be used with caution.

279,500 Tees Valley residents aged 16-64 were employed in the 12 months to June 2022, 68.8% of the working age population compared to 75.7% nationally.

Figure 4.4.1. Employment Rate (resident employment)



Source: ONS Annual Population Survey (APS) – 12 months to June

Key Findings:

- The Tees Valley employment rate was 68.8% in the year to June 2022, a drop of 1.6 percentage points from a high of 70.4% in 2021, whilst nationally and regionally the rate has risen 0.9 and 0.4 respectively over the last year.
- Between 2021 and 2022 the Tees Valley rate has fallen, with 7,400 fewer residents in employment.

Jobs by Sector and Occupation

Tees Valley has an estimated 271,000 jobs across a range of industries as shown in Table 4.4.1. Comparisons are made to 2020.

Table 4.4.1. Industry sector breakdown

| Industry Sector | Tees Valley Jobs (2021) | Change 2020-2021 | % Change 2020-2021 | % Change nationally 2020-2021 | LQ |
|--|-------------------------|------------------|--------------------|-------------------------------|-----|
| Chemical and Process | 4,500 | -500 | -10.0% | 7.8% | 2.0 |
| Advanced Manufacturing | 16,000 | 2,000 | 14.3% | -2.5% | 1.3 |
| Health and Social Care | 46,000 | -4,000 | -8.0% | 3.4% | 1.2 |
| Other Public Services | 40,000 | 0 | 0.0% | 2.2% | 1.1 |
| Other Private Services | 38,000 | 4,000 | 11.8% | 1.5% | 1.1 |
| Construction | 14,000 | 2,000 | 16.7% | 5.8% | 1.1 |
| Clean Energy Low Carbon | 6,000 | 0 | 0.0% | -0.2% | 1.0 |
| Logistics | 20,000 | 1,000 | 5.3% | 1.1% | 1.0 |
| Other Manufacturing | 10,000 | -1,000 | -9.1% | -0.3% | 1.0 |
| Creative, Culture and Leisure | 33,000 | 3,000 | 10.0% | 5.3% | 0.9 |
| Digital | 8,000 | 1,000 | 14.3% | 0.9% | 0.8 |
| Professional and Business Services | 34,000 | 3,000 | 9.7% | 5.7% | 0.7 |
| Raw Materials and Agriculture | 1,250 | 0 | 0.0% | -4.5% | 0.6 |
| Biologics | 350 | 225 | 180.0% | 10.0% | 0.4 |
| <i>Bioscience (cross cutting sector)</i> | 6,000 | 1,000 | 20.0% | 6.4% | 1.3 |
| Total | 271,000 | 10,725 | 4.1% | 3.0% | |

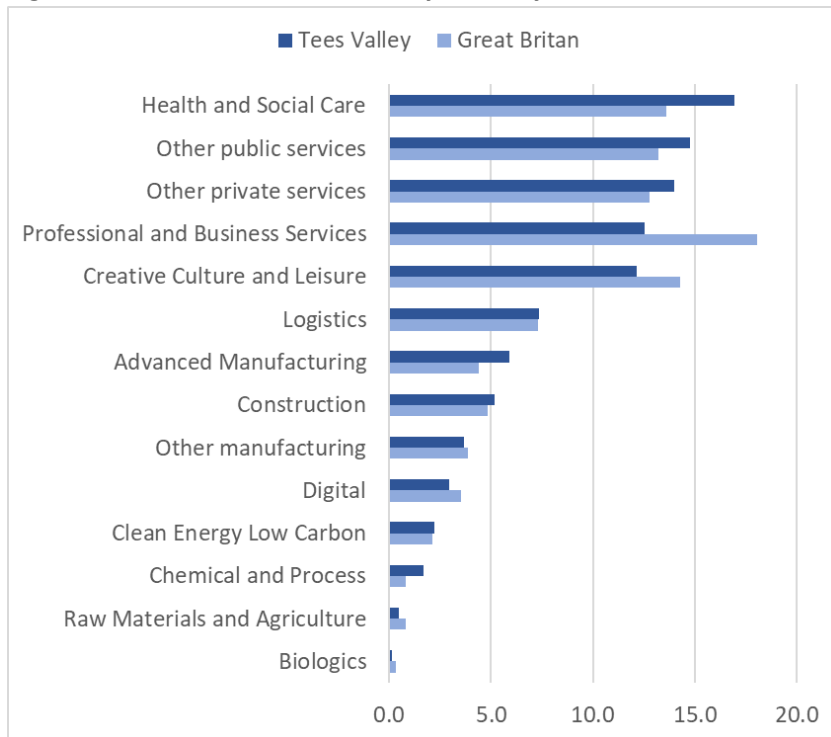
Source: ONS BRES

Key Findings:

- The top 5 sectors for jobs in Tees Valley are Health and Social Care, Other Public Services (mainly Education), Other Private Services (mainly Retail), Professional and Business Services and Creative, Culture and Leisure.
- Tees Valley has a sectoral strength in Chemical and Process with a Location Quotient of 2.0. However, this sector has seen a fall in jobs since 2020, a drop of 10% compared to 7.8% rise nationally.
- Health and Social Care, Other Manufacturing and Chemical and Process sectors have all seen falls in job numbers compared to 2020.
- Biologics has seen a significant rise in jobs since 2020 with a 180% increase (From 125 to 350, 225 extra jobs) compared to a 10% increase nationally.
- Compared to 2020, percentage increases in jobs have been seen in Biologics, Bioscience (Cross cutting sector), Construction, Advanced Manufacturing, Digital, Other Private Services, Creative Culture and Leisure, Professional and Business Services and Logistics with rises higher than the national.

Tees Valley has a number of key sectors which contain a higher number of jobs than national. The following figures show the distribution of jobs by industry and occupation compared to national in 2021.

Figure 4.4.2. Distribution of Jobs by Industry in 2021

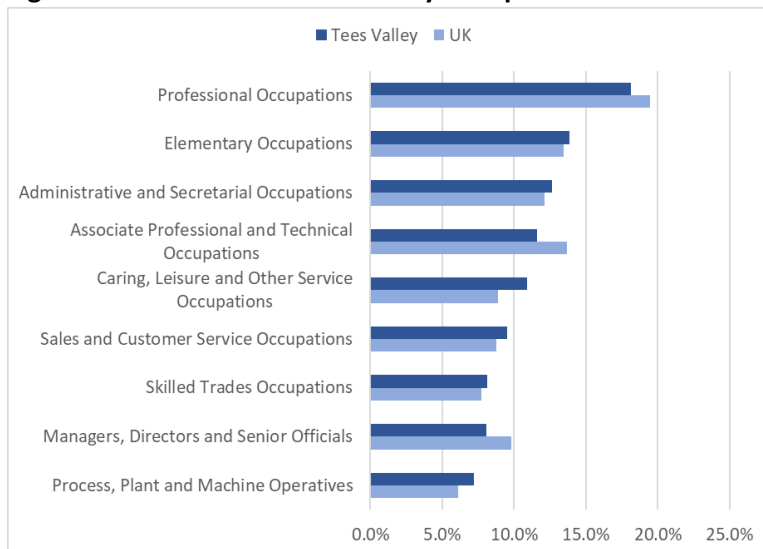


Source: ONS BRES

Key Findings:

- Tees Valley has a larger percentage than national employed in:
 - Health and Social Care
 - Other Public Services
 - Advanced Manufacturing
 - Other Private Services
 - Chemical and Process
 - Construction
 - Clean Energy Low Carbon and Hydrogen
 - Logistics
- Tees Valley has fewer than national employed in:
 - Professional and Business Services
 - Creative, Culture and Leisure
 - Digital
 - Raw Materials and Agriculture
 - Biologics
 - Other Manufacturing

Figure 4.4.3. Distribution of Jobs by Occupation in 2022



Source: Lightcast 2022.2

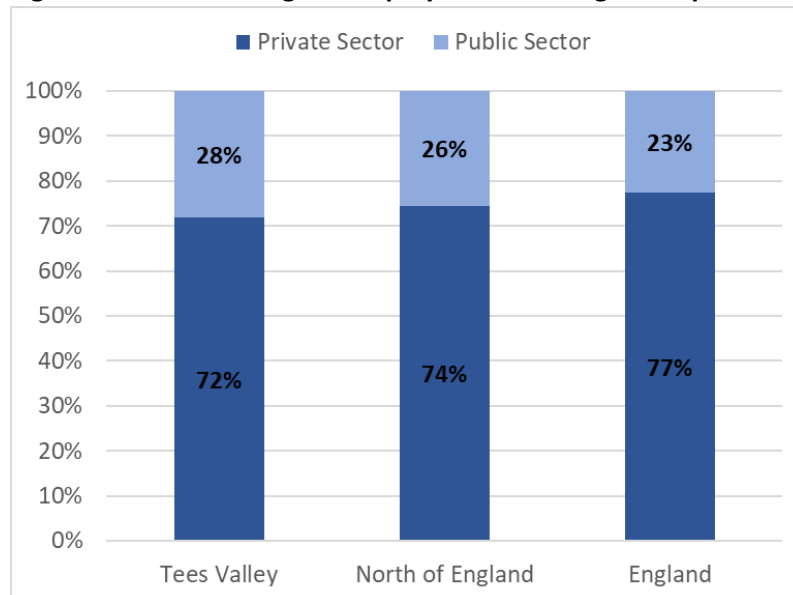
Key Findings:

- 18.1% of jobs in Tees Valley are in Professional occupations (19.4% nationally)
- 13.9% of jobs are in Elementary occupations (13.5% nationally).
- Tees Valley has above the national average jobs in:
 - Caring, Leisure and Other Service Occupations;
 - Process, Plant and Machine Operatives;
 - Sales and Customer Service Occupations;
 - Administrative and Secretarial occupations;
 - Elementary Occupations and;
 - Skilled Trades Occupations
- And fewer the national average jobs in:
 - Associate Professional and Technical occupations;
 - Managers, Directors and Senior officials and;
 - Professional Occupations

Public/Private Sector and Self-Employment

The majority (75.5%) of Tees Valley employees are employed in the private sector, with 24.5% employed in the public sector, compared to 77.1% and 22.9% nationally.

Figure 4.4.4. Percentage in employment working in the private sector 2021



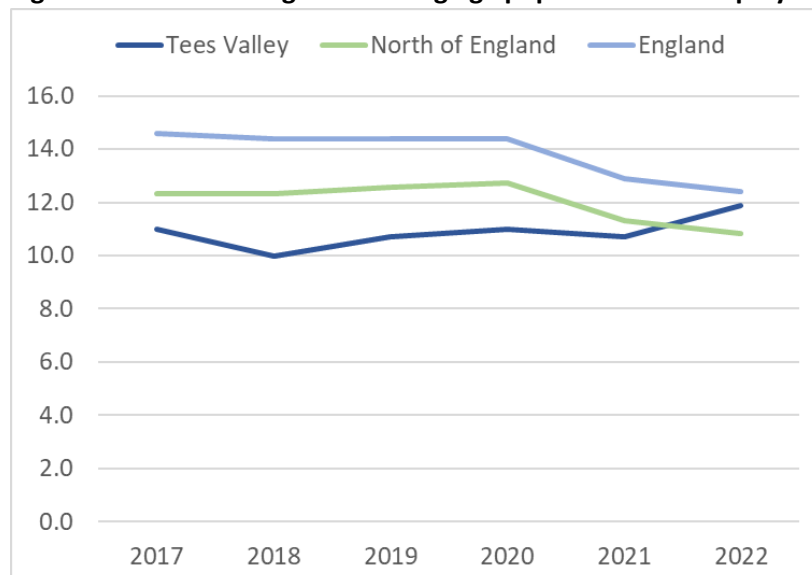
Key Findings:

- Private sector employment increased by 3.6 percentage points over the last year, from 71.9% in the year to June 2021 to 75.5% in 2022, compared to a 0.3 fall nationally and no change across the North of England.
- There was a 3.3 percentage point fall in private sector employment from 75.2% in 2020 to 71.9% in 2021, compared to a 1.4 drop nationally and a 2.1 drop across the North of England.

Source: ONS APS – 12 months to June

Figure 4.4.5. illustrates that 11.9% of Tees Valley working age residents in employment were self-employed in 2022, compared to 12.4% nationally and 10.8% across the North of England.

Figure 4.4.5. Percentage of working age population self-employed



Key Findings:

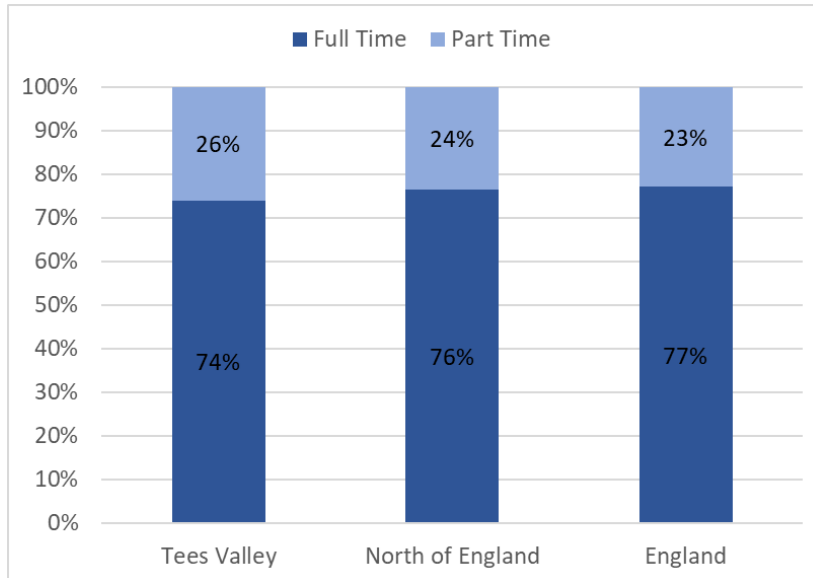
- Self-employment in Tees Valley has fluctuated slightly over the past five years with a rise of 1.2 percentage points between 2021 and 2022, whilst both nationally and across the North of England there has been a 0.5 fall.

Source: ONS APS – 12 months to June

Full-Time/Part-Time Employment

Figures 4.4.6. and 4.4.7. illustrate that Tees Valley had a lower percentage in employment working full-time and a higher percentage working part-time in 2022 than nationally.

Figure 4.4.6. Percentage in employment working full-time and part-time 2021



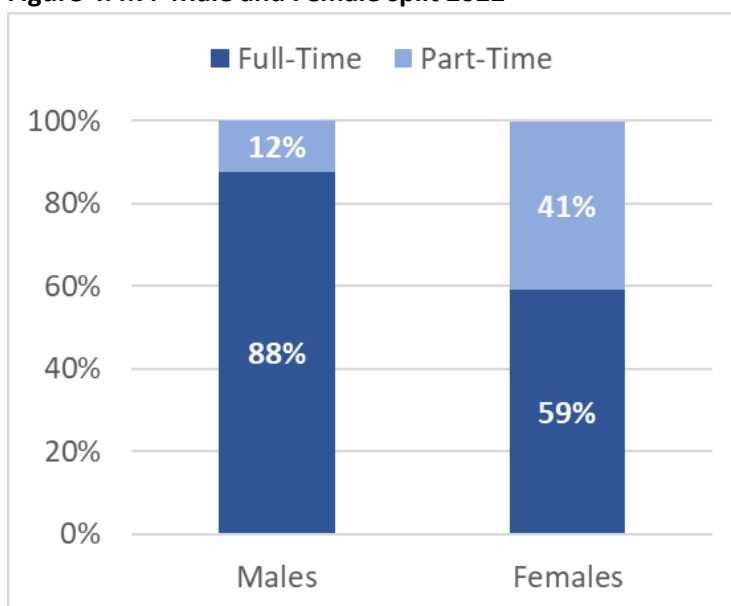
Source: ONS APS – 12 months to June

Key Findings:

- 73.9% of those in employment in Tees Valley are in full-time employment compared to 76.9% nationally. 26.0% of those in employment in Tees Valley are in part-time employment compared to 23.0% nationally.
- There has been no change in full-time employment in Tees Valley between 2021 and 2022, whilst there was a 0.3 drop both nationally and across the North of England. However, there has been a slight rise in part-time employment over the last year, rising from from 25.7% in 2021 to 26.0% in 2022, this matches the change across the North of England and compares to a 0.4 rise nationally.

Males have historically dominated full-time employment, and this continues to be the case. Female employment is more evenly distributed between full and part-time.

Figure 4.4.7. Male and Female split 2022



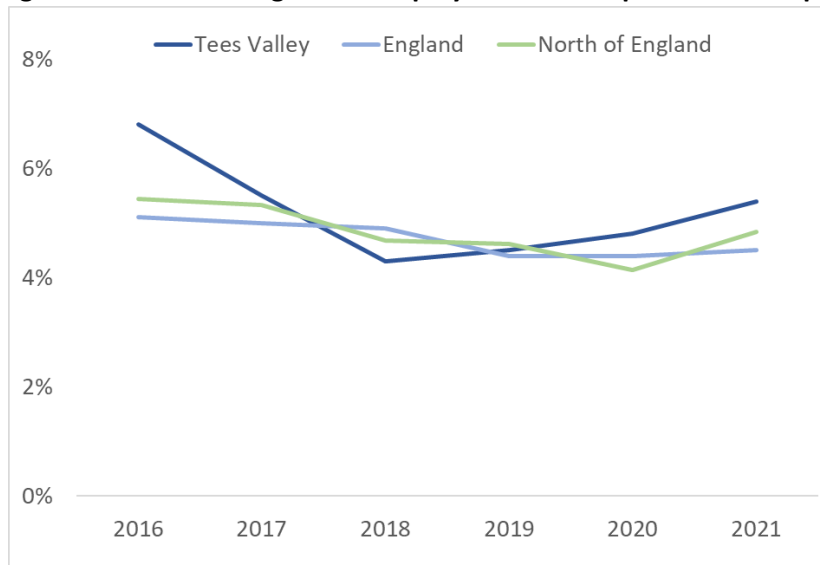
Source: ONS APS – 12 months to June

Key Findings:

- 87.7% of male residents in Tees Valley were employed full-time in 2022 compared to 59.0% of females (88.8% of males and 63.7% of females nationally).
- Male full-time employment has risen by 1.4 percentage points over the last year from 86.3% in 2020, compared to a drop of 0.7 nationally.
- Female full-time employment has fallen over the past year, from 61.3% in 2021 to 59.0% in 2021, a drop of 2.3 percentage points compared to a 0.1 drop nationally.

Note: Data for the year to June 2022 is not available for non-permanent employment, therefore the following figures have not been updated.

Figure 4.4.8. Percentage of all employment in non-permanent employment



Key Findings:

- The percentage of those in non-permanent employment in Tees Valley peaked in 2016 at 6.8% and has since fallen to 5.4% in 2021, a drop of 1.4 percentage points, compared to a drop of 0.6 nationally.

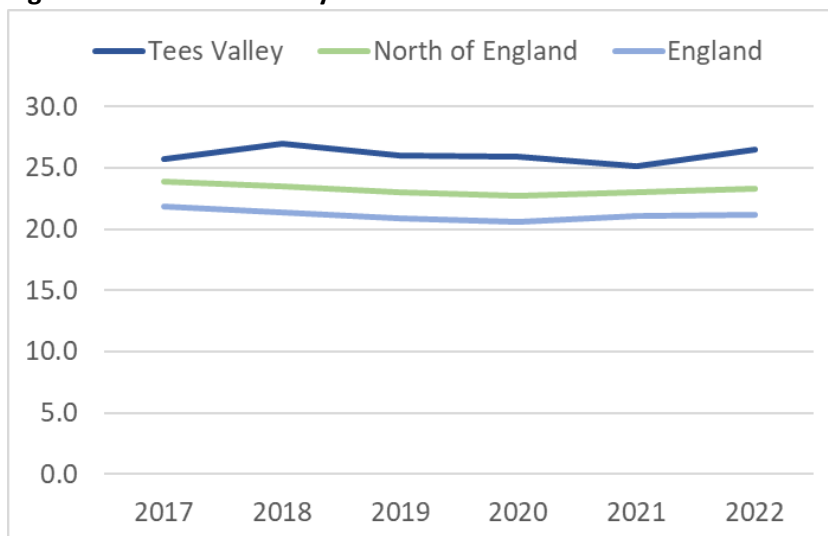
Source: ONS APS – 12 months to June

4.4.2. Economically Inactive

The economically inactive population comprises all persons who are neither "employed" nor "unemployed", for example those who are long-term sick, students or retired.

26.5% of the working age population in Tees Valley were economically inactive in the year to June 2022, compared to 21.2% nationally.

Figure 4.4.9. Economically inactive over time



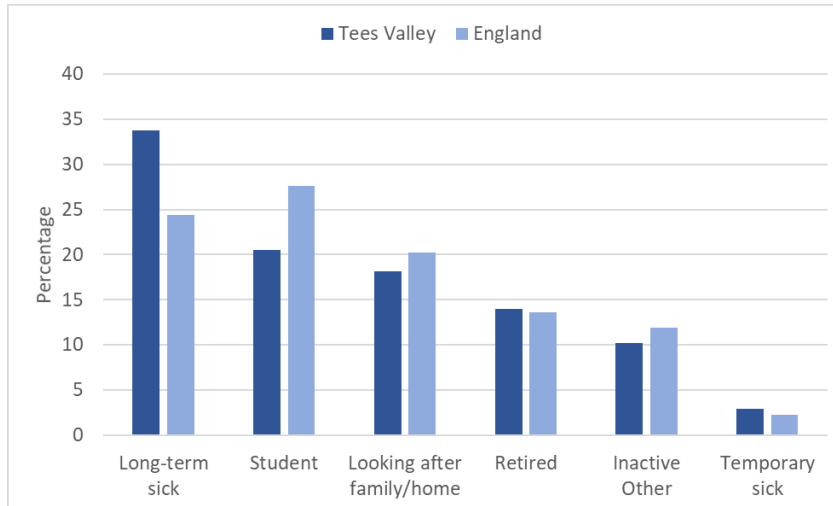
Key Findings:

- The percentage of the working age population who are economically inactive has fallen from a high of 27% in 2018 to 26.5% in 2022, a drop of 0.5 percentage points compared to a drop of 0.2 nationally.
- The rate has increased by 1.4 percentage points between 2021 and 2022, compared to a 0.3 rise across the north of England and a 0.1 rise nationally.

Source: ONS APS June 2022

Figure 4.4.10 shows that the economically inactive cohort is made up of the following:

Figure 4.4.10. Economically inactive Breakdown



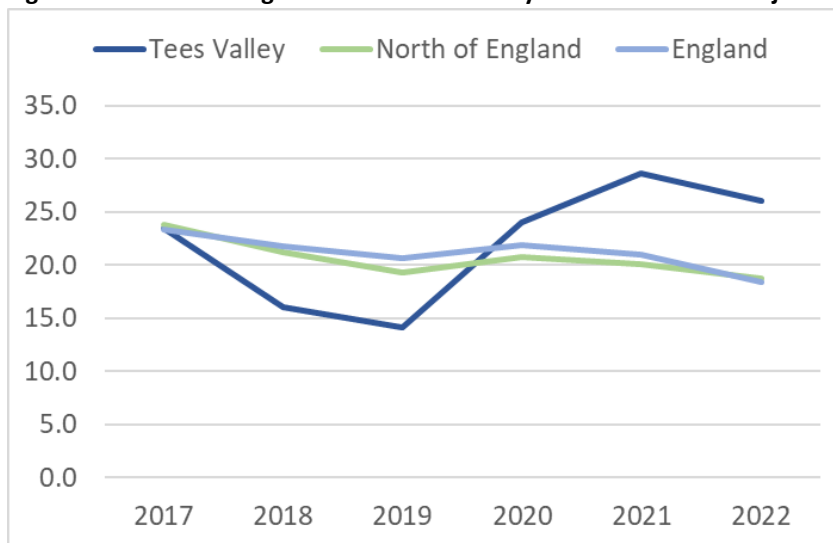
Source: ONS APS June 2022

Key Findings:

- 33.8% of the inactive population are long-term sick compared to 24.4% nationally.
- Tees Valley has fewer students than nationally at 20.5% compared to 27.6%.
- 18.1% of the inactive population are looking after family/home, compared to 20.2% nationally.
- A slightly higher percentage are retired at 14.0% compared to 13.6% nationally.
- A higher percentage are temporarily sick at 2.9% compared to 2.2% nationally.

The majority of the economically inactive in Tees Valley do not want a job at 73.9% compared to 81.6% nationally. Figure 4.4.11 shows that 26.1% of the economically inactive in Tees Valley do want a job, compared to 18.4% nationally and 18.8% across the North of England.

Figure 4.4.11. Percentage of those Economically Inactive who want a job

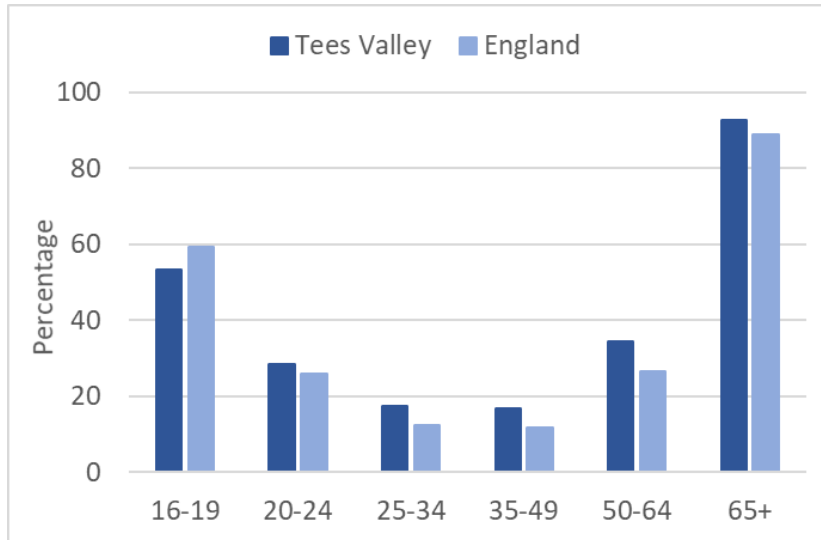


Source: ONS APS June 2022

Key Findings:

- The percentage of those economically inactive who **do want a job** rose sharply from 14.1% in 2019 to 28.6% in 2021, followed by a 2.5 drop to 26.1% between 2021 and 2022. This compares to a drop of 2.6 percentage points nationally and 1.4 drop across the North of England between 2021 and 2022.

Figure 4.4.12. Age split of economically inactive



Source: ONS APS June 2022

Key Findings:

- 53.3% of 16-19-year olds are economically inactive, compared to 59.4% nationally. This has fallen 9.0 percentage points from a high of 62.3% in 2018, compared to a rise of 3.3 percentage point nationally.
- 28.4% of 20-24-year olds are economically inactive, compared to 26% nationally. The rate has risen by 4.6 percentage points over the last 5 years, compared to a 0.2 drop nationally.
- 17.3% of 25-34-year olds are inactive compared to 12.4% nationally.
- 34.4% of 50-64-year olds are inactive, compared to 26.5% nationally. This has risen 3.1 percentage points from 31.3% in June 2021, compared to a rise of 1.3 nationally.
- 92.6% of those aged 65+ are economically inactive, compared to 88.9% nationally.

4.4.3. Unemployment

There are multiple official rates of unemployment produced by Government departments. Universal Credit and searching for work include those who are not working, or with very low earnings.

Universal Credit has been rolled out to all new claimants in stages across Tees Valley in the following order: Hartlepool - December 2016, Darlington - June 2018, Stockton - July 2018, Middlesbrough - October 2018 and Redcar & Cleveland - November 2018. It is expected that DWP will begin moving all remaining existing benefit claimants to the Universal Credit full service between July 2019 and December 2023.

The Annual Population Survey unemployment figures relate to all those aged 16+ and actively seeking work and uses the economically active population to calculate a rate.

The Claimant Count is an experimental series which counts the number of people claiming Jobseeker's Allowance plus those who claim Universal Credit and are required to seek work and be available for work and replaces the number of people claiming Jobseeker's Allowance as the headline indicator of the number of people claiming benefits principally for the reason of being unemployed.

Tables 4.4.2.-4.4.4. below include an overview of the unemployment measures for Tees Valley compared to nationally.

Table 4.4.2. Universal Credit and searching for work in Tees Valley

| Universal Credit | Previous Year (Nov 2021) | | Previous (Oct 2022) | | Latest (Nov 2022) | | Change against previous | Change against previous year |
|------------------|-----------------------------|------|------------------------|------|----------------------|------|-------------------------------|---------------------------------------|
| | | | | | | | | |
| Tees Valley | 21,686 | 5.3% | 17,772 | 4.3% | 18,291 | 4.4% | 0.1% | -0.8% |
| Great Britain | 1,718,924 | 4.2% | 1,361,856 | 3.3% | 1,399,034 | 3.4% | 0.1% | -0.8% |

Source: DWP

Table 4.4.3. Annual Population Survey Unemployment in Tees Valley

| Annual Population Survey - Unemployment (Age 16+) | Previous Year (Jun 2021) | | Previous (Mar 2022) | | Latest (Jun 2022) | | Change against previous | Change against previous year |
|---|-----------------------------|------|------------------------|------|----------------------|------|-------------------------------|---------------------------------------|
| | | | | | | | | |
| Tees Valley | 18,600 | 5.9% | 20,000 | 6.5% | 19,100 | 6.2% | -0.3% | 0.3% |
| Great Britain | 1,643,500 | 5.0% | 1,349,500 | 4.1% | 1,256,100 | 3.8% | -0.3% | -1.2% |

Source: ONS

Table 4.4.4. Claimant Count in Tees Valley

| ONS Claimant Count | Previous Year (Oct 2021) | | Previous (Sep 2022) | | Latest (Oct 2022) | | Change against previous | Change against previous year |
|--------------------|-----------------------------|------|------------------------|------|----------------------|------|-------------------------------|---------------------------------------|
| | | | | | | | | |
| Tees Valley | 24,825 | 6.0% | 19,420 | 4.7% | 19,150 | 4.6% | -0.1% | -1.4% |
| Great Britain | 1,911,955 | 4.7% | 1,474,045 | 3.6% | 1,472,000 | 3.6% | 0.0% | -1.1% |

Source: ONS

Economically Active

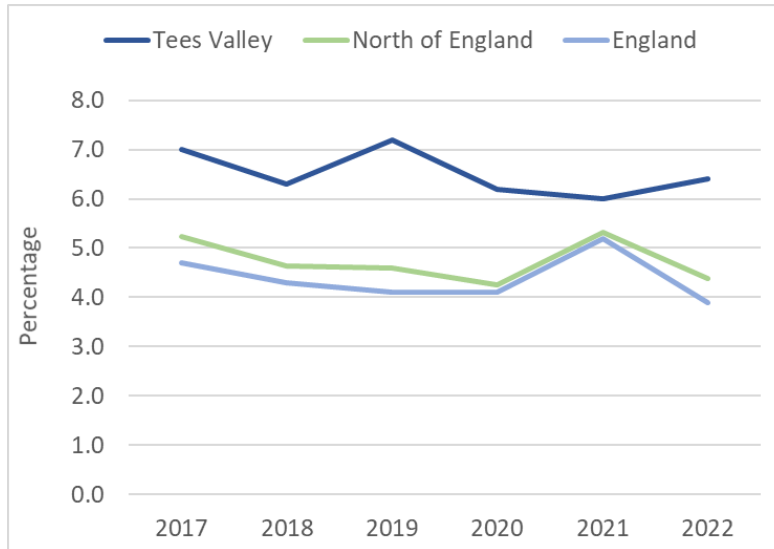
The economically active population comprises all persons who are either "employed" or "unemployed and actively seeking employment".

298,500 people aged 16-64 (73.5% of the working age population in Tees Valley) were economically active in June 2022, compared to 78.8% nationally, this comprised of:

- 93.6% in employment (96.1% nationally).
- 6.4% unemployed (3.9% nationally).

Figure 4.4.13 shows the percentage of economically active claiming to be unemployed.

Figure 4.4.13. Percentage of economically active claiming to be unemployed



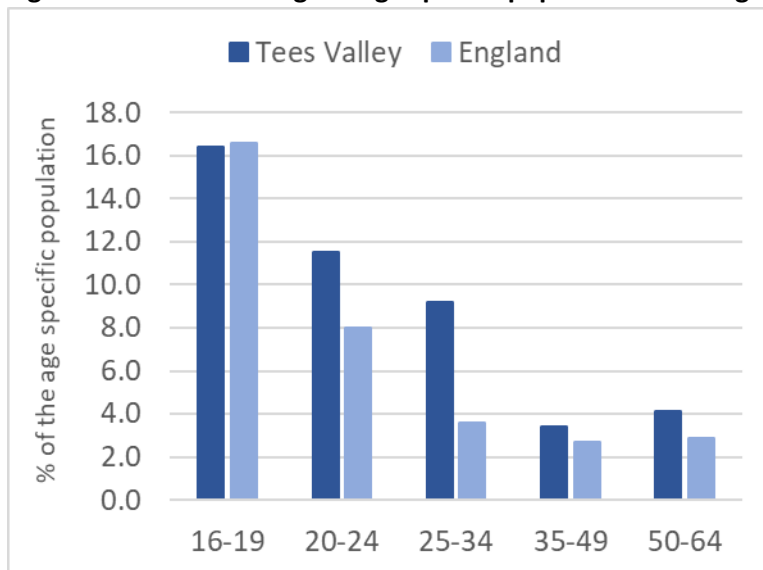
Source: ONS APS June 2022

Key Findings:

- The percentage of economically active claiming to be unemployed has fallen by 0.6 percentage points over the past five years, falling from 7.0% in 2017 to 6.4% in 2022, compared to a drop of 0.8 nationally and 0.9 across the North of England.
- Unemployment has risen 0.4 percentage points over the last year, compared to a fall of 1.3 nationally and 0.9 fall across the North of England.

Figure 4.4.14. shows that Tees Valley has a higher percentage unemployed across all age ranges than national.

Figure 4.4.14. Percentage of age specific population claiming to be unemployed



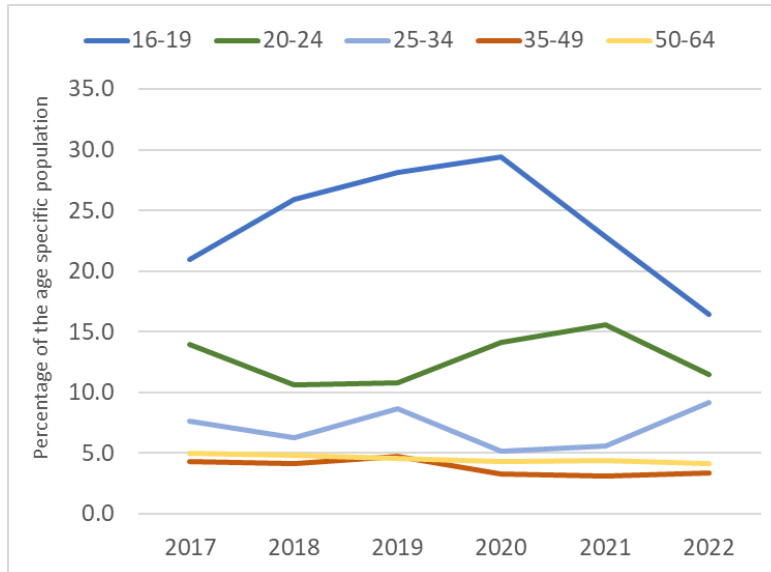
Note: Data for the age group 65+ is not available as the sample size is too small.

Source: ONS APS June 2022

Key Findings:

- 16.4% of 16-19 year olds in Tees Valley are claiming to be unemployed compared to 16.6% nationally.
- 11.5% of 20-24 year olds are claiming to be unemployed compared to 8.0% nationally.
- 9.2% of 25-34 year olds are claiming to be unemployed compared to 3.6% nationally.
- 3.4% of 35-49 year olds are claiming to be unemployed compared to 2.7% nationally.
- 4.1% of 50-64 year olds are claiming to be unemployed compared to 2.9% nationally.

Figure 4.4.15. Percentage of age specific population claiming to be unemployed over time



Source: ONS APS June 2021

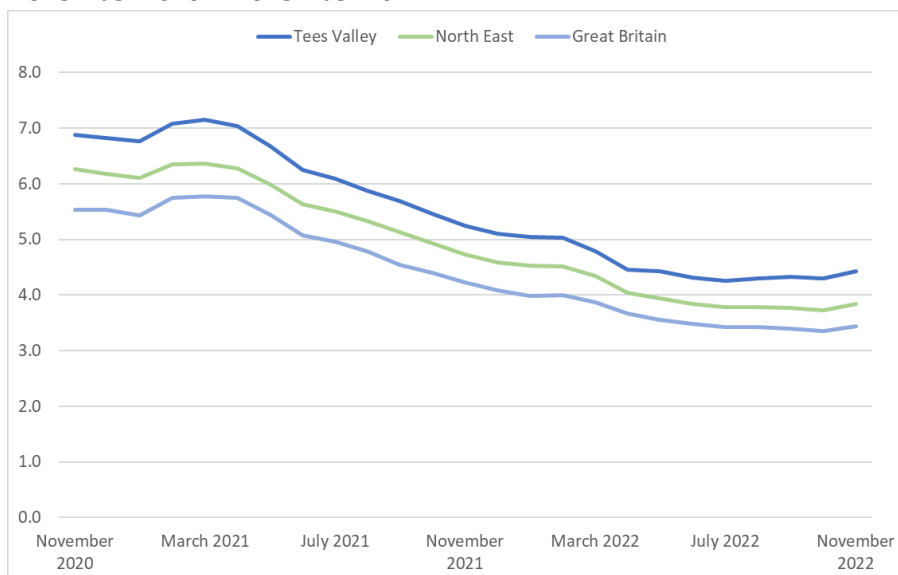
Key Findings:

- The percentage of 16-19-year olds claiming to be unemployed has fallen from a high of 29.4% in 2020 to 16.4% in 2022, a drop of 13.0 percentage points between 2020 and 2022, compared to a drop of 2.3 nationally.
- Over the last year the percentage of 20-24-year olds claiming to be unemployed has dropped by 4.1 percentage points, from 15.6% in 2021 to 11.5% in 2022, compared to a fall of 3.9 nationally.
- Between 2021 and 2022, the percentage of 25-34 year olds claiming to be unemployed has risen by 3.6 percentage points compared to a 0.8 drop nationally.

Universal Credit

In November 2022 there were 18,290 Tees Valley residents claiming universal credit and searching for work, with the rate falling from 5.3% in November 2021 to 4.4% in November 2022, 3,400 fewer claimants. This compares to a rate of 3.4% nationally and 3.8% across the North East. Tees Valley saw a rise in claimants in February 2021 to 7.1% before falling month on month and remaining steady at 4.3% between June 2022 and October 2022 before rising to 4.4% in November 2022.

Figure 4.4.16. Percentage of 16-64-year olds claiming Universal Credit and searching for work November 2020 – November 2022



Source: DWP Stat-Xplore

Claimant Count

Universal Credit is designed so that a broader span of claimants is required to look for work than under Job Seekers Allowance. Therefore, the ONS claimant count counts the number of people claiming Jobseeker's Allowance plus those who claim Universal Credit and are required to seek work and be available for work.

In October 2022 4.6% of 16-64-year-old Tees Valley residents were claiming either Job Seekers Allowance or Universal Credit (and required to seek work), compared to 3.6% nationally. This rises to 6.0% for 16-24-year-old residents, compared to 3.7% nationally. Compared to October 2021 the number of people claiming unemployment benefits has fallen by 5,675 people, with the rate dropping by 1.4 percentage points from 6.0% in October 2021, compared to a drop of 1.1 nationally.

Figure 4.4.17. Gender split of claimant count

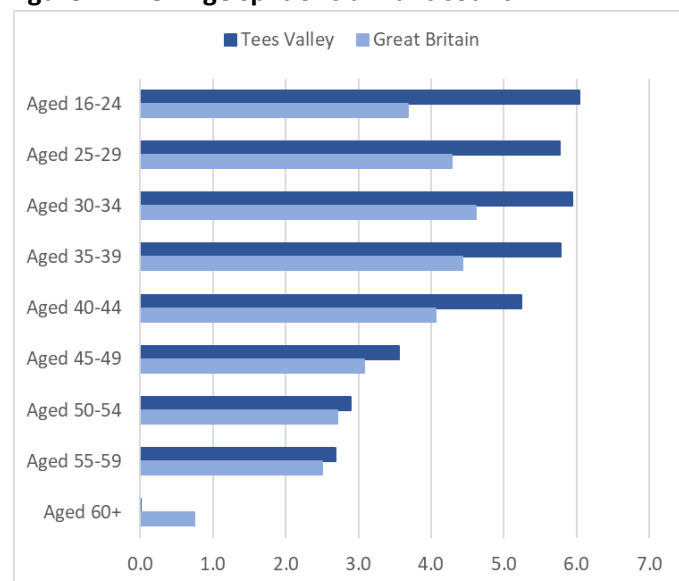


Key Findings:

- Tees Valley has a higher percentage of males claiming unemployment benefits than national at 62.4% compared to 58.0%.
- 37.6% of Tees Valley residents claiming unemployment benefits in October 2022 were female compared to 42.0% nationally.

Source: Claimant Count October 2022

Figure 4.4.18. Age split of claimant count



Key Findings:

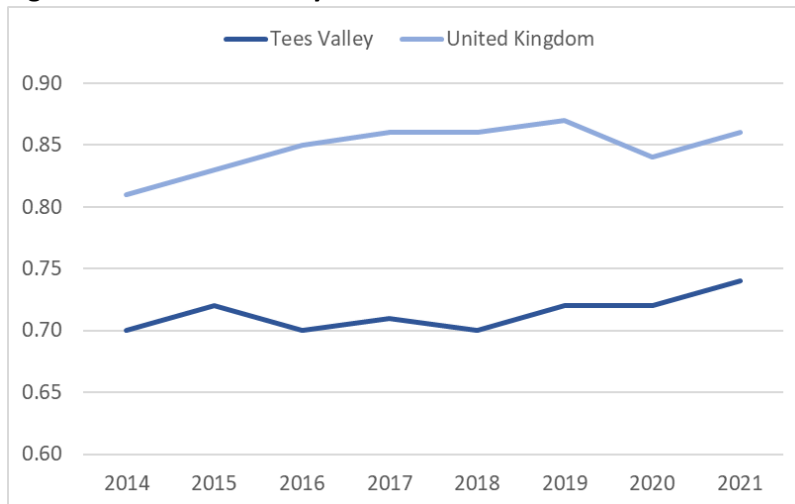
- The largest gap between the Tees Valley and national age groups is the 16-24 age group, in which 6.0% are claiming in Tees Valley, compared to 3.7% nationally.
- After the 25-29 age group the gap between the national figures closes as the age range increases.

Source: Claimant Count October 2022

4.4.4. Job Density

Figure 4.4.19. shows that Tees Valley consistently has a lower jobs density that nationally with 0.74 jobs for every working age resident in 2021 compared to 0.86 jobs in the UK as a whole.

Figure 4.4.19. Job Density



Source: ONS Jobs Density

Key Findings:

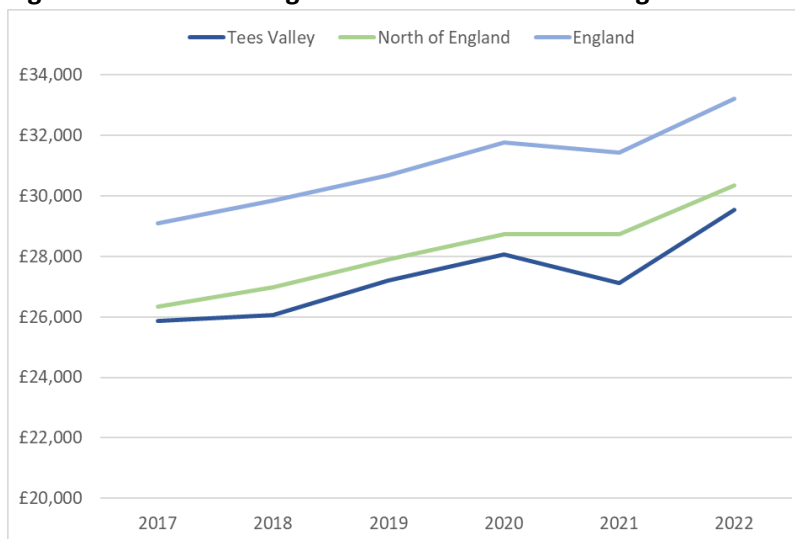
- Jobs density in Tees Valley has increased from 0.66 in 2011 to 0.74 in 2021.
- There was an increase in jobs density in Tees Valley from 0.72 in 2020 to 0.74 in 2021, whilst nationally there was a rise from 0.84 to 0.86.
- The total number of jobs in Tees Valley is at 306,000 in 2021, a rise of 10,000 between 2020 and 2021.

4.4.5. Wages and disposable income

Median full-time earnings

Tees Valley historically has a low percentage of residents employed in high value occupations compared to the national average; 37.8% employed in high value occupations in 2022 compared to 42.9% nationally. Tees Valley is 5.1% below the national average compared to 4.1% five years ago. For workers living in Tees Valley the median gross annual full-time wage in 2022 was £29,550 compared to £33,210 nationally and £30,360 across the North of England. Figure 4.4.20. shows how this has changed over time. Note that figures are presented in nominal terms and so do not account for inflation.

Figure 4.4.20. Median gross annual full-time earnings

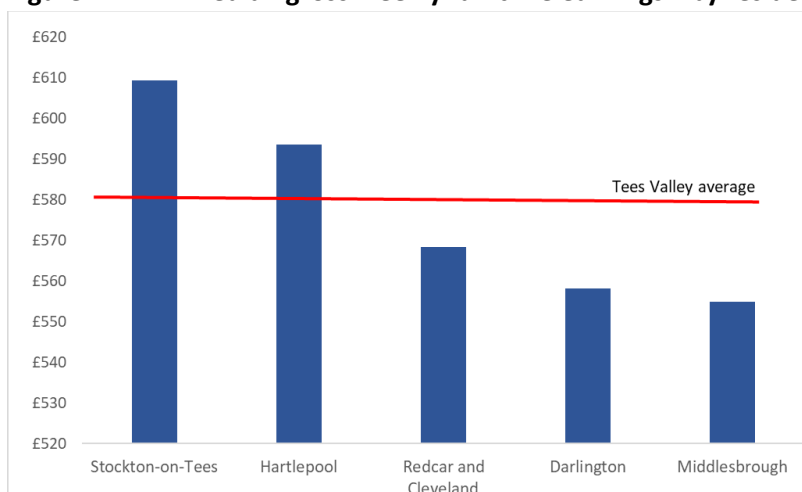


Source: ONS – Annual Survey of Hours and Earnings

Key Findings:

- The median gross annual full-time salary for Tees Valley residents increased by 9% (£2,420) between 2021 and 2022 compared to a 6% rise nationally and across the North of England.
- The median gross annual full-time salary for Tees Valley residents has increased by 14% (£3,680) over the last 5 years, this matches the rise nationally and compares to a rise of 15% across the North of England.

Figure 4.4.21. Median gross weekly full-time earnings²³ by resident local authority 2022

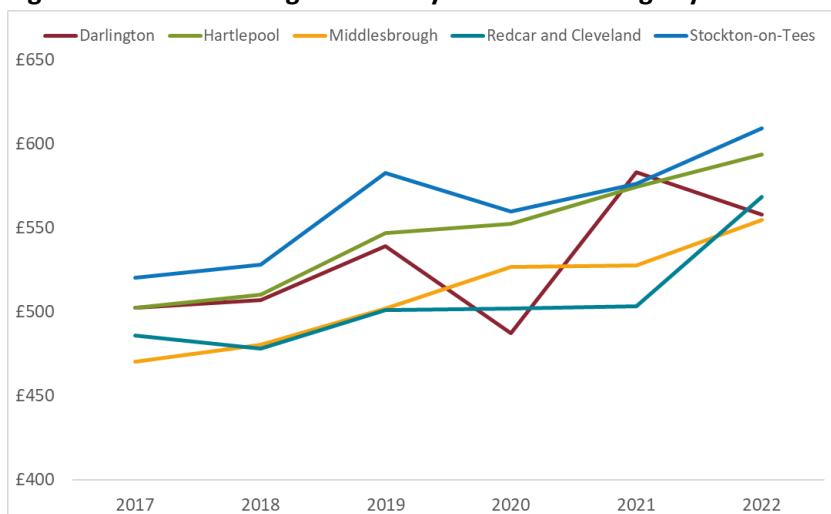


Source: ONS – Annual Survey of Hours and Earnings

Key Findings:

- Stockton-on-Tees residents currently have the highest weekly full-time earnings in the Tees Valley at £609 per week, followed by Hartlepool with £594. Middlesbrough residents have the lowest weekly earnings at £555 per week, followed by Darlington residents at £558 per week. Redcar and Cleveland residents' weekly earnings were £568 per week.

Figure 4.4.22. Median gross weekly full-time earnings by resident local authority over time



Source: ONS – Annual Survey of Hours and Earnings

Key Findings:

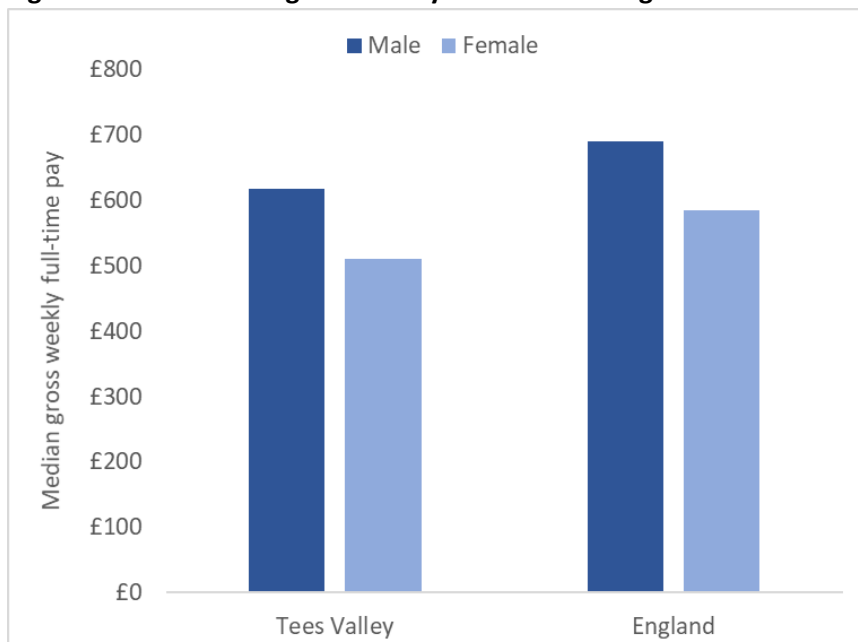
- The median gross full-time weekly wage for Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton-on-Tees residents has risen between 2021 and 2022.
- There has been a £25 fall in the median gross full-time weekly wage for Darlington residents over the last year.
- Large confidence intervals and high volatility in the estimates for local authority areas mean that year on year changes should be viewed with caution. Trend data over a number of years can instead provide a fuller picture.

Median household income – Gender

Males continue to earn a higher median gross weekly full-time wage than females, both within Tees Valley and nationally, with a weekly difference of around £107 in Tees Valley and £106 nationally.

²³ Weekly wages have been used instead of annual wages for the local authority breakdown as confidence intervals for annual wages at a local authority level made the data unreliable.

Figure 4.4.23. Median gross weekly full-time earnings



Key Findings:

- Tees Valley male residents earn on average £620 per week for full-time work, compared to £690 nationally.
- Tees Valley female residents earn on average £510 per week for full time work compared to £585 nationally.

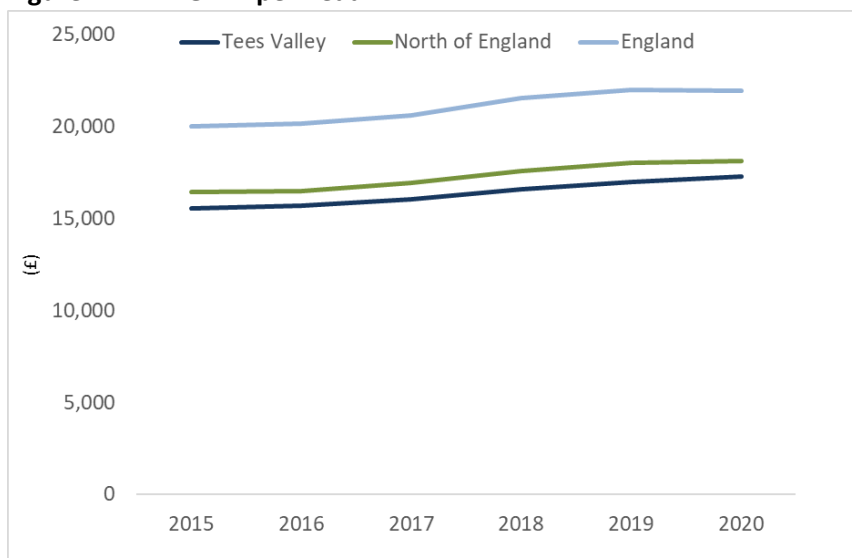
Source: ONS – Annual Survey of Hours and Earnings 2022

Gross Disposable Household Income

Gross disposable household income (GDHI) is the amount of money that all of the individuals in a household have available for spending or saving after they have paid direct and indirect taxes and received any direct benefits.

In 2020 GDHI per head in Tees Valley was £17,299, compared to £21,962 nationally and £18,145 across the North of England.

Figure 4.4.24. GDHI per head

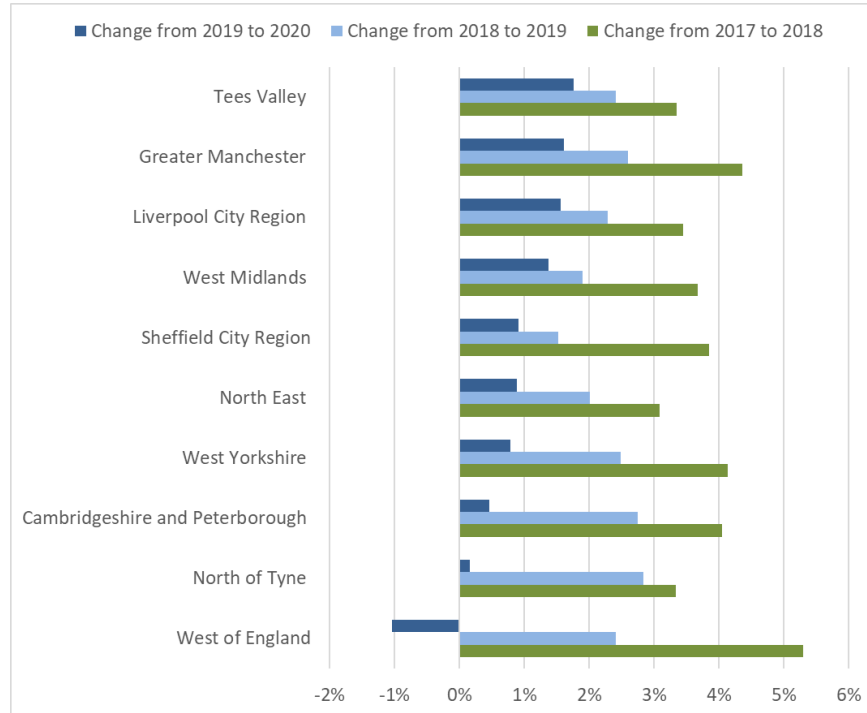


Key Findings:

- Over the last 5 years GDHI has risen by 11% in Tees Valley from £15,552 in 2015 to £17,299 in 2020, compared to a 10% rise both nationally and across the North of England.

Source: ONS GDHI

Figure 4.4.25. Growth in GDHI per head (%)



Source: ONS GDHI

Key Findings:

- Tees Valley saw a 1.8% rise in GDHI per head between 2019 and 2020 (£299 per head). Tees Valley had the highest growth rate out of all Combined Authorities in 2020.
- However, this rise is lower than the 2.4% growth observed between 2018 and 2019, and 3.3% between 2017 and 2018.

Pay As You Earn (PAYE) Real Time Information (RTI)

Payrolled employees is the number of people who are payrolled employees receiving paid remuneration in PAYE RTI. In October 2022, there were 286,700 payrolled employees in Tees Valley.

Figure 4.4.26. PAYE - number of payrolled employees in Tees Valley

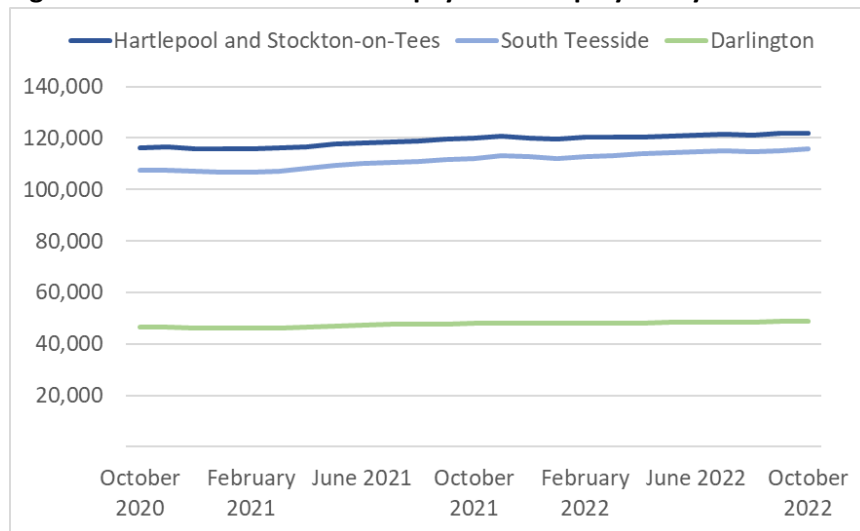


Source: ONS

Key Findings:

- The number of payrolled employees has increased sharply from a low of 268,450 in January 2021, increasing by 6.8% (18,215), compared to a 6.7% rise nationally.
- Between October 2021 and October 2022, the number of payrolled employees in Tees Valley has increased by 2.4% (6,829) compared to a 2.7% rise nationally.

Figure 4.4.27. PAYE – number of payrolled employees by NUTS3 areas



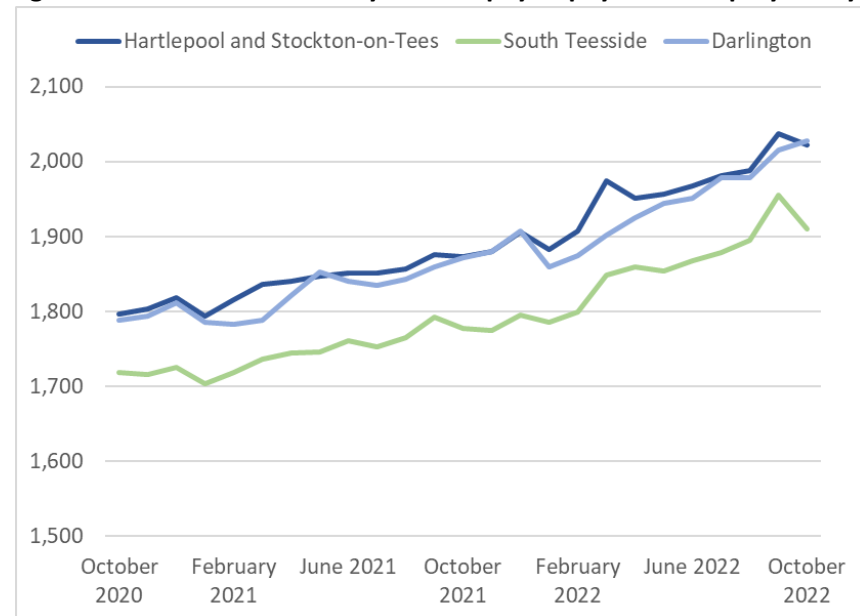
Key Findings:

- Hartlepool and Stockton-on-Tees had the largest number of payrolled employees at 122,000 in October 2022. This is followed by South Teesside with 115,770 and Darlington with 48,910.
- South Teesside has seen the largest increase in payrolled employees over the last two years, increasing by 7.8% (2,540) from 107,350 in October 2020.
- Darlington increased by 2.1% (1,020) between October 2020 and October 2022, whilst Hartlepool and Stockton-on-Tees increased by 1.8% (2,180).

Source: ONS

The median pay for payrolled employees in Tees Valley in October 2022 was £1,986 per month. Figure 4.4.28. shows the median pay of payrolled employees in Tees Valley by NUTS3 areas. Note that figures are presented in nominal terms and so do not account for inflation.

Figure 4.2.28. PAYE – monthly median pay of payrolled employees by NUTS3 areas



Key Findings:

- Darlington had the highest median pay in October 2022 at £2,027 per month. This is followed by Hartlepool and Stockton-on-Tees with £2,022 and South Teesside with £1,910.
- Darlington has seen the largest increase in median pay for payrolled employees over the last two years, increasing by 13.4% (£239) from £1,788 in October 2020 to £2,027 in October 2022.
- Hartlepool and Stockton-on-Tees increased by 12.6% (£226) between October 2020 and October 2022, whilst South Teesside increased by 11.1% (£191).

Source: ONS

People and Skills SWOT analysis

| Strengths | Weaknesses |
|---|--|
| <p>Tees Valley has sectoral strengths including Chemical and Process, Advanced Manufacturing, Health and Social Care, Other Public Services, Other Private Services and Construction.</p> <p>The percentage of working age residents with higher level skills has risen from 33.2% in 2020 to 33.4% in 2021.</p> <p>Tees Valley working age residents with no qualifications has fallen from 8.4% in 2020 to 6.6% in 2021. Tees Valley working age residents with no qualifications in 2021 was the same as the national average.</p> <p>Participation in higher education is above average with a higher percentage of 18-39-year olds in higher education at 11.3% compared to 10.9% nationally, and top subjects for participation supporting key sector strengths in Tees Valley.</p> <p>The Health Care sector accounts for largest percentage of undergraduate and postgraduate qualifications for Tees Valley graduates and saw an increase in qualifications between 2019/20 and 2020/21, with a 9% rise (180 extra passes).</p> <p>A strong heritage in computing with Teesside University's School of Computing, Engineering and Digital Technology one of the best-equipped in the country and university innovative research activity is higher than national LEP average.</p> <p>The percentage of Tees Valley graduates in employment 15 months after graduating has risen from 82% in 2018/19 to 84% in 2019/20.</p> <p>The percentage of Tees Valley graduates who found employment in Tees Valley 15 months after graduating has risen by 1 percentage point between 2018/19 and 2019/20 to 56%.</p> <p>The rate per 100,000 population starting an apprenticeship is higher than the national figure at 1,293 compared to 991. Whilst apprenticeship achievements are at 492 per 100,000 population compared to 389 nationally.</p> | <p>Population growth in Tees Valley is lower than national with a rise of 2.2% since census 2011, compared to 6.3% nationally.</p> <p>The percentage of households in Tees Valley deprived in at least one dimension or measure of household deprivation was 54.6% compared to 51.7% nationally.</p> <p>The percentage of Tees Valley residents qualified to level 2, level 2 including English and Maths and level 3 at age 19 is lower than the national average, however this has increased between 2019/20 and 2020/21.</p> <p>The percentage of working age residents with higher level skills is lower at 33.4% in 2021 compared to the national average at 43.6%.</p> <p>Whilst participation in higher education is above average, the percentage of Tees Valley residents aged 18-39 in higher education has dropped 2.0 percentage points from a high of 13.3% in 2010/11 to 13.3% in 2020/21.</p> <p>The percentage of 18-39-year-old Tees Valley residents in part-time higher education has fallen from 6.5% in 2010/11 to 3.1% in 2020/21, a drop of 3.4 percentage points compared to a drop of 1.4 nationally.</p> <p>Nationally the percentage of 20-39-year olds obtaining a postgraduate qualification is more than double the Tees Valley figure with 1.0% obtaining a postgraduate qualification in 2020/21 compared to 2.0% nationally.</p> <p>Tees Valley has a higher percentage of graduates in non-professional roles than nationally. However, this has dropped 2 percentage points between 2019/20 and 2020/21 from 29% to 27%.</p> <p>Whilst apprenticeship starts and achievements in Tees Valley are above average, the rate per 100,000 population starting an apprenticeship is 42% lower</p> |

The percentage of Tees Valley apprenticeship learners in sustained learning for all levels was higher than national in 2019/20, whilst those in sustained employment matched the national average. Sustained employment and learning destinations for Advanced level apprenticeships were higher than national, whilst sustained employment for Higher level apprenticeships were higher than the national average. A higher percentage of Intermediate level apprenticeship learners were in sustained learning than the national average.

Tees Valley has a higher rate of Adults aged 19+ achieving a Further Education qualification in 2021/22 at 5,628 per 100,000 population, compared to 3,277 nationally.

Participation for Adults aged 19+ in Further Education at Level 4 and above has increased over the last 5 years and is above national average.

There has been a 1.4 drop in working age residents claiming either Job Seekers Allowance or Universal Credit (and required to seek work) from 6.0% in October 2021 to 4.6% in October 2022 (5,675 fewer claimants). There has also been a 1.8 drop in youth unemployment from 7.1% of 16-24-year old residents in October 2021 to 6.0% in October 2022.

Tees Valley primary schools Ofsted results are above national average.

Ofsted results for secondary schools rated as outstanding or good have risen from 52% in 2021 to 70% in 2022.

87.0% Tees Valley KS5 students were in sustained education, apprenticeships or employment compared to 85.7% nationally. Tees Valley students aged 16-18 gaining a Level 3 are more likely to be in sustained education, apprenticeships or employment at 86.2% compared to 85.4% nationally.

Tees Valley has a higher rate of Adults aged 19+ achieving a Further Education qualification in

and apprenticeship achievements are 37% lower than in 2016/17.

Employment is lower than the national rate at 68.8% of the working age population employed compared to 75.7%. Employment has fallen 1.6 percentage points (7,400 fewer residents in employment) from a high of 70.4% in 2021.

The median annual wage for Tees Valley residents in 2022 is lower than the national average at £29,550 compared to £32,210 nationally. The gap has increased and is now 5.1% below the national average compared to 4.1% five years ago.

Unemployment is higher in Tees Valley with 6.4% of the economically active population aged 16-64 unemployed, compared to 3.9% nationally.

Youth unemployment is higher with 13.1% of the economically active population aged 16-24 unemployed, compared to 3.7% nationally.

The quality and performance of Tees Valley Secondary schools are below national average. In 2021/22 the average attainment 8 score per pupil was 46.7 compared to 48.8 nationally and the average Progress 8 score was -0.30.

The percentage of 16-17 year olds known to be NEET is higher than the national average at 4.7% compared to 2.6% nationally and 5.1% of 16-17 year olds are NEET or not known, compared to 4.7% nationally.

Tees Valley students aged 16-18 gaining a Level 2 or 'All Other Qualifications' are less likely to be in sustained education, apprenticeships or employment at 71.5% and 54.2%, compared to 72.6% and 57.6% nationally.

Further Education and Skills learners in sustained employment or education was lower for Tees Valley residents (aged 19+) at 75%, compared to 82% nationally in 2019/20.

16-18 attainment is lower than the national average for qualifications, with the exception of Applied General entries.

2021/22, with over a fifth in Health, Public Services and Care subjects and 12.3% in Engineering and Manufacturing Technologies subjects.

4.1% growth in jobs in Tees Valley between 2020 and 2021, compared to 3.0% nationally. In particular, rises in Bioscience (20.0%), Construction (16.7%), Advanced Manufacturing (14.3%) and Digital (14.3%).

Opportunities

At 17%, Health and Social Care is the top sector for employment in Tees Valley. There is an opportunity for significant GVA growth to come from marginal productivity improvement in fast growing, high employment sectors such as Health & Social Care.

Devolution of the Adult Education Budget provides the opportunity to continue to reduce the number of Tees Valley residents with no qualifications, including digital.

Threats

Travel to learn patterns are self-contained in Tees Valley. Transport connectivity between dispersed and multiple concentrations of housing and industry is poor. This could have a negative impact on access to employment opportunities.

Tees Valley has a higher percentage of residents participating in higher education, however the percentage of residents obtaining an undergraduate or postgraduate qualification is lower than nationally.

The challenge of finding experienced skilled people to fill jobs continues to be a key barrier to growth for the digital sector in the Tees Valley. This threat could be exacerbated by the increase in remote/home working with businesses not being limited to recruiting employees from a local geography.

Tees Valley has a higher than average number of residents who are Economically Inactive at 26.5% compared to 21.2% nationally, in particular those who are long term sick (33.8% compared to 24.4% nationally). This can be a key barrier to improving education, employment, and skills.

Apprenticeship starts have fallen by 42% since 2016/17, this could lead to firms having shortages of suitably qualified apprentices.

Section 5: Supporting Local Businesses

5.1. Economic Growth and Productivity

5.1.1. Introduction

This section outlines the economic performance of Tees Valley in relation to Gross Domestic Product (GDP), Gross value Added (GVA), Productivity, Trade and Foreign Direct Investment (FDI).

Demographic, employment and labour market participation issues contribute significantly to the area's relatively low GVA per capita. These factors account for around one half of Tees Valley's output gap with the other half explained by productivity issues relating to: company profitability; resource allocation and absorptive capacity; skills mismatches and wage rate differentials; workforce well-being and occupational and industrial employment structures.

Tees Valley has a number of sectors with high productivity and above national sector productivity rates and the majority of key sectors continue to achieve above average productivity, e.g. Clean Energy, Low Carbon and Hydrogen, Chemical & Process and Digital.

Tees Valley is an area of significant opportunity and has the potential to deliver a national step change in the use of Clean Energy and industrial decarbonisation, supporting the Government's commitment to achieve Net Zero by 2050. The region has economic assets of national significance, including the UK's largest chemical complex and the country's largest port for outward tonnage. In addition, there is potential for significant growth in emerging higher productivity sectors such as Bioscience and Digital. Despite these strengths, Tees Valley faces some persistent economic challenges, many worsened by the impacts of Covid-19.

The Tees Valley economy contributed £15.7 billion to UK GDP in 2020. A large proportion of economic value is generated in the conurbation of Middlesbrough which accounts for almost one quarter of total Tees Valley GVA. However, with economic growth below national rates the GDP gap – the amount of additional GDP that Tees Valley would need to match UK GDP per capita – has doubled in the past decade to stand at £5.9 billion in 2020. Coronavirus has compounded a situation in which regional productivity has remained largely stagnant over the past decade and currently stands at some 12 percentage points below the national average in GVA per hour worked terms.

5.1.2. Key messages

- Tees Valley GDP £15.7 billion in 2020 including £13.9 billion GVA.
- After a doubling in the past decade the GDP gap with the UK average fell back a little to £5.9 billion in 2020. This gap is the additional Tees Valley GDP required for Tees Valley GDP per capita to match UK GVA per capita.
- Tees Valley productivity in terms of GVA per hour worked has fallen from 91.0% of the UK rate in 2015 to 87.6% in 2020.
- In 2021, the port of Tees and Hartlepool became the largest UK port in terms of outward tonnage.
- A strong manufacturing and exporting area with trade surpluses in both goods and services. Combined trade in goods and services surplus of £1.2 billion.

- Tees Valley goods exports stood at £4,974 million in 2020, up by £481 million or 10.7% on 2019's £4,493 million. This was the fastest rate of growth of any Combined Authority or City Region.
- Driven by manufacturing, the Tees Valley total net FDI international inward investment position at the end of 2020 was 23.1% higher than at the end of 2019 – ahead of the increase nationally where the UK saw a 17.6% rise.

5.1.3. UK Macroeconomic Summary

Bank of England Monetary Policy Report – November 2022

UK Gross Domestic Product (GDP)

UK GDP is expected to decline by around ¾% during 2022 H2, in part reflecting the squeeze on real incomes from higher global energy and tradable goods prices. GDP is projected to continue to fall throughout 2023 and 2024 H1, as high energy prices and materially tighter financial conditions weigh on spending.

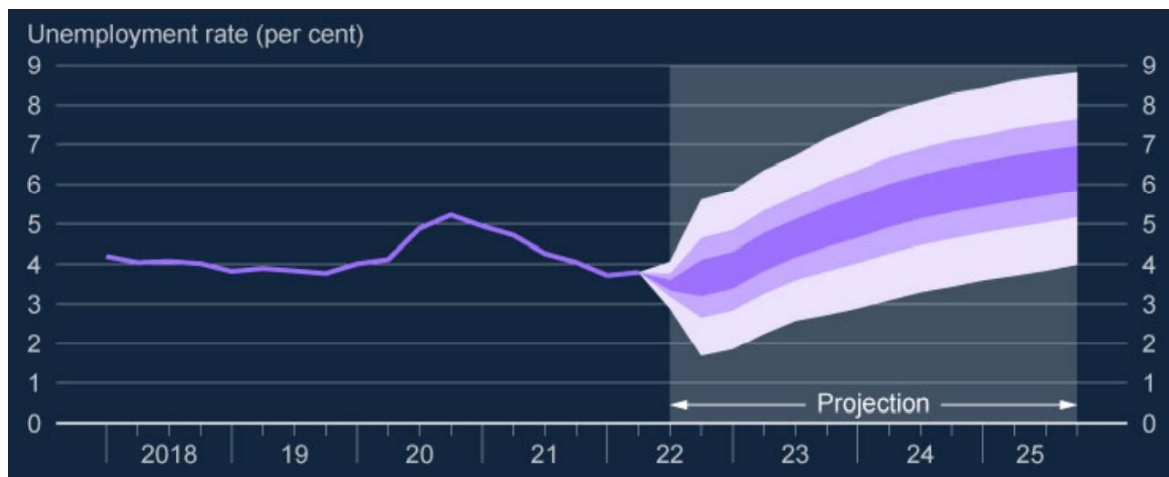
Figure 5.1.1. UK GDP growth projection based on market interest rate expectations, other policy measures as announced



UK unemployment

Although there is judged to be a significant margin of excess demand currently, continued weakness in spending is likely to lead to an increasing amount of economic slack emerging from the first half of 2023, including a rising jobless rate. UK unemployment is projected to trend upwards over the next three years to reach 6.4% by 2025 Q4, up from 3.7% in 2022 Q4.

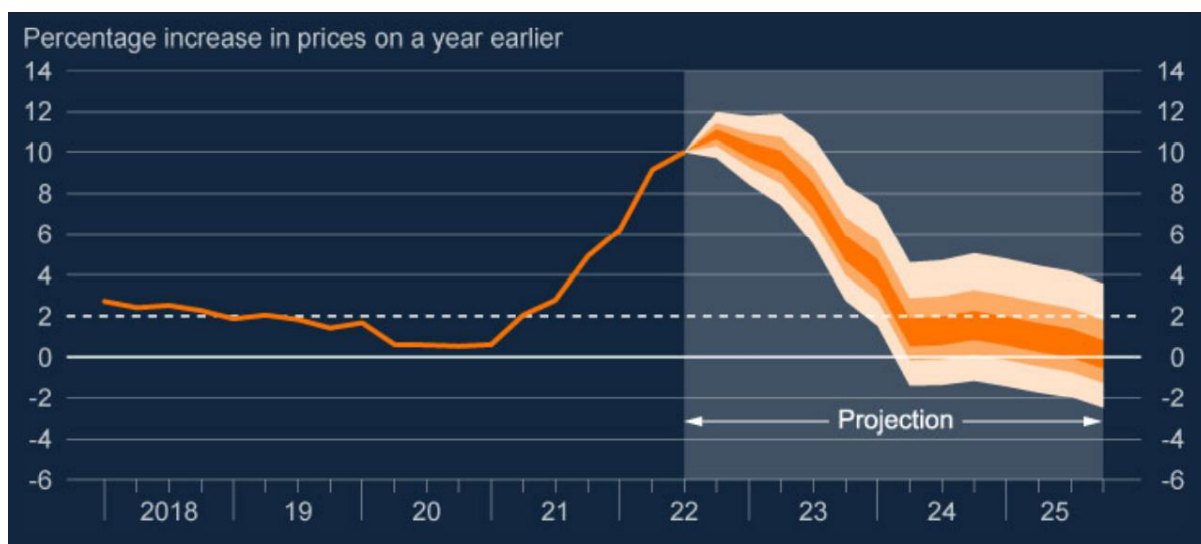
Figure 5.1.2. UK unemployment rate projection based on market interest rate expectations, other policy measures as announced



Inflation

CPI inflation was 10.1% in September and is projected to pick up to around 11% in 2022 Q4. CPI inflation starts to fall back from early next year as previous increases in energy prices drop out of the annual comparison. Domestic inflationary pressures remain strong in coming quarters and then subside. CPI inflation is projected to fall sharply to some way below the 2% target in two years' time, and further below the target in three years' time.

Figure 5.1.3. CPI inflation projection based on market interest rate expectations, other policy measures as announced



Economic projections

The Bank of England's GDP and unemployment projections are not as positive as those of external forecasters. The Bank also expects inflation to fall more rapidly through 2024/25 than do external forecasters.

Figure 5.1.4. Comparison of the Bank of England's macroeconomic projections and external forecasters' projections



OBR Overview of the November 2022 Economic and fiscal outlook

Over the past six months, the global energy and food supply shocks emanating from Russia's invasion of Ukraine have intensified. The further curtailment of Russian imports saw European wholesale gas prices rise ten-fold from pre-pandemic levels, and markets now expect prices to remain four times higher in the medium term. Rising energy, food, and other goods prices have pushed up the interest rates set by inflation-targeting central banks to levels not seen since the 2008 financial crisis. This has taken much of the wind out of the global economic recovery from the pandemic and ratcheted up the financial pressure on governments that emerged from it with higher debt and are again being called upon to help households and businesses through this latest crisis.

In the UK, CPI inflation is set to peak at a 40-year high of 11 per cent in the current quarter, and the peak would have been a further 2½ percentage points higher without the energy price guarantee (EPG) limiting a typical household's annualised energy bill to £2,500 this winter. Rising prices erode real wages and reduce living standards by 7 per cent in total over the two financial years to 2023-24 (wiping out the previous eight years' growth), despite over £100 billion of additional government support. The squeeze on real incomes, rise in interest rates, and fall in house prices all weigh on consumption and investment, tipping the economy into a recession lasting just over a year from the third quarter of 2022, with a peak-to-trough fall in GDP of 2 per cent. Unemployment rises by 505,000 from 3.5 per cent to peak at 4.9 per cent in the third quarter of 2024.

5.1.4. Gross Domestic Product (GDP)

The latest GDP estimates for Tees Valley are for 2020 and reflect the severe impact of Coronavirus on the UK economy in that year. Tees Valley GDP stood at £15,715 million in 2020, down from £16,345 million in 2019. In real terms this represented a fall of 11.0%, a rate close to the median LEP area decrease. This is reflected by England's average decline of 10.7%.

Tees Valley GDP accounted for 25.4% of North East of England GDP, 3.81% of North of England GDP, 0.85% of England's GDP and 0.73% of UK GDP in 2020.

Tees Valley GDP per capita, at £23,206, was 72.6% of the UK rate in 2020, up from 72.2% in 2019 and 71.8% in 2018. However, this rate remains well below the 75.0% observed in 2016 and the recent high point of 79.9% in 2009.

This means that the Tees Valley had a GDP or output gap of £5.9 billion in 2020 – the additional level of economic output required in Tees Valley to match the UK (less Extra-Regio) GDP per capita rate.

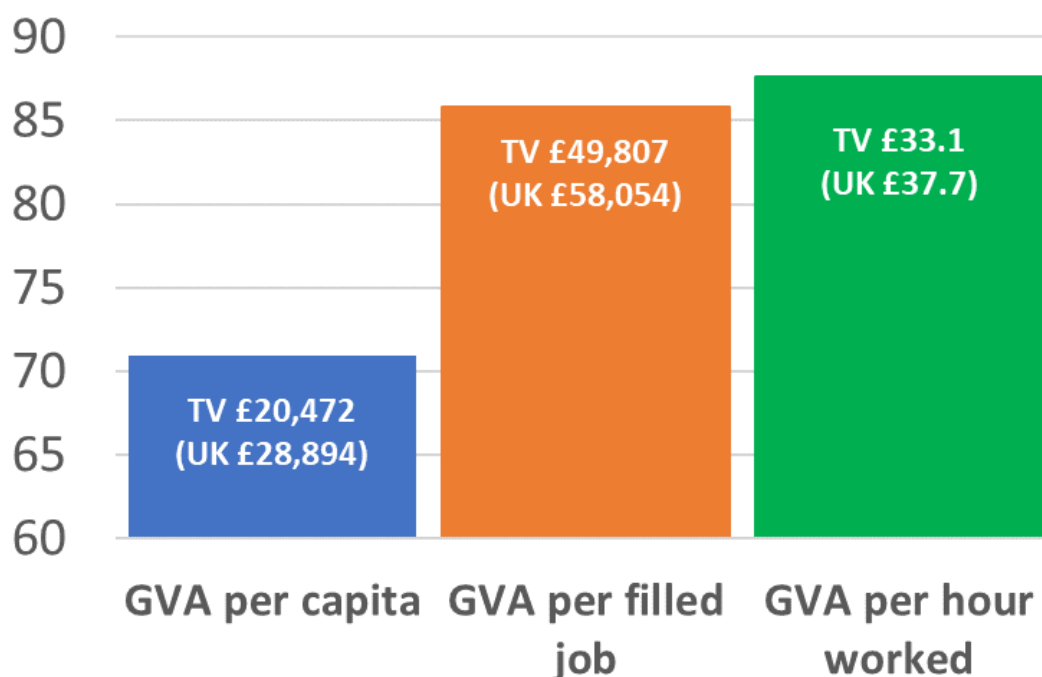
5.1.5. Productivity

GDP comprises Gross Value Added (GVA) plus taxes e.g. VAT or Excise duties, less any subsidies. Whilst GDP is the headline measure of the size of an economy, GVA can be defined as the value of goods and services generated. Tees Valley GVA stood at £13,863 million in 2020.

As a measure of productivity, GDP or GVA per capita is not the preferred measure because it divides a workplace-based numerator (GDP or GVA) by a residence-based denominator (residential population). GVA per hour worked provides the most preferred measure of productivity. This measure removes employment rate, economic inactivity, demographic and commuting considerations with GVA per capita and work pattern issues with GVA per filled job. Where GVA per hour worked estimates are not available then GVA per job estimates are generally used.

- In 2020, Tees Valley GVA per hour worked was £33.1, up from £32.4 in 2019. UK GVA per hour worked increased from £37.0 to £37.7 over the same period. This meant that the Tees Valley GVA per hour worked index fell from 87.7 in 2019 to 87.6 in 2020 (UK = 100).
- In 2020, Tees Valley GVA per filled job was £49,807, up from £49,681 in 2019. UK GVA per filled job increased from £57,808 to £58,054 over the same period. This meant that the Tees Valley GVA per filled job index fell from 85.9 in 2019 to 85.8 in 2020 (UK = 100).
- In 2020, Tees Valley GVA per capita was £20,472, down from £21,051 in 2019. UK GVA per capita (less Extra-Regio) decreased from £29,909 to £28,894 over the same period. This meant that the Tees Valley GVA per capita index rose from 70.4 in 2019 to 70.9 in 2020 (UK = 100).

Figure 5.1.5. Tees Valley productivity indices, 2020 (UK = 100)



Source: ONS

Tees Valley sectoral productivity

The majority of Tees Valley’s key sectors have relatively high levels of productivity, particularly so in Clean Energy, Low Carbon & Hydrogen. Digital, Chemical & Process, Bioscience and Construction also have high levels of productivity, with only Health & Social Care and Creative, Culture & Leisure displaying relatively low productivity rates. Advanced Manufacturing, Logistics and Professional & Business Services display broadly average productivity rates.

Health & Social care and Creative, Culture & Leisure have the lowest jobs multiplier rates. These multipliers result where changes in job levels lead to knock-on employment impacts from agglomeration, supply chain or wider household effects.

The Creative, Culture & Leisure, Health & Social Care and Professional & Business Services sectors are highly job rich, with these three sectors accounting for around four in ten of jobs in Tees Valley.

Finally, the Tees Valley Digital sector, whilst highly productive, is still relatively small compared to many other parts of the country. However, the sector is growing rapidly, and projections indicate that this sector will play an important role in generating many jobs in the future. In addition, the cross-cutting nature of the sector will support the development of other sectors, such as with the increasing trend towards manufacturing and industrial digitalisation.

- The Clean Energy, Low Carbon and Hydrogen sector recorded the highest GVA per employee job rate of any sector in Tees Valley.
- Construction recorded the highest jobs multiplier with 1.97.

Table 5.1.1. Tees Valley sectoral productivity and jobs multipliers, 2019

| | GVA £ million | Employee jobs | GVA per employee £ | Jobs Multiplier |
|---|--------------------------|--------------------------|-------------------------------|----------------------------|
| Advanced Manufacturing | 689.9 | 17,567 | 39,300 | 1.49 |
| Bioscience | 365.2 | 5,703 | 64,000 | 1.44 |
| Chemical & Process | 454.7 | 5,805 | 78,300 | 1.36 |
| Clean Energy, Low C & H | 1,100 | 5,665 | 194,200 | 1.68 |
| Construction | 920.8 | 12,383 | 74,400 | 1.97 |
| Creative, Culture & Leisure | 1,100 | 31,438 | 35,000 | 1.26 |
| Digital | 424.5 | 4,581 | 92,700 | 1.42 |
| Health & Social Care | 1,400 | 47,981 | 29,200 | 1.18 |
| Logistics | 783.8 | 17,494 | 44,800 | 1.39 |
| Professional & Business Services | 1,500 | 34,369 | 43,600 | 1.39 |

Source: Lightcast Input-Output Model, 2019 estimates. GVA per employee and Jobs Multiplier estimates derived by TVCA.

Note that the employee jobs numbers in the above are modelled estimates for 2019. More up-to-date official ONS estimates are available in Section 4.4.

Sectoral productivity comparisons

Three of Tees Valley's key sectors demonstrate a significant productivity comparative advantage over both the North of England and nationally. These sectors, Clean Energy, Low Carbon & Hydrogen, Digital and Chemical & Process also have the highest productivity rates within Tees Valley.

In contrast, Tees Valley sectoral GVA per employee rates are relatively lower than nationally in Advanced Manufacturing, Construction, Creative Culture & Leisure and Professional & Business Services. Rates are broadly in line for the Bioscience, Logistics and Health & Social Care sectors.

Table 5.1.2. Sectoral GVA per employee comparisons with England and North of England rates, 2019

| | Tees Valley | North of England | England |
|---|--------------------|-------------------------|----------------|
| | £ | £ | £ |
| Advanced Manufacturing | 39,300 | 47,700 | 55,000 |
| Bioscience | 64,000 | 62,500 | 61,700 |
| Chemical & Process | 78,300 | 69,100 | 59,500 |
| Clean Energy, Low C & H | 194,200 | 95,400 | 97,900 |
| Construction | 74,400 | 67,800 | 81,700 |
| Creative, Culture & Leisure | 35,000 | 36,200 | 45,700 |
| Digital | 92,700 | 58,400 | 68,400 |
| Health & Social Care | 29,200 | 30,200 | 31,500 |
| Logistics | 44,800 | 40,300 | 47,700 |
| Professional & Business Services | 43,600 | 44,800 | 62,300 |

Source: Lightcast I-O Model, 2019 estimates. GVA per employee estimates derived by TVCA.

5.1.6. International Trade

Tees Valley goods exports stood at £4,974 million in 2020, up by £481 million or 10.7% on 2019's £4,493 million.

Tees Valley was one of only two UK City Regions / Combined Authorities to see goods exports increase in 2020. Aberdeen City Region was the other with a 5.7% increase. UK goods exports fell by 17.1% compared to 2019.

Tees Valley's service exports stood at £1,366 million in 2020, down by £258 million or 15.9% compared to 2019's £1,624 million.

All City Regions / Combined Authorities apart from Greater London Authority (Inner London) saw services exports decrease in 2020. UK services exports fell by 5.1% compared to 2019.

With total exports of £6,340 million and imports of £5,114 million, Tees Valley's total trade balance was £1,226 million in surplus in 2020.

Table 5.1.3. International Trade in Tees Valley, 2020

| | | EU (£ million) | Non-EU (£ million) | Total (£ million) |
|--------------------|----------------|----------------|--------------------|-------------------|
| Goods | Exports | 2,438 | 2,536 | 4,974 |
| | Imports | 2,003 | 2,523 | 4,526 |
| Services | Exports | n/a | n/a | 1,366 |
| | Imports | 307 | 281 | 588 |
| Total trade | Exports | n/a | n/a | 6,340 |
| | Imports | 2,310 | 2,804 | 5,114 |

Source: ONS International trade in UK nations, regions and cities: 2020

Data presented here are counts of local units (including single-site enterprises) that are linked to VAT-registered UK businesses importing or exporting services, together with their associated employees.

- In terms of services exports from the Tees Valley in 2020, there were 65 local units and 7,838 employees linked to an exporting enterprise. Whilst the number of local units was down on 2019 (from 74), the number of employees actually rose from 4,788.
- South Teesside accounted for 36 local units and 3,010 employees, Hartlepool and Stockton 19 local units and 2,747 employees and Darlington 10 local units and 2,081 employees.
- Nationally in 2020, the number of local units exporting services increased by 6% on 2019 and the number of employees rose by 38%. In contrast, Tees Valley local units exporting fell by 12% but the number of employees increased by 64%.
- In terms of imports into the Tees Valley in 2020, there were 11 local units and 11,135 employees linked to an importing enterprise. These numbers were only slightly up on 2019 when there were 10 local units and 10,620 employees linked to an importing enterprise.

Sectoral trade

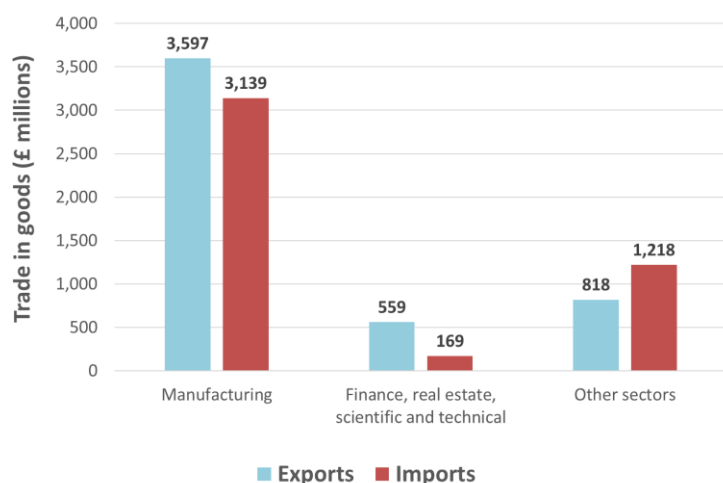
Trade in Tees Valley, as for many other combined authority areas such as Liverpool, Sheffield and West Midlands, is dominated by the manufacturing sector.

£3,597 million or 72.3% of Tees Valley’s goods exports are from the manufacturing sector compared to 51.8% in the UK.

Additionally, and reflecting the area’s strength in engineering design and consultancy, manufacturing accounts for a significantly higher share of Tees Valley services exports than other English combined authority areas with 36.9% of total services exports compared to 4.6% nationally.

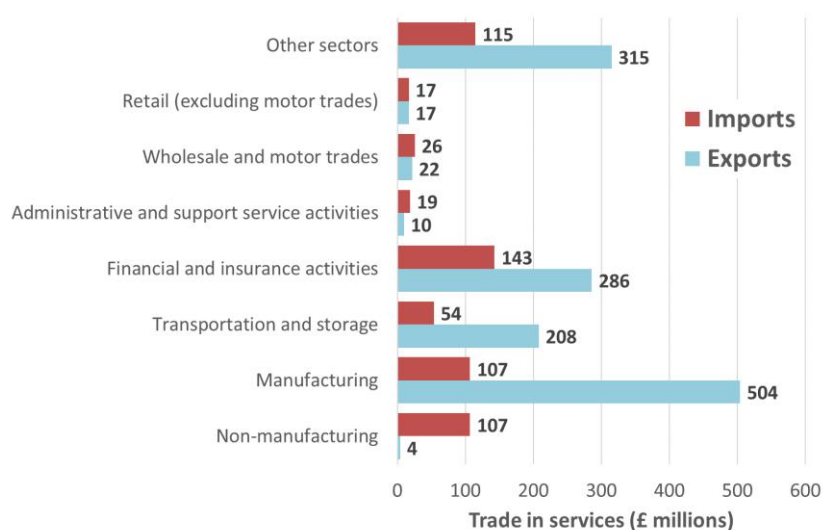
The figures below detail the full sectoral breakdown for both goods and services exports and imports. Note that there is a greater sectoral detail for services.

Figure 5.1.6. Trade in goods, Tees Valley, 2020



Source: ONS Subnational Trade in Goods

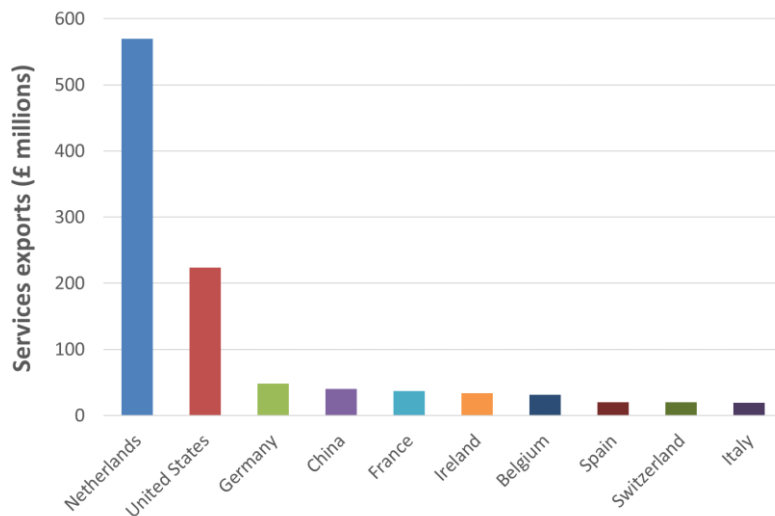
Figure 5.1.7. Trade in services, Tees Valley, 2020



Source: ONS Subnational Trade in Services

Identifiable destination countries are also available for Tees Valley service exports. The top ten destinations are show in the chart below.

Figure 5.1.8. Tees Valley services exports, 2020



Source: ONS Subnational Trade in Services

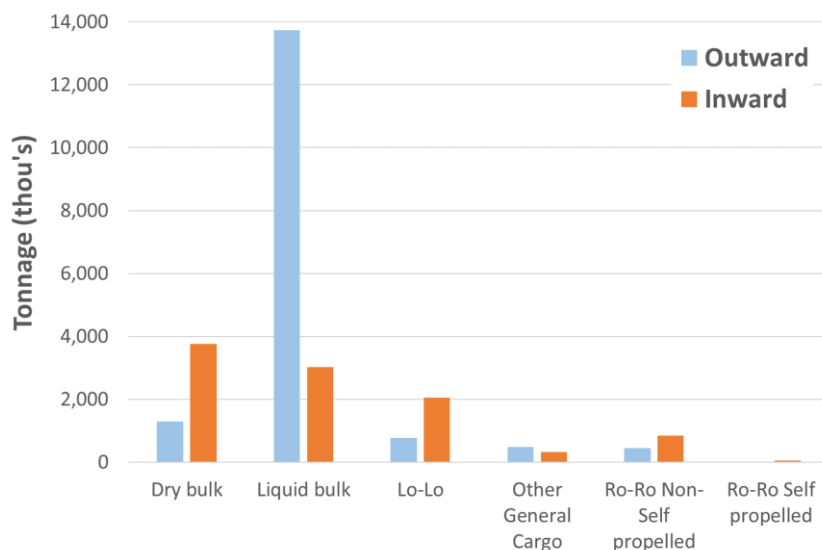
Port freight tonnage

In 2021, the port of Tees and Hartlepool became the largest UK port in terms of outward tonnage with 16,757 thousand tonnes, despite tonnage falling by 8% on 2020's 18,251 thousand tonnes.

Total tonnage through the port of Tees and Hartlepool was 26,831 thousand tonnes in 2021, a decrease of 8% on 2020 (29,256 thousand tonnes).

Liquid bulk dominates outward traffic and in 2021 was comprised of 87.6% Crude Oil, 6.6% Liquefied Gas, 5.2% Other liquid bulk products and 0.6% Oil Products.

Figure 5.1.9. Tees and Hartlepool port freight traffic by cargo type, 2021



Source: DfT Port Statistics

5.1.7. Foreign Direct Investment (FDI)

From a UK perspective, inward foreign direct investment (FDI) is an investment from a foreign investor into a UK enterprise.

The total net FDI international inward investment position at the end of 2020 for Tees Valley was £10,743 million, an increase of 23.1% compared to the position at the end of 2019. This rate of increase was a little above that observed nationally where the UK saw a 17.6% rise overall. The increase in Tees Valley was driven by the manufacturing sector which saw an increase of £1,120 million on the year, 55.5% of the total rise of £2,018 million.

In terms of the countries investing in Tees Valley, Germany (with £1,188 million) replaced the United States, which fell to second with £1,109 million, as the country with the largest net inward investment position in Tees Valley through 2020. The country with the third largest net inward position at the end of 2020 was Japan with £946 million. Japan replaced the Netherlands which is now fourth with £761 million.

5.1.8. Economic Growth and Productivity SWOT analysis

| Strengths | Weaknesses |
|--|---|
| <p>Strengths in high productivity sectors including Clean Energy, Low Carbon and Hydrogen (including Nuclear) and Chemicals & Process.</p> <p>Strong exporting region with strengths in Petroleum, Chemicals and Plastics.</p> <p>Nationally leading trade asset in the Port of Tees & Hartlepool, particularly for Crude Oil.</p> <p>Very high proportion of trade in Manufacturing. Trading surpluses in manufacturing for both goods and services.</p> <p>Two non-European countries feature in the top ten services export destinations – USA and China.</p> | <p>Sluggish economic growth during the past decade saw Tees Valley’s output (GDP) gap double.</p> <p>Demographic, employment, and labour market participation issues contribute significantly to the area’s low GVA per capita. These factors account for around one half of the output gap with the other half explained by productivity issues around company profitability, resource allocation and absorptive capacity, skills mismatches and wage rate differentials, workforce well-being and occupational and industrial employment structures.</p> <p>High export concentrations in sectors such as Manufacturing increases the area’s exposure to exogenous demand shocks in the global economy.</p> |
| Opportunities | Threats |
| <p>Potential for significant growth in emerging higher productivity sectors such as Bioscience and Digital.</p> <p>Significant GVA growth would come from marginal productivity improvement in high employment growth sectors such as Health & Social Care and Creative, Culture & Leisure.</p> <p>Great potential for diversification of supply chains and developing the capacity of firms to increase exports.</p> <p>Boosting local business through growing domestic supply chains to meet national need.</p> | <p>Increasing levels of trade protectionism across the world, particularly in key non-EU markets such as USA and China.</p> <p>Increased Government borrowing through the Coronavirus pandemic likely to constrain growth going forwards.</p> <p>Continuing Russia/Ukraine war further constrains energy supply, keeps prices high and embeds inflation.</p> <p>Falling real-terms household incomes impacting negatively on local demand and consumer spending.</p> <p>Higher interest rates and continuing uncertainty in the economic environment impacting negatively on aggregate business investment.</p> |

5.2. Business Growth

5.2.1. Introduction

This section details current business growth in each of the Tees Valley's key economic sectors, business creation, SME levels and prospects for future growth.

A thriving and sustainable business sector will increase the area's productivity and create good jobs with long term opportunities that local people can access. In 2022 there were 17,930 businesses in Tees Valley, which is an increase of 215 from the previous year. However, the Tees Valley continues to experience comparatively low levels of business density at less than two-thirds of the UK rate. 99.5% of businesses are SMEs with fewer than 250 employees and 0.5% are large firms.

Building on the previous business support service, Business Compass, Tees Valley Business was established by the Tees Valley Combined Authority in January 2020, to provide a needs-driven business support model geared to delivering tailored interventions which respond to the specific needs and state of readiness of Tees Valley SME's. Tees Valley Business provides tailored business support to provide easy to access advice, support, grants and loans to help businesses grow.

The Teesside Freeport is now operational and attracting new business interest and investment in emerging green sectors. In addition, the Government's new Darlington Economic Campus, which will be located in the town centre, is generating interest from businesses in the Professional & Business Services sector, a sector which currently has an under representation of businesses in Tees Valley.

5.2.2. Key messages

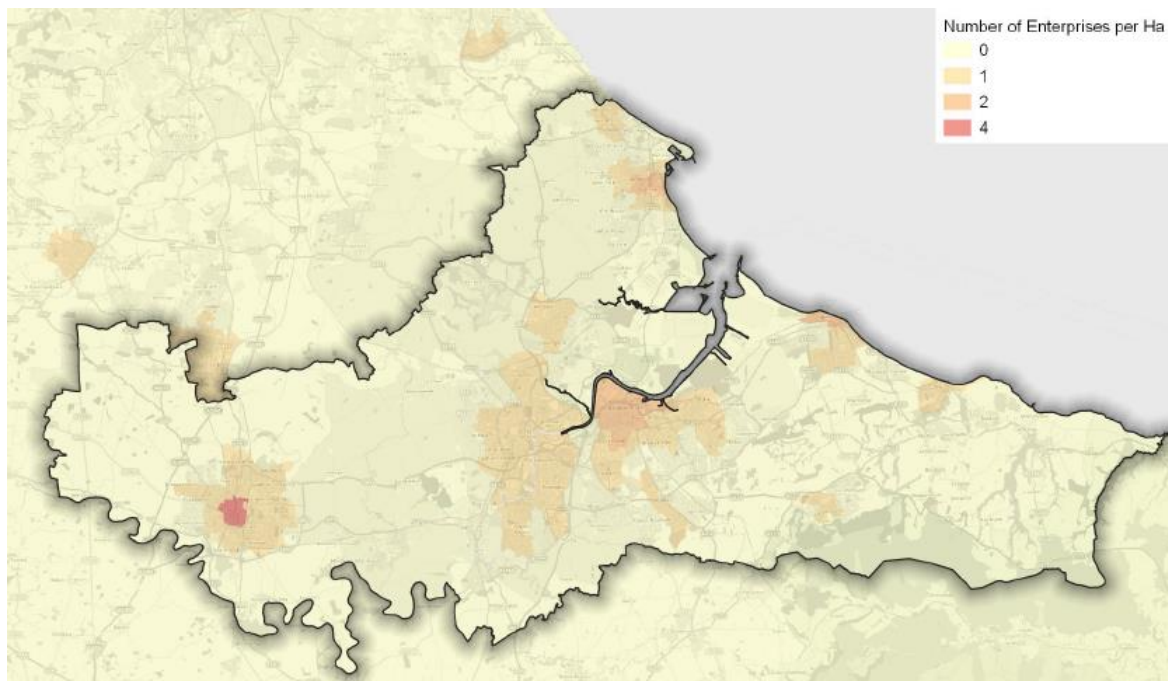
- Low levels of business density – less than two-thirds (64.6%) of the national rate.
- Business closures outstripped business creations for the last six quarters to 2022 Q3. Whilst the total number of enterprises grew by 1.2% between March 2021 and March 2022, the more negative quarterly performance points to an upcoming contraction in headline annual business numbers.
- However, the number of Tees Valley enterprises continues to grow in sectors such as Logistics, Creative, Culture & Leisure and Construction. In both Logistics and Creative, Culture & Leisure sectors the rate of business growth is well above national increases.
- Sectors accounting for large numbers of businesses in Tees Valley include Professional & Business Services, Creative, Culture & Leisure, Construction, Advanced Manufacturing and Other Private Services. These five sectors now account for three-quarters of all Tees Valley enterprises.
- Sectors where Tees Valley sees relatively more firms than nationally i.e. sector strengths include Advanced Manufacturing, Bioscience, Chemical & Process, Clean Energy, Low Carbon & Hydrogen, Health and Social Care and to a lesser degree Construction.
- Low scaleup density and growth rate but strong growth in terms of pipeline scaleups – firms that don't quite qualify as scaleups but are still growing at between 15% to 20%.

5.2.3. Business density

Tees Valley's business density rate – the number of enterprises per 10,000 adult population – remains significantly below many other areas of the country.

- There were 17,930 business enterprises (including 17,840 SMEs i.e. 99.5% of total Tees Valley enterprises) in Tees Valley in 2021. Large firms made up the remaining 0.5% of total Tees Valley enterprises. This proportion of SMEs to Large firms is similar to nationally (SMEs 99.6% and Large 0.4%).
- The number of Tees Valley enterprises increased by 215 or 1.2% in 2022, well above the national increase of just 0.1%.
- Tees Valley has a business density rate of 327 compared to the UK rate of 506.

The map below shows the number of businesses per hectare at the middle-layer super output area (MSOA) level. Businesses are largely concentrated in Darlington, Stockton, Middlesbrough and Hartlepool town centre locations. Darlington has the highest concentrations of all with up to four businesses per hectare. There are also clusters in business parks in peripheral locations. Note that many businesses in Teesport are handled by and operate through PD Ports and would therefore not be counted in the data.



Source: Tees Valley Growth Analysis Research Report, Savills, August 2022

5.2.4. Sectoral composition

There were 17,930 business enterprises in Tees Valley in 2022, up 215 on 2021. The annual rate increase in Tees Valley enterprises (up 1.2%) was well above the increase observed nationally (0.1%).

Table 5.2.1. Number of enterprises by sector, Tees Valley and UK, March 2021 and March 2022

| | Tees Valley | | | | UK | | |
|------------------------------------|---------------|---------------|------------|------------|------------------|------------------|------------|
| | 2021 | 2022 | Change | %change | 2021 | 2022 | %change |
| Advanced Manufacturing | 2,445 | 2,110 | -335 | -13.7 | 164,240 | 152,325 | -7.3 |
| Biologics | 25 | 25 | 0 | 0 | 4,240 | 4,305 | 1.5 |
| Chemical and Process | 80 | 80 | 0 | 0 | 8,875 | 9,100 | 2.5 |
| Clean Energy, Low C & H | 430 | 425 | -5 | -1.2 | 50,965 | 51,915 | 1.9 |
| Construction | 2,435 | 2,530 | 95 | 3.9 | 358,580 | 373,725 | 4.2 |
| Creative, Culture & Leisure | 2,700 | 2,855 | 155 | 5.7 | 456,720 | 470,595 | 3.0 |
| Digital | 660 | 630 | -30 | -4.5 | 173,430 | 155,210 | -10.5 |
| Health and Social Care | 790 | 790 | 0 | 0 | 104,550 | 106,175 | 1.6 |
| Logistics | 1,105 | 1,300 | 195 | 17.6 | 226,300 | 227,770 | 0.6 |
| Professional and Business Services | 2,915 | 2,915 | 0 | 0 | 558,535 | 547,220 | -2.0 |
| Raw Materials & Agriculture | 460 | 460 | 0 | 0 | 142,135 | 143,635 | 1.1 |
| Other Manufacturing | 435 | 455 | 20 | 4.6 | 71,135 | 72,370 | 1.7 |
| Other Private Services | 2,925 | 3,040 | 115 | 3.9 | 398,115 | 405,250 | 1.8 |
| Other Public Services | 320 | 315 | -5 | -1.6 | 47,320 | 48,095 | 1.6 |
| All sectors | 17,715 | 17,930 | 215 | 1.2 | 2,765,150 | 2,767,700 | 0.1 |
| Bioscience | 335 | 285 | -50 | -14.9 | 22,035 | 22,145 | 0.5 |

Source: ONS, NOMIS, UK Business Counts – enterprises. Estimates are rounded to the nearest 5. Totals may not sum due to rounding. Bioscience is a cross-cutting sector encompassing Industrial Food & Drink, Biologics and elements of Chemical & Process and Advanced Manufacturing. Position as at mid-March.

It should be noted that GVA and employment growth can be observed in sectors which have declining numbers of businesses. This is because of firm level employment and/or productivity increases.

Whilst annual changes in Tees Valley broadly mirrored those seen nationally there were a number of notable differences notably:

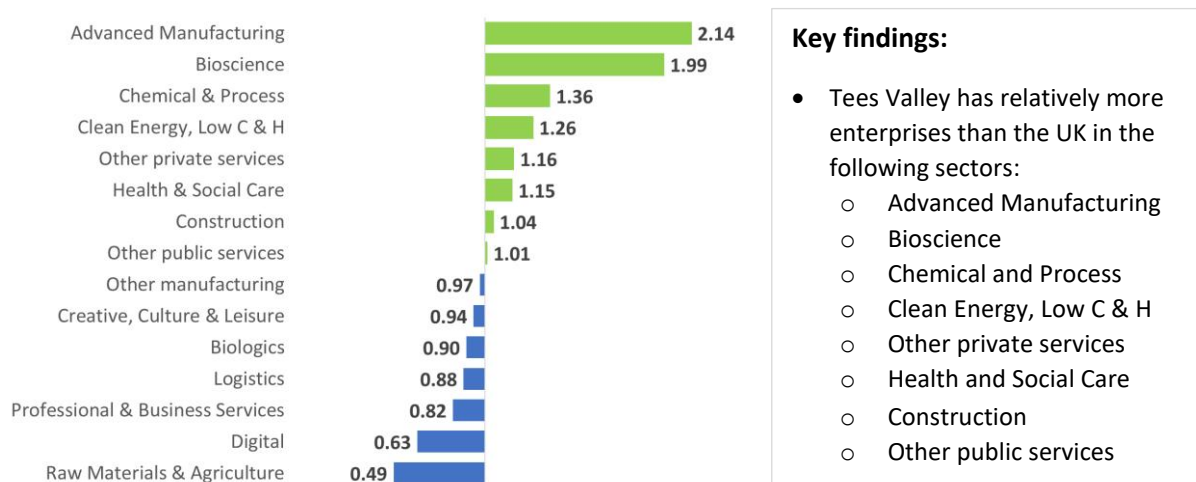
- Logistics saw a significant increase in the number of Tees Valley enterprises in contrast to just a small rise nationally.
- The growth in Tees Valley business numbers was driven by private sector services in 2022. Creative, Culture & Leisure and Other Private Services combined grew by around twice the comparable national rate and whilst the number of Professional & Business Services enterprises fell in the UK as a whole, it remained steady in Tees Valley.

Location quotients and sector strengths

The Tees Valley business base has relatively more firms concentrated in certain sectors than the national sectoral business distribution might suggest i.e. Tees Valley sector strengths. This is shown in the chart below where the Tees Valley sector has a location quotient (LQ) or more than one. Those sectors where the Tees Valley has an under-representation of businesses compared to the UK have an LQ of less than one.

Despite the continuing decline in the number of Tees Valley Advanced Manufacturing and Bioscience enterprises, these highly integrated sectors still have by far the highest concentration of firms in the country – around twice that of the national average.

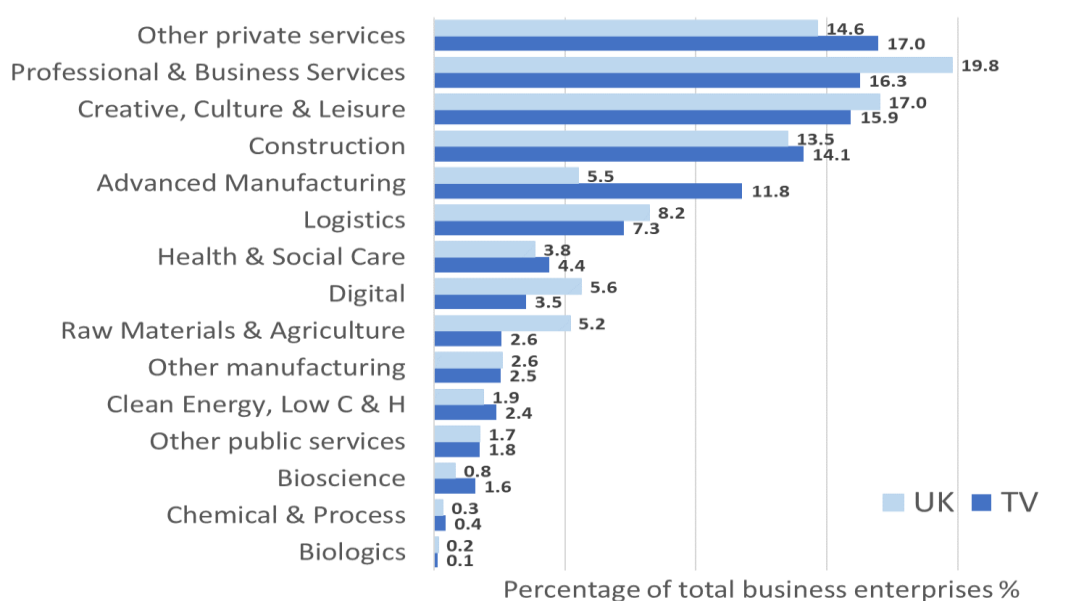
Figure 5.2.1. Business enterprises – Tees Valley Location Quotients, 2022



Source: ONS, NOMIS, UK Business Counts – enterprises

An alternative way of looking at sectoral concentration and the distribution of firms is shown below. Where Tees Valley has higher proportions of firms by sector than the UK it then also has a higher LQ.

Figure 5.2.2. Tees Valley and UK business enterprises by broad sector, 2022



Source: ONS, NOMIS, UK Business Counts – enterprises

5.2.5. Scale of enterprises

There were 15,765 micro enterprises (employing fewer than ten people) in Tees Valley in 2022. Small enterprises (employing between 10 and 49) numbered 1,750, there were 325 medium enterprises (between 50 and 249 employees) and 90 large firms.

In terms of sectoral size distribution and focusing on the 90 large enterprises, public sector organisations such as schools, hospitals and local authorities accounted for nearly 40% of Tees Valley's large employers. Similarly, private services sectors accounted for nearly 40% whilst Production and Construction sectors accounted for the remainder.

The UK government definition of small and medium-sized enterprises (SMEs) encompasses micro, small and medium-sized firms. Tees Valley's sectoral breakdown of SMEs is detailed below.

Table 5.2.2. Tees Valley SMEs by employment size band, 2022

| | Micro | Small | Medium | Total SMEs |
|----------------------------------|---------------|--------------|------------|---------------|
| Advanced Manufacturing | 1,980 | 100 | 25 | 2,105 |
| Biologics | 15 | 5 | 0 | 20 |
| Chemical and Process | 45 | 15 | 15 | 75 |
| Clean Energy, Low C & H | 365 | 50 | 10 | 425 |
| Construction | 2,350 | 160 | 20 | 2,530 |
| Creative, Culture & Leisure | 2,415 | 395 | 40 | 2,850 |
| Digital | 580 | 45 | 5 | 630 |
| Health and Social Care | 510 | 215 | 55 | 780 |
| Logistics | 1,105 | 155 | 30 | 1,290 |
| Professional & Business Services | 2,645 | 205 | 50 | 2,900 |
| Raw Materials & Agriculture | 445 | 15 | 0 | 460 |
| Other Manufacturing | 355 | 80 | 15 | 450 |
| Other Private Services | 2,740 | 275 | 20 | 3,035 |
| Other Public Services | 215 | 30 | 35 | 280 |
| All sectors | 15,765 | 1,750 | 325 | 17,840 |
| Bioscience | 245 | 20 | 15 | 280 |

Source: ONS, NOMIS, UK Business Counts – enterprises. Estimates are rounded to the nearest 5. Totals may not sum due to rounding. Bioscience is a cross-cutting sector encompassing Industrial Food & Drink, Biologics and elements of Chemical & Process and Advanced Manufacturing. SMEs include micro, small and medium enterprises. Position as at mid-March.

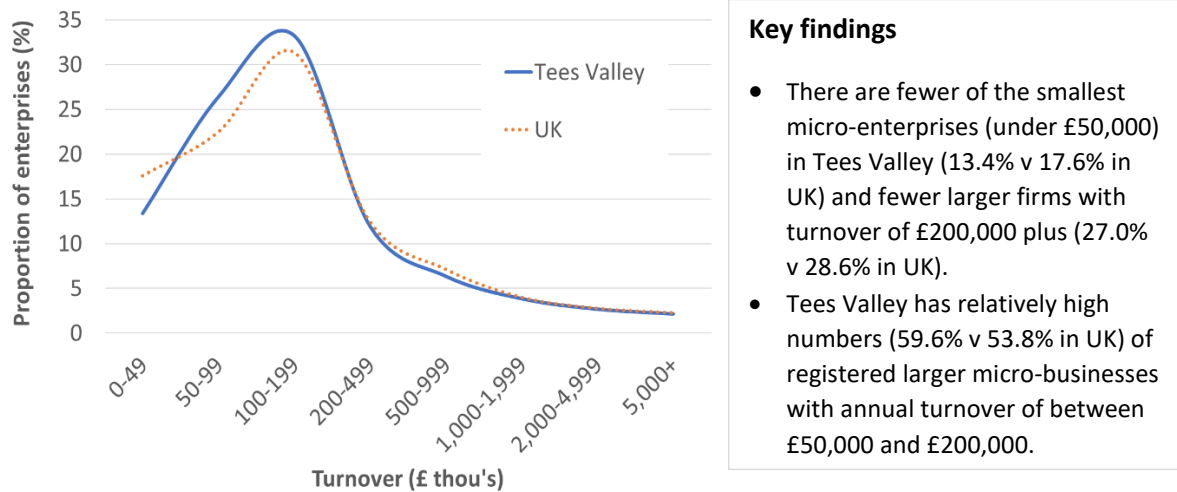
Data issues

The table above should be viewed as an indicative picture of the local business base. It should be noted that a firm may operate in a number of sectors but for analytical purposes is only classified under one primary sector. This may lead to the appearance of sector misallocation. In addition, the allocation of a business site's employment level/band can be affected by disclosure issues and by where the parent business's headquarters or registered address is located.

Turnover

In terms of firm level turnover (sales), Tees Valley displays a turnover band distribution that is somewhat skewed towards larger micro-businesses with annual sales of between £50,000 and £200,000. This contributes to relatively lower aggregate firm level profitability which in turn impacts negatively on aggregate private sector output, GVA and GDP.

Figure 5.2.3. Distribution of registered business enterprises by turnover band, Tees Valley, 2022



Source: ONS, NOMIS, UK Business Counts – enterprises

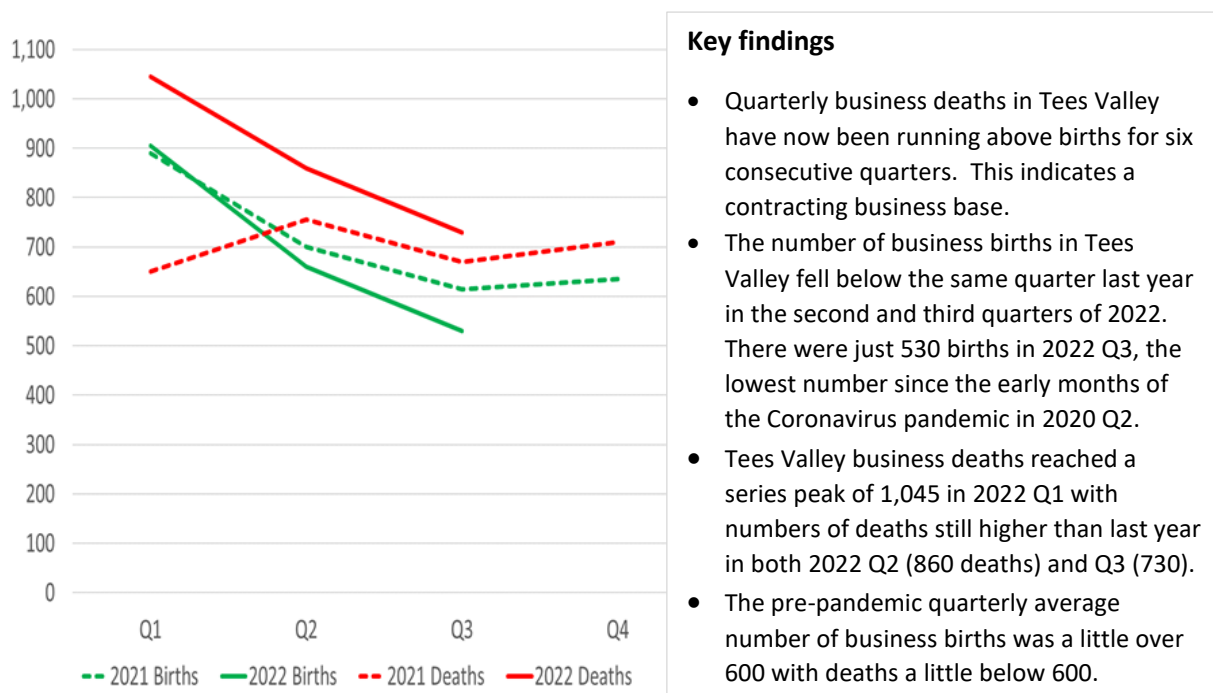
5.2.6. Start-ups, survival rates and high growth firms

Business births and deaths

Experimental quarterly local authority level business creation and closure estimates derived from the Inter-Departmental Business Register (IDBR), the official database of all businesses in the UK registered for VAT and/or the PAYE income tax system are now available from ONS.

Whilst these quarterly estimates are more timely than the annual estimates they are presently only experimental and should therefore be viewed as indicative.

Figure 5.2.4. Tees Valley quarterly business births and deaths, 2021 Q1 to 2022 Q3



Source: ONS

Official annual ONS Business Demography statistics are based on the number of enterprises active at any point during the year in question. This differs from point in time datasets such as UK Business Counts – enterprises, which records numbers each year in March. Therefore, the Business Demography birth and death rates observed across one year (e.g. 2021) will be closely correlated with the headline business enterprise estimates the following year (e.g. March 2022).

Key points – annual business birth and death rates

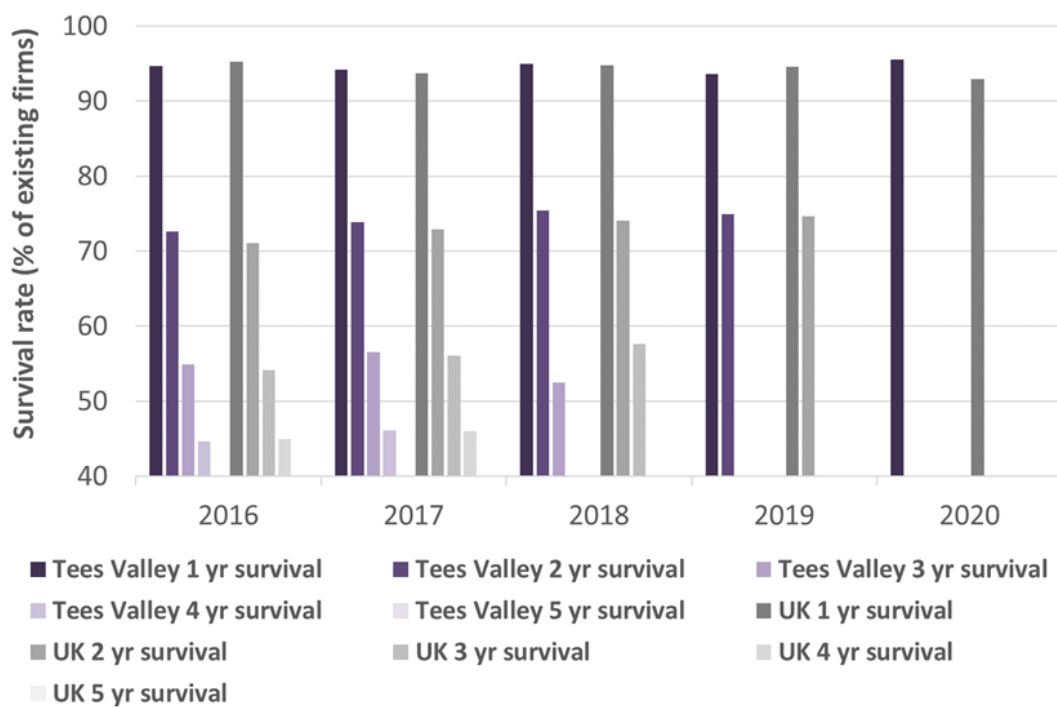
- After 2017 and up to 2021, Tees Valley recorded four consecutive years of a higher business birth rate than death rate.
- 2021 saw increases in both the Tees Valley business enterprise birth rate and death rate. Business births increased by 410 to 2,620 in 2021 whilst business deaths rose by 175 to 2,250.
- The Tees Valley business enterprise birth rate was 13.3% in 2021, well above the UK rate of 11.4%. This rate was also up by 1.8% on the 11.5% observed for Tees Valley in 2020.
- The Tees Valley business enterprise death rate was 11.4% in 2021, a little higher than the UK rate of 11.1%. This rate was up 0.6% from the 10.8% observed for Tees Valley in 2020.

Whilst official business birth and death rates (ONS Business Demography in the box above) are very broadly in line with national rates, these rates are calculated using the existing business stock as the denominator.

If, as for business density, the resident adult population is used as the denominator, then birth and death rates, as for business density, come in at only around two-thirds of UK rates.

This, combined with business survival generally around national rates, indicates that the Tees Valley has relatively low levels of business churn and a stagnant business base.

Figure 5.2.5. Business survival rates, Tees Valley and UK



Source: ONS Business Demography

Key findings – business survival rates

- Tees Valley business survival rates are very similar to national rates.
- The latest estimates suggest that 95.5% of Tees Valley firms born in 2020 were still operating in 2021 (1 year survival rate), 74.9% of those born in 2019 (2 year survival rate), 52.5% of 2018 start-ups (3 year survival rate), 46.1% of 2017 firms (4 year survival rate) and 37.5% of those born in 2016 (5 year survival rate).

Continuing the trend seen in 2020, in terms of sectoral birth rates and closely connected to the increase in online shopping, the transport and storage sector and small courier firms had the highest birth and death rates by some margin. Additionally, the birth rate was significantly above the death rate meaning a sharp increase in the number of firms in this sector.

High growth enterprises

ONS Business Demography also reports on high growth enterprises, defined here as enterprises with at least 10 employees and an average annualised employment growth greater than 20% per annum, over a three year period. Tees Valley's proportion of high growth enterprises – 80 or 3.8% of firms in 2021 matched the UK rate.

Sectorally and nationally, the service sector contains the greatest proportion of high growth firms with Information & Communication, Finance & insurance, Business administration & support services and Professional Scientific & Technical sectors demonstrating high growth rates well above the national all sector average rate.

Scale-ups

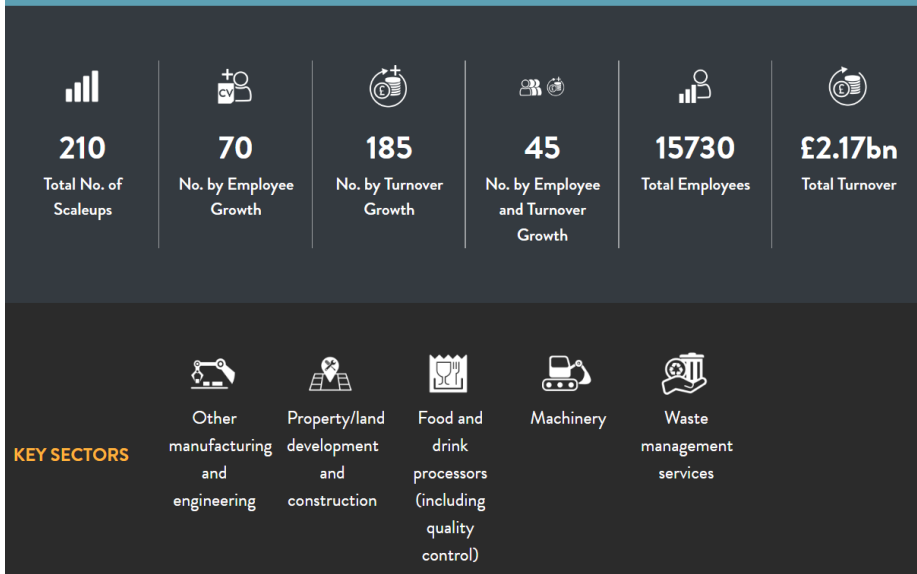
The ScaleUp Institute analysed ONS high growth enterprise data for 2020 against three elements of the OECD high-growth (scaleup) definition. These include the following:

- Scaleups growing by more than 20% per annum by employee growth
- Scaleups growing by more than 20% per annum by turnover growth
- Scaleups growing by more than 20% per annum in both employees and turnover

Tees Valley recorded 210 scaleups in 2020 as detailed below. This was down by 10 (4.5%) on 2019's 220 in contrast to the small rise observed nationally (UK up 1.5%).

LOCAL AREA SUMMARY:

TEES VALLEY

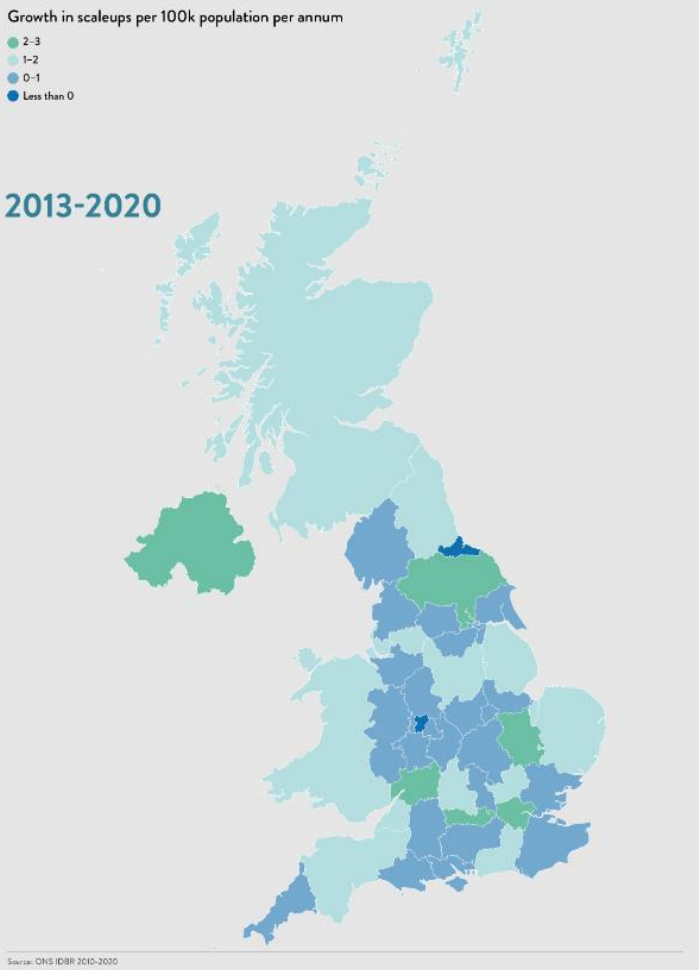


AVERAGE ANNUAL CHANGE IN SCALEUPS PER 100K POP, BY LEP/DEVOLVED NATION

Growth in scaleups per 100k population per annum

- 2-3
- 1-2
- 0-1
- Less than 0

2013-2020



Source: ONS IDBR 2010-2020

Key points

- The Scaleup Institute’s Scaleup Annual Review 2022 records Tees Valley as the LEP/devolved nation with the smallest number of scaleups per 100,000 population in 2020 (31.0) and the area with second slowest average annual growth in scaleup density between 2013 and 2020 at -0.3. Only one other LEP area saw scaleup density decline over this period i.e. Black Country.
- Tees Valley was home to 210 scaleups in 2020. 70 by employment growth, 185 by turnover growth (with 45 by both employment and turnover growth).
- These scaleups employed 15,730 employees and a combined turnover of £2.17 billion.

Source: Scale Institute ScaleUp Annual Review 2022

More positively, Tees Valley scores better for growth of smaller “scaleup pipeline” firms i.e. businesses growing either or both turnover and employment at 15-19.99% annually in the last three-year period (i.e. between 2017-2020) and have the potential to convert into scaleups.

Despite having one of the lowest scaleup pipeline densities in the country (19.2 per 100k population), the average annual growth in scaling pipeline density was 0.6 for the period 2014 to 2020 in Tees Valley, in the top ten LEP areas for growth. This highlights an opportunity locally to redouble efforts to convert more pipeline businesses to full blown scaleups.

The Scaleup Institute, with data analysis from Beauhurst, has also produced a list of named scaleups in Tees Valley. These are listed as below:

| TEES VALLEY – 46 COMPANIES | |
|--------------------------------|----------------------------|
| A V Dawson | Alexanders Motor Group |
| Applebridge Construction | Applied Graphene Materials |
| BMSL Group | C.J. Leonard & Sons |
| Camerons Brewery | Cavendish Northern |
| CIS Northern | Cleveland Cable Company |
| Cleveland Meat Co | Communicate Technology PLC |
| Coopers Chemists | Cordell Group |
| Country Valley Foods | Deepdale Solutions |
| Derek Slack Motors | Direct Line Supplies |
| Fisher Outdoor Leisure | Greencroft Milk Supplies |
| Gus Robinson Developments | HMC Group |
| Idec Group | Isotank Group |
| JT Atkinson | LJJ Ltd |
| Magnum Packaging | Mandale Group |
| MAP Group | Modus Seabed Intervention |
| Nifco UK | Niramax |
| PX Group | QA Weld Tech |
| Ramsdens | Scott Bros |
| Subsea Innovation | Tees Components |
| The Almit Group | The Feel Good Group |
| Total Recycling Services | Ward Bros (Steel) |
| Wearmouth Construction & Plant | Whitehead Alloys |
| Wilton Engineering Services | Wynyard Hall |

Source: Scaleup Institute and Beauhurst. Visible scaleup companies in England. Based on Companies House data excluding charitable and third sector scaleups and listed companies.

5.2.7. Business Growth SWOT analysis

| Strengths | Weaknesses |
|---|--|
| <p>Tees Valley's business base grew at a faster rate than nationally between March 2021 and March 2022.</p> <p>Tees Valley has high levels of employment concentration in a wide range of sectors including Advanced Manufacturing; Chemical & Process; Clean Energy, Low Carbon & Hydrogen and Health & Social Care.</p> <p>Teesside Freeport is operational and is already attracting new business and investment in emerging green sectors.</p> | <p>Turnover within Tees Valley firms is generally below national levels across the whole economy.</p> <p>Persistently low aggregate business density and relatively fewer firms demonstrating productivity improvement.</p> <p>Mirroring the broader business environment, Tees Valley has the lowest proportion of faster growing enterprises in England.</p> |
| Opportunities | Threats |
| <p>The pandemic has accelerated the ongoing reorganisation of global supply chains towards the local and regional. Tees Valley is well placed to benefit from this increasing trend towards reshoring in areas such as manufacturing and bio-processing. This particularly aligns to opportunities at the Teesside Freeport.</p> <p>Sectors exhibiting some of the strongest sectoral start-up rates reflect the increasing trend towards digital ways of working and shopping with transport and storage, including courier services, showing the highest rates of business start-up even before the pandemic.</p> <p>The Economic Campus in Darlington creates opportunities to grow the Professional & Business services sector.</p> | <p>Greater prevalence of relatively low value enterprises combined with a lack of business churn. This impacts negatively on productivity, creates barriers to entry and constrains market opportunity for new start-up firms.</p> <p>A relatively low concentration of firms in high growth service sectors.</p> <p>The global economic slowdown and supply chain issues may act to stifle Tees Valley business growth.</p> |

5.3. Clean Growth and Innovation

5.3.1. Introduction

This section details Tees Valley's performance in relation to research and development, innovation, and clean energy.

Tees Valley is home to globally competitive industries and innovation assets. Maintaining this competitiveness and growing the Tees Valley economy is dependent on innovation, however only 14% of firms are currently engaged in innovation collaboration or developing new products.

Targeted interventions in green energy, offshore technology, and Carbon Capture, Utilisation and Storage (CCUS) could have a significant impact on local productivity and prosperity, whilst establishing Tees Valley as a clean energy powerhouse of the UK. The Combined Authority has allocated £20 million in its Investment Plan to supporting research, development, and innovation.

The inclusion of Clean Energy within this section, reflects the region's ambition, and continued progress to establish Tees Valley as a global lead for Clean Energy, Low Carbon and Hydrogen, through an innovation-led agenda. The Tees Valley economy has key strengths in the chemical and process industries, advanced manufacturing, and offshore engineering, where we compete in global markets. Innovation, in its various forms is pivotal to ensuring the longevity of these competitive industries within the region – whilst also helping to move all our sectors up the value chain to drive productivity growth.

Within the Tees Valley there are currently a number of established innovation assets, which reflect our current and emerging sector strengths, including:

- Centre for Process Innovation: The National Catapult Centre for the UK Chemical and Bioscience sectors and a member of the High Value Manufacturing Catapult; and
- The Materials Processing Institute: an internationally recognised research facility focussing on the development of materials and the commercialisation of technologies for industrial processes; and
- TWI: a global leader in materials research and engineering processes, with Hydrogen Supply chain expertise.

Furthermore, Teesside University is well integrated into the regional innovation system to enable additional collaboration and expand the capabilities of the regions innovation assets. It is particularly active in digital and bioscience sectors (through DigitalCity, the Industrial Digitalisation Technology Centre (IDTC) and the National Horizons Centre respectively) and more generally through academic-business knowledge exchange. The university is also establishing a Net Zero Innovation Centre, located on a shared campus with TWI in the centre of Middlesbrough. This will support the scale up and demonstration of all aspects of Net Zero technology.

It is noteworthy that the recent 'project development' phases for what is today very visible as Net Zero Teesside, The Northern Endurance Project and the large-scale Hydrogen Projects from both bp, Kellas Midstream and others which have followed are now coming to an end, with these projects now awaiting decisions from the BEIS Cluster Sequencing Competition. These projects have been nurtured and supported from an early age by the Authority and, we anticipate, will shortly start to

become a reality. These projects will in turn lead to a future increase in innovation intensity, perhaps more focussed around 'learning by doing' and 'doing better'; critically they will also stimulate local supply chains and clusters of new industry, from which more primary product and process development innovation is expected to be driven, such that the virtuous circle of innovation will continue.

The [Net Zero Strategy for Tees Valley](#) was approved by TVCA Cabinet in December 2022. The strategy articulates the overall vision for a Net Zero Tees Valley, bringing together existing strategies and individual organisational targets into a single shared ambition. The strategy will bring together necessary partners to enable the region to reach Net Zero, laying the groundwork for a future built around sustainable industries and more resilient natural environment and will be used to inform future investments and economic interventions. The strategy's top ten priorities are:

1. Delivering the UK's first decarbonised heavy industrial cluster by 2040.
2. Delivering large-scale carbon capture, utilisation and storage and over 4GW of hydrogen production by 2030.
3. Creating a National Hydrogen Transport Hub, supporting the transition to zero emission transport.
4. Supporting Teesside International Airport to be Net Zero in its operations by 2030 and supporting the development of Sustainable Aviation Fuels to pursue Net Zero flights by 2035 – making it the UK's first Net Zero Airport.
5. Using our natural capital and responsibility for the Local Nature Recovery strategy to help mitigate the effects of climate change, support flood resilience and improve access to green and blue spaces – including by promoting tree planting by residents and community groups and working with private landowners on larger tree planting schemes.
6. Increasing the number of public Electric Vehicle charging points in Tees Valley by 200% by 2025 as part of a plan to deliver a Net Zero local transport network by 2036.
7. Supporting the national target of all homes being rated to EPC C and above by 2035.
8. Support all public sector organisations in the delivery of their own Net Zero strategies and supporting more than 1,000 businesses to adopt new practices and achieve carbon savings by 2035.
9. Provide online services to help residents monitor and reduce their environmental impact.
10. Deliver training and employment opportunities aligned to the new green economy.

5.3.2. Key Messages

- Lower number of firms participating in all forms of innovation.
- Systemic R&D funding imbalance between Tees Valley and other LEPs.
- BERD per FTE for the North East region stands at 46.6% of the national average.
- £13.5 million R&D facility as part of expanding Net Zero Industry Innovation Centre which is due to open in summer 2023.
- Several major private sector blue, green and bio hydrogen projects in Tees Valley.
- Tees Valley at the forefront of CCUS through projects including Net Zero Teesside.
- Industry emissions per capita are falling in the Tees Valley.

5.3.3. Innovation Benchmarks

Note: ‘Benchmarking Local Innovation’ report is published biannually, and this section has not been updated in this year’s Economic Assessment.

The Enterprise Research Centre (ERC) local innovation benchmarking report published in July 2021, analyses the innovation performance of all LEP areas against nine different metrics. Its indicators are directly comparable with those in the previous edition (published June 2019) of the report. The latest report analyses data from the 2019 UK Innovation Survey which relates to firms’ innovation activity during the three-year period from 2016 to 2018. The 2019 report examined the UK Innovation Survey of 2017 and covered the period between 2014 and 2016.

Table 5.3.1. Tees Valley Innovation Scores, 2019 and 2021

| | Lowest LEP score | | Median LEP score | | Highest LEP score | | Tees Valley score | |
|---|------------------|------|------------------|------|-------------------|------|-------------------|------|
| | 2019 | 2021 | 2019 | 2021 | 2019 | 2021 | 2019 | 2021 |
| Organisational and Marketing Innovation strand | | | | | | | | |
| New business practices | 12% | 8% | 24% | 12% | 39% | 21% | 20% | 14% |
| New methods of work organisation | 13% | 8% | 19% | 12% | 29% | 16% | 19% | n/a |
| Marketing innovation | 9% | 3% | 14% | 8% | 23% | 12% | n/a | n/a |
| Structure and Approach to Innovation strand | | | | | | | | |
| Engaged in R&D | 13% | 9% | 22% | 18% | 40% | 32% | n/a | 16% |
| Design investment | 6% | 5% | 13% | 11% | 20% | 18% | n/a | n/a |
| Collaboration | 21% | 13% | 31% | 22% | 48% | 30% | 21% | n/a |
| Outcomes/Success of Innovation strand | | | | | | | | |
| Product and service innovation | 21% | 10% | 25% | 20% | 38% | 30% | 21% | 12% |
| Sales of innovative products/services | 18% | 4% | 37% | 9% | 50% | 18% | 42% | n/a |
| Process innovation | 13% | 6% | 18% | 15% | 29% | 22% | 13% | n/a |

Source: Enterprise Research Centre. Percentages indicate proportion of firms engaged in identified innovation activity. n/a – estimate not available. The shading shows how Tees Valley compares against the median LEP score – red is lower than the median LEP score, orange the same and green higher.

The table shows that the median LEP score for all nine metrics have fallen from the previous edition published in 2019. Two of the three metrics that are available for the Tees Valley region have comparable scores from the previous report, both of which have fallen. This suggests a falling number of firms participating in all forms of innovation through the metrics presented in the report.

Additionally, the table shows that Tees Valley firms generally score below the LEP median on two of the three indicators. However, a notable exception is the ‘New business practices’ indicator where Tees Valley firms rank slightly above the national median. The idea that a higher proportion of Tees Valley firms are adopting new practices within their business could be a signal of the shifting landscape within the region as it shifts towards a green sector leader.

A number of other sources highlight those levels of innovation activity in the region fall below levels of activity and investment seen in other parts of the country. Data from the 2020 UK Innovation Survey show that the commercialisation of new innovations also has room for improvement: just 7.0% of turnover was from new to market innovations (compared to a UK median of 9.6%) and 12.5% of turnover was from new to business innovations (UK median of 12.9%).

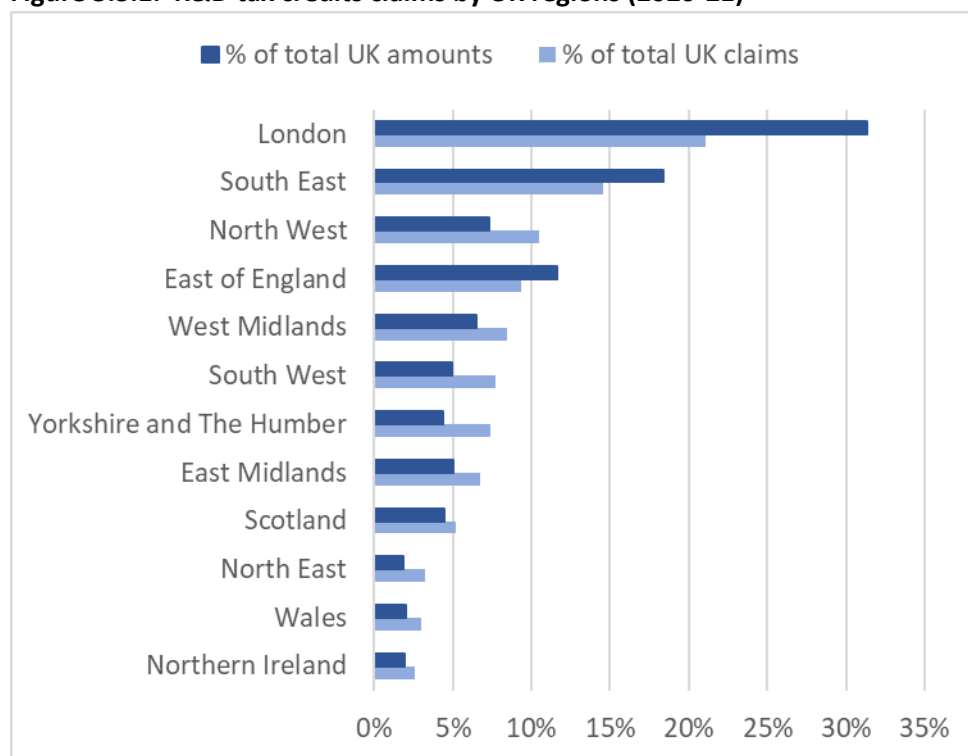
5.3.4. R&D Tax Credits

R&D tax credits are a tax relief designed to encourage greater R&D spending and so their take-up is an indicator of innovation activity. HMRC’s R&D tax credit statistics for 2020-21 show that firms in the North East made 2,900 claims (3.2% of UK total) to the scheme, at a total cost of £125 million (2.0% of UK total). The total number of claims increased by 265 claims, up 0.1% on the percentage of the UK total, whilst the total cost fell by £30 million, down 0.4% on the percentage of the UK total.

The additional local authority analysis for 2019-20 show that the five Tees Valley LAs made 565 claims to the scheme, or 20.5% of the North East total; firms in Stockton-on-Tees constituted the bulk of this with 220 claims. The regional sector breakdown shows that most claims in the North East were made by firms in either manufacturing (26.6%), professional, scientific, and technical activities (20.1%) and information & communication (17.6%).

The below table shows that the value and number of claims is concentrated mainly in the East and South East of England, particularly London. Note that the figures are liable to upward revision in future editions of this dataset, due to further claims being backdated in future years.

Figure 5.3.1. R&D tax credits claims by UK regions (2020-21)



Source: HMRC R&D tax credits statistics

There is a wealth of evidence that suggests systemic R&D funding imbalances between Tees Valley and LEPs in more prosperous parts of the UK. For instance, in 2017 Tees Valley received £2.9 million in research and innovation funding, while the Great Cambridge and Greater Peterborough LEP area received £524 million (BEIS LEP Outlook Report, 2019). The same LEP received over £1 billion in UKRI grants in 2014, while Tees Valley received just £8.3 million over the same time period (UKRI, 2019). Between 2007 and 2016, London and the South East received a total of £779.8 million of capital investment from the government for science projects; by contrast the North East received just £20 million (Nesta, 2020; NAO, 2016).

However, a £13.5 million research and innovation facility is currently under construction in the Tees Valley, as part of the expanding Net Zero Industry Innovation Centre (NZIIC), due to be opened in June 2023. The NZIIC is spearheaded by Teesside University and based on the Tees Advanced Manufacturing Park (TeesAMP). This will help to bridge the gap between R&D in Tees Valley compared the rest of the UK as well as again highlighting the region's position as a forerunner for clean energy and sustainability.

5.3.5. Business Expenditure on Research & Development (BERD)

Note: BERD data at a regional level has been paused for validation and therefore is not available for 2021, this section has not been updated in this year's Economic Assessment.

Regionally, 2020 estimates are now available through ONS. North East BERD rose slightly from £415 million in 2019 to £444 million, or a 7.0% increase from 2019 (£29 million). The increase observed in the North East is higher than that observed for the whole of the UK, where BERD rose by 3.5% or £900 million to £26,937 million in 2020. The North East figures is a reverse of last year, which was the first fall in BERD for five years, however last year's fall has been fully reversed in 2020. Additionally, the regional BERD remains 42.3% above the 2016 baseline.

In terms of BERD per Full Time Employee (FTE), the North East figure of £647 was 46.6% of the national rate (£1,387 per FTE for England); this disparity has fallen from the previous year, rising from 44.2% of the English Average. Applying the North East rate to the number of Tees Valley FTEs gives an R&D expenditure total of £110 million for the area.

Furthermore, the North East region has approximately 7,000 employees working in research and development performed in UK businesses. This represents 2.5% of the UK's total employees in R&D, whereas the North East region is responsible for only 1.6% of the UK's 2020 BERD total.

5.3.6. Green Energy

Tees Valley is home to an array of companies and commercial operations, including many within the 'green energy' industry. As the UK and the rest of the world transition to Net Zero, this sector will grow in importance with the potential to further support and maintain both the local and wider national economies. The Tees Valley has a particular strength in this industry, which can be utilised to make the region the place to be for projects surrounding hydrogen production, offshore wind and Carbon, Capture, Utilisation and Storage (CCUS) to name a few.

TVCA is leading work on using Carbon Capture, Utilisation and Storage (CCUS), decarbonised hydrogen, and green energy to get the region's industry to Net Zero by 2040. Tees Valley's Cluster Plan for Industrial Decarbonisation brings together government and industry to decarbonise the major emitters in the heart of the Teesside industrial cluster. More than forty companies are included in the cluster plan and most of these companies are located within a 5km radius and include world renowned firms, such as Anglo American, BP, Sabic, and Huntsman.

Net Zero Teesside & Carbon Capture

The UK Government has set a target to achieve net zero emissions by 2050. While the UK is aiming to be a leading country in the transition to net zero, Tees Valley is positioning itself at forefront of delivering net zero goals for industry, with a local ambition to achieve a net zero industrial cluster by

2040. The Tees Valley is a prime location due to being a historical industrial heartland, with many high emitting industries being located in the region for many generations. This is evidenced by the table below that highlights disparity between the Combined Authorities figures and that of the UK for the last six years. Note the sharp fall in Tees Valley emissions in 2016 following the closure of the SSI steel plant in Autumn 2015.

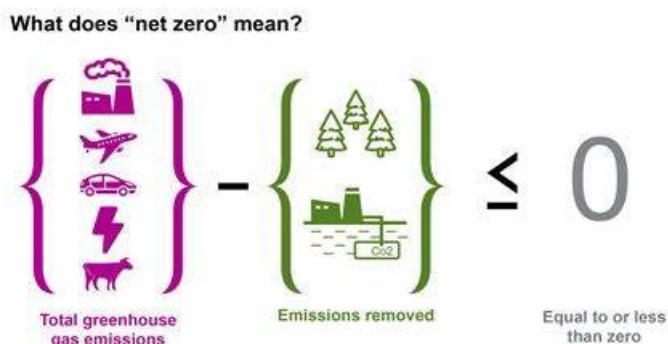
Table 5.3.2. Tees Valley and UK CO₂ emission estimates, 2015 to 2020

| | Tees Valley Industry Emissions per capita (t) | UK Industry Emissions per capita (t) |
|-------------|---|--------------------------------------|
| 2015 | 11.62 | 6.11 |
| 2016 | 6.87 | 5.71 |
| 2017 | 7.02 | 5.50 |
| 2018 | 6.59 | 5.37 |
| 2019 | 6.33 | 5.11 |
| 2020 | 5.75 | 4.56 |

Source: Department for Business, Energy & Industrial Strategy (BEIS), 2022

The term Net Zero is often confused by many as there is not a single simple definition universally used. However, the illustration below simplifies the meaning of net zero into a simple infographic.

Figure 5.3.2. Net Zero Explanation



Source: Scottish Government

Energy Hubs

The North East and Yorkshire (NEY) Net Zero Hub supports people and businesses across the North East and Yorkshire region to deliver projects that will facilitate the UK's transition to Net Zero by 2050, as well as delivering funding competitions that directly finance clean energy and low carbon projects. The Hub delivers across a set of strategic priorities, including:

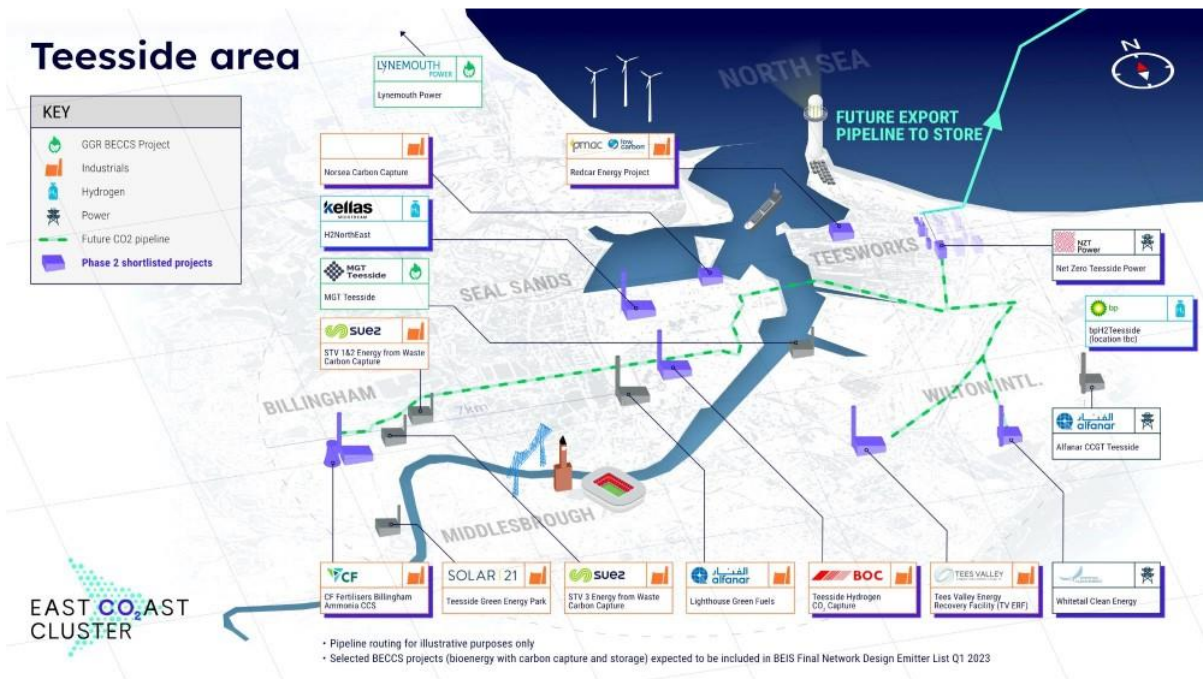
- Heat Decarbonisation
- Natural Carbon Sequestration
- Circular Economy
- Renewable Energy Technologies

Carbon Capture Utilisation & Storage

Carbon capture, utilisation, and storage technologies (CCUS) are an emerging opportunity set to be deployed at commercial scale. The UK government has demonstrated an appetite for growing the sector, including the announcement of £1 billion to develop CCUS projects as part of the UK's Net Zero Strategy. In October 2021, it was announced that the East Coast Cluster, comprising of Net Zero Teesside (NZZ), the Northern Endurance Partnership (NEP) and Zero Carbon Humber, was selected as one of two premier net zero projects to lead the UK's net zero ambitions and stands ready to remove 50%.



The Tees Valley part of the East Coast Cluster is shown in more detail below



NZT, which is a key part of the East Coast Cluster and the NEP is led by bp with the support of other companies such as Equinor, Shell, Total and ENI. The aims of the CCUS project are to be operational by 2026 and assist in creating the country's first decarbonised industrial cluster in the region. In addition, the project will store up to 6 MT of CO₂ each year, which is equivalent to the annual energy use of more than 2 million homes, along with producing 1.8GW of decarbonised electricity and delivering decarbonised hydrogen at both scale and low cost. This will be achieved by building a dispatchable gas fired power station on the Teesworks sites with full carbon capture capability. It is worth noting that the generators will be able to be ramped up and down in line with and to balance available renewable energy, hence being a dispatchable power station. This will become increasingly important as the proportion of renewables in the UK electricity supply increases over time.

Tees Valley is at the forefront of this revolution due to pre-existing strength in engineering, construction and the robust local oil, gas, and chemical sectors, meaning we are well suited to capitalise on this growing market and become a world-leader in net-zero emission industries. NZT is set to support and safeguard between 35% and 70% of existing manufacturing jobs in Tees Valley as well as add up to £450 million in GVA annually. Furthermore, an additional 5,500 direct jobs are expected to be created during the construction of the schemes. The projects would safeguard existing manufacturing jobs in Teesside and upskill the labour force to ensure the full economic benefits are realised.

The NEP project underpins the decarbonisation of the Tees Valley industrial cluster by developing the infrastructure needed to capture not only the emissions from the NZT power plant but also those from hard to decarbonise industrial processes such as Ammonia production. The NEP network will also allow production of low cost decarbonised hydrogen, decarbonise energy from waste production and enable the deployment of negative emission technologies including biomass fuelled electricity generation and direct air capture. These in turn will enable processes such as sustainable aviation fuel production to be developed.

Hydrogen

Much of the Tees Valley's present 'hydrogen economy' is built upon legacy ICI capability, which remain within clusters of independently owned 'branch plants'. Despite the separate ownership, they still remain linked by both infrastructure and supply chains.

The most prominent plant in Teesside, operated by BOC, is a large steam methane reformation unit converting natural gas to hydrogen, located on the North Tees Site. In addition, CF Fertilisers and Sabic Petrochemicals have substantial hydrogen production which is then consumed within their process operation.

At the present time, the Tees Valley imports approximately 26% of the UK's natural gas through a Central Area Transmission System (CATS) pipeline and an onshore gas treatment plant operated by Kellas Midstream and the Teesside Gas Processing plant owned by NSMP (North Sea Midstream Partners).

Figure 5.3.3. A Vision for Hydrogen in the Tees Valley

A vision for hydrogen in the Tees Valley

- 01 Initial development of large scale blue hydrogen (CCUS enabled) facilities, facilitated by the Northern Endurance Partnership's subsea saline aquifers. Green hydrogen (electrolytic) grows significantly over time, drawing on increasing access to offshore wind available near Teesside.
- 02 Supply of low carbon hydrogen into the gas distribution network, initially to decrease the carbon intensity of the natural gas grid serving homes and buildings via blending.
- 03 Supply of hydrogen into the gas distribution grid (building on the hydrogen village trial at Redcar hydrogen community), first via blending to 20%, later with 100% hydrogen.
- 04 Export of increasing volumes of hydrogen to meet demand. South to the Humber region and west to Cumbria (via East Coast hydrogen), north to Scotland, and east via ship to Europe.
- 05 Running of hydrogen trains on the Tees Valley line and then further afield.
- 06 Production of sustainable aviation fuels (SAF) for use at Teesside International Airport and exported nationally and internationally.
- 07 Recycling of scrap steel into green steel using hydrogen.
- 08 Deployment of fleets of hydrogen buses, public sector vehicles and other hard to decarbonise vehicles.
- 09 Production of green ammonia and other green chemical products.
- 10 Supporting the development of Teesside freeport as a green port hub with decarbonised shipping, hydrogen infrastructure and the export of hydrogen internationally.
- 11 Attraction into the Tees Valley region of new global industries and organisations seeking to secure sources of low and zero carbon energy, leading to further growth in hydrogen production and investment.



There is huge economic growth potential in the development of a hydrogen economy and associated infrastructure in the Tees Valley. Conversion of the gas grid and of consumer premises promises significant employment activity.

TVCA are currently supporting several major private sector blue, green and bio hydrogen projects in Tees Valley, indicating that major international businesses have concluded that investment in Net Zero is fundamental to their long-term growth, including:

- **BP's 1GW H2 Teesside Blue Hydrogen and HyGreen project, which targets 60MW Green Hydrogen production by 2025 and 500MW by 2030.** In March 2021 bp announced a 'blue' hydrogen facility, which is also targeting 1GW of hydrogen production. The proposed development called 'H2Teesside' will also utilise the CO2 storage capability in the North Sea in partnership with NEP, which will support the low carbon transformation in the Tees Valley. The development is expected to be completed in 2027, with the process being fully operational in 2029. With both of these projects expected to have a capability of 2GW worth of 'blue' hydrogen, Tees Valley will account for 40% of the governments 5GW capacity by 2030.
- **Kellas' 1GW H2 North East Blue Hydrogen project.** In October 2021 Kellas Midstream announced a strategic initiative to build a 1GW facility producing 'blue hydrogen' through the utilisation of their existing assets. The hydrogen produced will be 'blue' due to over 95% of the CO2 produced from the process being captured and stored in the North Sea, in collaboration with Northern Endurance Partnership (NEP). The project called 'H2NorthEast' is expected to be operational in 2027 and will assist the government to meet their target of 5GW capacity of 'blue' hydrogen by 2030.
- **Protium Green Solution's 70MW Green Hydrogen project.** Protium is the UK's largest Green Hydrogen firm and is working on plans for a hydrogen production facility at Wilton Universal Group's site and is due to be completed in 2026. The project site, known as Tees Valley Net Zero, will generate renewable green hydrogen energy, with proposals to supply local manufacturers once it is built. Once complete, it is envisaged this plant will generate almost 70MW of green hydrogen energy, saving 55,700 tonnes of CO2 per year.
- **EDF's newly announced Green Hydrogen project** in Redcar supplying clean fuel to British steel for steel reheating furnaces.
- **SABIC** have agreed to restart their cracker at Wilton International and convert it to run on hydrogen, which will cut CO2 emissions from 1MT to 0.3MT per year, with a route to achieve less than 0.001MT. This will be achieved by configuring the asset to utilise the available hydrogen to be burned instead of the natural gas, thus resulting in a reduction in CO2 emitted.
- **Redcar Hydrogen Community with Northern Gas Networks** is a proposed project to change the supply of natural gas to hydrogen at a 'several thousand metre point scale' as part of the wider Hy4Heat Programme funded by BEIS. The project would involve the replacement of all domestic gas appliances with those suitable for hydrogen, with consumer agreement and the objective of the project will be to demonstrate the efficacy of Hydrogen as a source of low carbon heat for households and light industry. BEIS have committed to funding this work and this is one of two shortlisted bids (the other being in the NW). A decision on the proposal will be made in 2023.
- **East Coast Hydrogen** is an ambitious 15 year large-scale infrastructure programme aiming to decarbonise the most carbon-intensive sectors in the UK through the provision of low carbon hydrogen. The Tees Valley is one of the two centres for the production and storage

of the hydrogen needed to decarbonise the gas grid along the eastern side of the northern England as shown in the figure below.

Figure 5.3.4. East Coast Hydrogen



Hydrogen for Transport Decarbonisation

Through Tees Valley’s role as the national Hydrogen Transport Hub, the region is also leading nationally on the development and testing of transport technologies using this low emission fuel source, for which international demand is anticipated and in which there is increasing interest globally. Hydrogen transport infrastructure construction and its supporting supply chain including for road and rail sectors adds further opportunities for employment and investment, both in process plant construction, network modification and consumer installations.

Moreover, Teesside International Airport (TIA) is leading the transition towards a greener UK aviation industry as it is implementing a decarbonisation action plan designed to make the airport operationally Net Zero by 2030 and deliver the UK’s first Net Zero airport by 2035. As well as setting out steps to halve the airport’s operational energy consumption, this action plan includes ambitious plans for the airport to install its own renewable energy systems, allowing it to become self-sufficient in energy production and even sell excess energy to the national grid. The airport is also transitioning its ground operation vehicles to zero emission hydrogen-powered vehicles, as well as participating in a number of major hydrogen refuelling centre projects. TIA is also partnering and brokering significant Sustainable Aviation Fuel projects, connecting aviation businesses to local industrial innovators and making the airport available as a test bed for ground-breaking projects, with the long-term aim of encouraging more airlines to fly from the airport due to the local availability of Sustainable Aviation Fuels.

Renewable & Low Carbon Energy

Wind power is contributing an increasing share of the UK's total electricity, accounting for 24% in 2020. It is clear that this renewable generation is key to the Net Zero plans. Tees Valley is situated in a prime position to continue to support the offshore wind industry located in the North Sea, especially since the northern North Sea experiences higher average wind speeds than anywhere else in Europe.

Construction of an offshore turbine base factory has begun by SeAH Wind at Teesworks and will offer 1.13 million sq ft of high-quality factory space for the production of monopiles up to 120m in length, 15.5m in diameter and weighing 3,000 tons which are used to support offshore wind turbines. The factory is expected to employ 750 direct roles when the site is fully operational and 1,500 indirect jobs through supply chains. The monopiles will be utilised at Dogger Bank Wind Farm, which is one of the world's largest wind farm located 80 miles off the North East coast, with enabling works for onshore convertor station platforms currently under construction near Redcar.

Hartlepool nuclear power station provides around 2% of UK's electricity demand and is presently expected to remain operational to 2024, although closure may be delayed. The sites decommissioning activity will provide employment for a significant period and in addition the location is being considered for deployment of small modular nuclear reactors for base load dispatchable power generation.

Renewable Fuels

Tees Valley is a significant UK cluster for sustainable low carbon transport fuel - key to a low carbon future – with current activity including:

- Greenergy: currently operates a refinery on Teesside producing up to 250,000 tonnes of biodiesel per year from waste cooking oils.
- Alfanar Group's Lighthouse Green Fuels Project will see £1 billion investment at Port Clarence to produce Sustainable Aviation Fuel from waste.
- Circular Fuels plan to use residual waste to make 50,000 tonnes per year of sustainable fuel (renewable dimethyl ether (rDME), a safe, cost-effective and clean burning fuel. This renewable fuel behaves in the same way as LPG and can be stored in cylinders and used by those properties not connected to the UK's national gas grid.
- Ensus operate a biorefinery producing 400 million litres of renewable ethanol and 350 thousand tonnes of high protein animal feed (DDGS) from agricultural crops. The CO2 produced is liquefied and used in the food industry. Ensus have 106 direct employees on Teesside and believe that the jobs created indirectly through their whole supply chain is between 2,000-3,000.

Sustainable Foodstuffs & Biotechnology

In July 2022, a £2 million investment was announced for research and product development organisation CPI, based at the Wilton Centre in Redcar, to establish a new food grade manufacturing facility. The funding will support the UK National Food Strategy, helping to create alternative proteins and nutrients as part of the drive for new and improved food ingredients. The laboratories will support research into global demands for food and sustainability as well as environmental and

animal welfare concerns which are currently driving emerging trends in food, feed and associated markets.

Marlow Foods also operate a large-scale fermentation plant at Billingham which produces the essential natural ingredient for its popular range of Quorn products and which is developing lower carbon production processes.

Battery Technology

In November 2022, Green Lithium announced its plans for a lithium refinery at Teesport in Middlesbrough, delivering more than 1,000 jobs in construction and 250 long-term high-skills jobs when up and running. Tees Valley Lithium is also looking to establish a £200 million lithium hydroxide processing facility on the Wilton International site in Redcar & Cleveland. Lithium is an essential component of batteries and is critical for automotive and energy industries.

Natural Capital

Despite being a largely urban region, the Tees Valley has been awarded £300,000 from the governments Woodland Creation Accelerator Fund to help create 50 hectares of woodland in 2023/24, rising to 150 hectares by 2025, as well as support the planting of 1,000 larger street trees across the region annually in those two years. This project is a partnership between the Tees Valley Mayor and Combined Authority and its constituent local authority partners, Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton-on-Tees, supported by the North East and Yorkshire Net Zero Hub. Across the UK more than 100 new green jobs will be created with an emphasis on upskilling professionals from outside the forestry sector to help expand the industry's workforce, address skills shortages and help to grow the economy.

Energy Efficiency and Energy Demand

The SME Energy Efficiency Scheme (SMEEEs) is a £2.9 million 3-year project, funded by ERDF. Eligible Tees Valley SMEs can access free site and premises specific energy assessments to identify energy usage and how efficiencies can be made to reduce costs and reduce Green House Gas emissions and a grant award scheme to help fund the upfront costs of implementing energy saving projects.

Phase 2 of the Local Authority Delivery Scheme (LAD2) aims to cut bills and improve energy efficiency in low-income homes across both the Tees Valley and the broader North East and Yorkshire region. The scheme is now active across all five local authority areas and Tees Valley has also benefited from additional funding measures such as the Social Housing Decarbonisation Fund (aimed at improving the energy performance of social housing) and the Homes Upgrade Grant (HUG), aimed at private homeowners and renters who are not connected to the gas network.

North East and Yorkshire Net Zero Hub Solar for Schools programme helps schools and further education colleges across the region access funding to install solar panels, as well as education initiatives to encourage students, school, and parents to be more environmentally friendly.

5.3.7. Clean Growth and Innovation SWOT analysis

| Strengths | Weaknesses |
|--|---|
| <p>Nationally recognised ambition to establish Tees Valley as a global leader in clean energy, low carbon, and Hydrogen, and to achieve a net zero industrial cluster by 2040. Multiple projects already announced, and a strong role for Tees Valley working with Northern LEPs in leading the agenda at a pan-Northern level.</p> <p>Continued progress in the development of projects such as Net Zero Teesside (NZE) and the Northern Endurance Partnership (NEP) highlights the regional strengths being built through these developments.</p> <p>The Tees Valley is home to the North East, Yorkshire and Humber Energy Hub, one of only five BEIS funded Local Energy Hubs in England, bringing financial and technical support capacity to the region, and accelerating the number, quality and scale of local energy projects being delivered.</p> <p>Strong innovation assets including centres of excellence and innovation centres such as CPI, MPI and TWI.</p> <p>Up-to-date technical expertise across existing workforce and through local technical training provision.</p> <p>Nationally recognised, wide-ranging strength across Clean Energy, Low Carbon & Hydrogen sub-sectors including Energy from Waste, Biomass and Biofuels.</p> | <p>Relatively low levels of business expenditure on Research & Development and commercialisation of new innovations.</p> <p>Relatively poor performance across many innovation metrics suggests significant scope for further investment across all aspects of the Tees Valley innovation ecosystem.</p> |
| Opportunities | Threats |
| <p>Sites such as Teesworks, supported by the Teesside Freeport, continue to offer an opportunity to attract innovative high value manufacturing, along with existing industrial sites such as Teesside Advanced Manufacturing Park.</p> <p>Business spread across a small physical region has resulted in a close community that discusses, shares, and cooperates well across many platforms and disciplines. Local knowledge sharing is well developed, reinforced by several ongoing Knowledge Transfer Partnerships.</p> | <p>Lack of critical SME business mass in many sectors associated with significant constraints on firms' innovation absorptive capacity. This is supported by North East firms being more prone to collaboration with higher education institutes over firms in the same industry.</p> <p>Erosion of skills base may hamper the region's future innovation potential. The skill gap is present further in the People and Skills section of this report.</p> |

Development opportunities in energy including carbon capture, storage, and utilisation cluster as well as Hydrogen transport hub.

Collaboration in innovation, as demonstrated by Knowledge Transfer Partnerships, provide a platform for future R&D.

The Tees Valley's rich industrial strengths will lead to digital innovation opportunities, with automation of traditional manufacturing and industrial practices using smart technology such as AI and the IoT.

International uncertainties impacting on FDI and international collaborative working on Science and Innovation, particularly with recent increases in grant funding from international sources.

Section 6: Performance Gaps and SEP 2016 Baselines

Economic metrics – performance gaps

| | Period | Tees Valley | National UK comparator | Tees Valley as % of UK average |
|--|---------------|-------------|------------------------|--------------------------------|
| Economy – GDP per capita | 2020 | £23,206 | £31,972 | 72.6 |
| Productivity – GVA per hour worked | 2020 | £33.1 | £37.7 | 87.8 |
| Earnings – Median weekly pay | 2022 | £480.0 | £532.5 | 90.1 |
| Gross disposable household income per capita | 2020 | £17,299 | £21,440 | 80.7 |
| Employment rate | Jul'21-Jun'22 | 68.8% | 75.4% | 91.2 |
| Workplace employment in high skill occupations | Jul'21-Jun'22 | 40.3% | 51.2% | 78.7 |
| Education – Qualified to NVQ4+ | Jan-Dec'21 | 33.4% | 43.5% | 76.8 |

Source: ONS

SEP 2016 baseline information and updates

The tables below summarise the baseline and progress to date for each the six thematic building blocks that underpin the SEP's overarching target of generating 25,000 additional new jobs across the Tees Valley between 2016 and 2026. ***Note that baseline figures are taken from data confirmed as correct at the time of writing the SEP. Where there have been retrospective revisions to ONS data sets, this is explained in the notes section for each metric. The latest update provides an indication of the direction of travel, in relation to achieving SEP ambitions.***

| |
|---|
| SEP target – Business Density: 10% Growth: reducing the gap to 72.2% of the UK rate (or 344 enterprises per 10,000) |
| Definition: Business Density is defined as the number of enterprises registered in an area as a percentage of the overall number of residents (16+). |
| SEP baseline (2015 data): 307 enterprises per 10,000 adults or 65.6% of UK rate. |
| Latest updated data: 2015 – 16,500 enterprises at 306 per 10,000 adults or 65.5% of UK rate. 2016 – 17,100 enterprises at 317 per 10,000 adults or 65.6% of UK rate. 2017 – 17,500 enterprises at 323 per 10,000 adults or 64.5% of UK rate. 2018 – 17,230 enterprises at 318 per 10,000 adults or 63.7% of UK rate. 2019 – 17,765 enterprises at 327 per 10,000 adults or 64.8% of UK rate. 2020 – 17,610 enterprises at 324 per 10,000 adults or 63.7% of UK rate. 2021 – 17,715 enterprises at 325 per 10,000 adults or 63.9% of UK rate. 2022 – 17,930 enterprises at 327 per 10,000 adults or 64.6% of UK rate. |
| Notes: The population estimates used to calculate the 2015 to 2021 rates are subject to revision and are not directly comparable with the 2022 rate. |

SEP target – Jobs Density: 55% Growth: or a jobs density figure of 0.75 (related to a reduction of the jobs density gap to 0.07 or approximately 25,000 additional jobs)

Definition: Jobs density is defined as the number of jobs in an area divided by the resident population aged 16-64 in that area. For example, a job density of 1 would mean that there is one job for every resident aged 16-64.

SEP baseline (2014 data): 0.12 gap. Tees Valley currently has jobs density of 0.70 against a UK average of 0.82.

Latest updated data:

- 2014** - 0.11 gap. Tees Valley job density of 0.70 (292,000 jobs) v UK average of 0.81.
- 2015** – 0.11 gap. Tees Valley job density of 0.72 (299,000 jobs) v UK average of 0.83.
- 2016** – 0.15 gap. Tees Valley job density of 0.70 (292,000 jobs) v UK average of 0.85.
- 2017** – 0.15 gap. Tees Valley job density of 0.71 (293,000 jobs) v UK average of 0.86.
- 2018** - 0.16 gap. Tees Valley job density of 0.70 (291,000 jobs) v UK average of 0.86.
- 2019** - 0.15 gap. Tees Valley job density of 0.72 (299,000 jobs) v UK average of 0.87.
- 2020** - 0.12 gap. Tees Valley job density of 0.72 (296,000 jobs) v UK average of 0.84.
- 2021** – 0.12 gap. Tees Valley job density of 0.74 (306,000 jobs) v UK average of 0.86.

Notes: Note that the job density estimates above were not available for Tees Valley until after the SEP was published. Once they were available then the jobs total estimate element became the official estimate of the total number of jobs in Tees Valley. These official estimates replace the previous informal method of summing BRES employee jobs estimates with APS self-employment to obtain Tees Valley total jobs. The jobs total of 303,500 quoted in the SEP (2015 estimate) was calculated in this fashion. Note also that all these figures will be subject to revision once historical population estimates are revised in line with Census 2021.

SEP target – GVA per hour worked: 30% Growth: reducing gap to 94% of UK average or £29.15 per Tees Valley worker

Definition: ONS's preferred measure of productivity is Gross Value Added (GVA) per hour worked. This measure removes employment rate, economic inactivity, demographic and commuting considerations with GVA per head and work pattern issues with GVA per job.

SEP baseline (2014 data): £28.30 representing 91.3% of the UK average

Latest updated data:

- 2014** – £29.2 representing 90.7% of UK rate
- 2015** – £30.0 representing 91.0% of UK rate
- 2016** – £30.6 representing 90.4% of UK rate
- 2017** – £30.9 representing 89.1% of UK rate
- 2018** – £31.6 representing 88.1% of UK rate
- 2019** – £32.4 representing 87.7% of UK rate
- 2020** – £33.1 representing 87.6% of UK rate

Notes: Latest update reflects ONS retrospective data revisions to GVA per hour worked estimates.

SEP target – Population: 6% Growth: increasing the Tees Valley population to 706,200 by 2026

Definition: Population projections provide an indication of the future size and age structure of the population based on mid-year population estimates and a set of assumptions of future fertility, mortality and migration.

SEP baseline (2014 data): Population growth rate of 2.61% and a population figure of 666,200.

Latest updated data:

2014 – 667,000
2015 – 668,300
2016 – 671,000
2017 – 672,500
2018 – 674,300
2019 – 675,900
2020 – 677,200
2021 – 678,200

Notes: The 2014 to 2020 estimates are subject to revision and are not directly comparable with the 2021 estimate.

SEP target – CO₂ emissions: 25% Reduction on 2005 baseline to 12.5m tonnes

Definition: CO₂ emissions relates to the following sectors: Industry, Road Transport, Public and Commercial, Other Transport, Agriculture and land use and waste.

SEP baseline (2005 data): 16.7m tonnes (including 825 for Darlington, 862 for Hartlepool, 1,030 for Middlesbrough, 10,427 for Redcar & Cleveland and 3,520 for Stockton).

Latest updated data:

2005 – 17.8m tonnes (including 846 for Darlington, 887 for Hartlepool, 1,100 for Middlesbrough, 10,426 for Redcar & Cleveland and 4,502 for Stockton).
2015 – 11.6m tonnes (including 612 for Darlington, 654 for Hartlepool, 715 for Middlesbrough, 6,498 for Redcar & Cleveland and 3,146 for Stockton).
2016 – 6.9m tonnes (including 583 for Darlington, 638 for Hartlepool, 674 for Middlesbrough, 2,195 for Redcar & Cleveland and 2,785 for Stockton).
2017 – 7.0m tonnes (including 560 for Darlington, 634 for Hartlepool, 647 for Middlesbrough, 2,102 for Redcar & Cleveland and 3,081 for Stockton).
2018 – 6.6m tonnes (including 547 for Darlington, 624 for Hartlepool, 653 for Middlesbrough, 2,054 for Redcar & Cleveland and 2,709 for Stockton).
2019 – 6.3m tonnes (including 536 for Darlington, 597 for Hartlepool, 622 for Middlesbrough, 1,961 for Redcar & Cleveland and 2,613 for Stockton).
2020 – 5.8m tonnes (including 486 for Darlington, 588 for Hartlepool, 558 for Middlesbrough, 1,665 for Redcar & Cleveland and 2,455 for Stockton).

Notes: Latest update reflects ONS retrospective data revisions to CO₂ emissions estimates.

SEP target – NVQ Level 4: 20% Growth: equating to 36% of residents having a NVQ Level 4 qualification

Definition: NVQ Level 4 is defined as the percentage of Tees Valley residents aged 16-64 who are qualified to a NVQ Level 4 or above. This equates to a degree level qualification.

SEP baseline (2015 data): 30% of residents aged 16-64 presently have a NVQ Level 4 qualification

Latest updated data:

2015 – 125,300 or 30.4% of residents aged 16-64
2016 – 126,600 or 30.8% of residents aged 16-64
2017 – 123,700 or 30.1% of residents aged 16-64
2018 – 125,700 or 30.6% of residents aged 16-64
2019 – 120,700 or 29.6% of residents aged 16-64
2020 – 135,500 or 33.2% of residents aged 16-64
2021 – 135,400 or 33.4% of residents aged 16-64

Notes: Latest update reflects ONS retrospective data revisions.

Section 7: Bibliography

The following outlines key sources under each section of the Economic Assessment.

Further material is available at: <https://teesvalley-ca.gov.uk/research-intelligence/>

SEP 2016 Baseline sources

- **Business Density** – ONS, NOMIS: UK Business Counts - Enterprises and Mid-year Population Estimates.
- **Jobs Density** - ONS, NOMIS: Jobs Density.
- **GVA per hour worked** – ONS: Sub-regional Productivity: Labour Productivity (GVA per hour worked and GVA per filled job) indices by Local Enterprise Partnership.
- **Population** – ONS, NOMIS: Mid-year Population Estimates.
- **CO₂ emissions** – BEIS: UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2020.
- **NVQ Level 4** – ONS, NOMIS: Annual Population Survey.

Section 3: Communities and Place

Sources: TVCA; ONS; Census 2011 and 2021; Tees Valley Rural Economy Evidence Base, January 2021; Savills, Tees Valley Growth Analysis Research, August 2022; Teesside Freeport; Local Trust & OCSI. Left behind? Understanding communities on the edge, 2019; Centre for Progressive Policy, Cost of Living Vulnerability report, September 2022; BEIS Sub-regional Fuel Poverty; ONS Well-being and Health Index for England; Natural England, Tees Valley Natural Capital Account, September 2021; Environment Agency; Arts Council England; Scarborough Tourism Economic Activity Monitor (STEAM); ONS Faster Indicators, Traffic camera data; DfT; UK CAA; QGIS/HQGIS plugin, 2022; UK local authority and regional greenhouse gas emissions national statistics, Department for Business, Energy & Industrial Strategy (BEIS); Tees Valley Local Cycling & Walking Infrastructure Plan; IRF, Tackling transport-related barriers to employment in low-income neighbourhoods, August 2018; Sheffield Hallam University, Addressing transport barriers to work in low income neighbourhoods, June 2017; Tees Valley Digital Strategy, January 2022; Ofcom; Tees Valley Digital Strategy; Ofcom Connected Nations 2022; TVCA Tees Valley Covid-19 and EU Transition Business Survey 2021; Higher Education Research & Development (HERD); Enterprise Research Centre (ERC) Benchmarking report 2021; State of the Nation 2020-21: Social Mobility in Great Britain July 2021; Lightcast; DfE Employer Skills Survey 2019; HESA; Digital Skills Audit – North East 2021 (Sunderland Software City); ONS Exploring the UK's Digital Divide March 2019.

Section 4: People and Skills

Sources: Sources: DfE, Ofsted, Higher Education Statistics Agency (HESA), ONS, Lightcast UK, DWP, Education Skills Funding Agency (ESFA), Local Skills Report Tees Valley Annexes.

Section 5: Supporting Local Businesses

Sources: Bank of England Monetary Policy Report – November 2022; OBR Overview of the November 2022 Economic and fiscal outlook; ONS; Lightcast; DfT Port Statistics; Scaleup Institute's Scaleup Annual Review 2022; Beauhurst; Enterprise Research Centre; UK Innovation Survey; HMRC R&D Statistics; ONS; BEIS; Nesta (2020); NAO (2016); UK Research and Innovation; TVCA; Vivid Economics; North East and Yorkshire Net Zero Hub; Scottish Government; East Coast Hydrogen; Net Zero Strategy for Tees Valley, TVCA.

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