TeesValley Unlimited

TEES VALLEY ECONOMIC ASSESSMENT 2015/16

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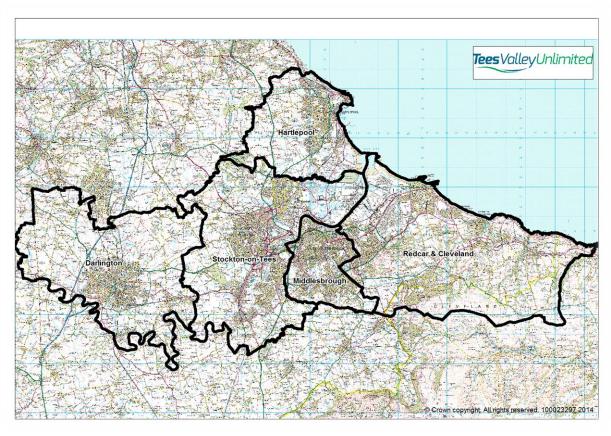
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1. FOREWORD

The Tees Valley covers the five local authority areas of Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton-on-Tees with a population of 666,200. Tees Valley is a functional economic area that is distinct in terms of business composition, industry focus, growth sectors, assets and infrastructure from that of its wider geography.



The Tees Valley Economic Assessment provides a strong and robust evidence base of the current state, and future potential, of the Tees Valley economy. The principal aim of the Assessment is to summarise how our economy operates, its linkages, assets, growth and productivity areas and opportunities, as well as to highlight the barriers and issues that prevent our businesses from growing and our residents from flourishing.

The Assessment, which will be updated annually, will inform the future strategies and action plans of TVU and key partners, including the Tees Valley Strategic Economic Plan, European Structural and Investment Funds Strategy, Strategic Infrastructure Plan and Innovation Strategy. At a local level, it will also help to inform local authority economic assessments, Local Plans and other policy and strategy documents.

The document is designed to be a high level statistical and analytical summary. The underpinning data (available at small area, ward and district level, providing comparisons to the national average and over time), as well as reports and analysis on key issues is available at Tees Valley Unlimited's Statistics Page: Information Hub at: https://www.teesvalleyunlimited.gov.uk/tees-valley-unlimited/tees-valley-statistics.aspx

If you would like to be added to the mailing list for TVU Briefings (such as Economic Briefing, Quarterly Economic Review, Skills Newsletter and Jobs Vacancy Report) please contact info@teesvalleyunlimited.gov.uk.

2. EXECUTIVE SUMMARY

Context

- The Tees Valley Economic Assessment provides a comprehensive, robust evidence base of how our economy operates, its linkages, assets, growth areas and opportunities, highlighting the barriers that prevent our businesses from growing and our residents from flourishing.
- It is based upon rigorous data, information and analysis available on our website

Progress

- The assessment sets out how Tees Valley has world-class expertise and critical mass in key sectors vital to Northern growth; including process/chemical, energy, advanced manufacturing (particularly oil and gas, metals and automotive) and logistics.
- If finds that Tees Valley has growing capability in new industries, such as biologics, subsea, digital/creative and the low-carbon economy.
- Tees Valley contributes £11.4bn to the economy each year, combined with a 280,000-strong highly skilled workforce, a business base of 16,500 firms and leading innovation centres. Tees Valley has England's largest exporting port, an international airport and direct road and rail routes to key locations across the North.
- Despite temporary global economic volatility resulting in job losses in some outwardfacing sectors e.g. steel and SSI, Tees Valley is making progress and, as one of the most significant integrated industrial economies in the UK, is at the forefront of private sector, export-led growth in key sectors vital to the Northern Powerhouse and boosting UK productivity.
- Our Economic Assessment sets out the progress we are making:

Key messages:

- Large rise in private sector employment, helping Tees Valley to rebalance
- Major contributor to UK GVA as one of the most significant industrial economies
- Most innovative area in the North given key sector strengths and Catapult Centres
- Highest business start-up rates in the UK, showing increased entrepreneurialism
- Largest growth in the digital sector of all UK areas
- Highest growth in exports in the country and the third biggest port in the UK
- Large fall in unemployment, particularly youth unemployment
- Skills levels are improving, closing the gap with the national average.

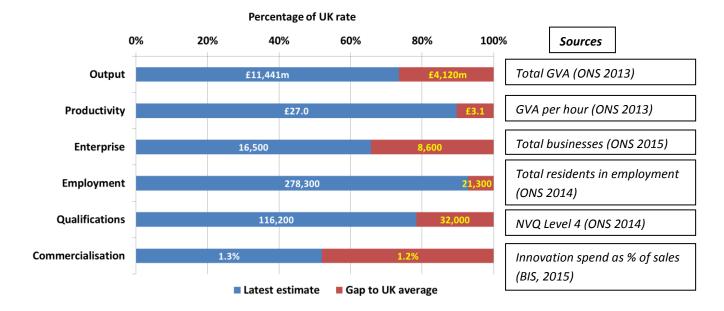
Key Stats:

- Loss of 7,500 public sector jobs since 2011 more than offset by an increase of 20,900 private sector jobs
- Tees Valley contributes £11.4bn to UK output (manufacturing is 14% of our GVA, 10% nationally)
- 24% of Tees Valley businesses introducing product or service innovation, higher than anywhere in the North
- Start-up rates, at 15.6%, highest in Tees Valley since 2007, and significant increase since 2011
- 20% rise in digital companies in Tees Valley between 2013 and 2014, higher than all other LEP areas
- Goods exports up 7% in the North East to £12.5bn, with growth at Teesport driven by chemicals and containers
- Claimant count down 45% since 2011, with youth unemployment more than halved
- The number of residents qualified to a level 4 has increased from 100,400 in 2011 to 116,200 today

Challenges

The Assessment explains the challenges we face.

- The Tees Valley has an ageing population (1 in 4 people will be aged 65+ in 2032) which
 is causing greater dependency on its working age population and we need to retain our
 young people and attract migrants of working age to offset this.
- The ageing workforce will bring skills shortages, particularly in key sectors with 127,000 jobs needing to be filled by 2022, making it increasingly important to retain skilled people in Tees Valley, up-skill residents and ensure young people are training for the right job opportunities.
- We continue to lag behind the national average on skills attainment, business stock, commercialisation, productivity and output, although we are closing the gap.
- This impacts upon employment levels (just 278,300 of our 417,000 working age
 population are in employment, with the Tees Valley providing just 292,500 jobs) and we
 must work to continue to narrow this gap in order to build the conditions for long-term
 investment and create a dynamic economy.



Our Economic Assessment is based upon the three key areas which will drive growth in our economy;

- Economy and Productivity (economic conditions, our business base and key industries)
- Skills and Labour Market (attainment, employment and future demand)
- Growth Enablers (connectivity, education, housing and culture)

3. SWOT ANALYSIS

STRENGTHS

- Key sector strengths in advanced manufacturing (including oil and gas, automotive and subsea), process and low carbon sectors
- Excellent quality of life (affordable house prices, excellent arts and cultural offer, good schools and quick transport links)
- Leading innovation assets (Centre for Process Innovation, Teesside University, Materials Processing Institute, TWI)
- Major exporting area (UK's largest exporting port at Teesport, North East seen largest growth in exports in the UK)
- Flourishing digital and creative sector (fastest growth in digital businesses of all LEP areas)
- Cost competitive and skilled workforce (particularly in key sectors)
- Robust physical infrastructure (fast road links, rail connectivity to London and international airport) and Enterprise Zone sites
- Excellent reputation of universities (Teesside and Durham), FE Colleges and training providers (high level of apprenticeships)

OPPORTUNITIES

- Build on the large rise in private sector employment since 2011 (and fall in unemployment) and high productivity in manufacturing
- Capitalise on UK's highest rate of new business creation
- Lever growth in new industries; biologics (Tees Valley home to national centre), energy and containers (25% growth at Teesport)
- Boost productivity through innovation (Tees Valley named as most innovative area in the North in government study)
- Retain our energy intensive industries through innovative Industrial Carbon Capture and Storage scheme
- Ensure our key schemes are recognised and funded through Transport for the North and the Northern Powerhouse
- More control over our economic destiny through devolution of powers (Tees Valley Devolution Deal signed in October 2015)
- Realise the growth potential of our businesses (2015 Business Survey found over 80% to be positive about future growth)

WEAKNESSES

- Not enough private sector jobs compared to working age population and high levels of unemployment (particularly youth)
- Some of the lowest enterprise and commercialisation rates in the UK and productivity levels considerably below the UK average
- Income levels below the national average and pockets of high deprivation and low skills (compounded by low attainment at secondary level and poor OFSTED performance and careers advice)
- Reliance upon large energy-intensive businesses in industries susceptible to changes in global commodity prices
- Poor broadband infrastructure to key employment sites
- Key bottlenecks on the road network and poor intra-Tees Valley rail connectivity
- Issues of outdated housing stock and lack of aspirational housing
- Lack of quality business accommodation, particularly innovation space

THREATS

- Difficulty of some employers in getting the skills they need (2015 Business Survey showed this as the top barrier to growth)
- Ageing population with forecast fall in working age population and continued out-migration
- Accentuated by challenge of 114,000 replacement jobs needed to be filled by 2022
- Continued globalisation of supply chains as production facilities move to lower cost locations and projects follow cheaper energy sources
- Lack of resilience of transport network hindering ability to open up new employment and housing sites
- SMEs at risk of falling behind competitors through pockets of poor broadband infrastructure and low levels of SMEs in digital economy
- Climate change threatening increased flood risk on Tees Estuary and potential threats from taxation on energy intensive industries
- Potential slowdown in domestic, European and world markets.

4. ECONOMY & PRODUCTIVITY – SUMMARY

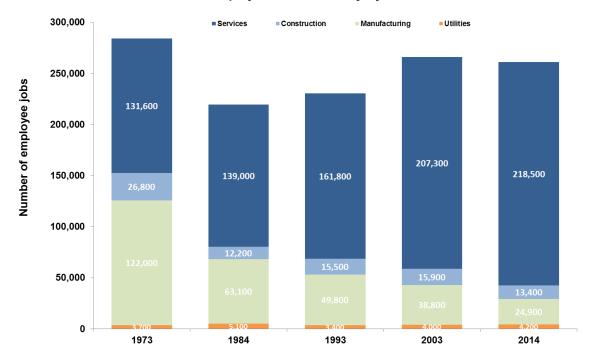
- After the 2008/09 national recession and subsequent recovery, the Tees Valley economy is now growing strongly and developing into a successful, diverse and resilient modern-day economy which contributed £11.4bn to UK PLC in 2013 compared to £11.0bn in 2009. However, the latter months of 2015 have seen an increasingly challenging global trade environment resulting from a slowdown in some emerging market economies; low commodity prices and an overvalued pound lead to major job losses in, for example, our export-sensitive steel sector. Over 2,000 jobs were lost at SSI in October, with a broadly similar number of losses expected to follow in the SSI supply chain and across other associated supporting sectors.
- Business and enterprise lie at the core of any successful economy and the Tees Valley business-base is well represented in high productivity sectors such as Advanced Manufacturing, Low Carbon, Process and Digital and Creative. Relatively large jobgenerating sectors include Professional & Business Services, Logistics and Health & Social Care.
- Challenges remain with economic output per head of population significantly below the
 national average just 73.5% of UK GVA per head in 2013. Key elements of this output
 gap are down to Tees Valley having relatively fewer people of working age and higher
 rates of economic inactivity and unemployment as compared to national rates.
- Encouragingly, underlying productivity is much closer to the UK average 89.8% of UK GVA per hour worked with lower wage rates (although they increased faster than nationally in 2014), company profitability and related sectoral and occupational structural differences contributing to this productivity gap.
- Whilst the Tees Valley business start-up rate in terms of enterprise births as a
 proportion of total stock is one of the highest in the country, the size of the Tees Valley
 private sector remains relatively small compared with many other parts of the UK at twothirds of the national rate.
- In terms of trade, the Tees Valley, as part of the wider North East region, is the only part of England to consistently record a trade in goods surplus, averaging £1bn every quarter.
- Because our economy includes high concentrations of key sectors such as advanced manufacturing and process industries, we are home to 58% of the UK's major users of energy in the process and chemical sector, accounting for 5.6% of UK industrial emissions.
- Finally, the Tees Valley is home to a number of highly innovative businesses operating across a wide range of up and coming sectors, particularly Advanced Manufacturing, Process, Digital and Health & Social Care.
- In conclusion, whilst the Tees Valley still lags behind many other parts of the country on a number of economic and business indicators, the direction of travel is firmly positive and the persistent historic performance gaps are now beginning to close.
- The following pages provide more detail on the above.

4.1. PRODUCTIVITY

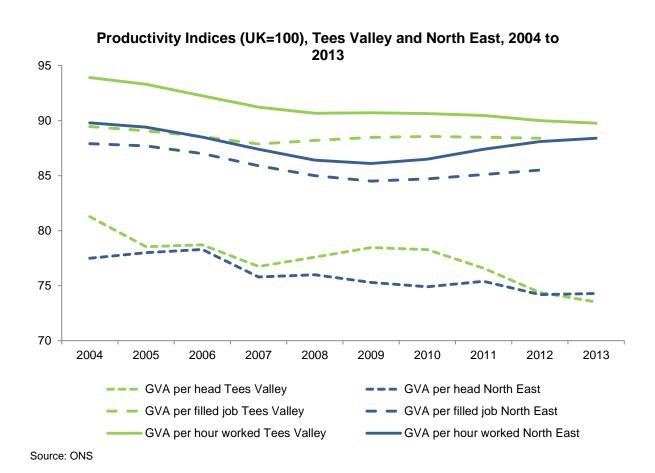
- The structure of the Tees Valley economy has changed markedly over the past 40 years. In 1973 almost 43% or 122,000 of the 284,000 employee jobs in Tees Valley was accounted for by the Manufacturing sector. Construction accounted for 9.4% of jobs and around 46% of employees worked in the Service sector (132,000).
- By 2003, manufacturing had declined considerably, with service sector employment generating significant numbers of new jobs (45,000 since 1993, offsetting the fall in manufacturing). By 2014 and following the 2008/09 recession, Tees Valley employee numbers stood at 261,000, combined with a further 31,500 self-employed to take the number of jobs to 292,500. Manufacturing employment had fallen to under 25,000 by 2014 with Construction below 14,000. Jobs in Utilities were broadly unchanged at 4,000 and Services was up to 218,000.
- Tees Valley has seen growth in private sector employment over the past 3 years, with total job numbers up 13,400 since 2011 to 292,500 in 2014. Private sector employment has increased by 20,900 in that period, while public sector jobs have fallen by 7,500.
- In 2013, Tees Valley GVA stood at £11.4bn and accounted for over a quarter of total North East regional GVA (£45.4bn). In turn, the North East accounted for around 3% of UK GVA (£1.53tn). The Tees Valley output gap – the amount of additional GVA required to match UK GVA per head – was £4.1bn in 2013. Since 2009, GVA has grown by £467m.
- In terms of productivity, GVA per head in the Tees Valley was £17,200 in 2013, compared to the regional rate of £17,381 and UK rate of £23,394. GVA per hour worked was £27.0 in Tees Valley, £26.6 in the North East and £30.1 in the UK. Tees Valley GVA per filled job was £41,646, North East £40,279 and UK £47,108. Since 2009, GVA per head has grown by £547.

- There were 261,000 employees in Tees Valley in 2014, some 23,000 lower than in 1973. There were a total of 292,500 jobs in Tees Valley in 2014, a rise of 13,400 since 2011, driven by growth in private sector employment.
- The past 40 years have seen great changes in the nature of work. Manufacturing jobs now account for less than 1 in 10 of all Tees Valley employee jobs whilst in 1973 it was nearer to half at 43% of total jobs. In contrast, the Service sector now employs 84% of Tees Valley employees but 40 years ago this proportion was just 46%.
- In comparison to Great Britain, Tees Valley has relatively fewer Service sector employees and relatively higher numbers employed in Manufacturing, Construction and Utilities; Manufacturing continues to be an area of specialism for Tees Valley.
- The Tees Valley contributed £11.4bn to the UK economy in 2013, up £467m since 2009. Tees Valley GVA per head is just 73.5% of the UK rate. This output gap equating to £4.1bn results from Tees Valley residents having relatively low economic activity and employment rates, a small pool of working age people and lower productivity.
- Tees Valley labour productivity, measured in terms of output per hour, is around 10% below the UK rate. This productivity gap arises from the Tees Valley economy having relatively higher numbers of workers employed in industries and occupations that generate lower average pay rates and lower company profit levels.
- However, more positively, the Tees Valley does have relatively high numbers of workers employed in high productivity sectors such as Advanced Manufacturing / Low Carbon (particularly in Process and Engineering Services) and also the Mining / Utilities sectors.

Number of employees in Tees Valley by broad sector, 1973 to 2014



Source: ONS, NOMIS, BRES



4.2. COMPETITIVE ADVANTAGE

The Tees Valley is home to a successful, diverse, modern economy and enjoys excellent connectivity with relatively uncongested roads, rapid rail services, the third busiest (and largest exporting) port in the UK, an international airport and a skilled workforce (see Appendix 3). In terms of industrial sectors, the Tees Valley has significant strengths across a variety of areas, some of which can be categorised as high productivity.

High productivity sectors

- Advanced Manufacturing: Tees Valley is a major European hub for the process and chemical industries (comprising 58% of the UK's chemical industry), home to one of the largest integrated chemical complexes in the UK. The area has a growing reputation for advanced manufacturing, from oil and gas and automotive, rail, aerospace and mining. New growing industries include biologics and subsea. These are all supported by a large engineering design sector, universities and assets such as Centre for Process Innovation, Materials Processing Institute and TWI.
- Low Carbon Economy: Tees Valley is a leading destination for the low carbon economy, with a growing supply chain. The area is a designated centre for offshore renewable engineering and is leading the UK in hosting plants that produce biofuel and bioethanol. Tees Valley is also home to Hartlepool Nuclear Power Station.
- **Digital/Creative**: The area's digital and creative sector has seen significant growth, with the annual percentage rise in the number of digital firms in 2014 higher than any other LEP area. Tees Valley's digital cluster is supported by Teesside University, one of the top 20 places in the world for animation and host of the annual Animex International Festival. The area is also home to a thriving cultural and arts network.

Intermediate productivity / employment sectors

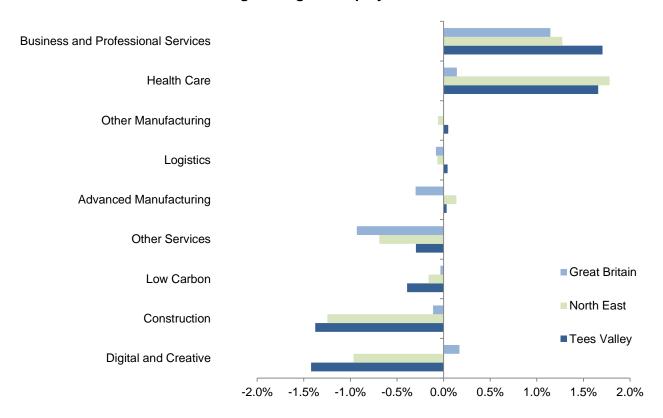
- **Professional and Business Services**: The professional, business, financial and legal services sectors in Tees Valley provide a high level of employment across all ranges, including over 7,500 people in business process outsourcing activities, a growing source of expertise.
- Construction: The construction sector in Tees Valley encompasses over 1,800 construction firms supported by the expertise of Teesside University, Carillion's Training Centre and the Thermal Insulation Contractors Association training facility.
- **Logistics**: The changing face of retail and manufacturing has led to further development of the logistics market, with Tees Valley now home to the major distribution centres of a significant number of large firms. Teesport is one of the largest ports in the UK and handles around 40 million tonnes of cargo a year.

Jobs-rich sectors

- Health: While dominated by the NHS, there are over 350 private sector businesses in Tees Valley, including the headquarters of major social care operators. The creation of the National Biologics Manufacturing Centre in Tees Valley is likely to boost this further.
- Other services: Wholesale, retail and related service industries continue to make the area an attractive location for residents and businesses. Additionally and despite recent job losses, the public sector remains a major employer in Tees Valley.

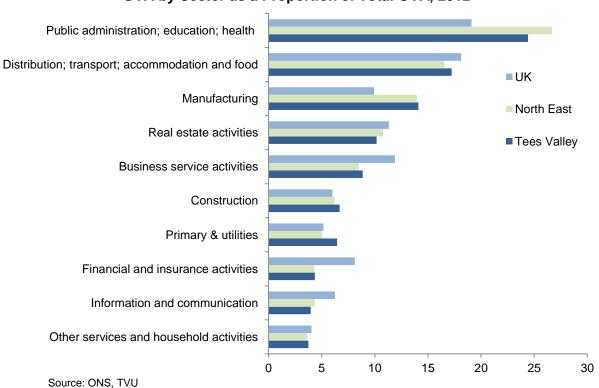
- Tees Valley has a well-balanced economy with relatively more people employed in sectors such as advanced manufacturing, construction and health than nationally and this has remained the case for the past four years.
- The Tees Valley manufacturing sector makes both a bigger contribution to economic output than the national average and is more productive in terms of output per job.

Percentage change in employment 2011 - 2014



Source: ONS,TVU

GVA by Sector as a Proportion of Total GVA, 2012

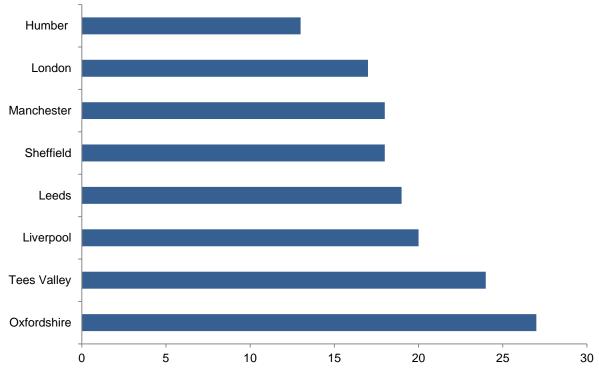


4.3. INNOVATION

- The Tees Valley has a history of innovation which places it at the forefront of research and development in the UK. Examples include the invention of the safety match, the operation of the first major public steam railway in the world and the creation of products from perspex and ammonia to polyethylene and nylon.
- Today this track record of innovation continues as we are home to the UK's largest hydrogen plant, the UK's first biomass power station, a world leading grapheme plant, a subsea training facility unique in the UK and Tees Valley will shortly be home to one of the largest advanced gasification facilities and the National Centre for Biologics.
- Tees Valley is overcoming obstacles in continuing to build an innovative economy, such as a lack of available and appropriate finance, incubation space to test new products, accessible support to help SMEs to innovate and barriers to collaborating within and across industries.
- To capitalise on this performance, Tees Valley needs to build on such positive signs as being named by a HEFCE-commissioned survey as the most innovative area in the North in 2015, seventh overall, and above London, Birmingham, Leeds and Manchester.
- Furthermore, graduate retention is amongst the highest in the UK (77.8% of graduates are employed within 6 months) and Tees Valley has had the highest spend per worker of all LEPs of funding from InnovateUK. This is based upon the High Value Manufacturing Catapult Centre, CPI, in the area.
- However, issues remain which require even greater effort to turn around. This include
 having low rates of NVQ Level 4 and full-time postgraduate enrolments. Rates of
 contract and collaborative research income into Tees Valley are comparatively small, as
 are R&D tax credit take up and, crucially, rates of commercialisation, are amongst the
 lowest in the UK.

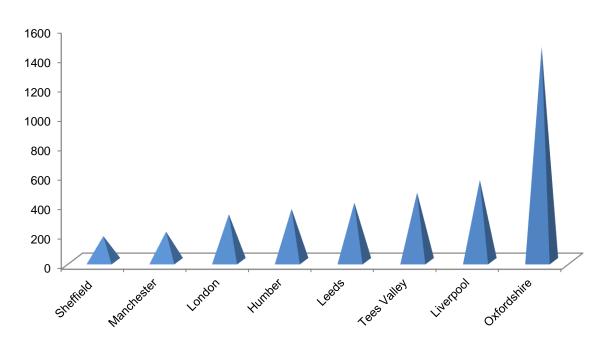
- Low rates of commercialisation, R&D investment and HEI research income.
- Increasingly recognised as having a high percentage of innovative businesses.
- Opportunity to grow our strengths in four key areas, given our history of innovation, competitive advantages and current investment. Tees Valley can lead the way on advanced manufacturing (advanced materials and low carbon), process (particularly polymers, biorefining and Industrial Carbon Capture & Storage), digital (visualisation and animation) and health (biologics and digital care).
- Opportunity to work with SMEs to increase engagement with world-leading innovation centres, such as Teesside University, Centre for Process Innovation, Materials Processing Institute and TWI.

% of Companies Introducting New to Market Products or Services



Source: Enterprise Research Centre, 2015

R&D expenditure by business: £ per FTE, 2013



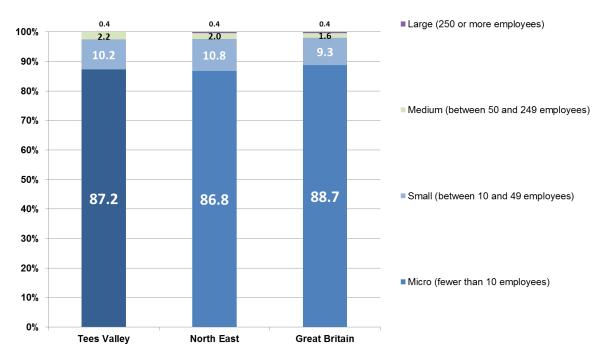
Source: BIS, 'Mapping Local Comparative Advantages in Innovation,' 2015

4.4. BUSINESS & ENTERPRISE

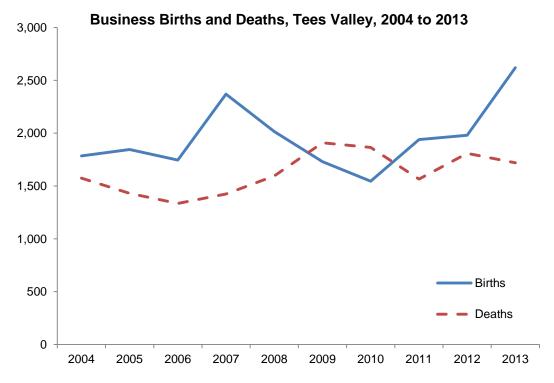
- SMEs account for over 99% of all registered businesses in the UK. However, they account for a far lower share of both employment and turnover.
- In Tees Valley, 12,315 or 74.6% of businesses employ fewer than 5 employees, with another 2,075 or 12.6% of firms employing between 5 and 9 employees. Together these make up the micro business stock totalling 14,390 or 87.2% of all registered businesses.
- Whilst the Tees Valley continues to employ relatively high numbers of people in the
 public sector, this is in large part a reflection of the area's relatively small private sector.
 Tees Valley, with 16,500 registered businesses in 2015, has around 34% fewer
 businesses than the national average might suggest. This approximates to a shortfall of
 around 8,600 private sector businesses.
- Across Tees Valley, there were 2,620 new enterprise births during 2013 at a birth rate of 15.6%. 2012 saw 1,980 births at a rate of 12.4%. This increase in enterprise births contrasted with a fall in enterprise deaths.
- Enterprise deaths fell from 1,810 in 2012 to 1,720 in 2013 with an associated drop in death rates from 11.3% to 10.2%. Companies House data shows 2,568 new company registrations in Tees Valley in the first nine months of 2015, taking the stock of 'active' businesses to 18,424 by the start of October.
- Enterprise survival rates broadly reflect business birth and death rates with Tees Valley business survival rates at or slightly above national rates. These relationships have tended to persist over time with recessionary periods seeing marginally lower survival rates.
- Since 2008, the average Tees Valley enterprise one year survival rate has been 92.3%, two year rate 75.1%, three year rate 59.0%, four year rate 48.7% and five year survival rate 41.7%.

- There were 16,500 businesses registered in the Tees Valley at the end of March 2015 of which 16,170 were small, 355 were medium and 70 were large. Almost three quarters of all businesses employ fewer than five employees. This broadly reflects national trends overall but we do have relatively fewer of these smaller micro-enterprises (less than 5 employees) than nationally.
- Businesses per head of population, Tees Valley has around 66% of the UK rate, representing a comparatively small business base.
- TVU estimates the Tees Valley total business population (registered and unregistered businesses) to be around 40,000.
- The number of business births in 2013 was 2,620, the highest number recorded in a decade, and the gap between business births and deaths grew substantially in 2013, reflecting economic recovery.
- In terms of new business births as a proportion of the existing stock of businesses i.e. the business birth rate, the Tees Valley has one of the highest rates in the country at 15.6% in 2013.

Stock of registered businesses by number of employees, 2015



Source: ONS, NOMIS, UK Business Counts - Enterprises



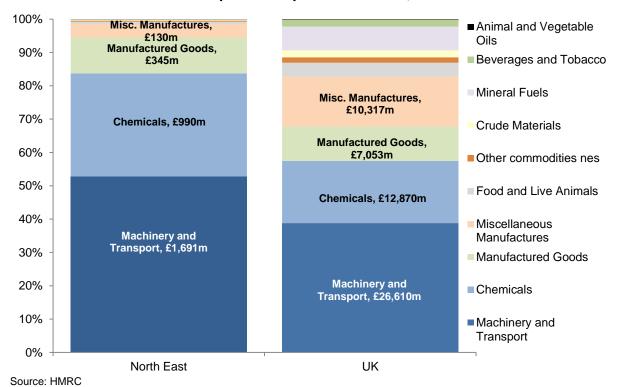
Source: ONS, Business Demography, TVU

4.5. TRADE

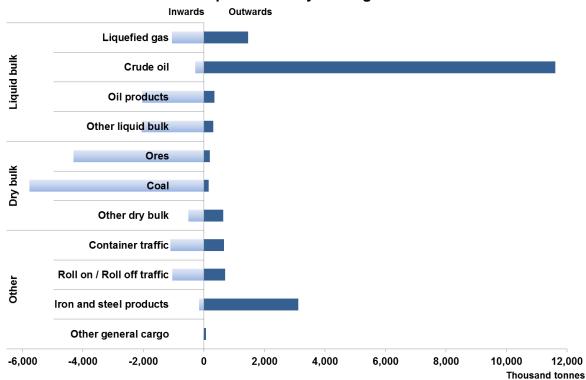
- North East of England goods exports totalled £12.5bn in the four quarters to Q1 2015.
 Regional imports totalled £8.4bn and there was therefore an annualised regional trade in
 goods surplus of £4.1bn. This was up from a surplus of £3.6bn observed in both of the
 four quarter periods Q2 2012/Q1 2013 and Q2 2013/Q1 2014. The North East is usually
 the only English region to record higher goods exports than imports, however the last
 two quarters have seen the North East joined by the North West in recording a trade in
 goods surplus.
- In terms of export growth, the North East saw the fastest rate of export growth in the
 country over the four quarters to Q1 2015. Between Q2 2013 to Q1 2014 and Q2 2014
 to Q1 2015, North East exports grew by 6.7%. Nationally exports fell by 4.7% over the
 same period with only the West Midlands and the South West seeing any growth outside
 of the North East.
- In relation to port traffic, 2014 saw Teesport overtake Forth to become the largest exporting port in the UK. The latest annualised data to Q1 2015 shows that 21.20 million tonnes of outwards traffic passed through Teesport compared to 20.68 million tonnes through Forth. Since the third quarter of 2013, quarterly outwards tonnage from Teesport has been consistently above five million tonnes.
- In terms of total tonnage inwards and outwards Teesport has seen growing levels of traffic since 2012. The four quarters to Q1 2015 saw total tonnage stand at 39.16 million tonnes, the third largest sum in the country. Only Grimsby & Immingham (58.80m tonnes) and London (45.49m tonnes) saw greater traffic.

- The recovery in export growth continues with North East exports increasing by the
 fastest rate in the country. This demonstrates the importance of assets such as
 Teesport and the vibrancy of Tees Valley companies in winning contracts across the
 globe.
- The North East is the only English region to consistently run a trade in goods surplus, typically averaging around £1bn every quarter.
- Sectorally, exports of Machinery & Transport and Chemicals make up almost 84% of the region's goods exports compared to just 57% nationally.
- Crude Oil dominates Teesport goods exports comprising 60% of total export tonnage.
 Currently, Iron and Steel products make up 16% and Liquified gas 8%.
- In contrast, over half of inwards traffic into Teesport is Coal and Ores, with Oil products and Other liquid bulk each accounting for 11% of the total.

Goods Exports Component Sections, 2015 Q1



Teesport Traffic by Tonnage - 2013



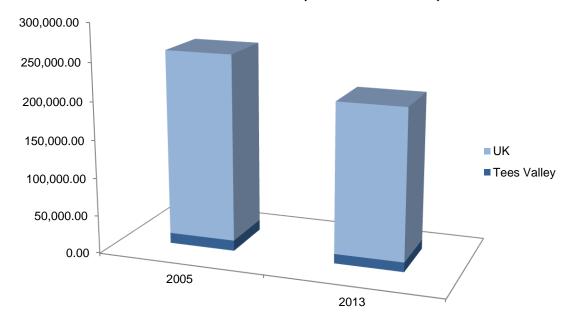
Source: DfT

4.6. LOW CARBON

- Tees Valley's energy-intensive integrated cluster of process and advanced manufacturing firms defines our economy, with over 1,400 local companies in the supply chain, generating sales in excess of £26bn per annum and together they comprise 58% of the UK's chemical industry.
- This is centred upon our three major industrial complexes at Wilton International the second largest integrated chemical complex in Europe North Tees and Billingham. Key companies include SABIC, Lotte, Lucite and Huntsman.
- Retaining our energy intensive industries is vital, both to our economy, as a major employer and contributor to local economic growth, and the national economy, with its significant contribution the process sector plays in underpinning manufacturing the key wealth-generating sectors of the UK, such as automotive and aviation.
- However, we recognise the need to improve our carbon footprint. At present, Tees Valley
 is home to 58% of the UK's major users of energy in the process and chemical sector,
 accounting for 5.6% of UK industrial emissions. These companies are vulnerable to
 foreign competition using cheaper energy sources, such as the USA, whilst meeting
 requirements to reduce emissions.
- Emission levels are falling in Tees Valley and in the UK as a whole, with large reductions in industrial emissions – which comprise 42% of total UK emissions between 2005 and 2011 due, in part, to more energy efficient processes.
- In order to move towards a low carbon economy, we are successful attracting new investment into renewable energy activities. Examples include Air Products, who are investing over £600m in Tees Valley in two of the world's largest renewable energy plants. Tees Valley is increasingly being seen as a low carbon investment destination, through opportunities lined to offshore wind, subsea, biomass and biofuels.
- Tees Valley is also home to Hartlepool Nuclear Power Station, whose current life has been extended until 2024, and companies such as SABIC are investing in shale gas as a new, more affordable, source of energy.
- Realistically, our industries will not become totally reliant on 'green energy' in the
 foreseeable future. To retain competitive advantage, the Tees Valley has developed an
 innovative industrial carbon capture and storage scheme to use proven technology to
 reduce UK carbon emissions. This will increase their competitiveness to the benefit of
 UK Plc and turn Tees Valley into a magnet for inward investment from international firms
 seeking to reduce their exposure to the cost of dealing with carbon emissions.

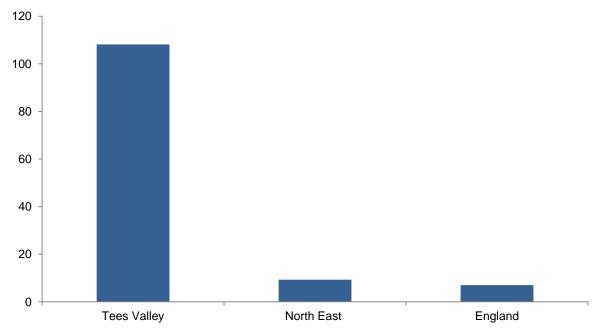
- Tees Valley is home to high energy intensive industries which are vital to UK advanced manufacturing and other key sectors.
- There is a risk that without long-term support that our industries, which are dependent upon global commodity prices and the cost of energy, could move operations abroad.
- Tees Valley recognises the need to move towards a high-value, low carbon economy through energy efficiency measures amongst SMEs, attracting low carbon investment, including in shale gas, maximising the usage of waste heat and, crucially, creating an innovative industrial CCS network.

Industrial Carbon Emissions (Kilo tonnes of Co2)



Source: DECC, CO2 emission estimates (Industrial emissions- total number), 2005-2013, 2015

Total Carbon Emissions Per Capita 2013



Source: DECC, CO2 emission estimates (per capita – all emissions), 2005-2013, 2015

4.7. BUSINESS PERSPECTIVE

The 2015 Tees Valley Business Survey was conducted between May and August 2015 (before the SSI closure announcement) and produced over 330 responses from Tees Valley businesses, across a variety of sectors, sizes and geographies. Key findings include:

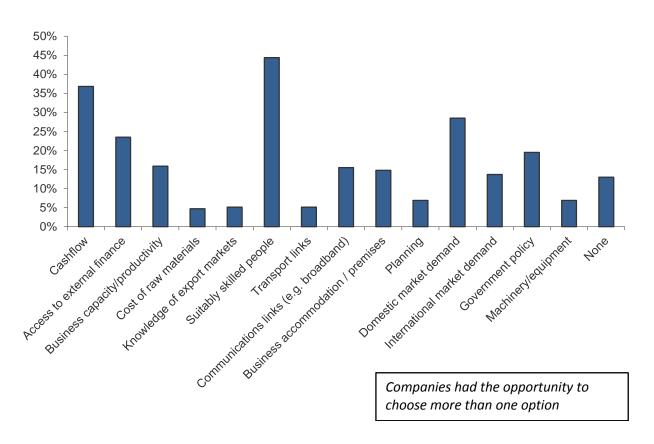
- 75% of Tees Valley businesses rate the Tees Valley as a very positive or positive
 place to do business (highest ratings were given to quality of life and workforce, the
 lowest to communications and transport infrastructure).
- 82% of Tees Valley businesses expect turnover to grow over the next year (over 30% will be investing in exporting over the next 12 months).
- The biggest barriers to growth were named as lack of suitably skilled people (44%), followed by cash flow (37%) and domestic market demand (29%).
- 65% of Tees Valley businesses expect their number of employees to grow over the next year, with 71% of employers investing or considering investing in training over the next year.
- 60% of Tees Valley business have engaged with schools or colleges over the past year and 42% of Tees Valley employers have taken on an apprentice over the last 12 months and are very satisfied with their performance
- 64% of Tees Valley employers had not or were not planning to invest in innovation or research and development.
- 45% of Tees Valley businesses have a skills shortage/are struggling to recruit, with the issue particularly acute in the ICT, digital and creative, chemical process and manufacturing industries.

What does this tell us?

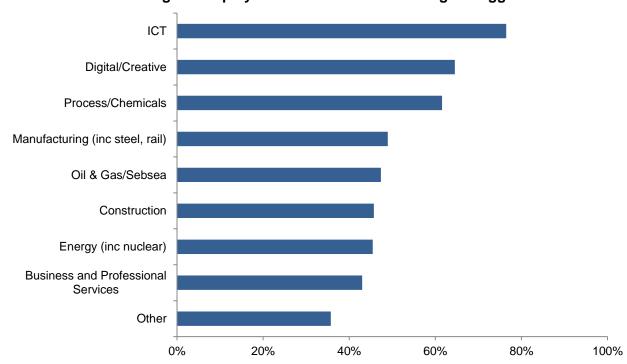
Compared with the previous Tees Valley Business Survey undertaken in 2012, and whilst the findings are broadly consistent, a number of notable changes have occurred as summarised below:

- Higher expectations of future growth for both increased sales and employment levels
- Largely positive changes to investment plans
- Skills issues have become the largest obstacle to growth overtaking both cashflow and domestic market demand concerns
- Hiring of staff is up for both graduates and apprentices
- Views of Tees Valley as a place to do business remain overwhelmingly positive

Are there any obstacles which have in the past, or are currently, preventing your business from growing?



Percentage of employers who have a skill shortage/struggle to recruit



4.8. GOING FORWARD

Through the work of Tees Valley Unlimited, one of the first Local Enterprise Partnerships to be established, Tees Valley has its own clear, shared, agreed and ambitious strategy to secure real growth and productivity improvements.

- The aim, as described in the Tees Valley Strategic Economic Plan (SEP) 2014, is to become a high-value, low-carbon, diverse and inclusive economy. The SEP set an ambitious, but achievable, growth target of creating over 25,000 net new private sector jobs between 2012 and 2022 and boosting GVA by £1bn.
- The target was based on independent analysis and an agreed methodology, examining future market trends, patterns of exporting, inward investment and business start-ups and the assets and opportunities of Tees Valley.
- The aim is to boost private sector growth, improving economic resilience and diversification and close the gap with national employment, particularly private sector, rates.
- The target is over and above the number of existing jobs that will need to be replaced over the next decade due to retirements, migration and natural change and is focused upon growth in key sectors:

Advanced Manufacturing and Low Carbon: Growth will be driven by the expertise of Tees Valley in the process and chemical, metals and oil and gas industries, plus growing expertise in defence, rail and automotive. This covers both manufacturing and engineering design. In low carbon, Tees Valley can benefit from opportunities linked to offshore wind, our growing subsea cluster and move towards a bioeconomy. With opportunities for re-shoring and the increased exporting ability of SMEs, the target is for 6,700 new jobs in these industries.

Construction: With a target of 4,000 new jobs, growth will be driven by continued investment in transport, infrastructure and housing activity.

Business & Professional Services: As a key driver of national employment growth before the recession, these supporting industries, which span from business processing and contact centres through to design, legal and accountancy services, is expected to benefit from growth in other sectors to produce a 7,700 net employment rise.

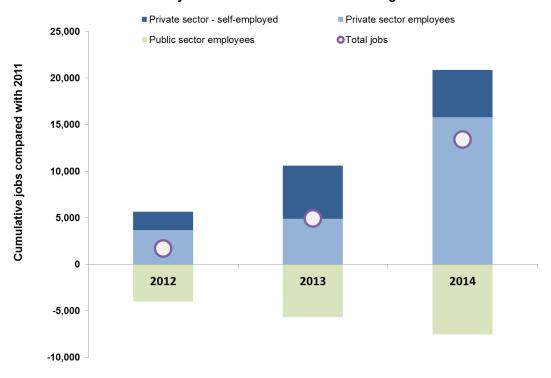
Logistics: This is anticipated to be a source of 2,400 jobs growth given the expansion of Tees Valley's existing assets, such as Teesport, DTVA and Wynyard Business Park, and the logistics operations which serve both our growing advanced manufacturing base and provide the large strategic distribution centres to supply Northern consumers.

Digital/Creative: Growth is expected to be driven by start-up activity through assets such as Digital City, CCAD and new business centres, the expansion of high growth companies and national drives towards a more online economy. Expected job gains of 1,700.

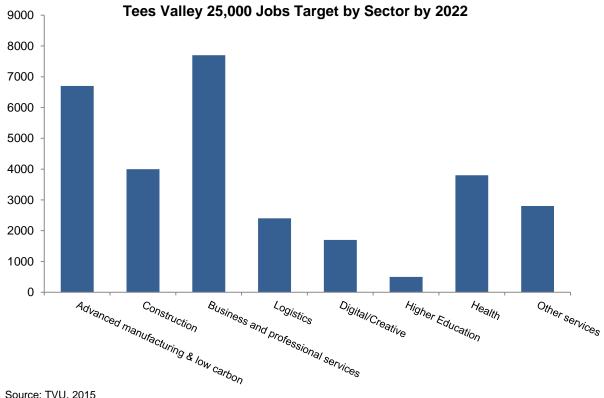
Health: Expected job gains of 3,900 in health due to the need for increased care provision for an ageing population, the harnessing of new assistive technologies, digital care and biologics and the potential to build upon Tees Valley's University expertise in this area.

Other services (retail, tourism): Expected job gains of 3,400 in supporting sectors, including retail, tourism and education as the Tees Valley economy grows.





Source: ONS, BRES, APS (workplace-based)



Source: TVU, 2015

5. SKILLS AND LABOUR MARKET – SUMMARY

- A skilled workforce, meeting the needs of current and future businesses, is essential to
 economic growth and productivity improvements over the next decade, filling the gaps
 left by an ageing workforce, as some 114,000 people are due to leave the workforce
 over the next decade, and ensuring a vibrant, diverse economy that is inclusive for all.
- Tees Valley has an ageing population (1 in 4 people will be aged 65+ in 2032) which will
 result in greater dependency on its working age population; the Tees Valley needs to
 retain its young people and attract migrants of working age to offset this. The ageing
 workforce would bring skills shortages, particularly in key sectors, making it increasingly
 important to retain skilled people in Tees Valley.
- Tees Valley has six Further Education colleges and a number of sixth form colleges providing education and training, including work-based apprenticeships and full-time and part time provision. Higher Education provision is focused upon Teesside University and Durham University (Queens Campus), with FE colleges also offering HE courses. Between 2013/14 almost 8,000 of our young people started apprenticeships and figures are expected to rise. According to a recent survey, 21% of Tees Valley employers offer an apprenticeship scheme which is the joint highest in the country.
- However, Tees Valley is behind the national average for both lower and higher level skills resulting in a high percentage of vacancies in skilled trade roles that are hard to fill due to a shortage of suitably skilled or experienced staff.
- The percentage of Tees Valley residents with no qualifications is 11% compared to 9% nationally, while those with NVQ levels 1 and above and 2 and above, are below the national average. We also have a significant shortfall in higher level skills, as just 28% of residents had an NVQ Level 4 in 2014. This is around 8% below the national average.
- There are signs, however, that skills levels are improving within the Tees Valley and the
 historic gap with the national average is starting to close; the number of residents
 qualified to a level 4 or above is increasing and GSCE rates are higher than they were
 four years ago.
- 7 out of 10 Tees Valley residents work full-time, with the percentage working full time increasing over the last 3 years, suggesting sustainable economic growth.
- Unemployment and youth unemployment have almost halved, but figures remain almost double the national averages. This places extra importance upon intervening to ensure young people have the skills needed to access career opportunities that they can access. The average household income in Tees Valley is typically some 15% below the national average with men earning around one quarter more than women on average, a slightly larger gender wage differential than observed nationally. However, the gap is starting to close.
- Up-skilling our existing workforce and preparing new entrants to go into the workforce
 play a vital role in driving our economic performance and improving social mobility. To
 equip our young people with the tools they need, Tees Valley must continue to improve
 achievement levels throughout all elements of provision from schools, FE Colleges and
 Higher Education.
- The following pages provide more detail on the above.

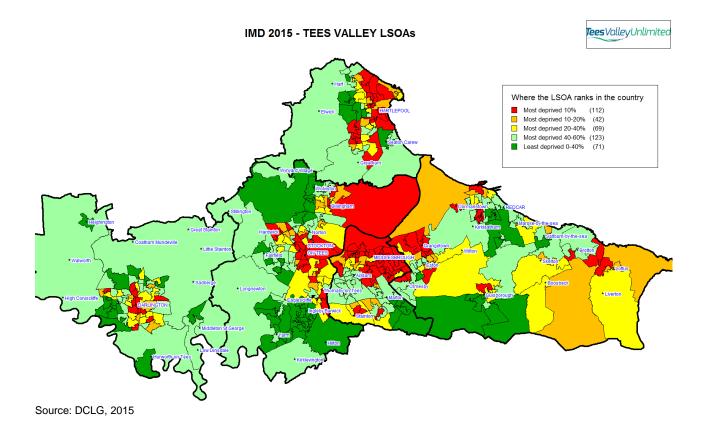
5.1. CURRENT POPULATION

Historic trend

- After seeing a declining population through the de-industrialisation of the 1980s and 1990s, the number of people living in Tees Valley has been on an upward trend since the turn of the millennium.
- This increase has been driven primarily by natural change and net inward international migration, predominantly from EU Accession and Southern Asian countries, which has offset a small outward migration trend to other parts of the UK.
- Over the last 7 years, the population in the Tees Valley has increased each year by between 500 and 2,300. This increase is a result of 1,600 to 2,600 more births than deaths each year and a net flow of between 100 and 1,200 people migrating into the Tees Valley from overseas. This contrasts with the net flow of 1,000 to 1,900 people out of the Tees Valley to other parts of the UK, mostly students (15 to 19 year olds) and young workers (25 to 34 year olds), to university cities.

Current population

- The population of the Tees Valley is estimated to be 666,200. There are 127,900 people aged 0-15 (19% of population), 417,000 people aged 16-64 (63% of population), and 121,300 people aged 65 and over (18%). Whilst the population of the Tees Valley is predominantly White British (94.8%), Tees Valley is home to a small BME community with Middlesbrough having an ethnic make-up that more closely reflects the national picture.
- Overall economic conditions have improved across the Tees Valley, although we do
 retain high levels of severe disadvantage. The Index of Multiple Deprivation combines
 different aspects of deprivation, including income, employment, education and skills,
 health and disability.
- The results of the recently released Index (2015 based upon mainly 2012/13 data) are generally consistent with the previous Indices, with no major changes to the pattern and extent of deprivation in the Tees Valley. Compared with other LEP areas, the Tees Valley has the 2nd largest proportion of small areas within the most deprived 10% in England, with just over a quarter (27%). Compared with the previous release (based upon mainly 2008/09 data), there has been a slight increase in the number of small areas falling within the most deprived (112 compared with 109); this indicates that the Tees Valley has become marginally more relatively deprived.
- The Tees Valley is the 6th most deprived LEP area based upon an average of the
 deprivation ranks given to the small areas. This higher rank in this measure shows that
 compared with some of the other highly deprived LEP areas, the Tees Valley is more
 diverse. As well as deprived areas, there are areas that are within the least deprived;
 17% of small areas are within the least deprived 20% in England.
- The number of small areas which are within the least deprived in the country has been growing over time (previously 55, 65, then 71), indicating that the polarity within the Tees Valley is increasing. This can be seen in the difference between the income and employment deprivation between small areas in the Tees Valley; in one small area half the working age population were living in employment deprived households, whilst in another only 3.2% were.



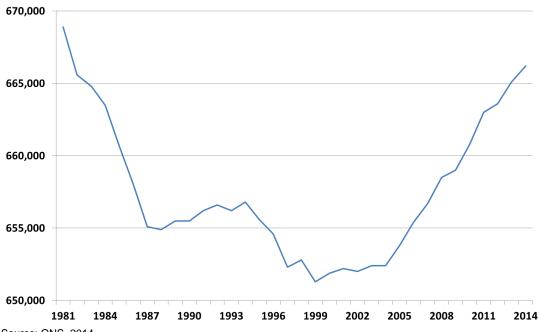
Health levels have improved across Tees Valley. However, they remain lower than in the country as a whole. Of our working age population, 16% have a long term illness, compared with 13% nationally. There is a higher percentage of the working age population economically inactive due to a long-term sickness in the Tees Valley, 6% compared to 4%.

Travel to work patterns

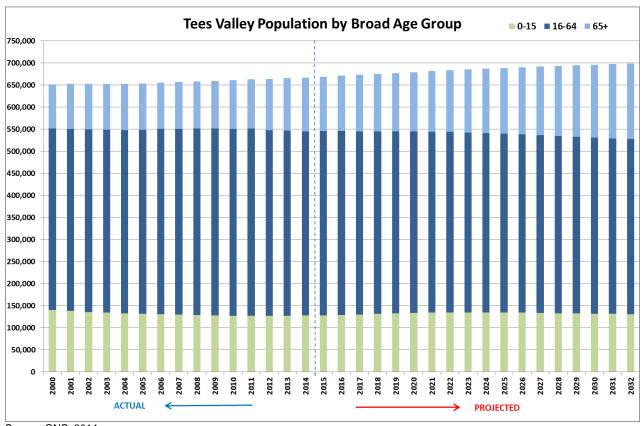
- Tees Valley is recognised as an economic functioning geography. 87% of residents work within Tees Valley, with relatively few commuters crossing the Tees Valley boundary (around 248,000 people live and work in Tees Valley with 38,000 Tees Valley residents working outside of the area and 35,000 Tees Valley workers resident in other areas). Whilst most people work within their district of residence, there are substantial proportions travelling between districts within Tees Valley (see Appendix 2).
- In terms of flows to Tees Valley's neighbouring areas, there is a small net out-flow of around 700 commuters to North Yorkshire (comprised of 9,700 out-flow and 8,900 inflow) with a similarly small net out-flow to Tyne & Wear of 1,300 (5,800 out-flow and 4,600 in-flow). The largest commuter flows are with County Durham with a net In-flow of close to 6,900 (comprised of 10,600 out-flow and 17,500 in-flow).

- Our levels of disadvantage and unemployment hinder our economic growth; we need to create more jobs and up-skill our people.
- We are a highly self-contained local economy, which helps clarify and concentrate 'local' economic decision-making, but to prevent introspection and a lack of ambition, more should be done to encourage talented people to move to Tees Valley.

Total resident population, Tees Valley, 1981 to 2014



Source: ONS, 2014



Source: ONS, 2014

5.2. FUTURE POPULATION

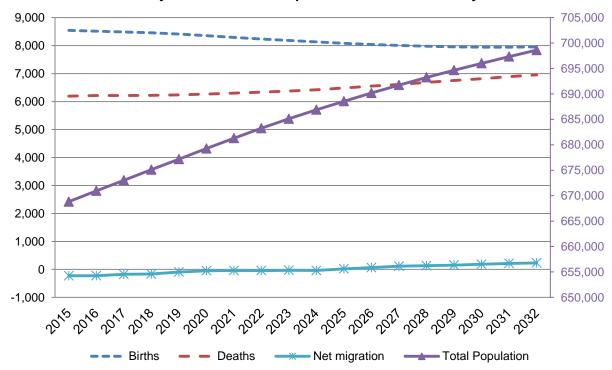
- The Tees Valley Population is projected to continue the growth it has experienced since the end of the 1990s of between one and two thousand each year, reaching just under 700,000 by 2032; a 5% increase compared to the most recent population estimates (mid-2014).
- Births are projected to continue to exceed deaths and it is natural change that is keeping
 the Tees Valley growing rather than migration. Births are projected to begin falling off in
 the next few years. Deaths are expected to follow national trends with mortality rates
 continuing to improve. However, as the numbers over 65s increase, so the numbers of
 deaths increase. This means that natural change peaks in 2015 at 2,400 and then slowly
 diminishes as time goes on to 1,100 by 2032.
- Net out migration is projected to remain until 2025 and then there is a net migration into the Tees Valley, although migration is to remain close to zero (net migration between -200 and 200 per annum). The change is a result of a predicted reduction in the out flow of residents from the Tees Valley to elsewhere in the UK.
- The trends in population by age group differ greatly. By 2023, there will be a 5% increase in the number of children and young people within the Tees Valley (an extra 6,800 0-15 year olds); this is due to the high level of births experienced in recent years (although this is projected to decrease slightly and then become constant after 2024). The working age population is predicted to fall by 5% by 2032 (a combination of migration and cohort size leads to a reduction of 20,700 16-64 year olds by 2032). Whereas the number of people aged 65 and over is predicted to increase by a substantial 41% by 2032, (an extra 49,800 65+ year olds). This change means that 1 in 4 of the population will be aged 65 and over rather than the current 1 in 5.5.
- In 2014 the old age support ratio was 3.1 (this is the number of people of working age per person over State Pension Age (SPA)), this stays the same for 2027 and then falls to 2.7 by 2032. The changes to SPA help retain this ratio. With no change to SPA, the ratios would be 2.1 by 2027, and 1.9 by 2032.
- In 2014, the median age for the population of the Tees Valley was 41.0; by 2027 it will have increased to 41.8, and by 2032, it will be 42.5.

What does this tell us?

- Increase in over 65s and fall in working age population means that employers may be faced with skills shortages (with over 112,000 jobs likely to need replacing by 2022); we are working with schools, colleges and employers to address this.
- Adapting the housing stock to cater for an ageing population is one of the many large challenges created by the changing make-up of the population.
- Retaining young people in Tees Valley remains a real challenge; we are working with schools and partners to provide better careers information advice and guidance, highlighting careers opportunities within Tees Valley.
- More young people from the UK and overseas need to be attracted into the Tees Valley in order to reduce the dependency ratios caused by the ageing population.

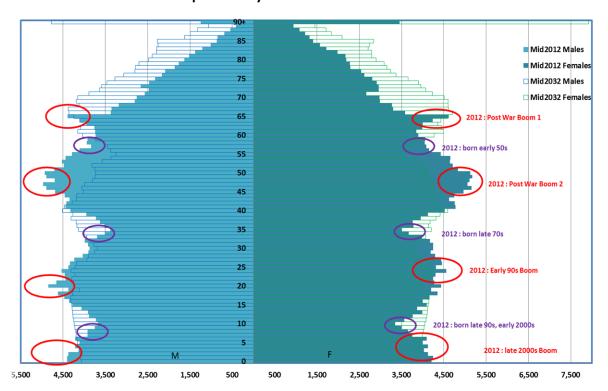
Links to other TVU activity: Tees Valley Demographic Reports available here.

Projected Trends in Population in the Tees Valley



Source: ONS

Population Pyramid Mid 2012 vs Mid 2032

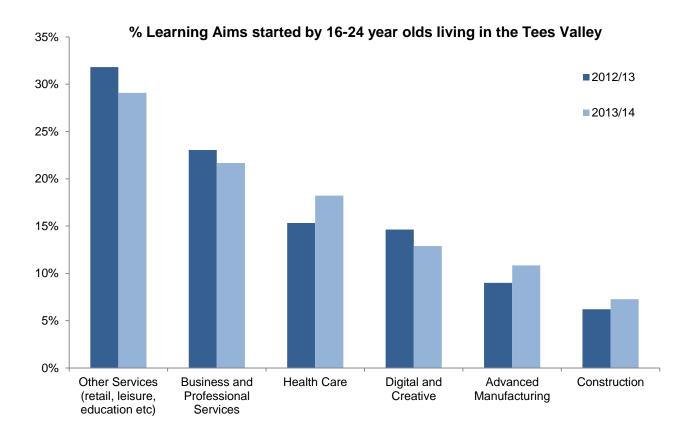


Source: ONS

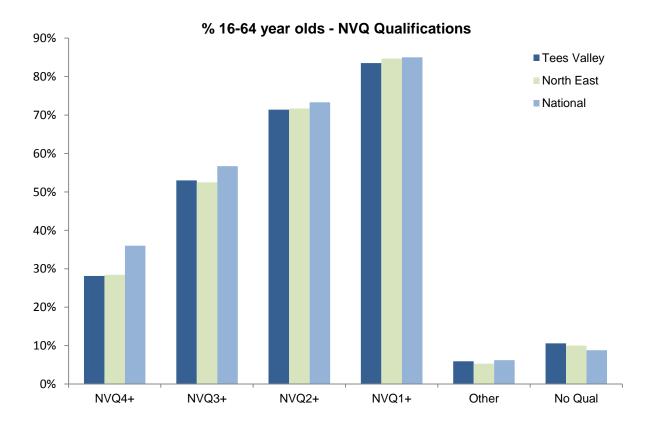
5.3. SKILLS ATTAINMENT

- In 2013/14 there were over 90,940 learning aims undertaken by 16-24 year olds living in the Tees Valley. A learning aim is a single form of learning, e.g. GCSE in English.
- These learning aims were made up of:
 - o 83,870 (92.2%) in Education or Training (classroom based learning)
 - o 5,030 (5.5%) starting an Apprenticeship
 - o 1,620 (1.8%) in Community Learning
 - o 420 (0.5%) in Workplace Learning
- The largest sector for learning in 2013/14 was the Other Services sector with 15,430 learning aims (29% of all learning aims). This sector includes sub sectors such as Retail, Leisure and Education.
- The second largest sector for learning is the Business and Professional Services sector with 11,500 learning aims (22%), followed by Health Care at 9,660 (18%).
- An increase in the percentage of the Tees Valley working age population gaining a NVQ4 qualification has brought levels equal to the North East at 28% (116,200 people) compared to a national figure of 36%.
- The percentage of the working age population in the Tees Valley gaining a NVQ3 qualification remains slightly above the North East at 53% (219,200 people), compared to a national value of 57%.
- The percentage of the working age population in the Tees Valley gaining a NVQ2
 qualification or above has increased slightly over the last year with an extra 500 people,
 whilst the percentage with a NVQ1 qualification has seen a very slight decrease, in
 comparison to a slight increase seen regionally and nationally.
- The percentage of working age population in the Tees Valley who have no qualifications has decreased slightly over the last year with 1,800 less people, in line with regional and national figures.

- Tees Valley residents qualified to a level 4 or above have increased over the last year.
- The percentage of the Tees Valley working age population who have no qualification has decreased.
- This suggests that skills levels are improving in Tees Valley and the historic gap with the national average is starting to close.



Source: SFA Datacube 2013/14

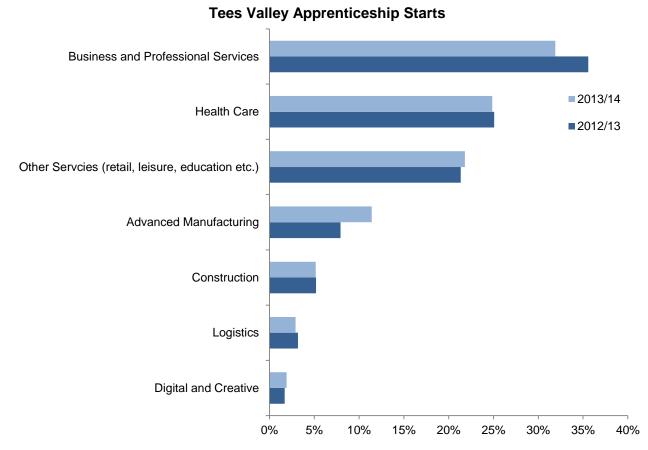


Source: Annual Population Survey, January 2014 – December 2014.

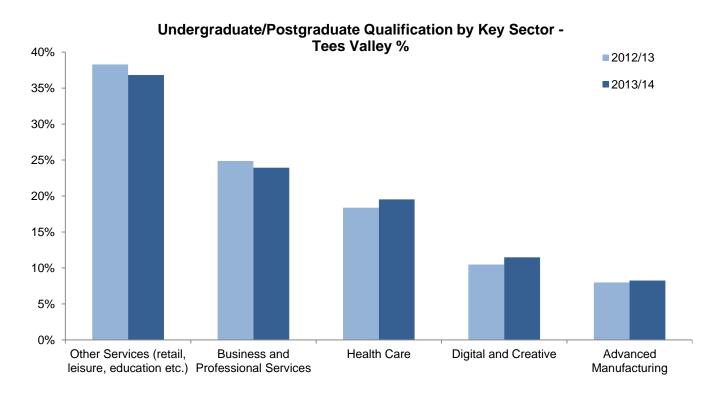
5.4. COLLEGE, UNIVERSITY AND APPRENTICESHIPS

- Tees Valley has six further education colleges (Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland, Stockton Riverside and Cleveland College of Art & Design) and four sixth form colleges along with a number of schools that contain a sixth form college. The six main Tees Valley Further Education colleges offer a range of education and training courses, including apprenticeships and full-time and part time provision. Over £225 million has been invested in FE colleges in the Tees Valley over the past decade, with new facilities in place at all of the major colleges.
- Teesside University was ranked the best in Britain for student retention in the Times and Sunday Times Good University Guide 2015. The university is also described as the UK's leading higher education institution for working with business and last year received the Queen's Anniversary Prize for work at world-class level in the field of enterprise and business engagement. Teesside University is in fact, according to ex-Business Secretary Vince Cable, "one of the best universities for business in Britain."
- As has been the case over the previous three academic years, the most popular
 qualifications gained by Tees Valley graduates are in the Other Services sector (retail,
 leisure, education etc.) with 2250 undergraduate and postgraduate qualifications gained
 in 2013/14 or 37% of all passes. These are predominately in Education and Social
 Studies. The second largest sector for qualifications is the Business and Professional
 Services sector with 24% of all passes (1460 passes).
- 80% of Tees Valley students who have obtained an undergraduate or postgraduate qualification over the last year found employment within 6 months after graduating, with 56% finding full time employment.
- The majority of Tees Valley based graduates (64%) find employment within Tees Valley, with 11% more finding employment in the wider North East.
- In the 2013/14 academic year almost 8000 people living in the Tees Valley started an apprenticeship, compared to 9870 in 2011/12.
- Numbers are highest in the Business and Professional Services sector (this includes admin which cuts across all industrial sectors), with 2550 apprenticeships or 32% of all apprenticeships, followed by Health Care at 25% (1990 apprenticeships). These top sectors are in line with the top sectors nationally.
- There has been an increase in the number of people starting an apprenticeship in Advanced Manufacturing with an extra 160 apprenticeships. The ratio of applications for apprenticeship vacancies is often highest in the Advanced Manufacturing sector indicating a need for more local manufacturing employers to take on apprentices.
- According to the most recent UKCES Employer Perspectives Survey 21% of Tees Valley employers offer an apprenticeship scheme, compared to only 15% nationally. This is the joint highest in the country.

- Almost 8000 people started an apprenticeship in the Tees Valley in 2013/14.
- Demand is high for Advanced Manufacturing apprenticeships.
- Tees Valley graduates are likely to find employment in the 6 months after graduating with over 60% finding employment within the Tees Valley.



Source: Skills Funding Agency Datacube

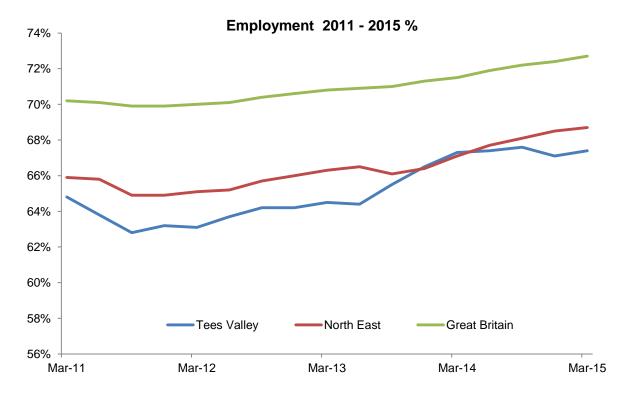


Source: Higher Education Statistics Agency

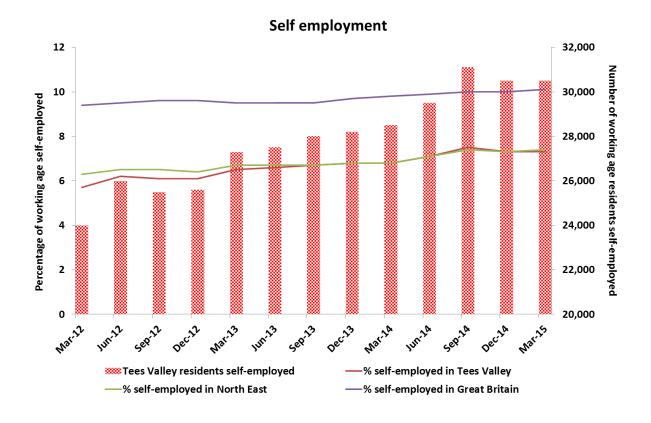
5.5. EMPLOYMENT AND UNEMPLOYMENT

- The employment rate in the Tees Valley has risen much more quickly than nationally over the last 3 years with an extra 14,600 people in employment, a rise of 4.3% compared to only 2.7% nationally.
- The employment rate for those aged 25-49 shows the largest rise compared to nationally by rising by 4.5% over the last 3 years compared to only 2.4% nationally, with an extra 7,100 25-49 year olds in employment.
- The employment rate for those aged 16-24 has risen by 4.5% compared to just 2.4% nationally with an extra 3,000 in employment. However this trend is reversed slightly in the 50+ age range with the Tees Valley seeing a 1.2% increase (extra 5,400 people) in employment compared to a 1.9% increase nationally.
- However whilst there has been progress, the Tees Valley is still twice the national average for claimant unemployment, with 3.4% of the working age population claiming Job Seekers Allowance compared to 1.6% nationally. Youth unemployment is more than twice the national average with 5.3% of 18-24 year olds claiming job seekers allowance compared to 2.1% nationally.
- The largest sector in Tees Valley for employment is the Other Services sector (encompassing retail, leisure and other sectors), with over 97,500 employees, accounting for 39% of all employment. There is a similar picture nationally.
- Whilst self-employment accounted for just over one-third of the total increase in employment nationally, in the Tees Valley it accounted for a significantly larger share at 43%. The number of Tees Valley residents who are self-employed has risen dramatically over the last three years overtaking the rate for the North East. Actual numbers of selfemployed in the Tees Valley have increased by 26% over the last 3 years compared to 9% nationally.
- Overall unemployment stands at 8.9% compared to 6% nationally however unemployment has fallen faster than nationally with 10,100 less people unemployed, a decrease of 3.4% over the last 3 years compared to 2.1% nationally.
- Claimant youth unemployment (18-24 year olds) has more than halved over the last two years from 13.5% to 5.3% with the fall in Tees Valley again almost double the national decrease and over 5,300 less 18-24 year olds claiming Job Seekers Allowance.
- Tees Valley has a high number of 16-18 year olds who are not in employment, education or training (NEET) at 7.8% or 1,860 16-18 year olds, well above the national average of 4.7%.

- The Tees Valley employment rate has risen faster that nationally over the last three years with a rise in self-employment accounting for 43% of the total increase.
- Claimant unemployment and youth unemployment is double the national average.
- Overall unemployment and youth unemployment has almost halved over the last two years, both almost double the national decrease.
- Tees Valley has a high number of 16-18 year olds who are NEET, placing extra importance upon intervening to ensure young people have the skills necessary to access career opportunities.



Source: Annual Population Survey



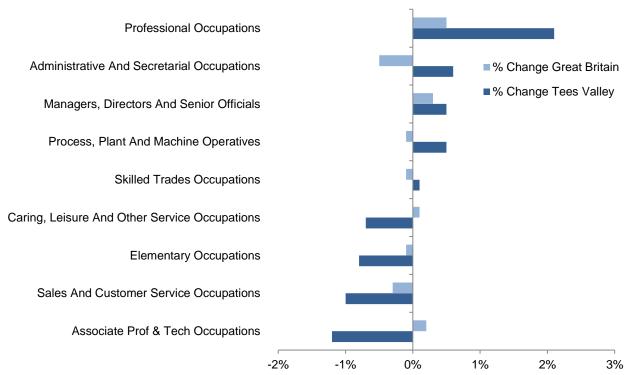
Source: Annual Population Survey

5.6. OCCUPATION AND EARNINGS

- In March 2015 18% of the Tees Valley working age population, comprising 50,500 people, were employed in Professional Occupations.
- Over the last three years the largest increase in employment has been in Professional Occupations with an increase of 8,300, which is a similar picture nationally. Tees Valley has also seen a rise in both Process, Plant And Machine Operatives and Skilled Trade Occupations compared to a fall nationally.
- The largest decrease over the last three years has been in the Associate Professional and Technical Occupations with a drop of 1,500, whilst this rose nationally.
- In the last quarter of 2014 around 28,000 or 2.3% of people in employment in the North East were employed on zero hour contracts, which matched the UK rate. It is estimated that around 6,300 or 2.4% of these would be in the Tees Valley and that the largest sector for zero hour contracts is the Health Care sector.
- 70% of Tees Valley residents work full-time. The percentage of 16-64 year olds working full time has increased slightly with an extra 13,300 people working full time compared to three years ago, an increase of 1.1% compared to a 0.1% increase nationally. Part time has decreased slightly by -0.6%, following national trends.
- Median earnings (the middle value or the value below which 50% of employees fall) for people working full-time in Tees Valley are presently around 5% below that observed nationally. The average full-time Tees Valley employee earned around £504 per week before tax in 2015 compared to a UK rate of £528. North East earnings stood at £489. Mirroring national and regional trends, Tees Valley earnings are now starting to grow again in real terms after a number of years of decline following the recession.
- Male earnings are on average higher than female earnings and are also closer to national rates. In 2015, men working full-time in Tees Valley averaged £549 per week compared to just £437 per week for women. Compared to the UK, male earnings were 97% of the UK male rate whilst female earnings were just 93%.
- Gross Disposable Household Income (GDHI) which estimates the amount of money that all of the individuals in the household have available for spending or saving, totalled £9.9bn in Tees Valley in 2013 with GDHI per head of population at £14,888, 84.8% of the UK rate. Benefits and pensions comprise around 24% of total resources in the Tees Valley compared to 20% nationally. Because these forms of income have generally grown faster than earnings since the recession, the Tees Valley GDHI per head index has narrowed the gap with the UK by almost 4 points since 2008.

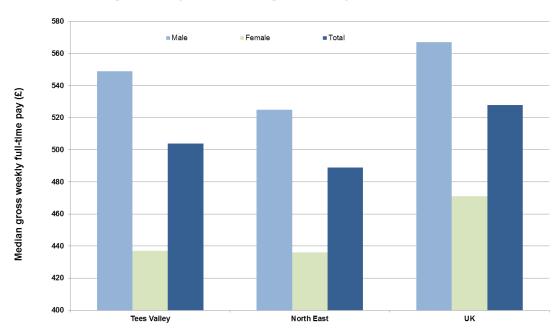
- There has been a rise in the number employed in professional occupations
- 2.4% of employed Tees Valley residents are employed on zero hour contracts.
- 7 in 10 Tees Valley residents work full-time, with the percentage working full time increasing over the last 3 years, suggesting sustainable economic growth.
- Average earnings in the Tees Valley are consistently below national rates
- Tees Valley men earn around 26% more than women on average, a slightly larger gender wage differential than observed nationally (UK 20%)
- Average household incomes in Tees Valley are typically some 15% below the national average, but the gap has been closing in recent years.

Percentage Change in Occupation 2011 - 2013



Source: ONS, APS, 2015

Median gross weekly full-time earnings, Tees Valley, North East and UK, 2015

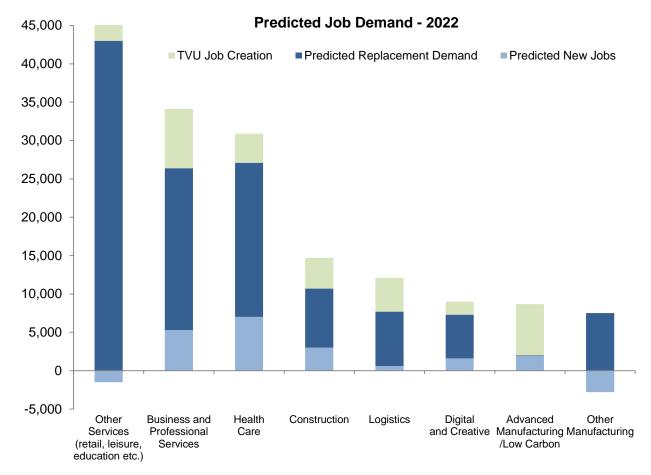


Source: ONS, ASHE 2015, TVU estimates

5.7. FUTURE SKILLS DEMAND

- The ageing workforce predicted in the Tees Valley will bring skills shortages when
 experienced and highly skilled staff leave the workforce. We need to therefore develop
 the skills of those both in work and wanting to work so that they can act as replacements.
 This could offer significant opportunities for our young people particularly in sectors such
 as engineering, chemical processing and logistics.
- According to the UKCES Working Futures projection model the Tees Valley will have 127,000 jobs that will need to be filled by 2022. This is made up of 13,000 new jobs and 114,000 replacements jobs. In addition to this the Tees Valley Strategic Economic Plan, published in April 2014, sets an ambitious growth target of creating 25,000 net new jobs over the next decade.
- It is estimated that to fill the 25,000 new jobs proposed by TVU a skilled workforce will be needed consisting of 2,500 entry level, 7,500 Level 2, 8,500 level 3 and 6,500 level 4+ jobs.
- There were over 24,000 jobs advertised online in Tees Valley in 2014.
- According to the 2013 UK Commission for Employment & Skills (UKCES) Employer Skills Survey, 15% of Tees Valley employers had vacancies when interviewed with 42% of the vacancies considered hard to fill, much higher than the national figure of 29%.
- 38% of vacancies were considered hard to fill due to a shortage of suitably skilled or experienced staff (skill shortage vacancy), again much higher than the England figure of 22%.
- 80% of Tees Valley's skills shortage vacancies are in the Professional, Associate
 Professional or Skilled Trades occupations, compared to 50% in England. England has
 higher proportions in the other occupations, especially Caring, Leisure & Other services
 occupations.
- When asked about skills that they found difficult to obtain, 78% of employers with skills shortage vacancies said that they found Technical, practical or job specific skills hardest to find compared to 62% nationally.

- Tees Valley has an ageing workforce which will bring skills shortages, particularly in key sectors.
- Tees Valley is predicted to have 127,000 jobs that will need to be filled by 2022, making
 it increasingly important to retain skilled people in Tees Valley.
- Tees Valley has a high percentage of skills shortage vacancies in skilled trade roles (hard to fill due to a shortage of suitably skilled or experienced staff)



Source: UKCES Working Future Projections and TVU estimates

Skilled trades Professionals ■ Tees Valley Associate Professionals England Elementary staff Sales and Cust Services Machine operatives Caring, leisure & Other Services Managers Admin/clerical staff 35% 0% 5% 10% 15% 20% 25% 30%

UKCES - Skills Shortage Vacancies Profile

Source: UKCES Employer Skills Survey 2013.

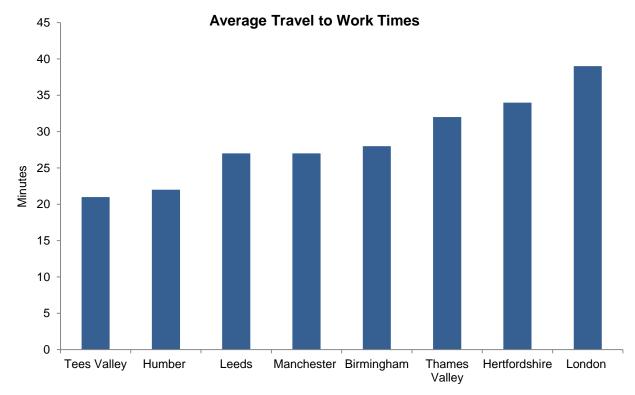
6. GROWTH ENABLERS - SUMMARY

- Robust transport and communications infrastructure, good educational establishments, high quality housing and a good cultural offer are all key enablers of economic growth. They allow businesses to trade and export, residents to access employment opportunities and enable the attraction of businesses, visitors and new residents to an area.
- In Tees Valley, we benefit from key transport assets that link us to key growth corridors and international gateways and provide quick and easy travel within Tees Valley. We also offer high numbers of working age population, graduates and students within a short drive of our major employment sites, a critical component in attracting inward investment.
- However, to unlock future employment and housing growth and improve economic competitiveness, even better intra-connectivity is required.
- To increase our competitiveness, better connections are needed to improve vital arteries
 across the North, such as the A19 and East Coast and Transpennine rail routes, and to
 boost international gateways, such as Teesport and Durham Tees Valley Airport. Such
 connectivity is critical to driving growth in our core employment base in sectors such as
 advanced manufacturing, chemical/process, logistics, low carbon and digital/creative.
- In addition, superfast broadband is becoming increasingly important for business growth and, although Tees Valley is comparatively well provided for, more needs to be done to increase speeds and coverage.
- In short, Tees Valley's voice in the debate about transport across the North through the Northern Powerhouse is vital to our area and integral to economic growth across the North and UK as a whole.
- To attract new residents, businesses, investors and visitors, raise aspirations and retain skilled people within the area, having an excellent offer on education, housing and culture is vital.
- Tees Valley primary school performance is above the national average with high quality schools and excellent performance. However, while GCSE rates have increased compared to 4 years ago, a third of Tees Valley secondary schools require improvement as rated by Ofsted and results continue to lag behind the national average.
- In terms of housing, Tees Valley offers a good mix of offers and some of the most affordable prices in the country. However, there are high rates of energy inefficiency and a lack of executive housing. Recent increases in house-building have improved this and boosted our construction sector, but there remains a need for better quality housing to attract and retain a skilled workforce.
- There is also a strong arts and cultural offer in Tees Valley, employing thousands of people and generating a significant, although small economic impact. While arts, culture and tourism remain a comparatively small part of our economy, they play a vital role in Tees Valley as a place to live, work and visit.
- The following pages provide more detail on the above.

6.1. CONNECTIVITY

- The Tees Valley's key transport assets include the strategic growth corridor of the A19, the A1M linking North and South, the A66 providing East-West connectivity and the East Coast Mainline and Transpennine rail routes. Our current rail connections to London and Scotland, through the vital gateway role played by Darlington, and Leeds and Manchester are significant contributors to our economy and we have an extensive local rail network between Darlington and Saltburn and Nunthorpe and Hartlepool.
- Our transport routes link the advanced manufacturing clusters across Yorkshire,
 Humber, North West, Tees Valley and North East, and combined with the international
 gateways at Teesport (the third largest port in the UK and the leading export port) and
 Durham Tees Valley Airport (with key business connections and serving over 150,000
 passengers a year), provide some of the fastest access for business and residents to
 markets and employment. This is particularly important given that 70% of major
 businesses in Tees Valley are foreign owned.
- Tees Valley's functional economic area means that there are many centres of economic
 activity, leading to complex travel patterns across the Tees Valley. This, combined with
 bus travel remaining a key part of the transport mix (over 34million journeys a year),
 offers the potential to reduce barriers to growth and improve sustainable transport.
- Connectivity barriers include significant pressure points on the A19 and on the road network accessing the A1M and A19, a lack of a fast, practical and modern rail system (reliant upon poor, outdated stock) both connecting Tees Valley to the rest of the North (for passengers and for freight) and within the area. There is also the need to unlock growth opportunities in international markets for Northern companies via freight expansion at Teesport, further rail gauge enhancements, maximising opportunities for growth at Durham Tees Valley Airport and bringing forward the direct Middlesbrough-London service planned by 2020.
- There is a good high speed broadband network serving the more densely populated areas in the Tees Valley conurbation and our main towns. Tees Valley has higher average broadband speeds than London, Leeds and Manchester and higher rates of availability than Sheffield, Edinburgh and Glasgow. However, take-up is not as high at 69%. There is significant investment underway through government and local investment which is likely to raise coverage of superfast to above 95% by 2017. However, pockets of poor connectivity, particularly in key business sites and rural areas, remain.

- Our fast commuting times are a key selling point to attract businesses and people to the area.
- Further employment and housing growth will add to the complexity of travel patterns in Tees Valley, putting pressure on internal networks and meaning that effective intraconnectivity (be this by road, rail or bus) is more important than ever.
- At the same time, to increase economic competitiveness, better connections outside of Tees Valley are required to unlock growth opportunities, particularly on vital routeways, such as the A19, East Coast Mainline, transpennine rail and road route and via Durham Tees Valley Airport.
- Superfast broadband is becoming increasingly important for business and further rollout is needed.
- Tees Valley has an ambitious, but deliverable, list of key priority schemes which would help achieve these goals (see Appendix 4).



Source: ONS, Annual Population Survey, 2012

Superfast Broadband Availability - % coverage



Source: OFCOM, Fixed Broadband Map, 2012 & 2013

6.2. EDUCATION

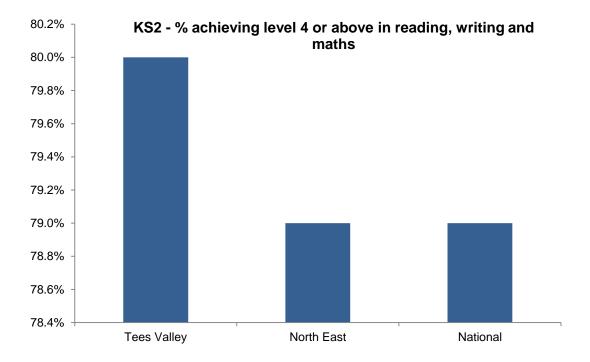
Primary Education

- There are over 200 primary schools in the Tees Valley. Of these 83% are rated as 'Good' or 'Outstanding' by Ofsted with only 13% rated as 'requiring improvement'.
- 28% of primary school pupils in Tees Valley are eligible for free school meals, compared to a national average of 16%, indicating higher levels of deprivation.
- 80% of Tees Valley primary school pupils achieve a Level 4 or above in reading, writing and maths at Key Stage 2, compared to 79% regionally and nationally.
- A quarter of schools in the Tees Valley have over 90% of their students achieving level 4 or above in reading, writing and maths at Key Stage 2.

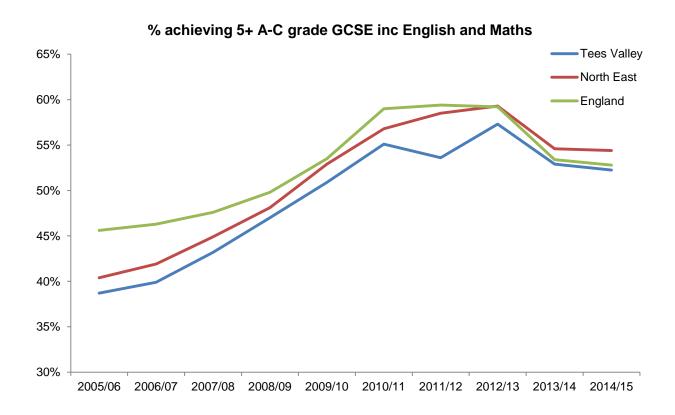
Secondary Education

- There are 53 secondary schools in the Tees Valley. Less than half, or 43%, are rated as 'Good' or 'Outstanding' by Ofsted; with 25% rated as 'Requiring Improvement'.
- 26% of secondary school pupils in the Tees Valley are eligible for free school meals, compared to a national average of 14%, indicating higher levels of deprivation.
- The percentage of pupils gaining 5+ A*-C GCSE or equivalent grades including English and Maths GCSE in the Tees Valley has increased over the last 5 years, from 51% in 2009/10 to 52% in 2014/15.
- The last two years have seen a decrease in the percentage of pupils gaining 5+ A*-C
 GCSE or equivalent grades rates along with national figures. However Tees Valley
 GCSE results have seen a smaller decrease than both regionally and nationally.
- The drop over the last two years has been attributed to changes to the exam system brought in by the Education Secretary. These include the removal of speaking and listening assessments from English and having less coursework, placing more importance on end-of-year exams. Pupils have also been stopped from sitting exams early for some course units, which facilitated resits.

- Tees Valley primary schools have a good reputation with the majority rated as Good or Outstanding by Ofsted.
- Tees Valley has higher levels of primary school pupils achieving level 4 in reading, writing and maths at Key Stage 2 than nationally.
- A higher percentage of primary and secondary school pupils are eligible for free school meals than nationally indicating areas of high deprivation.
- A third of Tees Valley Secondary Schools require improvement or are inadequate as rated by Ofsted.
- GCSE rates have increased compared to 5 years ago, demonstrating improved secondary school performance.
- Changes in the exam system resulted in a local and national drop in GSCE results in 2014 and 2015.



Source: DfE, 2015



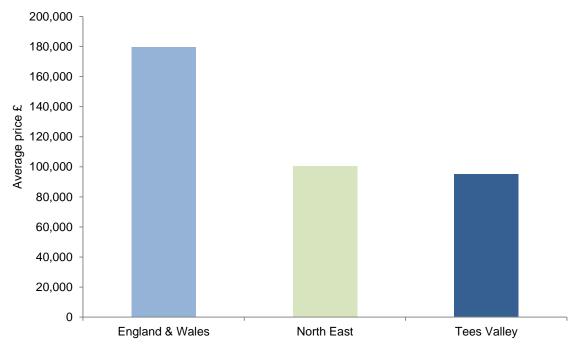
Source: DfE, 2015

6.3. HOUSING

- The Tees Valley has over 283,000 houses. There are 182,000 homes in owner occupation, 55,000 in the social rented sector and 41,000 privately rented.
- In percentage terms, owner occupation is slightly below the national average, while the level of social rented is higher (20% compared to 17.5%) and private rented lower (15% compared to 16.8%), although private rented has grown significantly in the last decade. 47% of households in Tees Valley fall into Council Tax Band A (double the national average), 36% in Bands B to C and 17% in Bands D to H.
- Tees Valley has some of the lowest house prices in the UK, where quality detached houses can be bought for a fraction of the cost of those in London and the South East. There are a number of prestige living environments such as Wynyard (Stockton), Nunthorpe (Middlesbrough) and Yarm (Stockton), along with Victorian town houses in villages in Darlington and East Cleveland, as well as seaside cottages and much more.
- While improvement programmes have made some impact, much of the housing stock in the Tees Valley's main centres remains of the older terraced variety. Over 12.5% of households in Tees Valley are 'fuel poor,' one of the highest levels in the country and comprising over 35,000 households
- Some areas of Tees Valley suffer from weak housing demand, low value stock, long term empty properties, population decline and significant deprivation. Tees Valley recognises the link between housing and population retention and economic growth.
- While there was a significant decline in new housing completions during the recession, Tees Valley housing starts are now averaging around 2,000 a year, compared to under 1,500 for the previous two years.
- Of these 2,000 completions, 20% have been delivered by housing associations and Tees Valley is home to a number of Registered Providers, including Thirteen Group, Coast and Country and NorthStar. This has boosted our construction sector which employs over 13,500 people. However, with low housing development values in Tees Valley, some key developments (particularly new aspirational housing) face major and costly infrastructure challenges.
- Tees Valley suffers from a lack of high quality housing to attract people and investment, with a smaller percentage of detached houses compared to the national average, affordability issues for local residents (with house price increases having outstripped earnings), high levels of outdated stock (and long-term empties) and potential future pressures through the projected rise in the proportion of our population over 65.

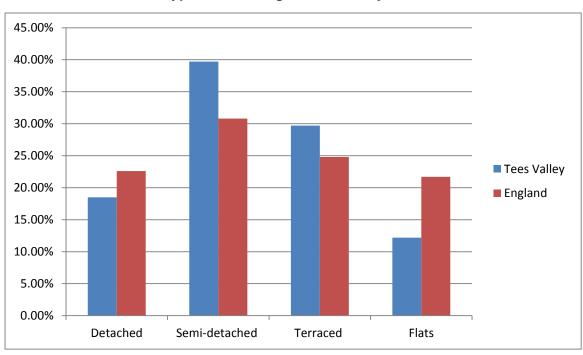
- Lack of executive housing and unbalanced housing stock, leading to net out-migration of population, particularly younger, aspirational families who are the future wealth creators.
- Pockets of housing market failure with low demand and high levels of deprivation
- Recent increase in house-building boosting our construction sector
- There is a need for better quality housing to overcome fuel poverty and meet the needs
 of both our ageing population and to attract a more aspirational population.
- Tees Valley has objectives over the next decade to grow the number of new homes, improve existing accommodation (particularly in the private rented sector and for vulnerable groups) and reduce the number of long term empty properties.





Source: Land Registry, House Price Index, 2015

Types of housing in Tees Valley, 2011



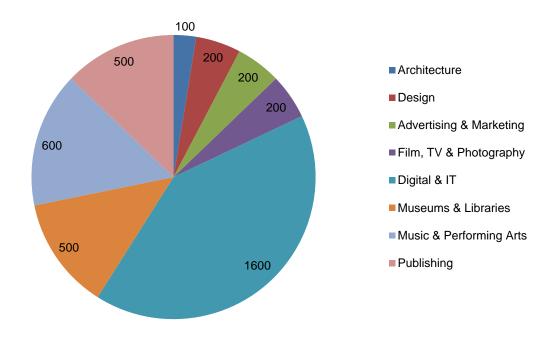
Source: ONS Census, 2011

6.4. CULTURE

- Arts and Culture plays a key role in Tees Valley and is one of the Tees Valley's often unrecognised strengths. There are 4,000 people in Tees Valley employed in the creative, cultural and arts sector in Tees Valley, a number which has risen since 2009. Comparatively this is low at 2% of total employment, compared to 5.1% in the North East and 8.5% for the UK as a whole.
- The highest proportions of jobs are in IT, software and computer services, reflecting the Tees Valley's strengths in digital and music and performing arts.
- Our cultural, arts and heritage businesses range from established creative businesses to sole traders and are part of supply chains across the country. Tees Valley has a developing reputation for excellence in the digital industries, with a vibrant cluster around Teesside University and Digital City where over 500 new jobs have been created in firms supplying the likes of Google and Sony
- Culture shapes the quality of a place, influencing perceptions and making a place more
 attractive to people to live, work and study. Our museums, collections, theatres, art
 galleries, libraries, music and other cultural and heritage assets, such as our coastline,
 countryside and natural assets, draw visitors to Tees Valley and help recruit staff.
- Major events, such as the Stockton International Riverside Festival, Middlesbrough Mela, and Darlington Festival of Thrift are attracting national attention and promote a positive brand. Other cultural assets include Darlington Civic Theatre, Middlesbrough Theatre, Preston Hall Museum, Hartlepool Maritime Experience, Darlington Head of Steam, mima, Captain Cook Birthplace Museum, Kirkleatham Museum and the Transporter Bridge visitor experience.
- Recent multi-million pound investment has taken place, or is underway, to grow our cultural asset base, including; the £8.5m Middlesbrough Town Hall renovation; £38m Stockton High Street redevelopment; £75m Redcar Sea Front improvements; £30m Feethams cinema and leisure development in Darlington; and the multi-faceted Hartlepool Vision campaign.
- Arts and culture are widely recognised as very effective ways of engaging with disenfranchised communities or individuals, such as NEETs, who are furthest away from the labour market. Arts led social inclusion programmes including volunteering can support improvements in wellbeing, self-esteem and employability.
- Our visitor economy is at present dominated by domestic day visitors, with low levels of overnight stays by visitors. Those that do visit Tees Valley only spend half of the national average visitor spend and the visitor economy contributes 1% to our GVA.
- Tees Valley has announced its intention to bid for UK City of Culture status in 2025 recognising the importance of culture to economic growth, education, health and social inclusion.

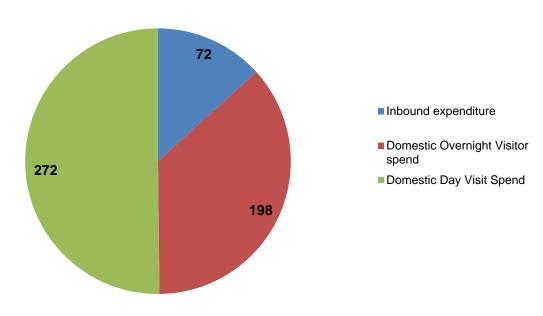
- There is a strong arts and cultural offer in Tees Valley, with many unique assets (see Appendix 5) employing thousands of people and generating economic impact.
- While arts, culture and tourism remain a comparatively small part of our economy, they play a vital role in Tees Valley as an attractive place to live, work and visit.

Creative & Cultural Employment in Tees Valley - numbers employed



Source: BRES, 2013 (DCMS definition of creative industries)

Tees Valley Annual Tourism Expenditure 2011 - £m



Source: ONS, Estimated Tourism Expenditure, 2011 (figures for Tees Valley & Durham)

Appendix 1 - BIBLIOGRAPHY

The following outlines the key sources – and explanatory notes on the methodology used – under each section of the Economic Assessment.

1. 2 page Summary (separate document)

Notes:

- Output (GVA) Gap equals GVA required to match UK GVA per head.
- Productivity (GVA per hour worked) Gap equals GVA required to match UK GVA per hour worked.
- *Enterprise (Number of registered enterprises)* Gap equals number of enterprises required to match UK enterprises per 10,000 adult population rate.
- *Employment (Number of employed residents)* Gap equals number of working age employed residents needed to match UK employment rate.
- Qualifications (Number of residents with an NVQ4 qualification or above) Gap
 equals number of working age residents needed to match proportion of UK residents
 with NVQ4+ qualification.
- Commercialisation (Innovation expenditure as a share of turnover (%), enterprise average, 2008-10) Gap equals increase in percentage of innovation spend as a share of sales required to match the overall LEP average of 2.5%.

2. Economy & Business

Economy & Productivity

 Tees Valley Economic & Business reports available here: https://www.teesvalleyunlimited.gov.uk/tees-valley-unlimited/tees-valley-statistics/economic-reports.aspx

Notes:

There are three ways to calculate the size (or output) of an economy – the production approach, the expenditure approach and the income approach. In theory, these methods should produce the same result. Regional and local level Gross Value Added (GVA), the preferred sub-national measure of economic activity (Gross Domestic Product or GDP being the preferred national measure), is calculated using the income approach and includes:

- Compensation of employees (includes wages and salaries, NI and pension contributions, redundancy payments) and
- Gross operating surplus (includes self-employment income, gross trading profits and rental income).

Productivity growth is the key contributor to economic growth. In the words of the economist Paul Krugman "Productivity isn't everything, but in the long run it is almost everything". Productivity can be measured in a number of ways. At the local level GVA per hour worked is the preferred measure. Other measures include GVA per filled job or more simply GVA per head of population

Competitive advantage

• Teesside Collective, http://www.teessidecollective.co.uk/

Innovation

- BIS, 'Mapping Local Comparative Advantages in Innovation,' 2015, https://www.gov.uk/government/publications/local-enterprise-partnerships-evidence-on-local-innovation-strengths
- Enterprise Research Centre, 'Benchmarking Local Innovation,' 2015, http://www.enterpriseresearch.ac.uk/wp-content/uploads/2015/05/Benchmarking-Local-Innovation1.pdf
- TVU, Tees Valley Innovation Strategy, 2015

Business base & Enterprise

Notes:

In the UK, the usual definition of an SME (small and medium sized enterprise) is any business with fewer than 250 employees. A 'small' business is defined as an enterprise with fewer than 50 employees. The small business category includes the sub-category 'micro' businesses i.e. one with fewer than 10 employees. A 'medium' size business is one with between 50 and 249 employees, whilst a 'large' firm employs over 249 employees.

An enterprise start-up or 'birth' is a company that was not on the ONS database in the previous year, whilst an enterprise 'death' is a company that was previously on the database but which has ceased to exist. Whilst many deaths are likely to be due to company insolvencies or closures, some will be due to companies being acquired by others or other forms of company restructuring. Similarly a birth may be a new company, but may also represent an expansion where a small company takes on employees or reaches the VAT threshold. A birth may also arise from a company restructure.

Trade

Notes:

HM Revenue & Customs (HMRC) is responsible for collecting the UK's international trade in goods data, which are published as two National Statistics series – the national level 'Overseas Trade Statistics (OTS)' and the 'Regional Trade Statistics (RTS)'. The RTS are published quarterly showing trade at summary product and country level, split by UK regions and devolved administrations.

Low Carbon

- NEPIC, 2014, http://www.nepic.co.uk/about/
- DECC, 'UK Local Authority and Regional Carbon Dioxide Emissions national statistics: 2005-2013,' 2015, https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2013
- Teesside Collective, http://www.teessidecollective.co.uk/

Views of Businesses

• TVU, Tees Valley Business Survey 2015

Going forward

- Ekosgen, 25,000 jobs target, 2012
- TVU, 25,000 jobs analysis, 2015

3. Skills & Labour Market

Population

- ONS, Annual Mid-year Population Estimates
 http://ons.gov.uk/ons/taxonomy/index.html?nscl=Population+Estimates+by+Age+and+Sex
- ONS Sub National Population Projections http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Sub-national+Population+Projections#tab-data-tables
- ONS, Census, 2011 http://www.nomisweb.co.uk/census/2011
- DCLG, English Indices of Deprivation (IMD), 2015
 https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015
- UKCES, 2014 https://www.gov.uk/government/organisations/uk-commission-for-employment-and-skills
- Tees Valley Demographic Reports available here: https://www.teesvalleyunlimited.gov.uk/tees-valley-unlimited/tees-valley-statistics/demography-census.aspx

Skills Attainment

- Learning Aims Skills Funding Agency
- GCSE Results DfE Statistical First Release 2014/15
- NVQ Levels Annual Population Survey, January 2014 December 2014. Figures must be used with caution due to confidence levels. NVQ1+ also includes all qualification above Level 1, NVQ2+ also includes all levels above level 2, NVQ3+ also includes all qualification above Level 3, NVQ4+ also includes all levels above level 4.

Employment and Unemployment

- Unemployment Annual Population Survey January 2014 December 2014. ONS
 claimant count, percentages are calculated using the mid-2013 resident working age
 population 16-64 and 18-24 for youth unemployment.
- Self-Employment Annual Population Survey, January 2014 December 2014. Figures must be used with caution due to confidence levels.
- NEET Department for Education 2014
- Employment Business Register and Employment Survey.

Occupations and Earnings

- Annual Population Survey, January 2014 December 2014. Figures must be used with caution due to confidence levels.
- ONS, ASHE 2015

Further Education, Higher Education and Apprenticeships

- Apprenticeships Skills Funding Agency
- Higher Education Higher Education Statistics Agency

Future Demand for Skills

- Workforce projections UKCES Working Futures projection model
- Skills Shortage Vacancies UKCES Employer Skills Survey 2013

All job vacancies - Labour Insight System

4. Growth Enablers

Connectivity

- Civil Aviation Authority, Passenger Numbers at UK airports 2014-15, http://www.caa.co.uk/default.aspx?catid=80&pagetype=88&sglid=3&fld=201505
- OFCOM, UK Broadband Speed Data 2013, http://maps.ofcom.org.uk/broadband/
- TVU, Tees Valley Strategic Infrastructure Plan 2015, https://www.teesvalleyunlimited.gov.uk/tees-valley-unlimited/aims-and-ambitions/infrastructure-and-place.aspx
- TVU, Transport Statement of Ambition, https://www.teesvalleyunlimited.gov.uk/tees-valley-unlimited/aims-and-ambitions/infrastructure-and-place/strategic-transport.aspx

Education

See Skills Attainment

Housing

- ONS Census 2011, http://www.ons.gov.uk/ons/guide-method/census/2011/index.html?utm_source=twitterfeed&utm_medium=twitter
- DECC, Fuel Poverty Statistics 2014, https://www.gov.uk/government/collections/fuel-poverty-statistics
- DCLG, Housing Completions by LEP area 2014-15, https://www.gov.uk/government/collections/house-building-statistics
- ONS, BRES, 2013
- Land Registry, House Price Index 2015, https://www.gov.uk/government/collections/house-price-index

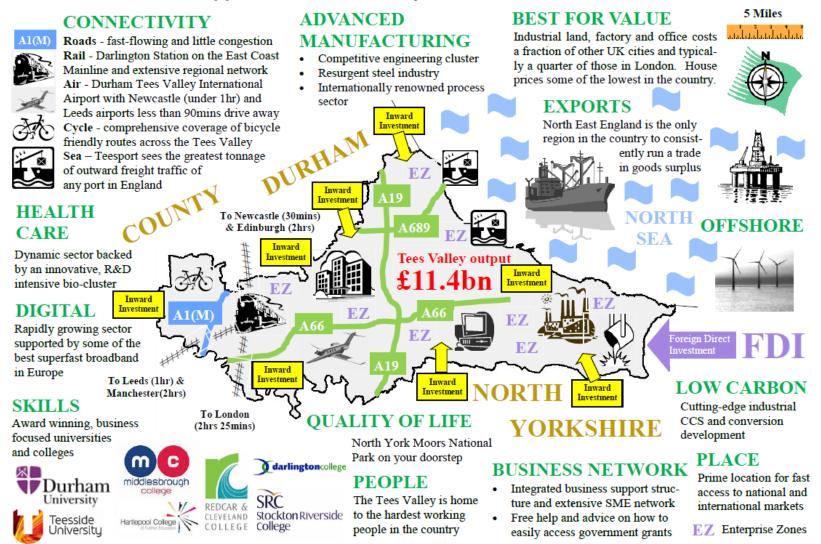
Culture

- ONS, BRES, 2013 (DCMS definition of creative and cultural sectors)
- Visit England, Tourism Statistics, 2013, http://www.t-stats-uk.co.uk/visitengland/SummaryReport.aspx
- ONS, Sub-National Tourism, The Regional Value of Tourism 2011 (Demand-Side Data), http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-353054

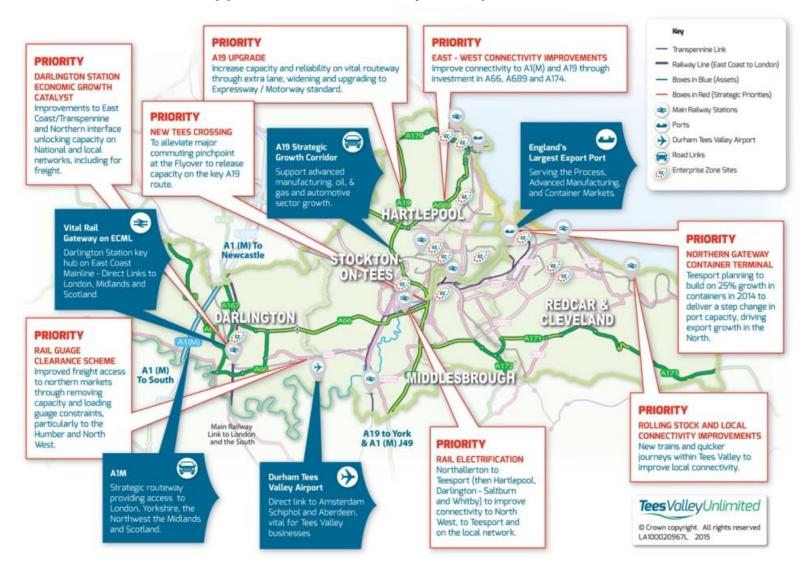
Appendix 2 – Tees Valley Travel to Work Patterns



Appendix 3 – Tees Valley Investment Attributes



Appendix 4 – Tees Valley Transport Priorities



Appendix 5 – Tees Valley Cultural Assets





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