

#### Local Industrial Strategy – Evidence Base

September 2019



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#### Executive summary

Metro Dynamics has been commissioned by Stoke-on-Trent and Staffordshire Local Enterprise Partnership to develop an evidence base to underpin their Local Industrial Strategy.

This report summarises the key points of this analysis, looking at the economy and productivity, sectoral strengths and opportunities, and the five foundations of productivity: Business Environment, People, Ideas, Infrastructure, and Place. This has been developed between March and July 2019 and therefore the data provided will reflect what was available at the time of development.

#### The Stoke-on-Trent and Staffordshire Economy

Stoke-on-Trent and Staffordshire is a £21.5bn economy, equating to 16.5% of the GVA for West Midlands, and 1.2% of UK output. The economy has tended to be weaker relative to the wider West Midlands and to England, with GVA per head of £19,114, compared to £22,301 for the West Midlands and £27,660 for England.

Since 2009, and following the financial crash of 2008, the economy has grown at a slower rate in Stoke-on-Trent and Staffordshire than the regional and national average. Over the five years leading up to 2017, Stoke-on-Trent and Staffordshire's GVA has grown an average of 1.5% per annum, compared to 2.5% for West Midlands.

With a GVA per hour worked of £25.90, Stoke-on-Trent and Staffordshire has one of the lowest productivity rates in the country, 21.9% lower than the national average and 11.2% below the West Midlands average. This is a problem across the local economy, as each sector in Stoke-on-Trent and Staffordshire underperforms the national average in productivity terms.

There are 485,000 jobs in the Stoke-on-Trent and Staffordshire area. Employment has grown by 9.6% since 2009, adding 42,340 new jobs. This is lower than the West Midlands and national averages (both 10.9%).



#### Sectoral strengths and opportunities

Manufacturing is a highly specialised sector in Stoke-on-Trent and Staffordshire. Manufacturing has grown by 12.5%, or 6,615 jobs over half of total national net jobs growth between 2009 and 2017.

The most specialised sub-sectors within manufacturing are the manufacture of other non-metallic mineral products; the manufacture of beverages; and the manufacture of machinery and equipment. This reflects Stoke-on-Trent and Staffordshire's strengths in the ceramics, advanced materials, brewing and automotive industries, centred in Stoke-on-Trent, Burton-upon-Trent, and Uttoxeter and South Staffordshire. Together, these three sub-sectors account for over 16,000 jobs.

Logistics is a key employer in Stoke-on-Trent and Staffordshire and one of the economy's specialisms. Logistics is one of the area's core industries. Since 2009, the number of logistics jobs in the area has grown by 19.9%, nearly double the rate of 10.8% for England, and faster than the West Midlands. The most specialised sub-sector in Logistics is warehousing and support activities for transportation, which is over twice as specialised in Stoke-on-Trent and Staffordshire as England, and accounts for 18,000 jobs.

Much of Staffordshire is rural, and there are corresponding specialisms in the economy in agriculture. Crop and animal production is nearly twice as specialised as in Stoke-on-Trent and Staffordshire as England, and is a significant employer, accounting for 10,500 jobs.

There is increasing specialisation in personal services and digital industries. The most specialised sub-sector is gambling and betting activities, over twice as specialised in Stoke-on-Trent and Staffordshire as England, accounting for 3,250 jobs. The sub sector has increased in specialisation since 2009. 10,500 jobs are in sports activities, amusement and recreation, reflecting the importance of the visitor economy to the area.

#### **Business environment**

Stoke-on-Trent and Staffordshire is home to 39,155 businesses. Business density in the area is lower than the regional and national averages at 410 businesses per 10,000 residents. The West Midlands, in comparison, has a business density of 425 businesses per 10,000 residents, whilst England has a rate of 482 businesses per 10,000 residents.



The rate of new business births in SSLEP is behind that of the West Midlands and England, with new businesses making up 10.9% of the total number of businesses, compared to 13.8% for the West Midlands and 13.5% for England. Its business death rate, however, is lower, at 10.4% compared to 11.2% for the West Midlands and 12.3% for England.

As a result, Stoke-on-Trent and Staffordshire has a slightly better survival rate for new businesses across than England and the West Midlands, from one year after establishment through to five years. This suggests that the LEP area is a good place to start a business and a supportive environment to maintain it.

#### People

Stoke-on-Trent and Staffordshire has a population of 1.1m people, and has seen slower population growth than the rest of the West Midlands and England as a whole. The area also has an ageing population, with 26.3% of the population aged over 60 compared to 23.4% of the population nationally.

Between 2004 and 2018 the proportion of the local population with

degree level or better (NVQ4+) skills rose from 20.4% to 33.4%. Nonetheless, the area has a lower proportion of the population with NVQ4+ (33.4%) than the UK (39.2%) though in line with the West Midlands average (33.1%).

Conversely, Stoke-on-Trent and Staffordshire also has a greater share of the population with NVQ1 qualifications or below than the national average (19.1% locally compared to 18.4% nationally), though this is lower than the West Midlands average (21.3%).

Both resident and workplace wages are lower than the regional and national averages. Resident wages in the area are higher than workplace wages, indicating that people are able to find more lucrative work outside of the area itself.

#### Ideas

Stoke-on-Trent and Staffordshire ranks 29th out of 38 LEPs for overall business R&D expenditure, and 23rd out of 38 for business R&D expenditure per FTE.



However, whilst the LEP area ranks better for expenditure per FTE, the available figures show that R&D expenditure is very unequally distributed across places. Whilst Stoke-on-Trent and Staffordshire had R&D expenditure of £422 per FTE, neighbouring Cheshire & Warrington LEP (a relatively strong performer in business R&D terms) recorded expenditure of £2,716 per FTE or 6.4 times as much.

Across the two most recent years for which data is available (2015/16 and 2016/17), businesses in the Stoke-on-Trent and Staffordshire claiming R&D tax credits cited expenditure totalling £170m, or just 3.4% of the total West Midlands amount (approx. £5bn). Patent activity is also significantly below the regional and national averages, although available data suggests this gap may be closing.

In the funding period 2012 – 2021, the area received funding totalling £93.7m from Innovate UK and various funding councils. The area ranked between 22nd and 28th of all LEPs for the different funding sources in terms of amount received.

In both Keele University and Staffordshire University, Stoke-on-Trent and Staffordshire has strong and engaged institutions that are continuing to invest in innovation. Both are important supporters of spin out firms, graduate start-ups and generate strong IP revenues. Both are engaged in finding commercial applications for their research and new avenues to develop the local economy.

#### Infrastructure

Stoke-on-Trent and Staffordshire sits at the heart of the country and at the centre of its road and rail network. It acts as a bridge from the South to the North, and sits at the intersection of three major engines of UK growth (the West and East Midlands and the North West), making an important contribution to all three.

Broadband coverage is uneven with large areas able to access high maximum download speeds (100 Mbit/s) but with lower average speeds and some rural or remote places, and even large towns, with low average download speeds.



Non-domestic energy consumption is high across the area thanks to the concentration of manufacturing, materials and logistics industries in the area.

There are clear differences between gas and electricity usage.

Aside from areas surrounding Stoke-on-Trent and Tamworth, there are high levels of non-domestic energy electricity usage away from large towns, for instance in East Staffordshire between Uttoxeter and Burton-upon-Trent. Non-domestic gas consumption is concentrated around the region's larger towns and cities.

Across the LEP, the home ownership rate is 67% compared to around 63% for both England and West Midlands. The proportion of privately rented houses is also lower than the those for West Midlands (18%) and England (20%).

Since 2011, house prices in Stoke-on-Trent and Staffordshire have increased by 25.6%. For the same period, house prices in West Midlands increased by 30.6% and in England by 32.8%.

#### **Place**

Stoke-on-Trent and Staffordshire is an incredibly diverse area, with two cities, several historic market towns, manufacturing towns, and large rural areas. Stoke-on-Trent and Staffordshire is an important part of neighbouring economies to the North, South, East and West.

70% of workers live in Stoke-on-Trent and Staffordshire, and the area has a net commuting outflow, with 80,800 commuters into the area and 117,000 leaving for work each day

The area is home to the Cannock Chase, an area of outstanding natural beauty, and a substantial part of the Peak District National Park, which attracts over 13 million visitors a year.



#### Introduction

In March 2019, the Stoke-on-Trent and Staffordshire Local Enterprise Partnership (SSLEP), in partnership with Metro Dynamics, began work on its Local Industrial Strategy. This document draws on and is informed by a range of other analyses, particularly the Skills Advisory Panel (SAP) evidence base.

The first stage of this project was to assemble an evidence base which shows the state of the region's economy at present. This report is the summary of that analysis.

The analysis has considered Stoke-on-Trent and Staffordshire as a whole, but also variation within the area. This involves looking at differences between the local authorities, as well as identifying patterns at the small area level, data permitting.

Throughout, where possible, comparisons have been drawn with the West Midlands regional average and the national (England) average, and temporal data and change over time has been used to contextualise current performance and show trends. This pack is organised into eight sections. The first two sections give an overview of the Stoke-on-Trent and Staffordshire economy:

- Economy and productivity analyses the size of the economy, economic growth, overall and sectoral productivity
- Employment and Sectors looks in depth at jobs growth, the sectoral make up of the economy, and subsectoral specialisation and employment levels.



To closely align with the national Industrial Strategy, the next five sections are structured by the five foundations of productivity:

- Business environment includes a detailed analysis of the business base looking at its structure, spatial distribution, births and deaths, and exports.
- People provides in depth analysis of the labour market, including demographics, employment patterns, wages, deprivation, skills and migration.
- Ideas covers R&D and innovation spending.
- Infrastructure covers residential and commercial property trends, digital connectivity, energy and transport.
- Place presents commuting patterns, deprivation and the visitor economy.

Following this, the appendix contains a methodology section setting out the analytical approach taken in this evidence base.



### **Economy & Productivity**



### Economy and productivity



An economy worth £21.5bn, equating to 16.5% of the GVA for West Midlands, and 1.2% of UK output. GVA has grown by £1.8bn in the last 5 years.



£19,114 produced per person, compared to £22,301 for the West Midlands, and £27,660 in England.



In 2017, GVA per hour worked was £25.90 in Stoke-on-Trent and Staffordshire. This puts the area in position 37 out of 38 LEPs.



The GVA per job is lower for every sector in Stoke-on-Trent and Staffordshire than the national average.

#### Economic output

Gross Value Added (GVA) is the standard measure in the UK for the total size of local economies. It measures the increase in the value of the economy due to the production of goods and services in the area.

According to the most recent figures, the GVA of Stoke-on-Trent and Staffordshire LEP is £21.5bn, equating to 16.5% of the GVA for West Midlands, and 1.2% of UK output.

Since 2009, and following the financial crash of 2008, the GVA of Stoke-on-Trent and Staffordshire has grown, albeit at a slower rate than the rates for West Midlands or for England. Over the five years leading up to 2017, SSLEP's GVA has grown an average of 1.5% per annum, compared to 2.5% for West Midlands. At the national level, over the same period, the UK grew at an annual average rate of 2.0%.

Stoke-on-Trent is the largest economy within the LEP area and, with a GVA of £5.3bn, accounts for 24.4% total output. East Staffordshire and Stafford are the second and third largest, with a GVA of £3.1bn and £2.8bn respectively.

GVA per head of population is a normalised measure of GVA

used to compare regions of different sizes. The charts overleaf shows GVA per head for Stoke-on-Trent and Staffordshire, its local authorities, and regional, national and LEP comparators from 2001 to 2017.

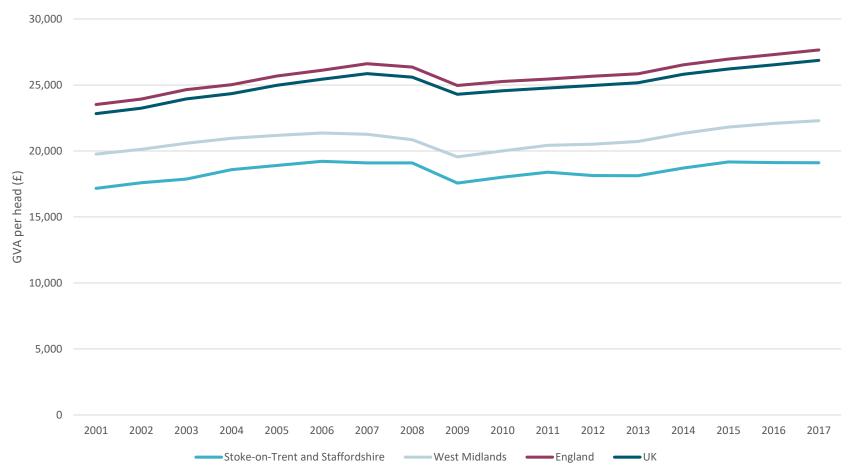
In 2017, the GVA per head for Stoke-on-Trent and Staffordshire was £19,114, compared to £22,301 for the West Midlands. At the national level, England had a GVA per head of £27,660.

Over the last five years, GVA per head in Stoke-on-Trent and Staffordshire has grown at a slower rate than the national and regional averages. From 2012-17, SSLEP grew at an average annual rate of 1.1% compared to an equivalent rate of 1.7% in the West Midlands, and rates of 1.5% in the UK.

Within the LEP area, Tamworth saw by far the fastest rate of growth, its GVA per head growing by an average annual rate of 9.2% over the last five years.

### GVA per head

Stoke-on-Trent and Staffordshire GVA per head compared to regional and national averages

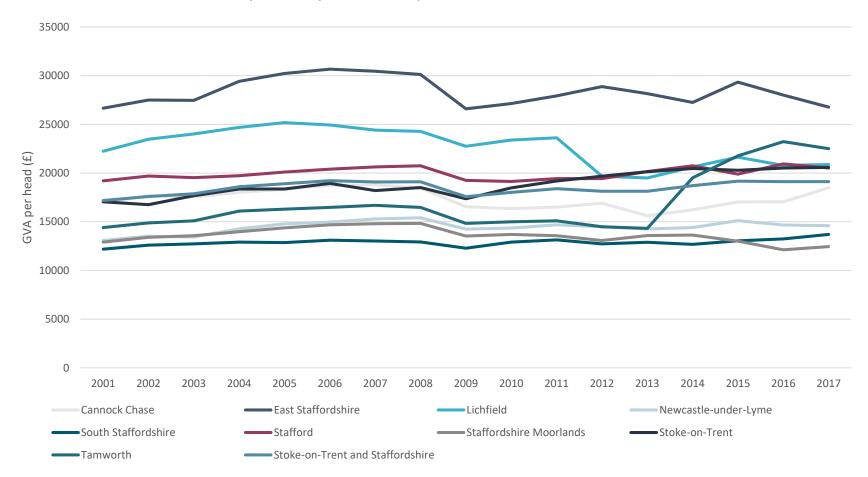


Source: ONS Regional gross value added (balanced) local authority by NUTS 1 region: UKG West Midlands chained volume measures in 2016 pounds (£ millions); Balanced Gross Value Added (GVA(B)) for Combined Authorities, City Regions and other economic and enterprise regions of the UK; ONS Gross Value Added (balanced) by country and region; ONS Regional gross value added (balanced) reference tables Stoke-on-Trent NUTS1 & UK chained volume measures in 2016 pounds ONS Population Estimates (2018)

Enterprise Partnership

### GVA per head by Local authority

Stoke-on-Trent and Staffordshire GVA per head by Local Authority



GVA is deflated to give values in 2017 terms



### Productivity

Productivity can be measured by GVA per hours worked. The chart overleaf shows GVA per hour worked for Stoke-on-Trent and Staffordshire and its regional and national comparators from 2004 to 2017. The chart on the following slide shows GVA per hour worked for Stoke-on-Trent and Staffordshire's constituent local authorities over the same time period.

In 2017, GVA per hour worked was £25.90 in Stoke-on-Trent and Staffordshire, placing it in position 37 out of the 38 LEP areas, 11.2% below the West Midlands average and 21.9% lower than the UK average.

From 2012 to 2017, Stoke-on-Trent and

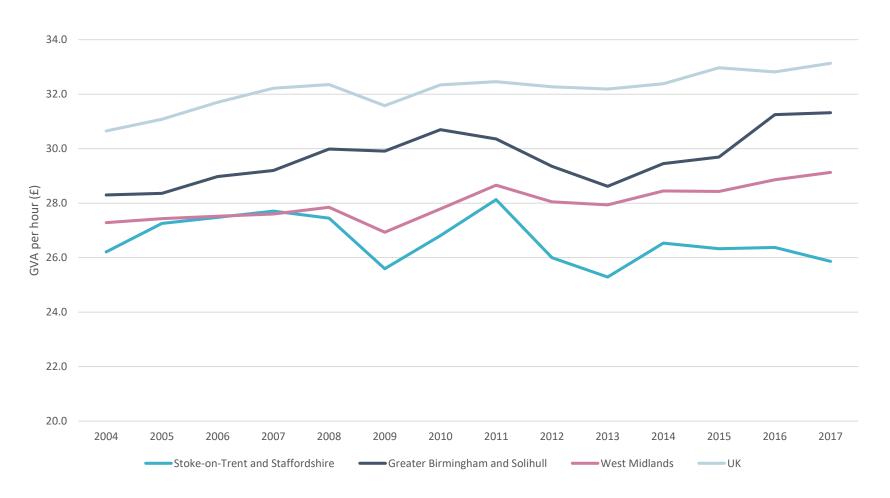
Staffordshire's GVA per hour worked has fallen by an average annual rate of 0.1%. Over the same period, the average annual growth rate in the UK was 0.5% and 0.8% in the West Midlands.

GVA per hour worked is considered one of the more accurate measure of productivity than alternative metrics, because there are regional and sectoral variations in the average number of hours worked per job.

GVA per hour is also preferable to GVA per person because the total population includes many people who do not work, or do not work in the area (and conversely does not count people who do work in the area but live somewhere else).

### GVA per hour worked

Stoke-on-Trent and Staffordshire GVA per hour compared to regional and national averages





### Productivity by sector (1)

The tables below show GVA per job for different sectors, split by SIC sections for Stoke-on-Trent and Staffordshire and its constituent local authorities. Colour coding indicates whether the sector is more (green) or less (orange / red) productive than England.

For the LEP area as a whole, there are no sectors which have a higher GVA per job than England. This demonstrates that, across its sectors, Stoke-on-Trent and Staffordshire's economy lags behind the rest of the country. Accommodation and food service activities has the closest GVA per job to the national figure at £22,685 to England's figure of £23,879.

The sectors where Stoke-on-Trent and Staffordshire is significantly lower than the national GVA per job rate are primary industries, financial and insurance activities, which has a GVA per job less than half of England, and professional, scientific and technical activities.

Across the majority of sectors, the Stoke-on-Trent and Staffordshire area as a whole is also less productive than the West Midlands. The exceptions are the accommodation and food services sector, real estate activities, and public administration and defence, where the GVA per job level is higher in Stoke-on-Trent and Staffordshire than the West Midlands.

### Productivity by sector (2)

Within the LEP area, there are notable areas of specific strength, which suggests that Stoke-on-Trent and Staffordshire is divided between specialised, and productive economics.

Cannock Chase and Tamworth outperform England in the construction sector. Cannock Chase has a GVA per job level of £95,143 and Tamworth with £114,667, compared to a national level of £73,113 per job.

Newcastle-under-Lyme has a higher GVA per job for information and communications at £133,333, 46% higher than the English equivalent figure of £91,605. It is the only local authority in the LEP area with a higher GVA per job rate for information and communications than the West Midlands and England.

Stafford has high productivity for financial and insurance activities at £222,000 per job, 77% higher than the national rate of £125,645. Every other local authority in

the LEP area has a lower GVA per job for financial and insurance activities than the West Midlands and England.

Transportation and storage is a highly productive sector in Tamworth, where the GVA per job rate of £272,667 is over five times higher than the UK level. East Staffordshire, meanwhile, with GVA per job level of £57,200, outperforms England in professional, scientific and technical activities by 8%.

Tamworth, Newcastle-under-Lyme and the Staffordshire Moorlands have higher GVA per job rates for administration and support service activities than England and the West Midlands. With a GVA per job of £51,000, the Staffordshire Moorlands is the key local authority for this sector, 59% higher than the English average.

### GVA per job by sector (1)

GVA per job by broad sector as a % of the GVA per job of England

Region	Primary Industries	Manufacturing	Construction	Wholesale and retail; repair of motor vehicles	Transportation and storage	Accommodation and food service activities	Information and communication	Financial and insurance activities	Real estate activities
England	78,452	72,092	73,113	40,690	52,984	23,879	91,605	125,645	442,331
West Midlands	74,250	68,260	69,025	37,645	46,614	22,128	87,456	92,214	312,346
SS LEP	43,000	59,617	66,538	32,448	40,125	22,658	70,583	60,429	442,333
Cannock Chase	33,333	59,400	95,143	27,512	45,000	13,429	69,000	56,667	415,556
East Staffordshire	32,857	57,818	81,200	38,634	25,556	72,400	72,000	68,333	357,778
Lichfield	114,375	53,111	75,333	29,379	46,500	15,500	80,800	16,667	374,444
Newcastle- under-Lyme	43,810	48,750	44,889	35,897	22,222	19,714	133,333	38,333	340,000
South Staffordshire	21,600	77,600	53,333	25,577	20,000	12,000	66,667	22,857	463,333
Stafford	26,667	59,857	52,333	27,385	26,750	12,500	47,429	222,000	472,000
Staffordshire Moorlands	18,571	77,111	38,000	22,683	28,889	9,000	36,667	32,000	457,778
Stoke-on-Trent	101,587	62,643	64,000	36,047	22,500	17,833	74,250	69,778	415,000
Tamworth	65,000	39,556	114,667	42,000	272,667	17,333	68,750	70,000	562,857

Source: ONS GVA Reference tables; BRES Employment by SIC Sections

As a percentage of the GVA per job for England:

50% 150%



### GVA per job by Sector (2)

GVA per job by broad sector as a % of the GVA per job of England

Region	Professional, scientific and technical activities	Administrative and support service activities	Public administration and defence	Education	Human health and social work activities	Other services sector	Total
England	52,976	32,091	65,119	39,146	31,934	54,738	58,550
West Midlands	38,132	27,996	58,458	37,252	30,223	45,984	49,949
SS LEP	33,179	27,636	60,375	34,294	28,652	43,296	45,194
Cannock Chase	26,000	26,400	55,000	36,500	26,286	36,800	44,310
East Staffordshire	57,200	23,143	58,000	34,286	32,000	34,333	50,031
Lichfield	21,333	19,111	63,333	32,667	30,167	43,714	45,102
Newcastle-under- Lyme	25,667	38,400	60,000	32,833	29,800	54,500	40,484
South Staffordshire	22,333	29,500	58,400	38,000	20,250	34,286	41,760
Stafford	40,571	26,000	60,800	33,143	27,778	47,333	44,667
Staffordshire Moorlands	18,857	51,000	55,714	36,000	20,857	23,714	38,338
Stoke-on-Trent	35,000	22,286	63,000	36,333	32,208	57,429	44,124
Tamworth	24,667	35,333	60,000	33,714	21,143	47,333	60,655

Source: ONS GVA Reference tables; BRES Employment by SIC Sections

As a percentage of the GVA per job for England:

50% 150%



### **Employment & Sectors**



#### Employment & sectors



There are 485,000 jobs in Stoke-on-Trent and Staffordshire. Employment has grown by 9.6% since 2009, adding 42,340 new jobs.



Growth in job numbers in manufacturing in Stoke-on-Trent and Staffordshire has been over half of total national net jobs growth between 2009 and 2017.



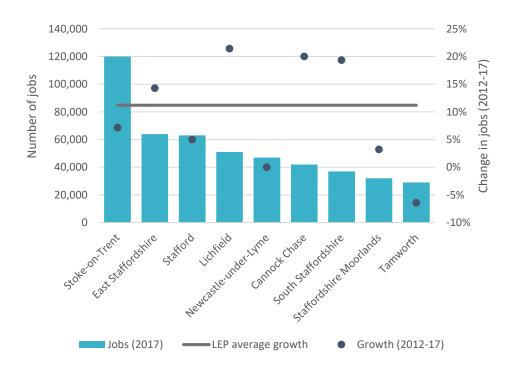
Since 2009, the number of logistics jobs in Stoke-on-Trent and Staffordshire has grown by 19.9%, nearly double the rate of 10.8% for England.



The professional services sector grew by 15.5% since 2009 in Stoke-on-Trent and Staffordshire, lower than the national and regional averages.

### Employment by Local Authority

Jobs number and growth by local authority (2012-17)



There are 485,600 jobs in Stoke-on-Trent and Staffordshire. Since 2009, the total number of jobs has increased by 9.6%. This is lower than the West Midlands and national averages (both 10.9%).

The chart to the left shows the number of jobs in each of he nine local authorities in the area and their 5-year jobs growth rate. The blue bar and left axis shows the number of jobs in 2017. The right axis and blue dot shows the jobs growth between 2012-17. The grey line shows the LEP average jobs growth over the same period.

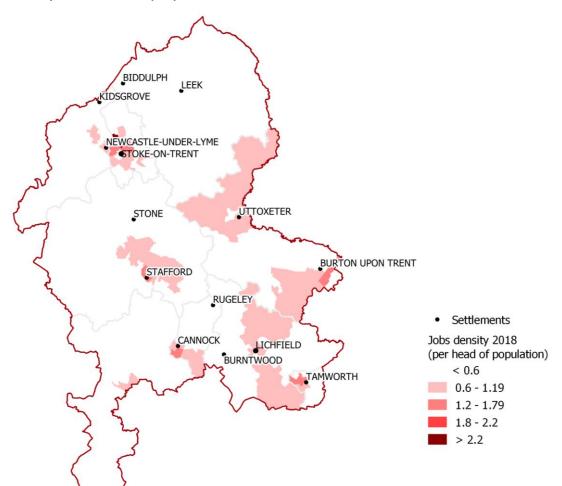
In 2017, there were 461,000 jobs in Stoke-on-Trent and Staffordshire. Three local authorities, Stoke-on-Trent, East Staffordshire and Stafford comprise over 50% of jobs within the LEP. Stoke-on-Trent, with 120,000 jobs, represents nearly 25% of total LEP area employment, reflecting its larger population and importance as an employment centre.

The average jobs growth rate for the area was 11.2%. Five out of nine local authorities had experienced a jobs growth rate below the LEP average between 2012-17. Tamworth has experienced a 6% decline in jobs.

Four local authorities experienced a jobs growth rate above the LEP average. Lichfield and Cannock Chase had the highest jobs growth, increasing by 20% or above from 2012-17, almost twice the LEP average.

#### Jobs Density

Jobs per head of population, 2018



The chart to the left shows the number of jobs per head of population for 2018. It shows the geographic distribution of jobs in Stoke-on-Trent and Staffordshire.

It shows that jobs are concentrated in main population centres with the remaining part of the area having a lower jobs density.

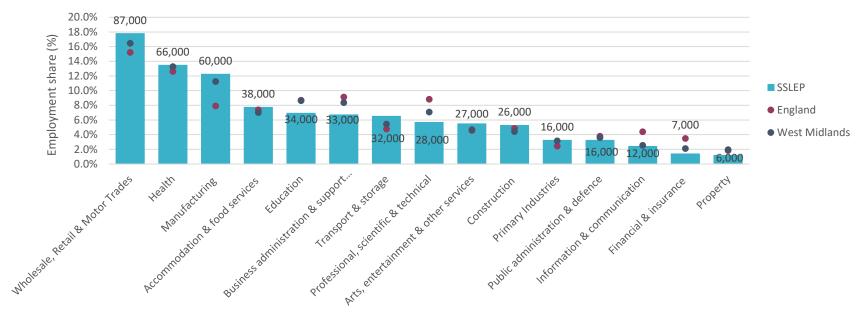
Newcastle-under-Lyme and Stafford have the highest jobs density in the area ranging from 1.2 to over 2.2 jobs per head of population.

Burton-upon-Trent, Tamworth and Cannock have a lower jobs density ranging from less than 0.6 to 1.8 job per head of population.



### Employment by broad sector

Employment by broad sector in Stoke-on-Trent and Staffordshire (2017)



The chart above shows the share of jobs in Stoke-on-Trent and Staffordshire by broad sector compared to the West Midlands and UK. The data label shows the number of jobs in Stoke-on-Trent and Staffordshire for each broad sector.

In 2017, there were 461,000 jobs in the area. The three largest sectors are Wholesale & Retail (125,000 jobs), Health (66,000 jobs) and Manufacturing (60,000 jobs). These sectors account for over 50% of employment in the area.

Wholesale & retail employment share in Stoke-on-Trent and Staffordshire is 18%. This is higher than the West Midlands and England average.

Health employment share is 14%, equivalent to or moderately higher than the regional and national average. Manufacturing employment share is 12%, higher

than both England average of 8% and West Midlands average of 11%,

Employment share in Business Administration & Support (33,000 jobs, 7% share); Professional, Scientific & Technical (28,000 jobs, 6% share); Information & Communication (12,000 jobs, 3% share); Finance & Insurance (7,000 jobs, is lower than both the West Midlands and England average.



### Levels of specialisation

To understand specialisation patterns in terms of concentration for the different activities taking place in the LEP area, we have analysed the location quotients (LQs) of the different sectors.

LQs are ratios for each sector between the local share of employment and share of employment in England.

Higher LQs correspond to higher levels of specialisation, with an LQ above 1 indicating that the area is more specialised in that sector than England as a whole. This is a key piece of analysis since building on existing sectoral strengths is likely to increase the chances of economic success.

The bubble charts on the following pages illustrate results of the Location Quotient analysis for SIC2 sub-sectors. On the y-axis are the LQs for 2017 with a higher value indicating a higher degree of specialisation. The right quadrant denotes gains in concentration and the left quadrant represents reducing concentration, relative to England over the period 2009-2017.

#### Manufacturing

Manufacturing is a highly specialised sector in Stoke-on-Trent and Staffordshire. Manufacturing and supporting services in Stoke-on-Trent and Staffordshire has grown at a faster rate since 2009 than in the West Midlands and England. Growing by 12.5% overall, the sector grew by 6,615 jobs in the period 2009-17, over half of total national net jobs growth between 2009 and 2017.

There are ten manufacturing SIC2 sub-sectors in the overall top 20, many of which are increasing in specialisation. Of these, the most specialised are the manufacture of other non-metallic mineral products; the manufacture of beverages; and the manufacture of machinery and equipment. This reflects Stoke-on-Trent and Staffordshire's strengths in the ceramics, advanced materials, brewing and automotive industries, centred in Stoke-on-Trent, Burton-upon-Trent, Uttoxeter and South Staffordshire. Together, these three sub-sectors account for over 16,000 jobs.



With an LQ score of 5.2, the manufacture of other non-metallic mineral products is the most specialised sub-sector in the area, and is over five times as specialised as England. This reflects Stoke-on-Trent and Staffordshire's status as a centre of ceramics and materials production. The most significant increase in specialisation has occurred in the manufacture of chemical and chemical products, its LQ score rising by over one point since 2009.

Logistics

Logistics is a key employer in Stoke-on-Trent and Staffordshire and one of the economy's specialisms. Logistics is one of the area's core industries.

Since 2009, the number of logistics jobs in Stoke-on-Trent and Staffordshire has grown by 19.9%, nearly double the rate of 10.8% for England, and faster than the West Midlands. The most specialised subsector in Logistics is warehousing and support activities for transportation, which is over twice as specialised in Stoke-on-Trent and Staffordshire as England. Accounting for 18,000 jobs, it is one of the largest sub-sectors for employment in the area.

#### Agriculture

Much of Staffordshire is rural, and there is a corresponding specialism

in the economy in agriculture. With an LQ score of 1.7, crop and animal production, hunting and related service activities is nearly twice as specialised as in Stoke-on-Trent and Staffordshire as England, and is a significant employer, accounting for 10,500 jobs. It has seen the most significant increase in specialisation of all the top-20 sub-sectors, increasing by 1.6 points since 2009.

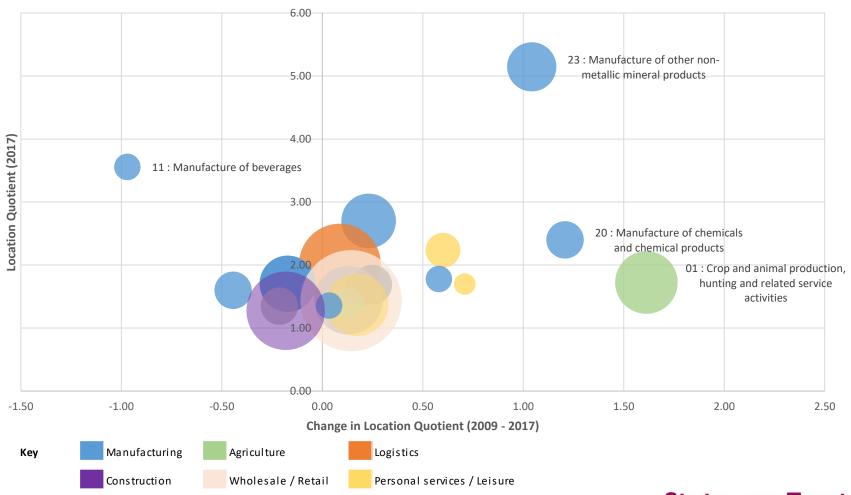
#### Personal services and leisure

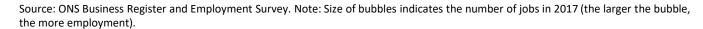
There are a number of specialisms in personal services and leisure, which, despite their small employment size relative to logistics and agriculture, show increasing specialisation in digital industries. The most specialised sub-sector is gambling and betting activities, over twice as specialised in Stoke-on-Trent and Staffordshire as England, accounting for 3,250 jobs. The sub sector has increased in specialisation since 2009. 10,500 jobs are in sports activities, amusement and recreation, reflecting the importance of the visitor economy to the area.



### Sectoral specialisation

Top 20 sectors by location quotient (LQ) (2017) (>1,000 employed)

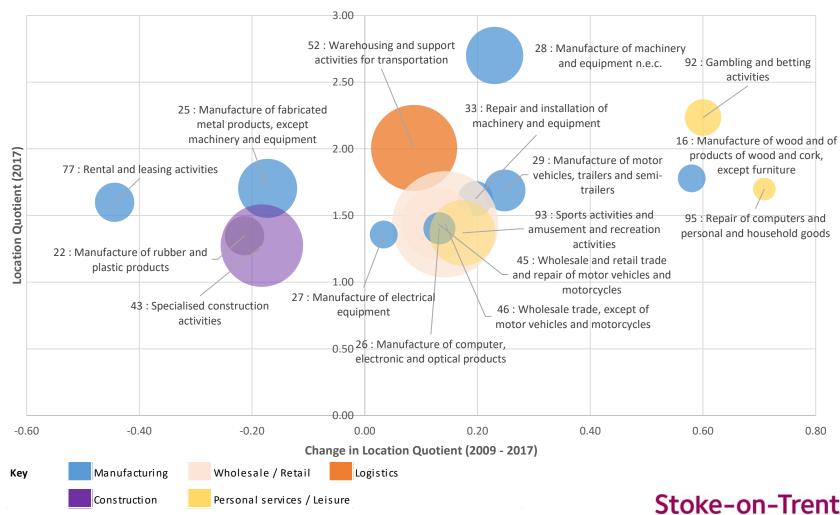






### Sectoral specialisation (2)

Top sectors by location quotient (LQ) (2017) (>1,000 employed) (zoomed in)



Source: ONS Business Register and Employment Survey. Note: Size of bubbles indicates the number of jobs in 2017 (the larger the bubble, the more employment).



#### More detailed specialisation

The tables on the following pages illustrate results of the LQ analysis for SIC5 sub-sectors. Carrying out specialisation analysis at the detailed sub-sectoral level enables us to dig down and identify specific strengths and specialisms in Stoke-on-Trent and Staffordshire.

#### Manufacturing

A highly specialised sub-sector within manufacturing is the manufacture of lifting and handling equipment, which, with an LQ of 4.64, is over four times as specialised than England. It grew by 1,210 in the period 2009-17.

#### Logistics

A key specialist sub-sectors within logistics is the operation of warehousing and storage facilities for land transport activities of division, which, with an LQ of 3.26, is over three times more specialised than the national average. Since 2009, the number

of jobs in this sector has grown by 6,715 in Stoke-on-Trent and Staffordshire, the largest change of all the sectors.

This reflects Stoke-on-Trent and Staffordshire's strengths in the logistics centre, boosted by its position at the centre of the country and its excellent connectivity. The wholesale of perfumes and cosmetics and the wholesale of fruits and vegetables are also large employers, thanks to the large warehousing presence in the LEP area.



### More detailed specialisation (2)

#### Professional and business services

The professional services sector and the business services sector are growing at slower rates in Stoke-on-Trent and Staffordshire than the national and regional averages. The number of jobs in the professional services sector grew by 15.5%, lower than the English rate of 18.1% and the West Midlands rate of 23.4%. At 8.5% of total Stoke-on-Trent and Staffordshire employment, it is below behind the national proportion of 14.2%.

The most significant sub-sector within professional services is Management consultancy activities (other than financial management), which grew by 3,340 jobs in the period 2009-19.

Gambling and betting activities is a stand-out sub sector for Stoke-on-Trent and Staffordshire, an LQ of 2.15 showing that it is over twice as specialised in this area than England. This demonstrates the importance of Bet365 as a local employer.

#### **Digital**

One of Stoke-on-Trent and Staffordshire's fastest growing sectors is the digital sector, which grew by 26.8% in the period 2009-17, albeit from a low base. Since 2009 it has grown by 26.8%, or 1,785 jobs, far faster than the West Midlands rate of 9.6% but still significantly lower than the English rate of 46.2%. Representing 1.7% of total employment in Stoke-on-Trent and Staffordshire, it sits below the average for the national industry of 2.8%. A key sub-sector is computer consultancy activities, which has added 890 jobs in the period 2009-17.

#### Drivers of employment growth

## More concentrated sectors (LQ>1)

# -ess concentrated sectors (LQ<1)</pre>

#### **Declining sectors**

- Further education
- Unlicensed couriers
- Some manufacturing subsectors
  - Brewing
  - Some retail sub-sectors

- Social care
- Policing
- High street banks

#### **Growing sectors**

- Logistics
- (B2B) Catering
- Local services/Sports/Leisure
  - Health & care
    - JCB
  - Gambling (Bet 365)
  - Professional services
    - Business services
- Automotive manufacturing
  - Real estate
  - Housebuilding
    - IT
    - Hotels

#### Growing sectors with higher concentration

Growing sectors		
Sector	Employment change (2009 - 2017)	Locatio Quotie
52103: Operation of warehousing and storage facilities for land transport activities of division	49 6,715	3.26
56290 : Other food service activities 46450 : Wholesale of perfume and cosmetics	3,915 3,030	1.88 5.41
88100 : Social work activities without accommodation for the elderly and disabled	2,490	1.11
56102: Unlicensed restaurants and cafes 45200: Maintenance and repair of motor vehicles 86900: Other human health activities 93110: Operation of sports facilities 71200: Technical testing and analysis 61200: Wireless telecommunications activities 28220: Manufacture of lifting and handling equipment 87900: Other residential care activities 46310: Wholesale of fruit and vegetables 87300: Residential care activities for the elderly and disabled 87100: Residential nursing care activities	2,425 2,310 2,300 1,605 1,435 1,220 1,210 1,195 1,155 1,100 1,080	1.15 1.67 1.47 1.32 2.59 2.49 4.64 1.28 2.44 1.08
01000 : DEFRA/Scottish Executive Agricultural Data 88910 : Child day-care activities 49410 : Freight transport by road 96020 : Hairdressing and other beauty treatment	1,075 1,070 1,050 1,040	1.83 1.27 2.07 1.26
46342: Wholesale of wine, beer, spirits and other alcoholic beverages 92000: Gambling and betting activities 39000: Remediation activities and other waste management services 56103: Take away food shops and mobile food stands	1,020 1,015 685 650	2.85 2.15 4.04 1.03
77390 : Renting and leasing of other machinery, equipment and tangible goods nec	625	2.70
16230 : Manufacture of other builders' carpentry and joinery	615	1.91

#### Growing sectors with lower concentration

	Growing sectors		
	Sector	Employment change (2009 - 2017)	Locatio Quotier
		(2003 2017)	Quotici
	70229: Management consultancy activities (other than financial management)	3,340	0.75
	78200 : Temporary employment agency activities	2,150	0.79
	70100 : Activities of head offices	1,920	0.74
	81210 : General cleaning of buildings	1,820	0.95
	55100 : Hotels and similar accommodation	1,665	0.69
10	84110 : General public administration activities	1,450	0.98
Less concentrated sectors	68310 : Real estate agencies	1,325	0.88
볹	29100 : Manufacture of motor vehicles	1,205	0.96
e e	85590 : Other education nec	1,105	0.92
<u>S</u>	69201 : Accounting, and auditing activities	965	0.58
Pa Pa	41202 : Construction of domestic buildings	915	0.94
atí	62020 : Computer consultancy activities	890	0.61
<u> </u>	82990 : Other business support service activities nec	815	0.49
	62090: Other information technology and computer service activities	800	0.96
2	82200 : Activities of call centres	710	0.72
5	69202: Bookkeeping activities	700	0.40
ວັ	86101: Hospital activities	570	1.00
SS	94990 : Activities of other membership organisations nec	565	0.88
نة	68320 : Management of real estate on a fee or contract basis	560	0.47
	66220 : Activities of insurance agents and brokers	545	0.69
	71121: Engineering design activities for industrial process and production	540	1.00
	69102 : Solicitors	530	0.66
	62012 : Business and domestic software development	525	0.44
	84120 : Regulation of the activities of providing health care, education, cultural services and other social		
	services, excluding social security	510	0.80
	73110 : Advertising agencies	500	0.38

#### Declining sectors with higher concentration

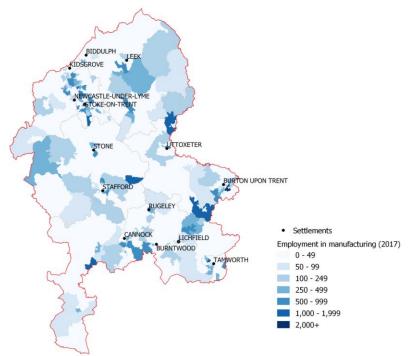
	Declining sectors		
	Sector	Employment change (2009 - 2017)	Location Quotient
	53202 : Unlicensed Carriers	-2,065	1.58
	85320 : Technical and vocational secondary education	-1,125	1.03
	84230 : Justice and judicial activities	-950	1.66
	43220 : Plumbing, heat and air-conditioning installation	-800	1.36
	56301 : Licensed clubs	-725	1.26
	47110 : Retail sale in non-specialised stores with food, beverages or tobacco predominating	-675	1.14
ပွာ	43210 : Electrical installation	-530	1.52
Ō	25110 : Manufacture of metal structures and parts of structures	-405	1.76
T T	11050 : Manufacture of beer	-350	6.42
Se	47300 : Retail sale of automotive fuel in specialised stores	-305	1.09
ਰ	96090 : Other personal service activities nec	-295	1.34
ţ	28960 : Manufacture of plastics and rubber machinery	-290	1.20
<u></u>	46440: Wholesale of china and glassware and cleaning materials	-275	1.50
i i	26301: Manufacture of telegraph and telephone apparatus and equipment	-260	2.29
2	28120 : Manufacture of fluid power equipment	-245	5.58
ou	47990 : Other retail sale not in stores, stalls or markets	-235	1.03
Ŏ	46740 : Wholesale of hardware, plumbing and heating equipment and supplies	-230	1.54
Highly concentrated sectors	77299: Renting and leasing of other personal and household goods (other than media entertainment equipment)	-225	2.05
I	47760 : Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores	-225	1.10
	96040 : Physical well-being activities	-220	1.31
	77120 : Renting and leasing of trucks	-175	2.42
	26120 : Manufacture of loaded electronic boards	-175	2.08
	31010 : Manufacture of office and shop furniture	-165	1.28
	43320 : Joinery installation	-160	1.35
	43310 : Plastering	-155 <b>Stoke</b> 0	1.24

#### Declining sectors with lower concentration

	Declining sectors		
	Sector	Employment change (2009 - 2017)	Location Quotient
	88990 : Other social work activities without accommodation nec	-4,875	0.74
	64192 : Building societies	-2,575	0.64
	85310 : General secondary education	-2,350	0.86
	84240 : Public order and safety activities	-2,000	0.84
	61900 : Other telecommunications activities	-1,685	0.53
	85421 : First-degree level higher education	-1,460	0.55
	85410 : Post-secondary non-tertiary education	-1,405	0.74
	35110 : Production of electricity	-1,330	0.43
	85200 : Primary education	-1,250	0.82
	77110 : Renting and leasing of cars and light motor vehicles	-1,020	0.92
	71129: Other engineering activities (not including engineering design for industrial process and production or		
ors	engineering related scientific and technical consulting activities)	-940	0.91
ğ	53100 : Postal activities under universal service obligation	-875	0.83
Se	84300 : Compulsory social security activities	-850	0.21
eq	47421 : Retail sale of mobile telephones in specialised stores	-805	0.69
rat			
Ę	64999 : Other financial service activities, except insurance and pension funding, (not including security dealing		
Če	on own account and factoring) n.e.c.	-660	0.18
Less concentrated sectors	79110 : Travel agency activities	-625	0.68
SS	68209: Letting and operating of own or leased real estate (other than Housing Association real estate and		
ě	conference and exhibition services) n.e.c.	-610	0.68
	81100 : Combined facilities support activities	-585	0.38
	46499 : Wholesale of household goods (other than musical instruments) nec	-570	0.62
	84130 : Regulation of and contribution to more efficient operation of businesses	-565	0.26
	58130 : Regulation of and contribution to more efficient operation of businesses	-505 -500	0.26
	20120 . rubiisiiliig oi newspapers	-500	0.37
	29201 : Manufacture of bodies (coachwork) for motor vehicles (except caravans)	-480	0.64
	64191 : Banks	-450	0.33
	47620 : Retail sale of newspapers and stationery in specialised stores	-445	0.71
	38320 : Recovery of sorted materials	-445	0.53

# Manufacturing

Spatial distribution of manufacturing jobs in Stoke-on-Trent and Staffordshire (2017)



Location	Significant local employers
Stoke-on-Trent/ Newcastle-under- Lyme conurbation	Goodwin International, Barkers Engineering, Churchill China, Gough and Co, Michelin Tyre, Wade Ceramics, IAE, Marangoni Tread, KMF, Lucideon
East Staffordshire (Burton-upon- Trent and Uttoxeter)	JCB, Etex, Knott Avonride, Ramsteel Tubes, Molson Coors, Marstons, LH Access Technology
Burntwood	Unitech Engineering, RGK Wheelchairs, Valve Train Components, Maier UK
South Staffordshire	JLR, Moog, Eurofins, Era, ISP

### Manufacturing

Manufacturing growth in SSLEP (6,615 jobs locally) was **over half of total national net jobs growth** between 2009 and 2017.

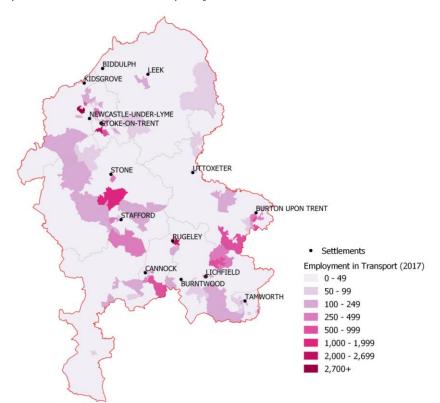
	Emp. (2017) (and % of total)	Net emp. change (2009 – 2017)
SSLEP	59,540	6,615
SSLEP	12.30%	12.5%
West Midlands	11.2%	5.1%
England	7.9%	0.6%

Sector (with 500+ jobs growth 2009 - 2017)	Growth in employment 2009 - 2017
28220 : Manufacture of lifting and handling equipment	1,210
29100 : Manufacture of motor vehicles	1,205
46690 : Wholesale of other machinery and equipment	875
77390: Renting and leasing of other machinery, equipment and tangible goods nec	625
16230 : Manufacture of other builders' carpentry and joinery	615
22290 : Manufacture of other plastic products	610
33200 : Installation of industrial machinery and equipment	610
23410: Manufacture of ceramic household and ornamental articles	540
71121: Engineering design activities for industrial process and production	540
82920 : Packaging activities	515

Sector (with 250+ jobs decrease 2009 - 2017)	Decline in employment 2009 - 2017
29201: Manufacture of bodies (coachwork) for motor vehicles (except caravans)	-480
25110: Manufacture of metal structures and parts of structures	-405
11050 : Manufacture of beer	-350
10831 : Tea processing	-300
28960 : Manufacture of plastics and rubber machinery	-290
22210 : Manufacture of plastic plates, sheets, tubes and profiles	-280
26301: Manufacture of telegraph and telephone apparatus and equipment	-260

# Transport

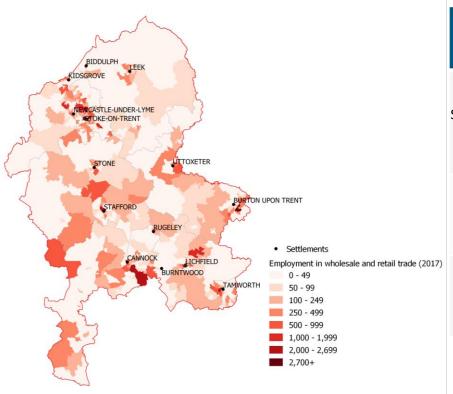
Spatial distribution of transport jobs in Stoke-on-Trent and Staffordshire (2017)



Location	Significant local employers
Stoke-on-Trent/ Newcastle-under- Lyme conurbation	Shirley's Transport, CH Gore Haulage
Stafford	Stan Robinson, Abnormal Load Engineering, Blue Cube
Cannock Chase	N.S. Clarke Transport, The Alternative Parcels Company

### Wholesale and retail

Spatial distribution of wholesale and retail jobs in Stoke-on-Trent and Staffordshire (2017)



Location	Significant local employers
Stoke-on-Trent/ Newcastle-under- Lyme conurbation	<ul><li>Fedex</li><li>TK Maxx</li><li>Gap, DHL</li><li>ARPA</li><li>DEE SET</li></ul>
Cannock Chase / Burntwood	<ul><li>Amazon</li><li>Screwfix</li><li>Pentalver</li></ul>
Burton-upon-Trent	<ul> <li>Palletforce</li> </ul>

# Logistics

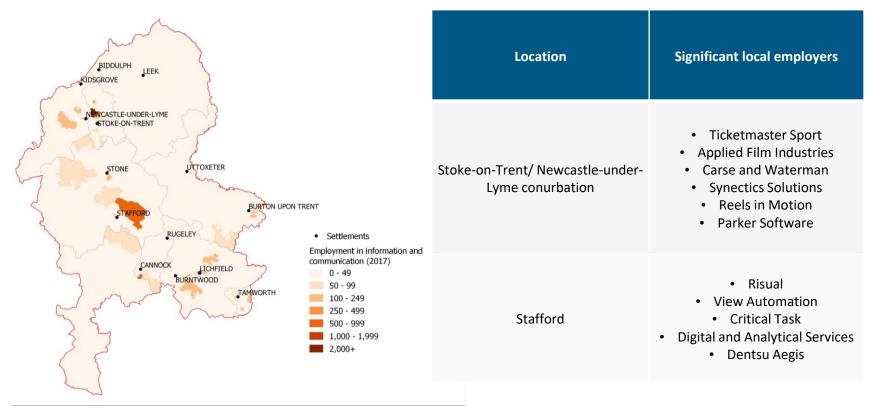
	Employment (2017) (and	Net employment change (2009 – 2017)
SSLEP	56,590	9,395
SSLEP	11.7%	19.9%
West Midlands	9.0%	12.6%
England	6.7%	10.8%

Sector (with 500+ jobs growth 2009 - 2017)	Growth in employment 2009 - 2017
52103: Operation of warehousing and storage facilities for land transport	6,715
46450 : Wholesale of perfume and cosmetics	3,030
46310 : Wholesale of fruit and vegetables	1,155
49410 : Freight transport by road	1,050
46342 : Wholesale of wine, beer, spirits and other alcoholic beverages	1,020
Sector (with 300+ jobs decrease 2009 - 2017)	Decline in employment 2009 - 2017
	_ = = = =
53202 : Unlicensed Carriers	-2,065
53202 : Unlicensed Carriers 53100 : Postal activities under universal service obligation	-
	-2,065
53100 : Postal activities under universal service obligation	-2,065 -875
53100 : Postal activities under universal service obligation 46499 : Wholesale of household goods	-2,065 -875 -570
53100 : Postal activities under universal service obligation 46499 : Wholesale of household goods 46330 : Wholesale of dairy products, eggs and edible oils and fats	-2,065 -875 -570 -410



#### Information and communication

Spatial distribution of information and communication jobs in Stoke-on-Trent and Staffordshire (2017)





## Digital

Data on the IT & software sector shows a limited picture of digital activity – but still shows jobs growth of over 20% since 2009.

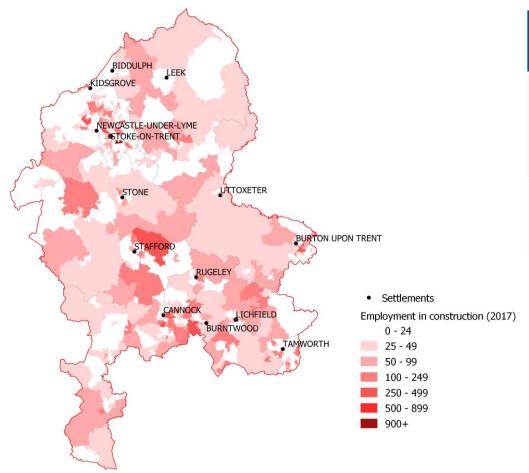
	Emp. (2017) (and % of total)	Net emp. change (2009 – 2017)
SSLEP	8,440 1.7%	1,785 26.8%
West Midlands	1.9%	9.6%
England	2.8%	46.2%

Sector (with 500+ jobs growth 2009 - 2017)	Growth in employment 2009 - 2017
62020 : Computer consultancy activities	890
62090 : Other information technology and computer	
service activities	800
62012: Business and domestic software development	525
Sector (with 100+ jobs decrease 2009 - 2017)	Sector (with 100+ jobs decrease 2009 - 2017)
63110 : Data processing, hosting and related activities	-425
63120 : Web portals	-100



#### Construction

Spatial distribution of construction jobs in Stoke-on-Trent and Staffordshire (2017)



Location	Significant local employers
Northern Staffordshire	<ul><li>Novus</li><li>Rudheath,</li><li>H.L.W Developments,</li></ul>
Stafford	Development Worx



Enterprise Partnership

# Construction and engineering

	Employment (2017) (and	Net employment change (2009 – 2017)
SSLEP	25,765	345
SSLEP	5.3%	1.4%
West Midlands	4.4%	-3.2%
England	4.9%	3.7%

	Growth in employment 2009
Sector (with 500+ jobs growth 2009 - 2017)	- 2017
41202 : Construction of domestic buildings	915
42990 : Construction of other civil engineering projects nec	765
41100 : Development of building projects	280
43290 : Other construction installation	235
41201 : Construction of commercial buildings	160
Sector (with 300+ jobs decrease 2009 - 2017)	Decline in employment 2009 - 2017
Sector (with 300+ jobs decrease 2009 - 2017) 43220 : Plumbing, heat and air-conditioning installation	employment 2009
	employment 2009 - 2017
43220 : Plumbing, heat and air-conditioning installation	employment 2009 - 2017 -800
43220 : Plumbing, heat and air-conditioning installation 43210 : Electrical installation	employment 2009 - 2017 -800 -530
43220 : Plumbing, heat and air-conditioning installation 43210 : Electrical installation 42110 : Construction of roads and motorways	employment 2009 - 2017 -800 -530 -205



# Agriculture and agri-food

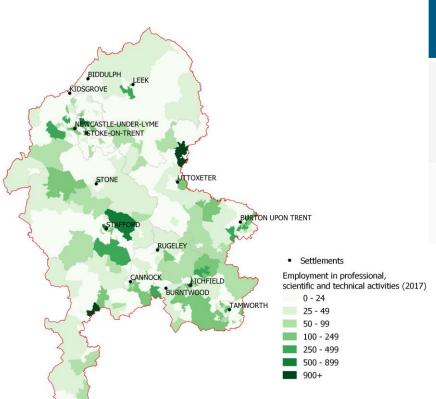
	Employment	Net employment change (2009 – 2017)
CCLED	18,320	320
SSLEP	3.8%	1.7%
West Midlands	3.0%	0.1%
England	2.6%	6.2%

Sector	Growth in employment 2009 - 2017
01000 : DEFRA/Scottish Executive Agricultural Data	1,075
10890: Manufacture of other food products nec	300
10850: Manufacture of prepared meals and dishes	100
10130 : Production of meat and poultry meat products	90
10910 : Manufacture of prepared feeds for farm animals	60
Sector	Decline in employment 2009 - 2017
11050 : Manufacture of beer	-350
10831 : Tea processing	-300
01610 : Support activities for crop production	-245
10710: Manufacture of bread; manufacture of fresh pastry goods and	
cakes	-230



# Professional, scientific and technical activities

Spatial distribution of professional, scientific and technical jobs in Stoke-on-Trent and Staffordshire (2017)



Location	Significant local employers
Northern Staffordshire	<ul><li>Vodafone</li><li>Wardell Armstrong</li><li>Mice and Dice</li><li>Grindeys Legal</li></ul>
Stafford	<ul><li>Entrust</li><li>CH corporate services</li></ul>



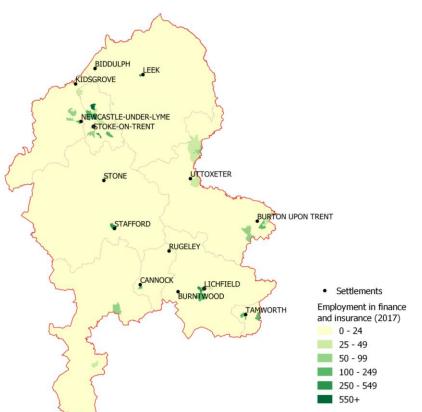
### Professional services

	Employment	Net employment change (2009 – 2017)
SSLEP	41,090	5,515
SSLEP	8.5%	15.5%
West Midlands	11.2%	23.4%
England	14.2%	18.1%

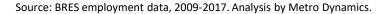
	Growth in employment 2009
Sector (with 500+ jobs growth 2009 - 2017)	- 2017
70229: Management consultancy activities (other than financial	
management)	3,340
70100 : Activities of head offices	1,920
71200 : Technical testing and analysis	1,435
68310: Real estate agencies	1,325
69201 : Accounting, and auditing activities	965
69202 : Bookkeeping activities	700
68320: Management of real estate on a fee or contract basis	560
66220 : Activities of insurance agents and brokers	545
71121: Engineering design activities for industrial process and production	540
69102 : Solicitors	530
73110 : Advertising agencies	500
	Decline in
	employment 2009
Sector (with 300+ jobs decrease 2009 - 2017)	- 2017
64192 : Building societies	-2,575
71129: Other engineering activities (not including engineering design for industrial process and production or engineering related scientific and	
technical consulting activities)	-940
64999: Other financial service activities, except insurance and pension funding, (not including security dealing on own account and factoring) n.e.c.	-660
68209: Letting and operating of own or leased real estate (other than Housing Association real estate and conference and exhibition services)	C10
n.e.c.	-610

#### Finance

Spatial distribution of finance jobs in Stoke-on-Trent and Staffordshire (2017)



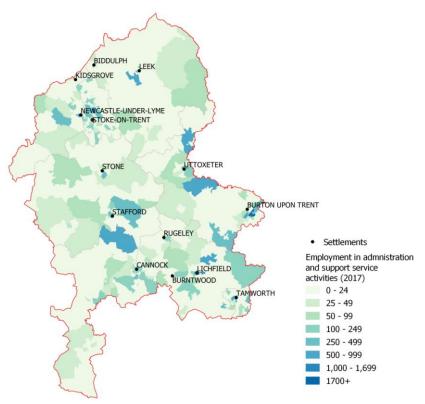
Location	Significant local employers
Northern Staffordshire	<ul> <li>Hanley Economic Building         <ul> <li>Society</li> <li>Advantis Credit</li> <li>Autonet Insurance</li> <li>Dains LLP,</li> </ul> </li> </ul>
Stafford	<ul><li>Entrust</li><li>CH corporate services</li><li>Ageas Insurance</li></ul>





## Administration and support services

Spatial distribution of administration and support service jobs in Stoke-on-Trent and Staffordshire (2017)



Location	Significant local employers
Northern Staffordshire	<ul> <li>Abbotshurst Group</li> <li>Resimed</li> <li>Davies Group</li> <li>Mirage HR</li> <li>Education Business services</li> <li>Blue Bay Travel</li> </ul>
Southern Staffordshire	<ul> <li>Mainline Digital Communications</li> </ul>

Source: BRES employment data, 2009-2017. Analysis by Metro Dynamics.



#### Business services

	Employment	Net employment change (2009 – 2017)
CCLED	49,225	2,970
SSLEP	10.1%	6.4%
West Midlands	12.0%	13.5%
England	12.9%	11.9%

Sector (with 500+ jobs growth 2009 - 2017)	Growth in employment 2009 - 2017
78200 : Temporary employment agency activities	2,150
81210 : General cleaning of buildings	1,820
84110 : General public administration activities	1,450
82990 : Other business support service activities nec	815
82200 : Activities of call centres	710
77390 : Renting and leasing of other machinery, equipment and tangible goods nec	625
82920 : Packaging activities	515
84120 : Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security	510
	Decline in

Sector (with 300+ jobs decrease 2009 - 2017)	Decline in employment 2009 - 2017
84240 : Public order and safety activities	-2,000
77110: Renting and leasing of cars and light motor vehicles	-1,020
84230 : Justice and judicial activities	-950
84300 : Compulsory social security activities	-850
79110 : Travel agency activities	-625
81100 : Combined facilities support activities	-585
84130 : Regulation of and contribution to more efficient operation of	
businesses	-565

# Business environment



#### Business environment



Stoke-on-Trent and Staffordshire is home to 39,155 businesses.



410 businesses per 10,000 population, lower than the regional and national averages.



There are 38 new business start-ups per 10,000 people in Stokeon-Trent and Staffordshire, a lower proportion than the regional and national averages, though business survival rates are higher.



£3.2bn goods exports and £884m service exports.

# Businesses and growth

Businesses counts and growth, Stoke-on-Trent and Staffordshire, 2019

Area	Business count (2019)	Business growth (2014-19)
Stoke-on-Trent and Staffordshire	39,155	14.4%
West Midlands	213,915	20.3%
England	2,360,780	21.1%
Cannock Chase	3,385	9.0%
East Staffordshire	4,760	16.1%
Lichfield	4,815	10.6%
Newcastle-under-Lyme	3,530	14.6%
South Staffordshire	4,660	22.3%
Stafford	5,360	13.0%
Staffordshire Moorlands	4,165	9.7%
Stoke-on-Trent	6,140	17.6%
Tamworth	2,345	15.8%

The table shows the number of VAT registered businesses in 2019 and the growth between 2014 and 2019 for Stoke-on-Trent and Staffordshire, its local authorities, the West Midlands region, and England.

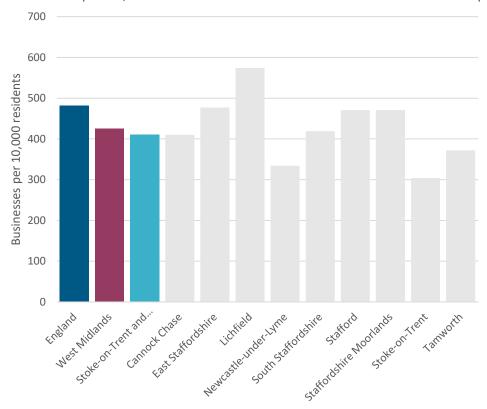
Overall, there are 39,155 VAT registered businesses in Stoke-on-Trent and Staffordshire. Business growth of 14.4% between 2014 and 2019 is significantly lower than England (21.1%) and the West Midlands (20.3%).

Looking within Stoke-on-Trent and Staffordshire, Stoke-on-Trent has the highest number of business, nearly 16% of the total. The highest rate of growth has occurred in South Staffordshire, where the number of businesses increased by 22.3% between 2014 and 2019, a growth rate above both the regional and national averages.



# Businesses per 10,000 residents

Businesses per 10,000 residents Stoke-on-Trent and Staffordshire and comparators



The chart to the left shows the number of businesses per 10,000 residents in 2018 in Stoke-on-Trent and Staffordshire and its local authorities compared to the regional and national average.

Stoke-on-Trent and Staffordshire had 410 businesses per every 10,000 residents in 2017. This is lower than both the West Midlands and national average. The West Midlands, in comparison, has a business density of 425 businesses per 10,000 residents, whilst England has a rate of 482 businesses per 10,000 residents.

There are marked differences in the number of businesses to residents between each local authority. In particular, Lichfield has a higher businesses to residents average than both the West Midlands and national average.

Newcastle-under-Lyme and Stoke-on-Trent have the lowest business to resident average of the local authorities.



### Business size and employment

Business base composition (2017)

Area	Micro (0-9 employees)	Small (10- 49 employees)	Medium (50-249 employees)	Large (250+ employees)
England	89.5%	8.6%	1.6%	0.4%
West Midlands	88.9%	9.1%	1.6%	0.4%
Stoke-on-Trent and Staffordshire	88.8%	9.3%	1.6%	0.4%

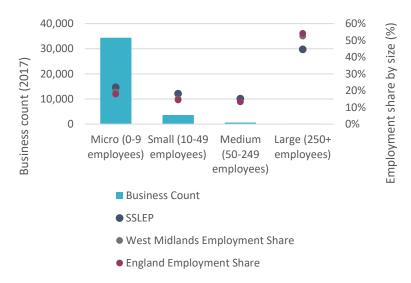
The table to the left shows the number of businesses by size in Stokeon-Trent and Staffordshire, the West Midlands and England for 2017. The chart to the right shows the number of businesses in the area and the share of the workers employed in each size band. The number of businesses is shown by the left axis.

Employment share is shown on the right axis with the coloured dots indicating how the employment share by enterprise size in the area compare to the West Midlands and England share.

The composition of businesses in the area is almost identical to the West Midlands and England. However, there are differences in employment share by enterprise size:

Source: ONS Business Counts (2018)

Business count by size and employment share (2017)

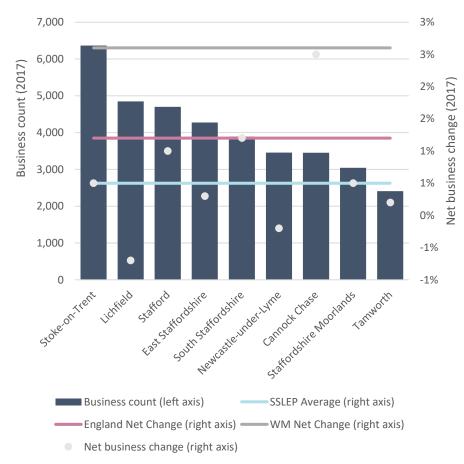


- There are more workers employed in micro businesses (22%), small (18%) and medium (15%) businesses in the area compared to West Midlands and England
- There are fewer workers employed in large businesses in the area (45%) compared to the West Midlands and England where 50% or more of workers are employed in large businesses.



### Business births and deaths

Business count and net business change (2017)



The chart to the left shows the business stock of each local authority, its net business change and how it compares to the regional and national rate. Net business change is the difference between business births and death rates. The white dot shows the net business change for each local authority. The colour coded lines show the net business change for Stoke-on-Trent and Staffordshire as a whole, the West Midlands and England.

The rate of new business births in the area is behind that of the West Midlands and England, with new businesses making up 10.9% of the total number of businesses, compared to 13.8% for the West Midlands and 13.5% for England. Its business death rate, however, is lower, at 10.4% compared to 11.2% for the West Midlands and 12.3% for England. The net business change in the area was 0.05%. This is lower than both the West Midlands average of 2.6% and the England average of 1.2%. Only 2 local authorities had a business change comparable to the national average. The remaining local authorities have a business change rate below the area average with Lichfield experiencing the highest business decline.

Source: Employer Demography: Counts of Births, Deaths and Active for 2017



# Start-up businesses

Start-up businesses per 10,000 residents (2012 – 2017)

Region	2012	2017	Growth (2012-17)
England	44.8	61.0	36.2%
West Midlands	34.8	52.4	50.6%
Stoke-on-Trent and Staffordshire	31.5	37.9	20.3%
Cannock Chase	35.7	42.9	20.2%
East Staffordshire	37.6	40.8	8.5%
Lichfield	45.0	56.5	25.6%
Newcastle-under-Lyme	24.6	29.5	19.9%
South Staffordshire	36.9	37.1	0.5%
Stafford	34.2	42.3	23.7%
Staffordshire Moorlands	26.2	31.0	18.3%
Stoke-on-Trent	24.4	32.5	33.2%
Tamworth	28.5	36.6	28.4%

Stoke-on-Trent and Staffordshire has a low proportion of start-up businesses in its business base when compared to the regional and national averages. With 37.9 start-ups per 10,000 residents, this is nearly 40% below the English average and nearly 30% below the regional average.

From 2012-17, Lichfield has consistently had the highest proportion of start-ups. In 2017, it had 56.5 start-up businesses per 10,000 residents, the highest of all the local authorities. The Staffordshire Moorlands, meanwhile, had the lowest rate, with 31 start-up businesses per 10,000 residents.

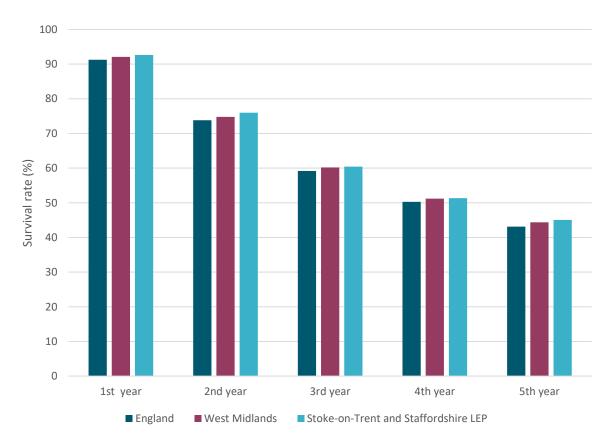
Stoke-on-Trent has had the highest growth in start-ups as a proportion of the total population. Between 2012 and 2017, the number of start-ups relative to the population grew by 33.2%.

Source: Business Demography 2017: Count of Births of New Enterprises; ONS Population Estimates



#### Business survival rates

Survival Rate of New Business (%), 2012-17



The chart to the left shows the 5-year business survival rate in Stoke-on-Trent and Staffordshire compared to regional and national averages.

The business survival rate in the area is consistently higher than both the West Midlands and England average from years one to five. This suggest that Stoke-on-Trent and Staffordshire is a stable environment for businesses.

Source: Business Demography - 2017: District, Counties and Unitary Authorities within Region and Country by Births of Units in 2012 and their Survival - Survival Rate of New Business (%)



# **Exports**

#### **Total goods exports (2015)**

Area	Goods exports (£m)	Goods exports per business (£)	LEP rank	Goods exports per capita (£)	LEP Rank
Stoke-on-Trent and Staffordshire	3,174	86,721	16	2,849	21
Average across all LEPS	6,403	105,903	N/A	4,063	N/A

#### **Total service exports (2016)**

Area	Service exports (£m)	Service exports per business (£)	Service exports per capita (£)
Stoke-on-Trent and Staffordshire	884	23,516	789
West Midlands	9,169	45,719	1,578
England total	227,069	95,454	4,109

High levels of exports are indicative of a successful, outward looking area with productive companies. In 2015, the latest available data, Stoke-on-Trent and Staffordshire exported £3.2bn of goods, less than half of the national LEP average of £6.4bn (£4.9bn excluding London).

This is equivalent to £86,721 per business, and £2,849 per head of population, putting Stoke-on-Trent and Staffordshire in a midranking position out of the 38 LEPs, though it performs better for goods exports per business than per capita. Both measures are below the LEP average, suggesting that Stoke-on-Trent and Staffordshire is underperforming other areas.

In 2016, Stoke-on-Trent and Staffordshire exported £884 million in services. This is equivalent to £23,516 per business, below the equivalent figures for the West Midlands, which had £45,719 of service exports per business, and England, where the rate was £95,454. It is also equivalent to £789 per head of population, again below the West Midlands equivalent (£1,578) and England (£4,109).

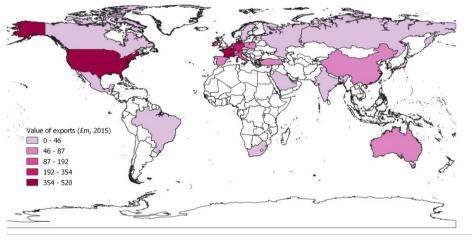
Source: HMRC Growth Hub Data – Exports (2015); ONS International exports of services from subnational areas of Great Britain (2016); ONS BRES (2015-2016); ONS UK Business Counts (2015-2016).



# Exports destination

Value of goods exports to main world trading partners (2015)

Partner Country	Export value (£ million)	% of total
USA	520	19.1%
France	446	16.4%
Germany	354	13.0%
Irish Republic	192	7.1%
Italy	127	4.7%
Netherlands	87	3.2%
Spain	71	2.6%
Turkey	67	2.5%
Poland	66	2.4%
United Arab Emirates	64	2.4%



The table on the left and the map above illustrate the value of goods exports to the main trading partners of Stoke-on-Trent and Staffordshire.

52.4% of goods exports from Stoke-on-Trent and Staffordshire go to EU countries. The majority of this trade Is divided between France and Germany: goods exports to these countries make-up 16.4% and 13.0% of total goods exports respectively. The Irish Republic is also a significant trading partner, where goods exports account for 7.1% of the total.

For non-EU goods exports, by far the largest trading partner is the USA. 19.1% of total exports totalling £520 million go to the USA from Stoke-on-Trent and Staffordshire.

# Goods exports by sector

Export of goods by destination, Stoke-on-Trent and Staffordshire (2015)

SITC Section	Export value (£ million)	% of total
Machinery and transport, EU	756	24.9%
Machinery and transport, non-EU	965	31.8%
Manufactured goods, EU	507	16.7%
Manufactured goods, non-EU	312	10.3%
Chemicals, EU	197	6.5%
Chemicals, non-EU	100	3.3%
Misc. manufactures, EU	44	1.5%
Misc. Manufactures, non-EU	77	2.5%
Crude materials, EU	48	1.6%
Crude materials, non-EU	100	0.9%

The chart on the left depicts the breakdown of goods by broad sectors and by EU and non-EU trade.

The largest export category is machinery and transport, which, in the Standard International Trade Classification, includes industrial machinery, telecommunications equipment, electrical machines/appliances, and transport vehicles and components. At £965 million, this makes up 31.8% of exports of goods from the LEP area. The second largest is machinery and transport trade to the EU, which represents 24.9% of total goods exports.

The export of manufactured goods to the EU is the third largest category in terms of exports. This category includes metals and non-metallic mineral manufactures (including glass), leathers, rubber, cork and wood, paper, and textiles. At £507 million, it makes 16.7% of total goods exports. The export of manufactured goods to non-EU countries, at £312 million, represents 10.3% of the total.

Exports of chemicals, which includes organic and inorganic chemical products, pharmaceutical products, oils and cleaning preparations, plastics and fertilisers, make up £297 million, or 9.8% of total exports. The majority of this trade, £197 million, is to EU countries.

The smallest category in terms of exports is the trade of crude materials trade to non-EU countries, just 0.9% of total exports.

Source: HMRC Growth Hub Data – Exports (2015)

# People



# People



Stoke-on-Trent and Staffordshire has a population of 1,126,203, which has grown by 2.5% since 2011, a slower rate than the regional and national average.



The population is projected to grow by 2.4% by 2030 to 1.16 million. This less than half the rate of growth for both the West Midlands and England.



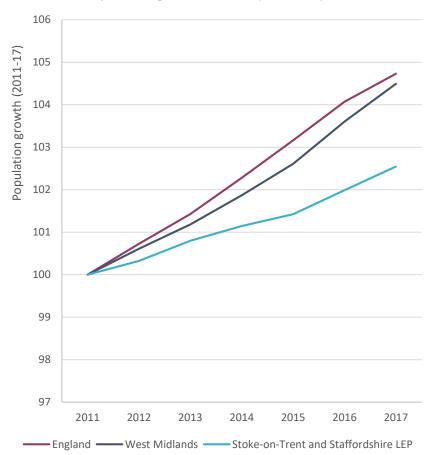
Since 2014 there has been a continual and steady decline in Stoke-on-Trent and Staffordshire of the working age population with no qualifications, while the share of those with high skills has risen.



Wages for residents are lower than in the West Midlands and England. However, the growth rate of resident pay between 2014 and 2018 is higher than the English average.

# Population and growth

Indexed Population growth 2009-17 (2009=100)



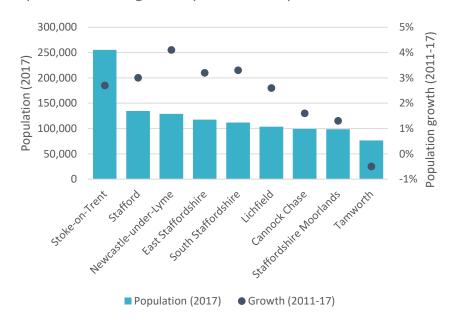
Stoke-on-Trent and Staffordshire has a population of 1.1m people, 19.2% of the West Midlands population, and 2.0% of the population for England. The Stoke-on-Trent and Staffordshire area has seen slower population growth than the rest of the West Midlands and England as a whole.

The graph to the left shows the population growth from 2011-17 of Stoke-on-Trent and Staffordshire compared to the West Midlands and England using 2011 as the base year.

Since 2011, the local population has grown at a slower rate than both the regional and national average. Stoke-on-Trent and Staffordshire's population has grown by 2.5% since 2011 compared to England and West Midlands' growth of 4.9%.

# Detailed population change

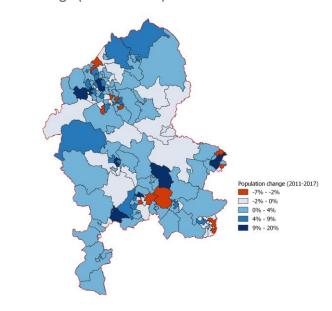
Population size and growth by local authority



The chart to the left shows the population size and growth of each local authority. The blue bar chart and left axis shows population size in 2017. The dark blue dot and right axis shows the population growth from 2011-17.

Three local authorities – Tamworth, Cannock Chase and Staffordshire Moorlands – have experienced population

Population change (2011 – 2017)

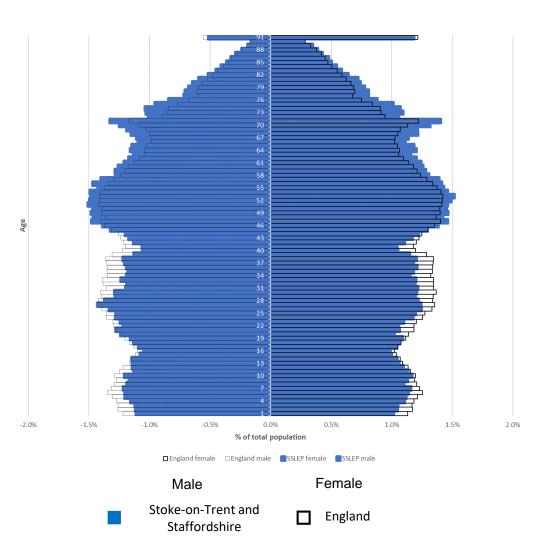


decline or growth below the LEP average of 2.5%.

Newcastle-under-Lyme had the highest population growth of 4.1% since 2011, marginally lower than the regional and national average, while Tamworth's population declined by 0.5%.

# Age profile

Population age distribution Stoke-on-Trent and Staffordshire (2017)



Stoke-on-Trent and Staffordshire has an ageing population, with 26.3% of the population aged over 60 compared to 23.4% of the population nationally.

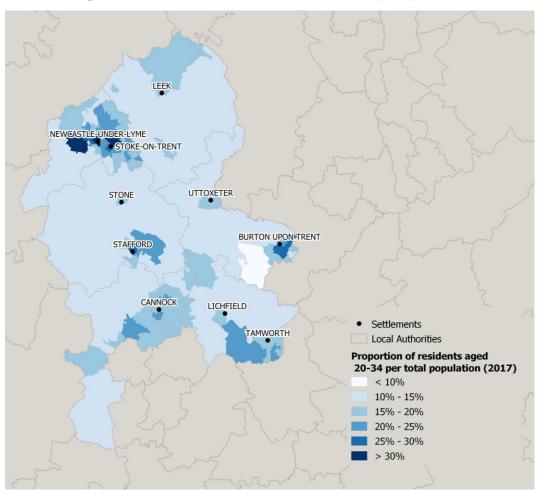
At the same time, there are lower proportions of younger age groups than the English average.

By 2041, the proportion of the population over the age of 60 is projected to increase to 32.3% (or 381,000 people) compared to 29.7% nationally.



# Spatial distribution of young working age residents

Residents aged 20-34 in Stoke-on-Trent and Staffordshire (2017)



Within Stoke-on-Trent and Staffordshire, the highest proportions of 20-34 year olds are to be found in Newcastle-under-Lyme and Stoke-on-Trent. In some areas of both places, up to 43% of their population is in this age bracket. This reflects their importance as dormitories for students, and, as key urban centres, their role as graduate employers. Stafford, Tamworth, Cannock Chase and Burton-upon-Trent all have lesser concentrations of this age group.

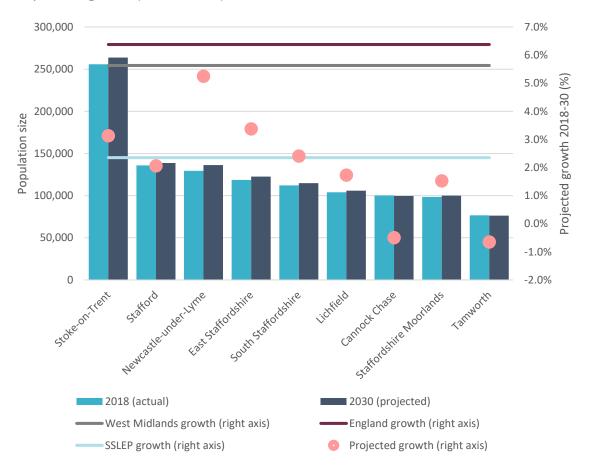
The rural areas between these urban centres tend to have lower concentrations of 20-34 year olds, ranging from 10-20% of the total population. East Staffordshire has some of the lowest concentrations of 20-34 year in the area, the area to the west of Burton-upon-Trent has rates lower than 10% of the total population.

Source: ONS MSOA Mid-Year Population Estimates (2011-16)



# Population projections to 2030

Population growth (2018 – 2030)



The chart to the left shows the 2018 population for each local authority in Stoke-on-Trent and Staffordshire and the projected population to 2030. The blue bars shows the population size. The red dot and colour coded lines shows the population growth.

The local population is projected to grow by 2.4% by 2030 increasing from 1.13 million to 1.16 million. This is over two times slower than the projected West Midlands projected population growth of 5.6% and England's projected population growth of 6.4%.

Newcastle-under-Lyme is projected to have the strongest population growth of 5.3%, marginally lower than the West Midlands growth rate. Tamworth and Cannock Chase are projected to experience modest population declines.

Source: ONS 2016-based subnational population projections for local authorities and higher administrative areas in England



# Internal UK migration

Internal UK migration (June 2016-17)

Local Authority	Inflows	Outflows	Net inflow*
Stoke-on-Trent	11,260	11,650	-390
Cannock Chase	4,460	4,100	360
East Staffordshire	5,190	5,200	-30
Lichfield	5,760	5,460	310
Newcastle-under-Lyme	8,260	7,830	430
South Staffordshire	6,280	5,820	470
Stafford	6,990	6,240	740
Staffordshire Moorlands	4,380	3,820	570
Tamworth	2,700	3,570	-890
Stoke-on-Trent and Staffordshire	55,280	53,690	1,570

The table to the left shows internal migration figures for Stoke-on-Trent and Staffordshire and its local authorities. These are broken down into inflows and outflows to and from the place to other places in the UK. The net movements are also quoted.

Overall, there has been a positive net inflow of people to the local area between 2016-17. This trend reflects the longer-term pattern of the movement of people in the area.

The population increased by 1,570 in this period. There is variation within this. Stoke-on-Trent and Tamworth have both seen a net decline in people, the former a decline of 390, and the latter 890. East Staffordshire had a net outflow of 30 over the period.

Stafford has experienced the largest new inflow of people at 740, nearly half of the total for the LEP area, followed by Staffordshire Moorlands.



<sup>\*</sup> Columns may not sum to the net figure precisely due to rounding

# Internal UK migration

Net movements by age (June 2016-17)



The chart above shows the age distribution of internal migration to each place. Overall, Stoke-on-Trent and Staffordshire has seen the greatest net inflow from the age group 35-49 at 740 for the LEP area, 440 of which took place in Stafford.

Newcastle-under-Lyme has seen a significant inflow of 1,100 from

persons aged 0-19, many of whom are likely to be students attending Keele University.

However there has been a sharp negative outflow in the next age group category 20-34. This could suggest that students don't remain in the area after completing their studies.



# Overseas migration

The number of overseas nationals who have been allocated National Insurance numbers (NINo) can be used as a proxy for international migration into an area. Data obtained from the DWP shows that, for Stoke-on-Trent and Staffordshire as a whole, the number of overseas nationals obtaining NINo decreased by 0.4% between 2014 and 2018.

There is significant variation over time, and across the local authorities which make up the area. Between 2014 and 2015, they rose by 33.3\$, and between 2016 and 2017 they fell by 20.8%, and fell again by 9.8% the following year.

In 2014, the largest group of NINo recipients were those from from EU2 countries, at 38.4% of the total, with EU8 recipients as the second largest group at 34.2%. Migrants from EU2 countries were the main recipients in every year in the period 2014-18, and making up 47.6% of the total in 2018. in 2018, EU8 recipients remained the second highest proportion of total NINo allocations, but at a much lower proportion of 18.6%.

Over the period 2015-18, NINo allocations to people from EU15 countries fell by 26.5%, hile those to EU2 recipients fell by 7.3%. The number of NINo allocations for EU8 countries fell by the highest rate, 59.4%, whereas allocations from Asia grew by 7.9%. In 2017, NINo registrations fell across every category.

**EU15:** Austria, Belgium, Denmark, Finland, France, Germany, Greece, Republic of Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden.

**EU8:** Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia.

EU2: Bulgaria, Romania.

### Overseas migration

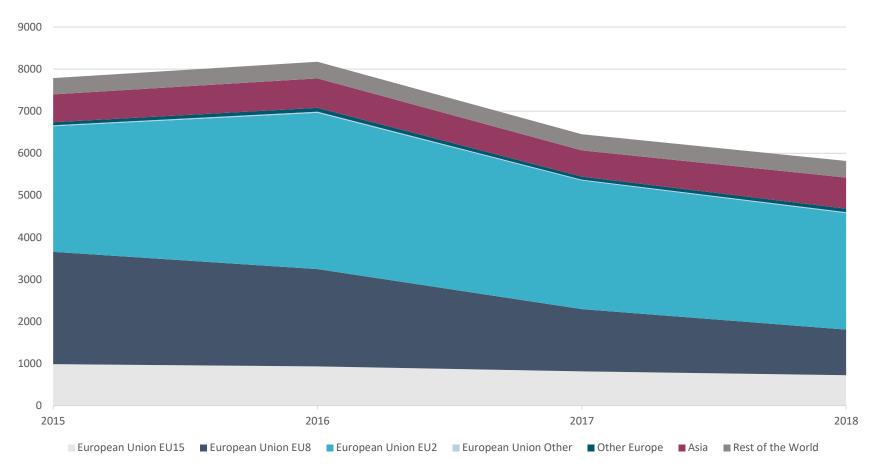
Stoke-on-Trent, East Staffordshire and Stafford are the main recipients of migration in the Stoke-on-Trent and Staffordshire area. NINo registrations increased in Stoke-on-Trent and East Staffordshire 2014-18, by 7.1% and 1.3% respectively, but fell by 10.6% in Stafford over the same period.

Over the period 2014-2018, four local authorities in Stoke-on-Trent and Staffordshire have seen a net increase in the number of NINo allocations – Cannock Chase, East Staffordshire, South Staffordshire, and Stoke-on-Trent. The largest increase occurred in South Staffordshire, where the number of NINo applications grew by 55, or 61.1%. The sharpest decline occurred in the Staffordshire Moorlands, where NINo allocations fell by 20.0% over the same period, albeit from a low base.



### Overseas migration

DWP NINo Registrations for Stoke-on-Trent and Staffordshire (2015 – 2018)



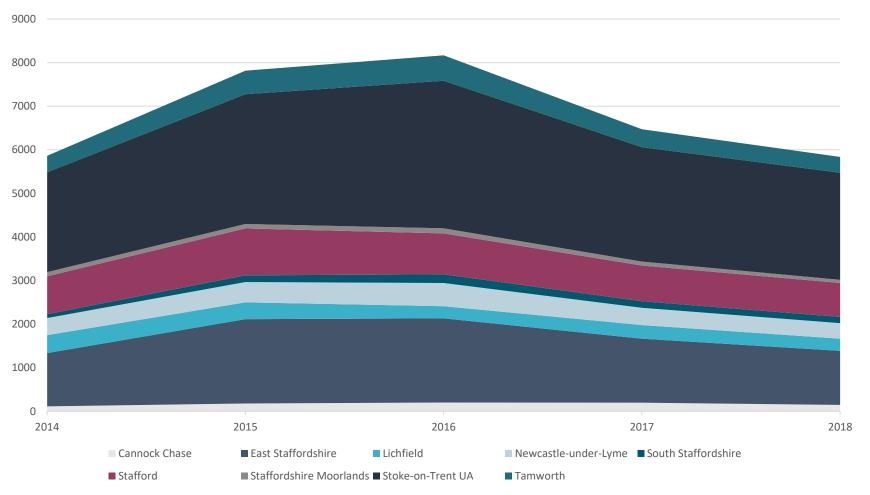
Source: Source: DWP NINo registrations to adult overseas nationals entering the UK by Region / Local Authority and world region - registrations in calendar year

EU15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Republic of Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden. EU8: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia. EU2: Bulgaria, Romania



# Detailed overseas migration

DWP NINo Registrations by Local Authority (2014 – 2018)



Source: DWP NINo registrations to adult overseas nationals entering the UK by Region / Local Authority and world region - registrations in calendar year



## Employment profile

Employment and economic activity of residents aged 16-64 (2018)

	Economic Activity	Employment Rate	Unemployment Rate
Cannock Chase	77.1%	73.5%	4.7%
East Staffordshire	86.4%	85.4%	-
Lichfield	79.8%	76.4%	4.2%
Newcastle-under-Lyme	77.9%	76.1%	-
South Staffordshire	84.2%	80.2%	4.7%
Stafford	80.8%	78.9%	2.3%
Staffordshire Moorlands	79.2%	78.5%	-
Stoke-on-Trent	74.1%	68.8%	7.2%
Tamworth	85.9%	81.0%	5.7%
Stoke-on-Trent and Staffordshire	79.6%	76.4%	4.0%
West Midlands	77.0%	73.3%	4.8%
UK	78.3%	75.0%	4.3%

The table to the left shows economic activity, employment and unemployment rates across Stoke-on-Trent and Staffordshire, with UK and West Midlands data for comparison.

Economic activity indicates the size of the labour market: the proportion of people who are either in employment or unemployed. The economic activity rate in Stoke-on-Trent and Staffordshire (79.6%) is higher than for the UK and the West Midlands. This shows that a high proportion of people are involved in the labour market. Within the region, East Staffordshire is the district with the highest economic activity rate (86.4%) and Stoke-on-Trent has the lowest (74.1%).

The unemployment rate is a measure of the health of an economy, as it responds to recession and growth. Unemployed people are those without a job who have been actively seeking work in the past four weeks and those who have found a job and are waiting to start.

The unemployment rate in Stoke-on-Trent and Staffordshire (4.0%) is lower than the average for the West Midlands (4.8%) and the UK (4.3%).

Within the LEP area, Stoke-on-Trent has the highest unemployment rate at 7.2%, whereas Stafford, at 2.3%, has the lowest.

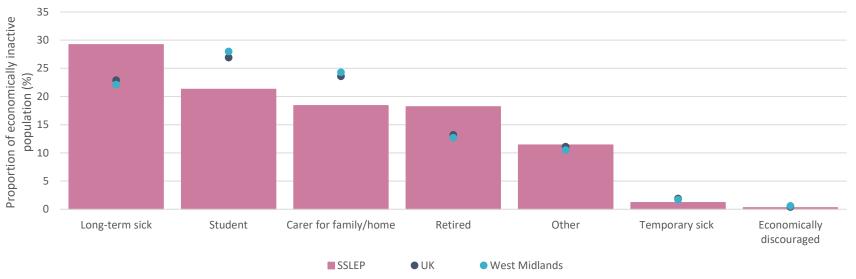
There is no data available for East Staffordshire or the Staffordshire Moorlands. The unemployment rates in both Stoke-on-Trent and Tamworth (5.7%) are higher than the rates for the West Midlands and the UK, while South Staffordshire (4.7%) has a higher unemployment rate than the West Midlands (4.8%).

Source: ONS APS (2018)



# Economically inactive population

Economic inactivity in Stoke-on-Trent and Staffordshire, 2018



The chart above shows the prevalence of economic inactivity by reason in Stoke-on-Trent and Staffordshire compared to the West Midlands and UK average. Economically inactive people, including students, the long-term sick and carers, are outside the labour market, as they are neither in employment nor unemployed.

The primary source of economic inactivity in Stoke-on-Trent and Staffordshire is long-term sickness. 29.2% of the total economically inactive population are so due to long-term sickness, higher than both the UK and West Midlands proportions. This is also the case for retirees, who make up a higher proportion of the economically inactive population in Stoke-on-

Trent and Staffordshire (18.2%) than the West Midlands (12.7%) and the UK (13.2%).

Just over a fifth of economically inactive people in Stoke-on-Trent and Staffordshire are so due to being students (21.3%), a lower proportion than the regional (28.0%) and national (26.9%) averages. There is also a lower proportion which is inactive due to being carers (18.4%) than either the regional (24.3%) or national (23.6%) averages.



### Economic inactivity locally

Reasons for economic inactivity, Stoke-on-Trent and Staffordshire, 2018

	Long-term sick	Student	Carer for family / home	Retired	Other
Cannock Chase	26.4%	25.9%	15.0%	16.6%	9.7%
East Staffordshire	14.1%	41.3%	20.4%	16.6%	0%
Lichfield	16.0%	0%	15.2%	40.0%	16.6%
Newcastle-under-Lyme	48.6%	10.7%	11.7%	25.8%	0%
South Staffordshire	19.1%	15.4%	15.4%	34.5%	15.6%
Stafford	24.5%	24.5%	13.2%	18.3%	19.5%
Staffordshire Moorlands	23.0%	29.8%	9.6%	18.8%	18.9%
Stoke-on-Trent	31.0%	23.7%	27.5%	6.8%	9.1%
Tamworth	53.9%	0%	23.9%	0%	0%

The table above compares the reasons for economic inactivity in the nine constituent districts of Stoke-on-Trent and Staffordshire.

Economic inactivity due to sickness is highest in Tamworth at over 53.9% and Newcastle-under-Lyme at 48.6%.

Within the region, East Staffordshire is the local authority area with the highest proportion of students – 41.3% of its total economically inactive population are students. Lichfield and Newcastle-under-

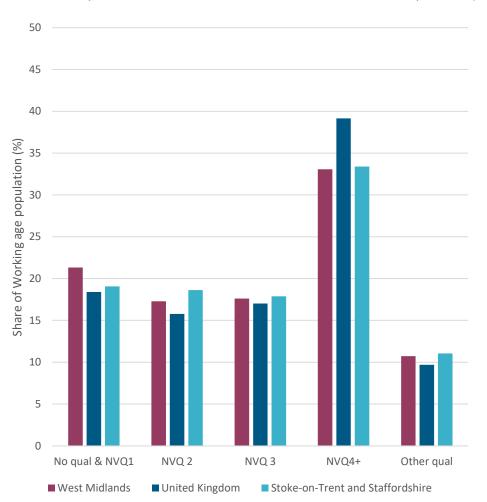
Lyme have the lowest proportions, at 0 and 10.7% respectively.

The local authority with the highest percentage of people economically inactive due to being retired is in Lichfield at 40%, closely followed by South Staffordshire at 34.5%.

Stoke-on-Trent & Staffordshire 77 Enterprise Partnership

### Skills levels

Qualifications profile for Stoke-on-Trent and Staffordshire and comparators (2018)



The chart on the left shows the differences in skills profiles between Stoke-on-Trent and Staffordshire, the West Midlands and the UK. Stoke-on-Trent and Staffordshire has a lower proportion of the population with NVQ4+ (33.4%) than the UK (39.2%) but higher a higher proportion than the West Midlands (33.1%).

Stoke-on-Trent and Staffordshire also has a greater share of the population with no qualifications than the national average, at 19.1%, but this is lower than the share in the West Midlands, where 21.3% of the population have no qualifications.

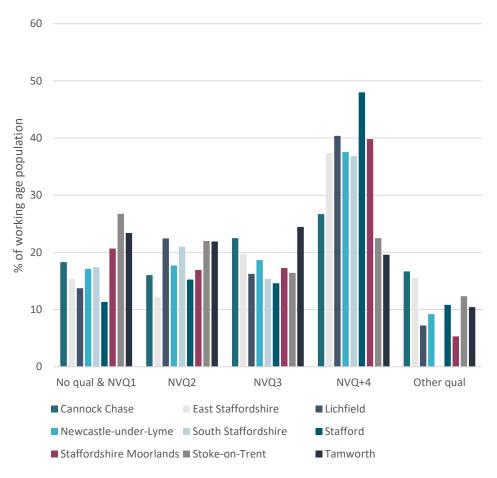
The LEP area has a higher share with other qualifications (including trade apprenticeships) and NVQ3, suggesting the presence of mid skill levels within the area.

Source: ONS Annual Population Survey (APS) (2018). NVQ1 is equivalent to 1-4 GCSEs and entry level qualifications, NVQ2 to 5+ GCSEs at A\*-C, NVQ3 to 2+ A Levels BTEC or other advanced diplomas, and NVQ4+ to a degree level qualification.



### Skills profile of local authorities

Qualification by local authority, Stoke-on-Trent and Staffordshire, 2018



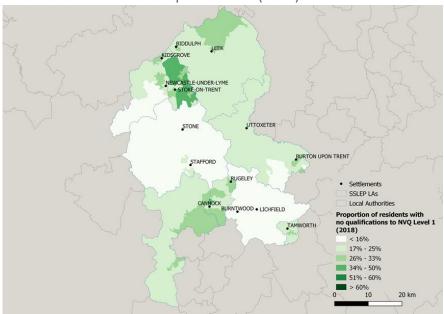
The chart to the left shows the differences within the LEP area. Stafford is the local authority area with the highest proportion of high level skills, and 48% of the population have NVQ4+ qualifications. The two key areas with low levels of NVQ4+ are Stoke-on-Trent and Tamworth, where 22.5% and 19.6% of the total population have NVQ4+ qualifications. Both places have the highest proportion of the population without qualifications, Stoke-on-Trent 26.7% and Tamworth with 23.4%. Stafford has the lowest proportion, at 11.3%.

At 16.7% and 15.5% of the working age population respectively, Cannock Chase and East Staffordshire have high shares of other qualifications. Alongside high proportions of the population with NVQ3, this indicates the existence of medium level and applied skills within both places.



### Skills levels across the area

Residents with no or low qualifications (2018)

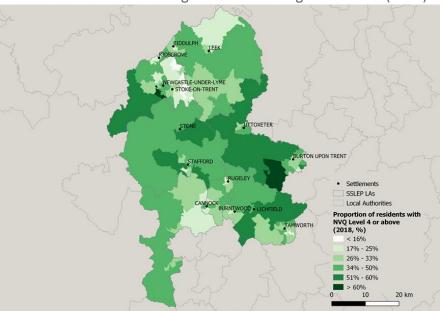


Mapping qualification levels provides an understanding of the spatial distribution of skills across the area, which is important for understanding the skills challenge. The left hand map shows the proportion of residents with either no qualifications or NVQ Level 1 and the map on the right shows the proportion of residents with NVQ Level 4 (NVQ4+) or above.

There are high levels of skills inequality within Stoke-on-Trent and Staffordshire with a difference of 55.5 percentage points between the areas with the highest and lowest proportion of residents with NVQ level 4 or above.

The areas around Stafford and Stone have low proportions of residents with no qualifications or NVQ level 1 and have a relatively high share with NVQ level 4 or above, and parts East Staffordshire have a low share of residents with no qualifications and a very high proportion with NVQ4+ (over 60%).

Residents with further or higher education degree or above (2018)



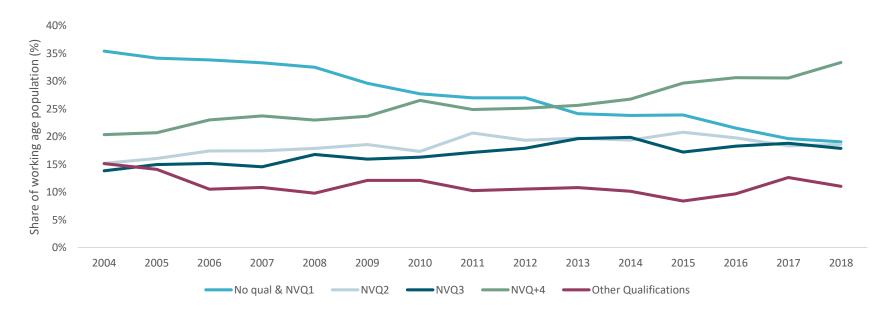
Areas around Stoke-on-Trent have a considerable share with no qualifications or NVQ level 1, where in some parts almost half its residents have no qualifications, with only 9% having NVQ level 4 or above.

Out of the key districts, the skills profile shows that Stafford has the highest overall share of residents with NVQ4+ at 47.9%. Lichfield is another district with a high proportion, and 40.4% of residents have NVQ4+ qualifications. Conversely Stoke-on-Trent is an area that has some of the lowest levels and, overall, 22.5% of residents have NVQ4+ qualifications or above.



### Skills trends

Qualifications level change in Stoke-on-Trent and Staffordshire area (2004-18)



Over time, there has been a continual and steady decline in the share of the working age population in Stoke-on-Trent and Staffordshire with no qualifications or NVQ1.

Conversely, the share of the working age population with high skills, NVQ level 4 and above, has risen since 2014. This reflects a general demographic shift, with younger residents being more likely to have

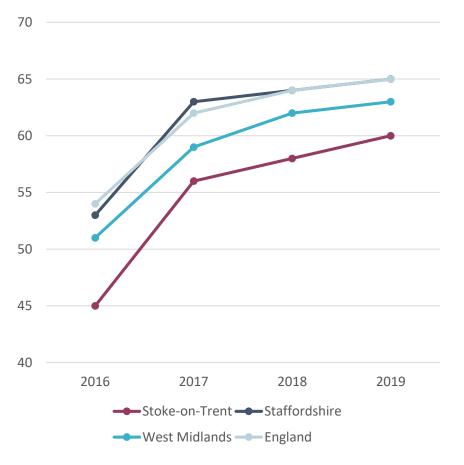
higher level skills than older residents, and reflects the trend playing out at a national level.

The proportion of the working age population with mid-level skills, NVQ2 and NVQ3, and those with other qualifications has remained relatively stable since 2014.



### KS2 Schools Performance (1)

Percentage of KS2 pupils reaching expected standard in reading, writing and maths (state-funded schools) (2016 – 2019)



Key Stage 2 (KS2) refers to the period of schooling between 7 and 11 years old. Stoke-on-Trent and Staffordshire experiences some school underperformance at KS2 level. Over the last four years whilst Staffordshire has performed as well as, or better than, the national average, Stoke-on-Trent has seen a performance gap in terms of the percentage of pupils attaining the expected standard in reading, writing and maths compared to the national average.

Whilst this gap has narrowed, there remains a gap of five percentage points in terms of the number of pupils in Stoke-on-Trent achieving the expected level.

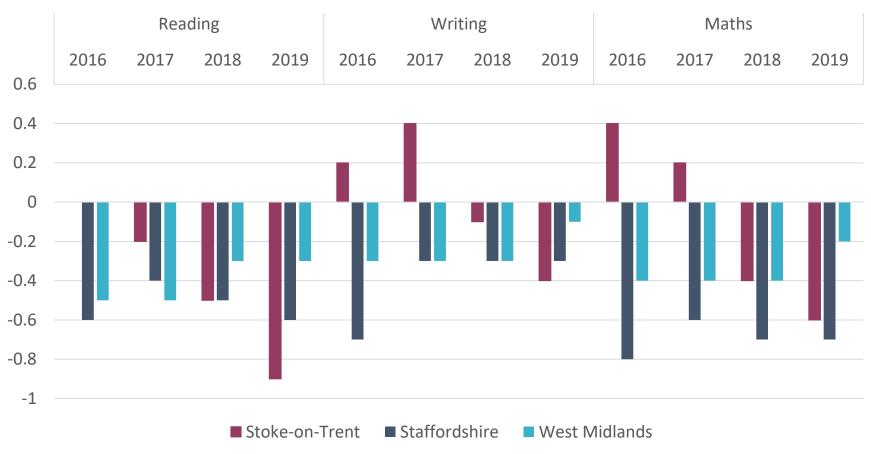
Another measure of performance – progress scores at KS2 level – is shown on the next slide. This demonstrates that across the LEP area, pupils do less well at KS2 compared to their achievement levels at KS1. This is true in Staffordshire as well as Stoke-on-Trent and holds across reading, writing and maths. Therefore, whilst attainment is reasonable across Staffordshire, pupils are not achieving as much as the experience of other places suggests that they should do.

Source: DfE (2016 – 2019) National curriculum assessments: key stage 2 (data compiled from multiple releases) Note: the graph uses a truncated axis to increase legibility.



# KS2 Schools Performance (2)

Progress scores of pupils (2016 – 2019)



Source: DfE (2016 – 2019) National curriculum assessments: key stage 2 (data compiled from multiple releases)

Note: The progress measures aim to capture the progress that pupils make from the end of key stage 1 to the end of primary school.

They are a type of value-added measure, which means that pupils' results are compared to the actual achievements of other pupils nationally with similar prior attainment. A positive score means pupils, on average, do better at KS2 than those with similar prior attainment nationally. A negative score means pupils, on average, do not make as much progress by the end of KS2 as those with similar prior attainment nationally.



### KS4 Schools Performance (1)

Key Stage 4 (KS4) refers to the period of schooling between 14 and 16 years old. The graphs overleaf show that Staffordshire school performance at this level is lower than other comparable areas at KS4, and that this represents a worsening of relative performance compared to KS2. The performance of Stoke-on-Trent is lower, with 41.9% being the average 'attainment 8' score per pupil.

This is reinforced by the 'progress 8' data, which shows that school performance at KS4 is lower

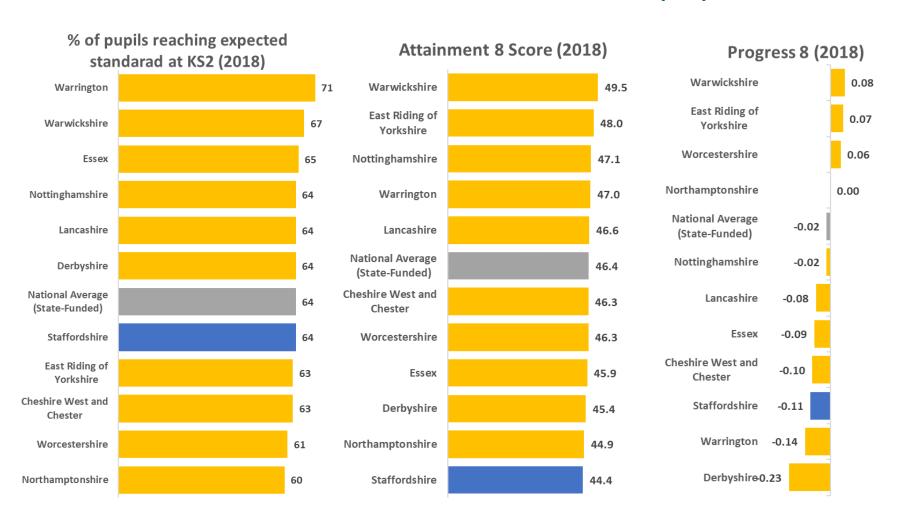
than expected given previous pupil performance and national average levels of progress achieved. Staffordshire scores -0.11 and Stoke-on-Trent -0.26, demonstrating that progress achieved at KS4 level is significantly below what national averages suggest can and should be achieved.

Source: Stoke-on-Trent & Staffordshire (2019) Skills Advisory Panel Analysis and Key stage 4 and multi-academy trust performance 2018 (revised)

Note: Attainment 8 is a measure of a pupil's average grade across a set suite of eight subjects. Once calculated, this Attainment 8 score is compared to the average Attainment 8 score of all pupils nationally with the same prior attainment at KS2 in order to calculate a pupils' Progress 8 score. A positive Progress 8 score means pupils, on average, do better at KS4 than those with similar prior attainment nationally. A negative score means pupils, on average, do not make as much progress by the end of KS4 as those with similar prior attainment nationally.



### KS4 Schools Performance (2)

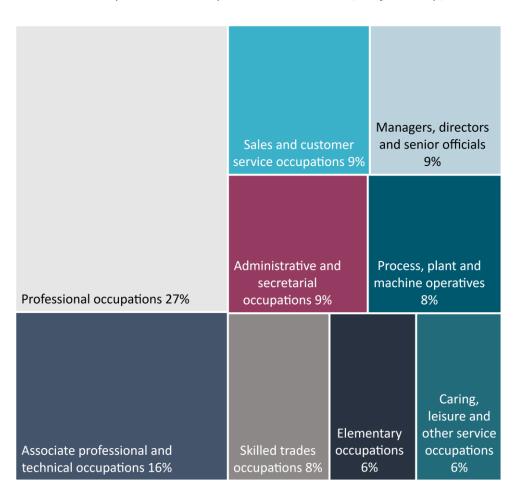


Source: Stoke-on-Trent & Staffordshire (2019) Skills Advisory Panel Analysis and Key stage 4 and multi-academy trust performance 2018 (revised)



### Occupations demand

Job vacancies by Standard Occupational Classification, Major Group, 2018



Available data on vacancies suggests that a narrow majority of employer demand is for occupations with high level skills requirements: with 52% of positions advertised being for managerial, professional or associate professional level occupations.

Conversely, only 6% of jobs vacancies are for elementary occupations. Though many vacancies for sales and customer service occupations, machine operatives, and other service occupations (which together account for 22% of vacancies) will also be low skilled and low paid.



### Occupations demand, detailed level

Job vacancies by Standard Occupational Classification, detailed classification, (postings > 3,000) 2018



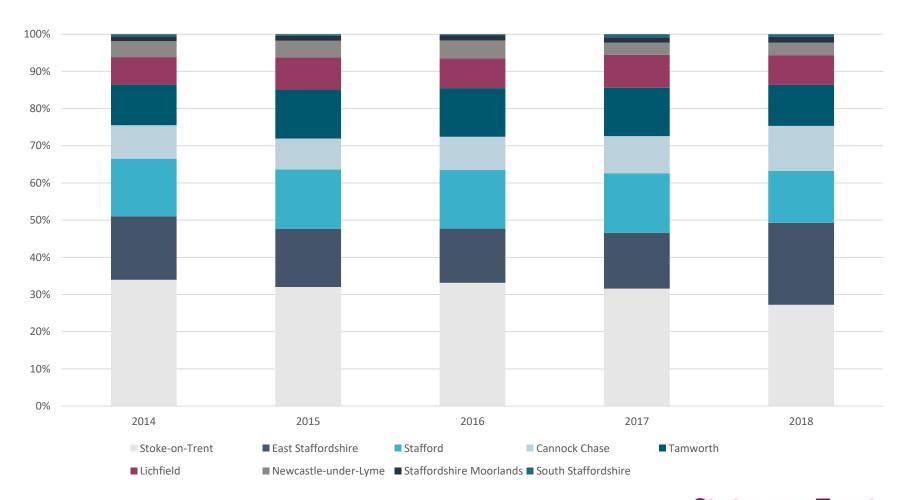
From the available data, distinct professions such as IT professional (6% of advertised vacancies), truck drivers (6%), teachers (5%) and nurses (3%) are visible, but a large proportion of the top advertised occupations are managerial and professional occupations.

Analysis of the skills requested suggests employment in manufacturing is driving some of the hiring patterns – e.g. advertising for welding and mechanical engineering skills. Logistics employment can also be seen in the demand for forklift truck drivers.



### Employment vacancies

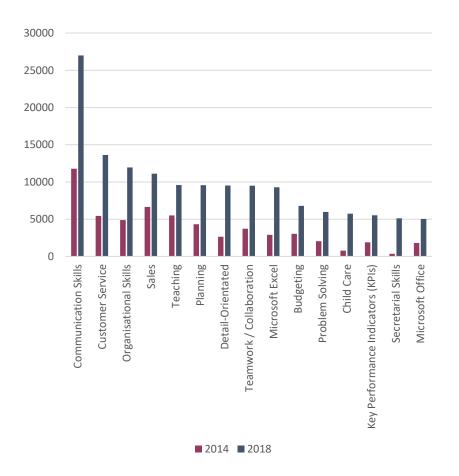
Job postings by district, 2014-18





### Skills demand

Most requested skill clusters in jobs vacancies, 2018



Available data also suggests strong demand for digital skills, from basic skills (e.g. Microsoft Word and Excel) through to specific software packages (e.g. AutoCAD), data analysis (e.g. SQL) and computer programming (e.g. Javascript).

The data on demand shows a significant increase in the number of jobs vacancies over time, roughly doubling between 2014 and 2018 across nearly all local authority areas and skill types, though care must be taken in interpreting these numbers as they may reflect sampling issues with the data (improvement in collection over time).



# Skills demand, detailed level

Most requested specialist skills in jobs vacancies, 2018

#### Specialist skills (2018)

	, ,			
Skill	Number of job postings requiring the skill, 2018	Growth, 2014- 18		
Secretarial Skills	5,127	93%		
Plumbing	2,195	86%		
Child Care	5,742	86%		
Mechanical Engineering	3,019	77%		
Forklift Operation	2,492	72%		
Accounting	3,474	70%		
Welding	2,246	70%		
Purchasing	2,409	67%		
Computer Numerical Control	2,052	64%		
Software Development	2,627	61%		
Scheduling	3,236	61%		
Teamwork / Collaboration	9.499	61%		

#### Baseline skills (2018)

Skill	Job postings, 2018	Growth, 2014- 18
Detail-Oriented	9,538	260%
Microsoft Excel	9,292	220%
Time Management	3,180	208%
Problem Solving	5,983	190%
Microsoft Office	5,033	177%
Building Effective Relationships	4,887	175%
Research	3,267	161%
Writing	4,381	155%
Organisational Skills	11,954	145%
Communication Skills	27,003	129%
Creativity	4,960	122%
Planning	9,577	121%

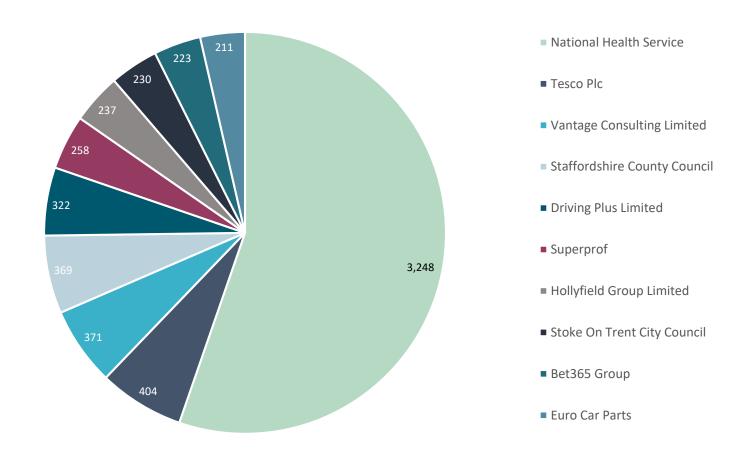
#### Computer skills (2018)

Skill	Job postings, 2018	Growth, 2014- 18
Microsoft Excel	9,292	220%
SAP	1,918	217%
Microsoft Word	2,013	217%
Microsoft Powerpoint	1,528	200%
Facebook	1,559	189%
Microsoft Office	5,033	177%
Software Development	2,627	157%
AutoCAD	1,546	147%
JavaScript	1,999	145%
MicrosoftC#	2,535	107%
SQL	3,602	54%
.NET	1,917	38%



## Key employers

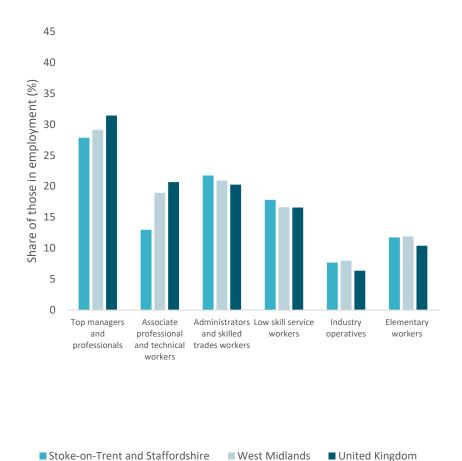
Employers with over 200 advertised positions available, 2018





### Occupations Profile

Occupations profile for Stoke-on-Trent and Staffordshire and comparators (2018)



The chart to the left shows the proportion of working age residents working in different occupations in Stoke-on-Trent and Staffordshire compared to the regional and national levels.

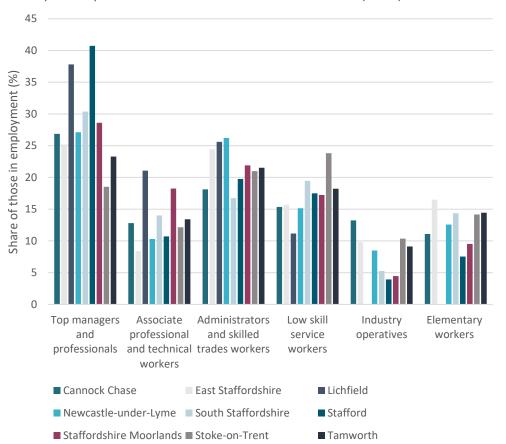
The profile of occupations mirrors the skills levels in the area. Stoke-on-Trent and Staffordshire has a lower share of top managers and professionals compared to the UK and West Midlands.

Similarly to the high share of medium skills found in the area, Stoke-on-Trent and Staffordshire has a larger share employed as administrators and trade workers compared to the UK average, which is also the case for industry operatives. There are greater share of workers employed in low skilled and elementary occupations in Stoke-on-Trent and Staffordshire when compared to both West Midlands and UK.

Stoke-on-Trent & Staffordshire
Enterprise Partnership

# Occupations profile of local authorities

Occupations profile in Stoke-on-Trent and Staffordshire (2018)



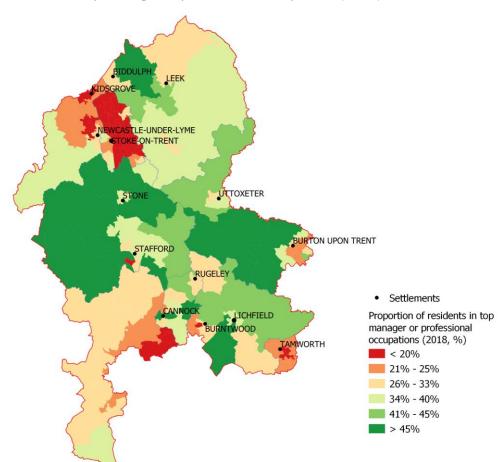
The chart on the left shows the occupations profile of the local authorities within Stoke-on-Trent and Staffordshire. Stafford has the largest share of its total employment, with 40.7% in top managerial positions, reflecting the high share of people with NVQ+4 in the authority. This is also the case in Lichfield, where 37.8% are in top managerial positions. Lichfield also has a high proportion of total employment in associate, professional and technical jobs, at 21.1%.

Nearly a quarter of the total workforce in Stoke-on-Trent are low skilled service workers, again reflecting the high proportion of people in the city with low or no qualifications.



### Occupations across the area

Residents in top manager or professional occupations (2018)



Mapping the proportion of residents in certain occupations is useful for strengthening our spatial understanding of the labour market.

This map shows the proportion of residents who work as managers, directors, senior officials or in professional occupations. It follows a similar pattern to the map of residents with NVQ Level 4 or above.

Areas with relatively high proportion of residents in top level roles (>45%) include Cannock, West of Stafford, East Staffordshire and parts of Lichfield.

Other urban settlements such as Stoke-on-Trent and Tamworth have a lower proportion of residents in top managerial positions, where in some parts the figure is less than 20%.

The skills profile indicates that the top districts with respects to the proportion of residents within these roles are: Stafford (40.6%), Lichfield (37.6%) and South Staffordshire (30.3%). Some of the districts with the lowest share are Tamworth (25.1%) and Stoke-on-Trent (18.6%).



### Wages profile

The chart on the following page shows the median annual wages for residents in Stoke-on-Trent and Staffordshire in 2018. The chart on the page following the table shows the median annual salary and salary growth for residents in the local authorities across Stoke-on-Trent and Staffordshire compared to the regional and national averages. The blue bar and left axis shows the annual salary. The blue dot shows salary growth in each local authority, the red dot and blue lines shows the salary growth of West Midlands and England from 2014-18.

Gross median annual pay for Stoke-on-Trent and Staffordshire residents, at £27,556, is lower than the equivalent figure for the West Midlands and the UK, which have a gross median annual pay of £27,636 and £29,869 for residents respectively. This is the same situation for workplace gross median pay, which, at £26,305 is lower than in the West Midlands and the UK. The disparity between

these two levels shows likely shows that workers commuting out of the LEP area are able to find higher wages elsewhere.

However, the growth rate for residents' gross annual pay between 2014-18 is higher than the English average. Growing at 10.0% in this period, residents' wages grew slower than in the West Midlands, where wages grew by 10.3%. Workplace gross median annual pay grew by 9.3% in the same period.

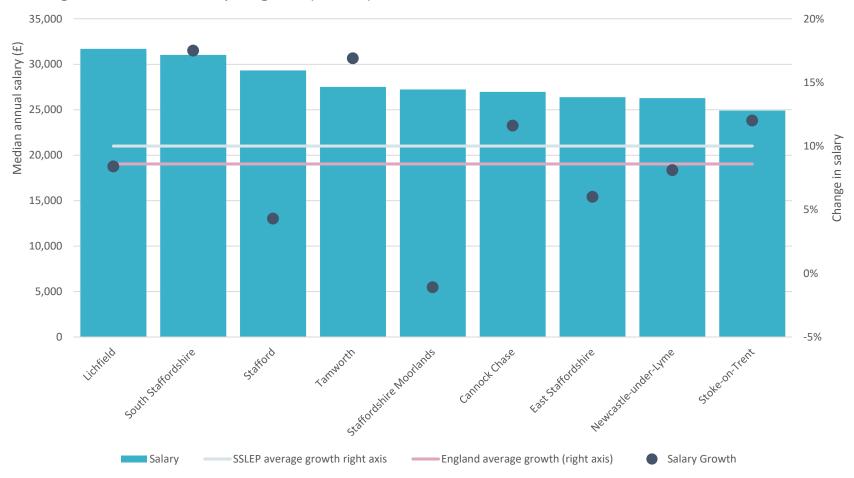
Within the LEP area, Newcastle-under-Lyme has some of the lowest wage levels, with a resident annual pay of £26,275 and workplace pay of £24,439. Lichfield has very high annual pay for residents at £31,701 and has also experienced the largest growth between 2014-2018, increasing by 8.4%.

### Wages profile of local authorities

	Residents		Workp	lace
Area	Gross annual median pay (£) (2018)	Growth (2014- 2018)	Gross annual median pay (2018)	Growth (2014- 2018)
Cannock Chase	26,967	11.6%	26,168	12.3%
East Staffordshire	26,375	6.0%	27,493	6.6%
Lichfield	31,701	8.4%	26,122	N/A
Newcastle-under-Lyme	26,275	8.1%	24,439	6.8%
South Staffordshire	31,026	17.5%	N/A	N/A
Stafford	29,323	4.3%	27,062	1.6%
Staffordshire Moorlands	27,232	-1.1%	25,334	-6.6%
Stoke-on-Trent	24,907	12.0%	26,186	13.8%
Tamworth	27,507	16.9%	24,647	7.0%
Stoke-on-Trent and Staffordshire	27,556	10.0%	26,305	9.3%
West Midlands	27,636	10.3%	27,716	11.0%
England	29,869	8.6%	29,872	8.7%

### Wages profile of local authorities

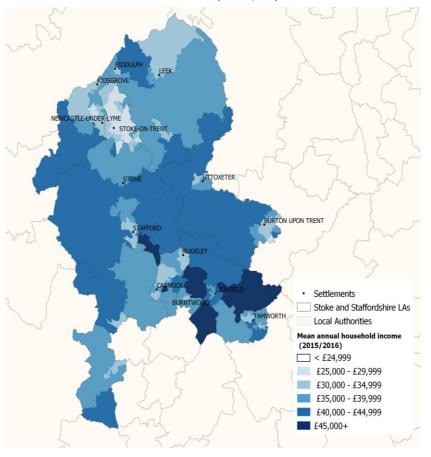
Resident gross median annual salary and growth (2014-18)





# Spatial distribution of earnings

Mean annual household income (2015/16)



This map illustrates the spatial distribution of wage levels across the Stoke-on-Trent and Staffordshire. The mean is used because data showing median is unavailable.

Mean annual household income may be distorted by outlying values, resulting in income seeming higher than expected. This disguises extremes which is important when considering inclusive growth.

A considerable part of the LEP has a mean annual income of £40,000 to £45,000. There are some areas that are slightly below this with income around £35,000 to £35,000.

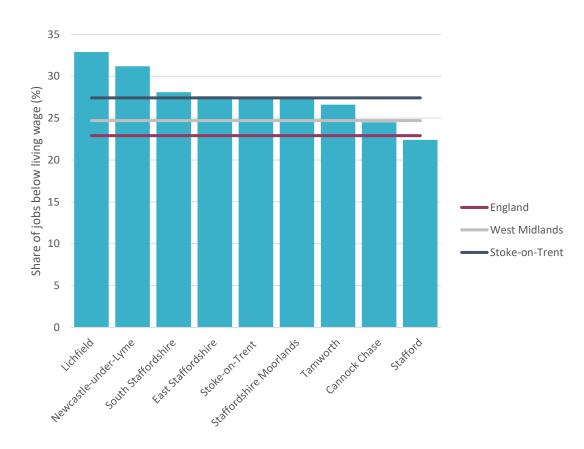
Wealthier pockets feature slightly east of Lichfield (around Whittington and Huddlesford area) and North of Burntwood with income over £45,000.

Areas on the lower end of the spectrum are Stoke-on-Trent and Newcastle-under-Lyme, with mean annual household income between £25,000 to £29,999.



### Jobs below National Living Wage

Share of jobs under National Living Wage (2018)



The chart to the left shows the share of jobs under the National Living Wage in Stoke-on-Trent and Staffordshire's local authorities compared to the regional and national average. The real living wage for areas outside of London in 2018 is £9/hour.

The share of jobs under the real living wage in the area was 27%. This is higher than the West Midlands share of 25% and England's share of 23%.

Lichfield and Newcastle-under-Lyme have the highest of jobs under the real living wage, exceeding 30%.

Stafford has the lowest share of jobs under the real living wage at 22%. This is below both the regional and national average.



# Ideas



### Ideas



Businesses in Stoke-on-Trent and Staffordshire spend £422 per full time employee, putting the area at 23rd out of the 38 LEPs for this measure.



£170m of R&D expenditure by businesses according to tax credit claims, just 3.4% of the total West Midlands amount.



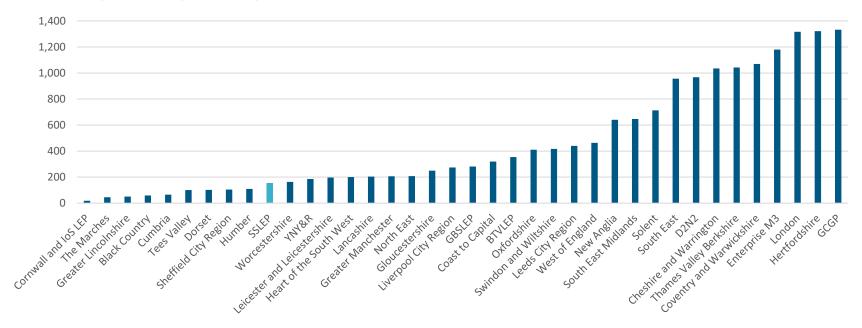
298 graduate start-up businesses formed from local universities with a combined turnover of £6.9m in 2018.



£93.7m in research funding received from Innovate UK and various funding councils, ranking Stoke-on-Trent and Staffordshire between 22<sup>nd</sup> and 28<sup>th</sup> of all LEPs for amount received from each source.

### R&D Expenditure

Business Enterprise R&D Expenditure by LEP area (£m) (2013)



The graph above shows the spending of businesses on R&D by LEP. This uses a dataset which is only available for 2013.

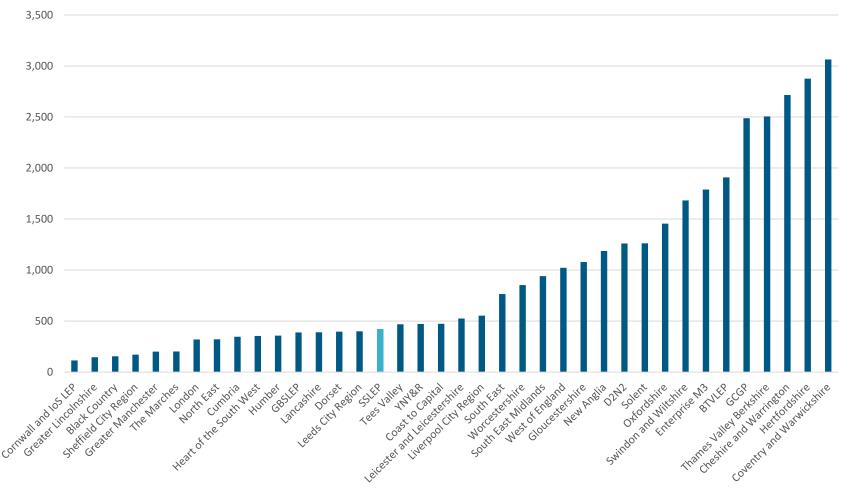
The data shows that historically the Stoke-on-Trent and Staffordshire area has had lower rates of R&D spending than other parts of the country. Stoke-on-Trent and Staffordshire ranks 29th out of 38 LEPs for overall business R&D expenditure, and 23rd out of 38 for business R&D expenditure per full time employee (FTE), shown on the graph below.

Whilst the LEP area has a higher rank for expenditure per FTE, the available figures show that R&D expenditure is very unequally distributed across places. Whilst Stoke-on-Trent and Staffordshire had R&D expenditure of £422 per FTE, neighbouring Cheshire & Warrington LEP (a relatively strong performer in business R&D terms) recorded expenditure of £2,716 per FTE or 6.4 times as much.

Source: BIS (2015) Mapping Local Comparative Advantages in Innovation

### **R&D** Expenditure

Business Enterprise R&D Expenditure per FTE by LEP area (£) (2013)



### **R&D Tax Credits**

R&D Tax Credits – claims and amounts (2015/16 & 2016/17)

2015/16		Number of claims				
	SME R&D Scheme	Large company R&D scheme and RDEC Scheme	SME claims in large company and RDEC scheme	Total claims	Total amount claimed (£m)	Total R&D Expenditure (£m)
Staffordshire	500	40	30	575	*	20
Stoke-on-Trent	105	5	5	120	*	20
SSLEP Total	605	45	35	695	*	40
West Midlands	3,325	240	220	3,785	290	2,440

2016/17	ı	Number of claims				
		SME claims in				
			large company		Total amount	Total R&D
	SME R&D Scheme	RDEC Scheme	and RDEC scheme	Total claims	claimed (£m)	Expenditure (£m)
Staffordshire	430	35	40	510	20	115
Stoke-on-Trent	80	5	10	100	*	15
SSLEP Total	510	40	50	610	20	130
West Midlands	2,905	190	245	3,340	295	2,535

R&D tax credits support companies working innovatively to advance science and technology. It is essential that projects advance the overall field, rather than innovate just for the purpose of the business. Relief is made available for both SMEs and large companies.

Across the two most recent years for which data is available (2015/16 and 2016/17), businesses in Stoke-on-Trent and Staffordshire claiming R&D tax credits cited

expenditure totalling £170m, or just 3.4% of the total West Midlands amount (approx. £5bn).



### Research funding

Stoke-on-Trent and Staffordshire area research funding by source (2012 - 2021)

	Funding received (£m)	Rank of LEPs for funding received
Gateway to Research	49	28th
Innovate UK	27.4	28th
Biotechnology & Biological Sciences Research Council	4.9	25th
Medical Research Council	3.5	22nd
Arts & Humanities Research Council	3	27th
Engineering & Physical Sciences Research Council	2.9	27th
Economic & Social Research Council	1.7	24th
National Environment Research Council	1.3	26th
Total	93.7	

Innovate UK, the innovation agency for the UK, is part of UK Research and Innovation (UKRI). It works with individuals, companies and other organisations to drive innovation in science and technology with the aim of growing the economy.

The table above shows a summary of funding allocations for Stoke-on-Trent and Staffordshire from Innovate UK and other funding sources, and the position this puts the area in relation to other LEP areas.

In the funding period 2012 – 2021, the LEP received funding totalling £93.7m from Innovate UK and various funding councils. The LEP area ranked

between 22nd and 28th of all LEPs for the different funding sources in terms of amount received.



### University led innovation

Intellectual property revenues, and spin-offs start-ups, Stoke-on-Trent and Staffordshire Higher Education Institutions

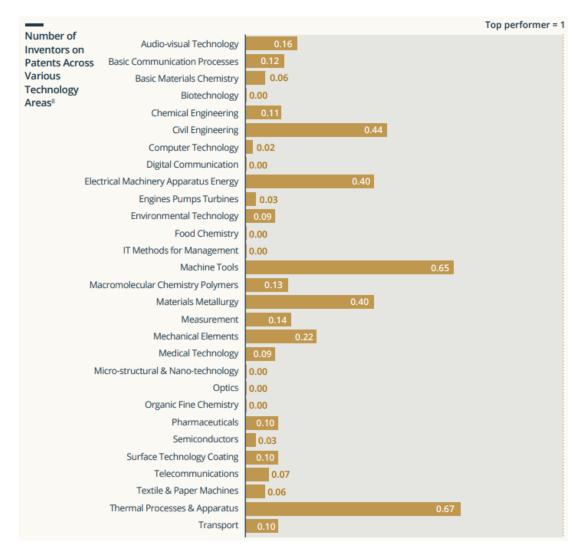
HE Provider	HE Provider Total IP revenue (excluding costs)		Spin offs with some HEI ownership		Graduate Start ups		Staff Start-ups	
2014-2018	2014-2018	Number of active firms (2018)	Turnover (2018)	Number of active firms (2018)	Turnover (2018)	Number of active firms (2018)	Turnover (2018)	
Keele University	£339,000	1	£135,000	3	£26,000	0	0	
Staffordshire University	£25,000	3	0	295	£6,826,000	24	80,000	
West Midlands Average	£724,000	7	£1,004,000	64	£1,375,000	4	£102,000	

The table above shows intellectual property revenues and spinoffs/start-ups at the two universities found within Stoke-on-Trent and Staffordshire. Note that spin offs refer to companies set up to exploit the IP that has originated from within the HE provider and start-ups include new businesses started by recent graduate/staff regardless of where IP resides but have received business support from the HEP provider.

Keele University generated a modest total IP revenue of £339,000 between 2014-2018 whereas Staffordshire University comes in with a lower figure of £25,000. Although the revenues produced by these two institutions are below the West Midlands average, larger universities such as Birmingham and Warwick within the region inflate this average so that it is not reflective of many of the HE providers found within the region. While Staffordshire University has a lower intellectual property revenue, it has a significantly large number of graduate start-ups, with 295 companies active in 2018, accounting for £6.8m in turnover. Out of 134 higher education providers found on the HESA database in England, Staffordshire University ranks in the Top 25 for graduate start up turnover and is placed 9th for number of active firms.

In terms of growth, the University of Staffordshire has seen rapid increases in graduate start-ups, where they have doubled in the short time between 2014-2018. In addition, staff start-ups at the university have also trebled up to 24 companies in the same period. Although Keele University has a low number of graduate and staff start-ups, it has one spinoff company with HEP ownership that is generating high revenues of £135,000 per annum and another where ownership has been released by the university which is producing turnover of £280,000 per annum.

### R&D: Patents



The chart to the left is taken from the Smart Specialisation Hub's profile on Stoke-on-Trent and Staffordshire. The document identifies sectoral and innovation capabilities using benchmarking with the performance of other LEPs.

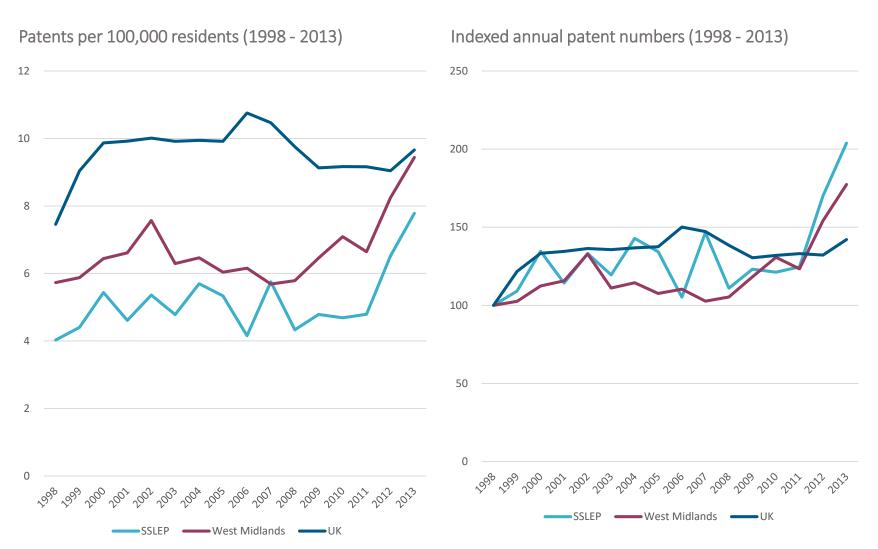
This chart shows a score for the number of inventors on patents across a variety of science and technology areas where 1.0 is the top performer. The highest score Stoke-on-Trent and Staffordshire has is for thermal processes & apparatus (0.67) followed by machine tools (0.65). This shows that there are relatively low levels of patent activity in Stoke-on-Trent and Staffordshire.

The charts on the following page show OECD data on the number of patents filed in the area per 10,000 residents, compared to the regional and national averages. While Stoke-on-Trent and Staffordshire has consistently been below the regional and national averages, it appears that this gap is now beginning to close.

Source: Smart Specialisation Hub (2019) LEP Profile: Stoke-on-Trent & Staffordshire. Figures are from IPO for 2015-2017. Benchmarking is relative to the highest LEP, with London excluded. London is excluded from the figure due to patents being registered with HQ in London



### **R&D**: Patents



Source: OECD (2018) Patents by regions

# Infrastructure



### Infrastructure



Excellent road and rail connections North, South, East and West. Well connected internally, with strong road and rail networks, but with congestion on some important local routes.



Median house prices are lower than the regional and national averages, but this varies across the area, and some places have significant affordability challenges.



High average download speeds near key urban centres but with pockets of poor connectivity in some major towns and in rural areas.



There are centres of high non-domestic energy use surrounding Stoke-on-Trent and Tamworth and Stafford, but also in more remote areas in East Staffordshire.

## Transport infrastructure

Map of the UK showing up to 4 hour drive times from Stoke on Trent



Stoke-on-Trent and Staffordshire sits at the heart of the country. It acts as a bridge from the South to the North. Stoke-on-Trent and Staffordshire is at the intersection of three major engines of UK growth (the West and East Midlands and the North West), making an important contribution to all three. Stoke-on-Trent and Staffordshire is a major centre for modern logistics.

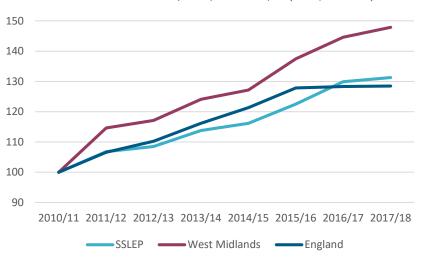
Stoke-on-Trent and Staffordshire sits at the heart of the UK's road and rail network, benefitting from the presence of the M6 and M6 toll running north to south through the area, as well as the M54 to the south and a number of major A-roads.

Nearly every part of Great Britain lies within a four-hour drive of the area, and the quality of the local road network is reflected in the huge demand for logistics space locally. Usage on the strategic road network nationally is expected to grow by between 32% and 66% by 2050, as referenced in the Staffordshire County Council Strategic Infrastructure Plan (2019).

The West Coast Mainline means Stoke-on-Trent and Staffordshire is 1 hour and 18 minutes from London Euston, 30 minutes from Birmingham New Street, and 39 minutes from Manchester Piccadilly. Other lines – the Cross City Line, the Chase Line, the Crewe to Derby Line, and the Shrewsbury Line – provide important commuting connections to other parts of the Midlands and neighbouring urban centres.

# Rail usage

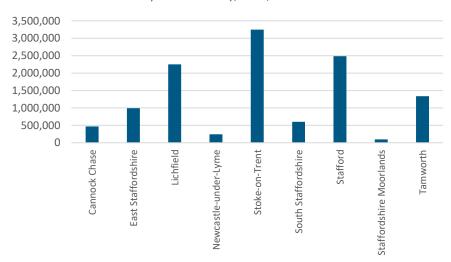
Indexed station entries and exits, 2010/11 - 2017/18 (2010/11 = 100)



Railway station entries and exits show how the volume of rail travel has changed over a period of time. The charts above show the change in rail station entries and exits over time in Stoke-on-Trent and Staffordshire compared to the regional and national averages.

In Stoke-on-Trent and Staffordshire there were 11,725,454 entries and exits in 2017/18, growth of 31.3% since 2010/11. This is a higher growth rate than the national average growth rate of 28.5% over the same period, but lower than the regional rate of 47.9%. The number of entries and exits has increased steadily from 2010/11 to 2017/18.

Station entries and exits by local authority, 2017/18



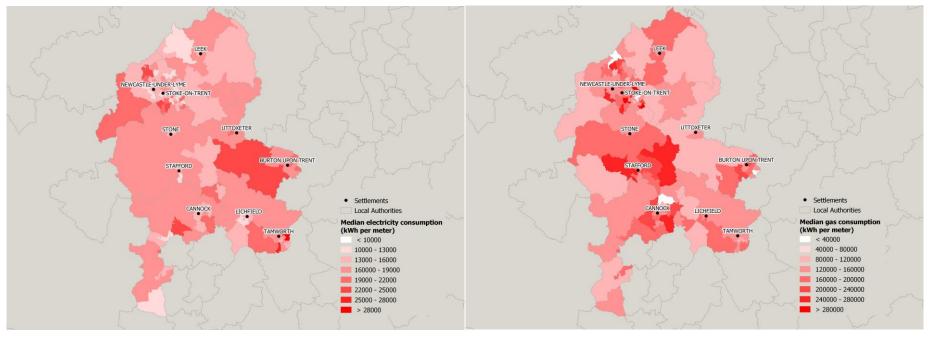
Stoke-on-Trent, as the area's largest city, attracts the highest number of these entries and exits, with over 3m made in 2017/18. This is followed by Stafford with 2.5m and Lichfield with 2.25m. There has been minimal change over time in the traffic through the stations in relation to each other, and Stoke-on-Trent has attracted the most since 2010/11.



# Non-domestic energy usage

Non-domestic electricity consumption by KWh per meter (2017)

Non-domestic gas consumption by KWh per meter (2017)



The two maps represent median non-domestic electricity (left hand map) and gas (right hand map) consumption at the local level by Kilowatts per hour (KWh) per meter. This can be used to analyse where demand is highest.

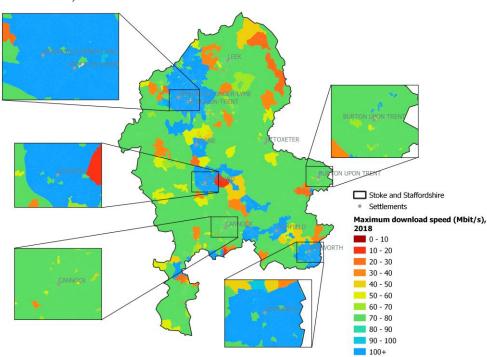
There are clear centres of high non-domestic use surrounding Stoke-on-Trent and Tamworth and Stafford.

There are clear differences between gas and electricity usage. Aside from areas surrounding Stoke-on-Trent and Tamworth, there are high levels of non-domestic energy electricity usage away from large towns, for instance in East Staffordshire between Uttoxeter and Burton-upon-Trent. Non-domestic gas consumption is concentrated around the region's larger towns and cities.



# Broadband connectivity, maximum speeds

Maximum download speeds (Mbit/s) across Stoke-on-Trent and Staffordshire, 2018



The two maps above represent maximum and average broadband download speeds at the local level by Mbit/s for the Stoke-on-Trent and Staffordshire area. This can be used to see which areas have the highest and lowest connectivity.

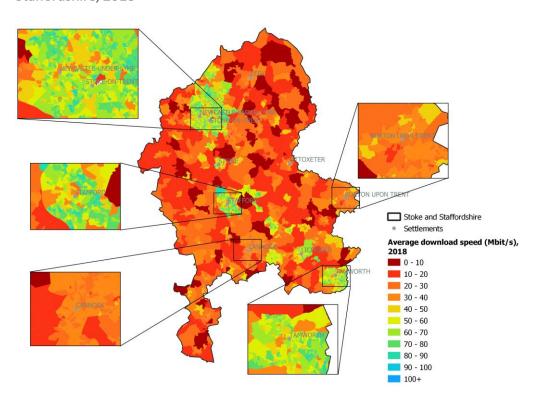
Maximum speeds allow us to see the constraint on connectivity, i.e. what it is possible to get in any area as demonstrated by the fastest connections available. Stoke-on-Trent, Stafford, Lichfield and Tamworth have the highest maximum speeds, with islands of high connectivity dotted elsewhere across the area.

Areas of low maximum download speeds (0 – 10 Mbit/s) are typically found in rural parts of Stoke-on-Trent and Staffordshire, particularly in the Staffordshire Moorlands.



# Broadband connectivity, average speeds

Average download speeds (Mbit/s) across Stoke-on-Trent and Staffordshire, 2018



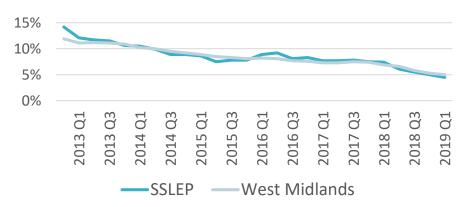
Maximum speeds only reveal so much about the connectivity of a place. Looking at the average downloads speeds gives a better understanding of the current levels of digital connectivity.

The pattern of average downloads speeds largely reflects that of maximum. Areas surrounding key towns and cities have average download speeds 70-80 and sometimes 80-90 Mbits/s, in particular Stoke-on-Trent, Stafford and Tamworth. Rural or remote areas, but also Burton-upon-Trent, have poor average download speeds, ranging from some parts of the Staffordshire Moorlands with 0-10 M/bits per second to 20-30 in Burton-upon-Trent.

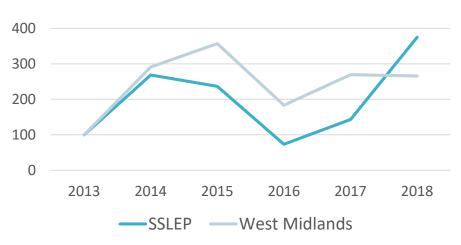


# Office property vacancy and sales

Office Vacancy Rate (2013 – 2019)



Indexed Annual Sales Volume (2013 – 2019) (2013 = 100)



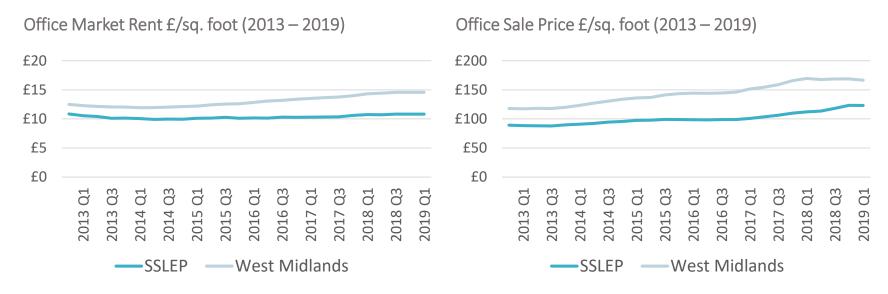
The chart to the top left shows the average vacancy rate for office commercial property in Stoke-on-Trent and Staffordshire compared to the West Midlands from 2013 to 2019. This data is from CoStar, which collates real time data and produces insights into the UK's commercial property market.

Office vacancy rates have declined significantly over the last ten years, and are currently at a lower rate than the West Midlands average.

The chart to the left shows an index of sales volume in office property in Stoke-on-Trent and Staffordshire. In the last year, investment in office property in the area has overtaken the rate for the West Midlands, which signals demand for investment in commercial space in the region.

Source: CoStar

# Office market price and rent growth



The charts above show the rental and sales values for office property in Stoke-on-Trent and Staffordshire compared to the West Midlands. Market rents for offices in Stoke-on-Trent and Staffordshire have been consistently lower than in the West Midlands. This is the same situation for sales prices, showing that Stoke-on-Trent and

Staffordshire is a comparatively affordable place for businesses to locate.

# Investors in office property

Proportion of Sales Volume by Buyer Type (3 years to Q1 2019)



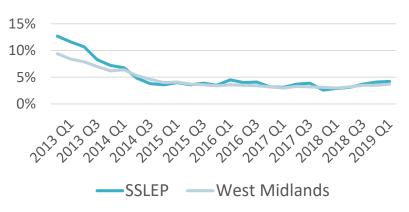
In comparison to the West Midlands as a whole, where only a quarter of office space investment has come from private investors over the last three years, 42% of investment in office space in Stoke-on-Trent and Staffordshire has been made by private investors.

Conversely, a lower proportion of investment in office space is institutional than in the West Midlands, with just 11% of total office investment made by institutional investors, compared to 64% in the West Midlands.

Source: CoStar

# Industrial property vacancy and sales

Industrial vacancy rate (2013 - 2019)



Indexed Annual Sales Volume (2013 - 2019) (2013 = 100)



The chart to the top left shows the average vacancy rate for industrial commercial property in Stoke-on-Trent and Staffordshire compared to the West Midlands from 2013 to 2019. The Costar definition of industrial property includes warehousing, which is reflected in these figures.

Industrial vacancy rates have declined significantly over the last ten years, though they are currently at a marginally higher rate than the West Midlands average.

The chart to the left shows an index of sales volume in industrial property in Stoke-on-Trent and Staffordshire. Industrial sales growth in Stoke-on-Trent and Staffordshire has consistently been higher than for the West Midlands up until 2018, showing that there has been significant demand for industrial investment in the region.

Source: CoStar

# Industrial market price and rent

Industrial market rent £/sq. foot (2013 - 2019)



Industrial sales price £/sq. foot (2013 - 2019)

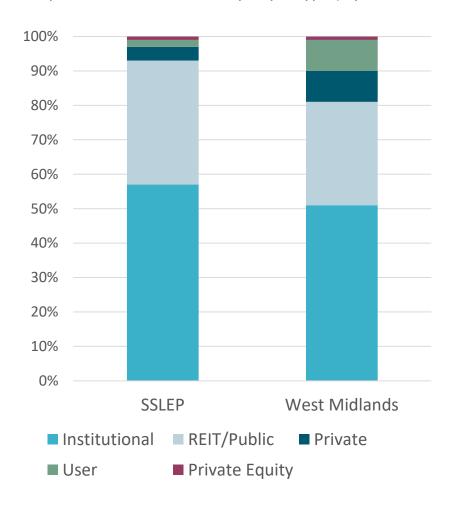


The charts above show the rental and sales values for industrial property in Stoke-on-Trent and Staffordshire compared to the West Midlands. Market rents for industrial space in Stoke-on-Trent and Staffordshire have largely been in line with the West Midlands over time, only dropping in recent years. This is a different situation for

sales prices, where prices are higher in Stoke-on-Trent and Staffordshire than the West Midlands. Prices for both have risen consistently over the past half decade.

# Investors in industrial property

Proportion of Sales Volume by Buyer Type (3 years to Q1 2019)



57% of investment in industrial space in Stoke-on-Trent and Staffordshire over the last three years has been made by institutional investors, compared to 36% by private investors. This is a higher proportion of institutional buyers than in the West Midlands. The market for industrial space is far more institutionalised in the Stoke-on-Trent and Staffordshire than for the office market, where a far greater proportion of investment comes from private actors.

The proportion of private investors in the West Midlands is nearly double that in Stoke-on-Trent and Staffordshire.

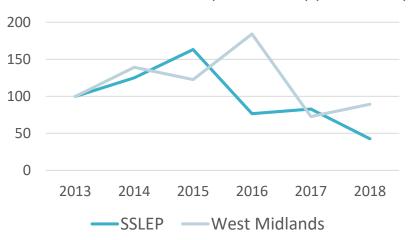
Source: CoStar

# Retail property vacancy and sales

Retail vacancy rate (2013 - 2019)



Indexed retail sales volume (2013 - 2019) (2013 = 100)



The chart to the top left shows the average vacancy rate for retail commercial property in Stoke-on-Trent and Staffordshire compared to the West Midlands from 2013 to 2019.

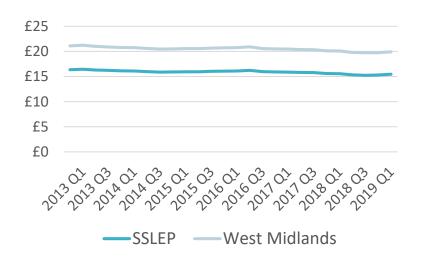
Retail vacancy rates have declined consistently over the last ten years, in line with the trend for the west Midlands. The vacancy rates for both places are currently aligned.

The chart to the left shows an index of sales volume in industrial property in Stoke-on-Trent and Staffordshire. Retail sales in Stoke-on-Trent and Staffordshire have fallen since 2015, and, while sales growth in the West Midlands recovered in 2018, this is not the case for Stoke-on-Trent and Staffordshire.

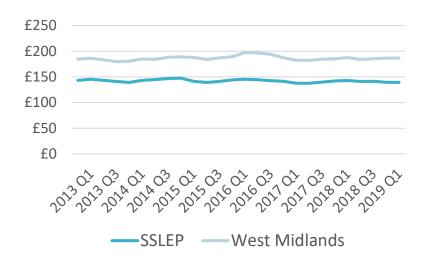
Source: CoStar

# Retail property market price and sales

Retail market rent £/sq. foot (2013 - 2019)



Retail sales price £/sq. foot (2013 - 2019)

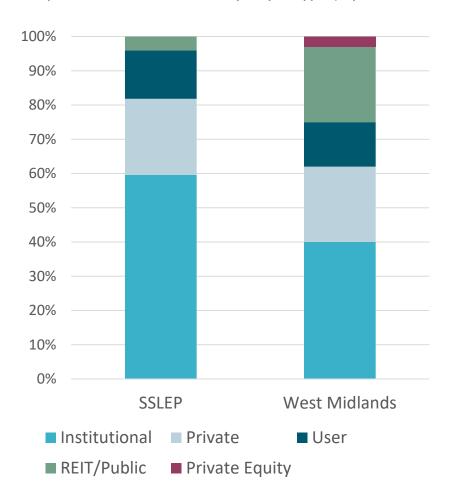


The charts above show the rental and sales values for retail property in Stoke-on-Trent and Staffordshire compared to the West Midlands. Market rents for retail space in Stoke-on-Trent and Staffordshire have been lower than with the West Midlands over time but stable, falling only marginally since 2013. This is a similar

situation for sales prices, where prices are lower in Stokeon-Trent and Staffordshire than the West Midlands. Sales prices have remained largely consistent since 2013.

# Investors in retail property

Proportion of Sales Volume by Buyer Type (3 years to Q1 2019)



59% of investment in retail space in Stoke-on-Trent and Staffordshire over the last three years has been made by institutional investors, compared to 22% by private investors. This is far a higher proportion of institutional investment than in the West Midlands, where just 40% of investment has come from institutions.

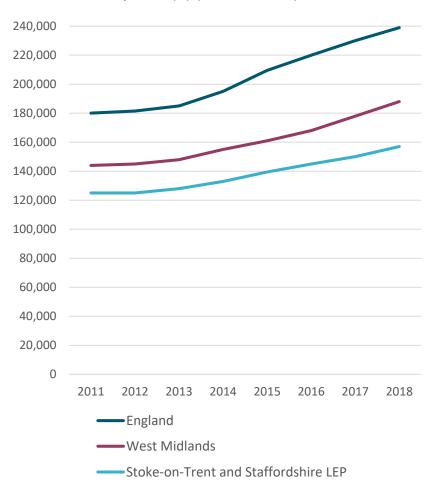
In contrast, a much higher proportion of investment in the West Midlands has been made by public bodies, 22%, compared to just 4% in Stoke-on-Trent and Staffordshire.

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> > Enterprise Partnership

# Housing

Median house prices (£) (2011 - 2018)



The 2016 based household projections data shows that there are around 485,000 households in Stoke-on-Trent and Staffordshire.

Across the LEP, home ownership rate is 67% compared to around 63% for both England and West Midlands. Around 16% of dwellings are privately rented, meaning there are over four times as many owner occupied dwellings in Stoke-on-Trent and Staffordshire as there are privately rented dwellings. The proportion of privately rented houses is also lower than the those for West Midlands (18%) and England (20%).

Since 2011, house prices in the area have increased by 25.6%. For the same period, house prices in West Midlands increased by 30.6% and in England by 32.8%.

In the previous five years, the average annual rate of growth in house prices for Stoke-on-Trent and Staffordshire (4.2%) has been lower than the rate of growth in both West Midlands (4.9%) and England (5.3%). For that period, annual rate of growth in house prices within the LEP area was higher than the national average in one year – the 12 months ending September 2018.

Nationally, the highest annual increase was between 2014 and 2015 when house prices increased by 7.4% in England. In that year, the median price in Stoke-on-Trent and Staffordshire increased by 4.9%. For the same year, the annual rate of growth in house prices within the LEP area was higher than the regional average for the West Midlands, which increased by 3.9%.

Stoke-on-Trent & Staffordshire Enterprise Partnership

# Infrastructure: Housing (2)

Within Stoke-on-Trent and Staffordshire, home ownership is highest in Staffordshire Moorlands (81%) and the lowest in Stoke-on-Trent. The proportion of privately rented houses is highest in East Staffordshire (24%) and lowest in Staffordshire Moorlands (10%).

House prices have increased the most in Tamworth since 2011 by 40.8%, but all districts have had increases of around 20% or more.

There are also noticeable annual fluctuations in some districts. For example, rate of growth decreasing year on year in Newcastle-under-Lyme between 2014 and 2017 with house prices declining by 3.3% in 2017 but recorded a sharp increase of 9.2% in 2018. In South Staffordshire, the rate of growth was 5.0% in 2016, 7.6% in 2017 but only 1.2% in 2018. This could be a result of changes in the availability of housing stock for the local districts.

Housing affordability data from the ONS, expressed as the ratio of median house price to median gross annual workplace-based earnings, shows that growth in house prices have outstripped increases in gross annual earnings - both nationally and regionally.

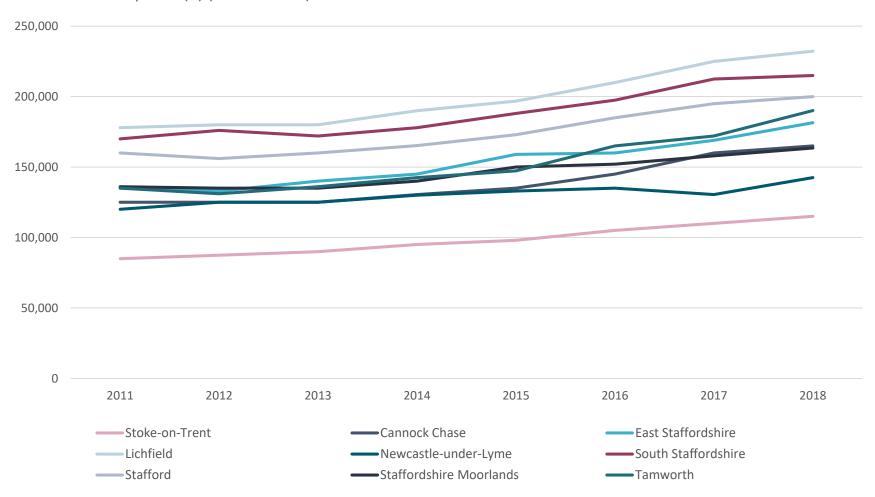
Within the LEP area, affordability for individual districts has either stayed the same or slightly worsened between 2011 and 2018. Stoke-on-Trent is the most affordable area with an affordability ratio of 4.4.

In South Staffordshire and Newcastle-under-Lyme, there has not been a significant change between 2011 and 2018. The affordability ratio for Lichfield, where house prices increased by 30.5% between 2011 and 2017, the median house price is currently 8.9 times gross annual earnings.

During that period, the affordability ratio for Tamworth, which had the highest increase in house prices, went up from 6.2 to 7.7. Even in Newcastle-under-Lyme and Staffordshire Moorlands, where increases in house prices were 20% lower than the LEP average, the typical house is now less affordable than it was 2011.

# Housing prices at the local level

Median house prices (£) (2011 - 2018)

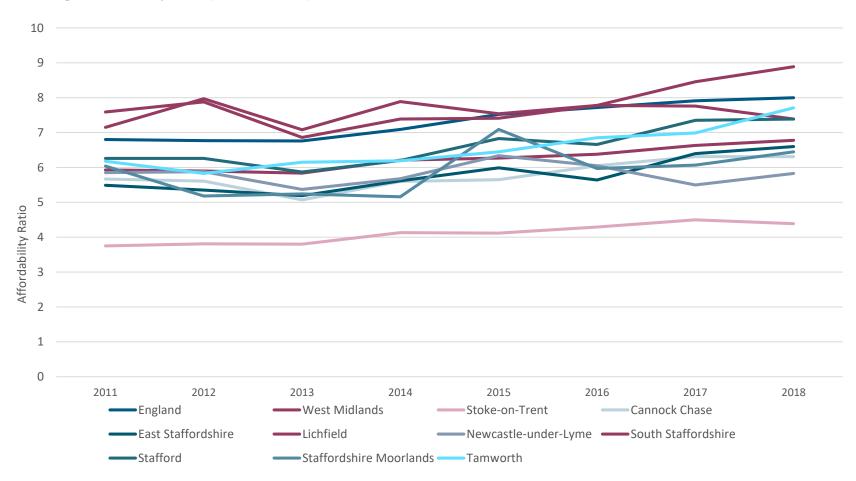


Source: House Price Statistics for Small Areas: Median Price between 2011 and 2018 (data for year ending Sep)



# Housing affordability at the local level

Housing affordability ratio (2011 – 2018)



Source: House Price Statistics for Small Areas: Median Price between 2011 and 2018 (data for year ending Sep). ONS, Annual Survey of Hours and Earnings (ASHE). The housing affordability ratio is the ratio of median house price to median gross annual workplace-based earnings



# Place



#### Place



70% of workers live in Stoke-on-Trent and Staffordshire, with 80,800 commuters into the area and 117,000 leaving for work each day



The area is home to the Cannock Chase, an area of outstanding natural beauty, and a substantial part of the Peak District National Park, which attracts over 13 million visitors a year.



The area is incredibly diverse, with two cities, several historic market towns, manufacturing towns, and large rural areas. Stoke-on-Trent and Staffordshire is an important part of neighbouring economies to the North, South, East and West.

# Commuting patterns

Inflows and outflows of all workers, 2011

Total movements	Total	%
Those living in the LEP and commuting within	278,275	58.5%
Those living in the LEP and commuting out	116,831	24.5%
Those living outside the LEP and commuting in	80,804	17.0%

The table above and charts below illustrate commuting inflows and outflows for all workers to Stoke-on-Trent and Staffordshire.

Stoke-on-Trent and Staffordshire has a negative net inflow, with more workers commuting out of the region for work (116,831) than those coming in (80,804). Overall, 70.4% of the workers living within the LEP area commute to work inside it, while 29.6% commute out.

Of the 116,831 commuting out of the LEP for work, 16,201 commute to Birmingham, or 13.9% of the total who leave the area. 11.0% commute to Wolverhampton and 10.9% commute to Cheshire East.

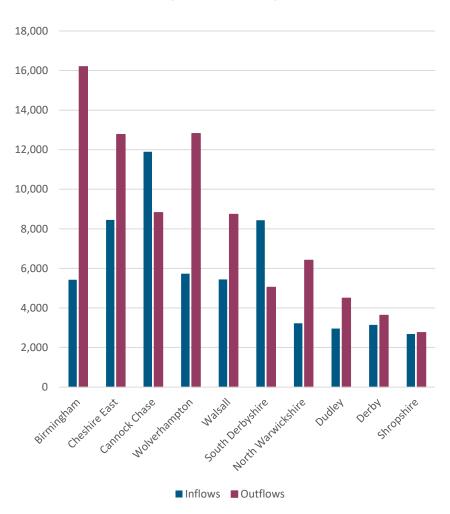
80,804 workers commute into Stoke-on-Trent and Staffordshire for work. The largest number of these, 8,446, or 10.5%, commute from Cheshire East. 8,434 commute from South Derbyshire, 10.4% of the total.

The local authority within Stoke-on-Trent and Staffordshire which attracts the highest numbers of commuters from outside the region is Stoke-on-Trent.



# Commuting inflows and outflows

Inflow of commuters by local authority (2011)



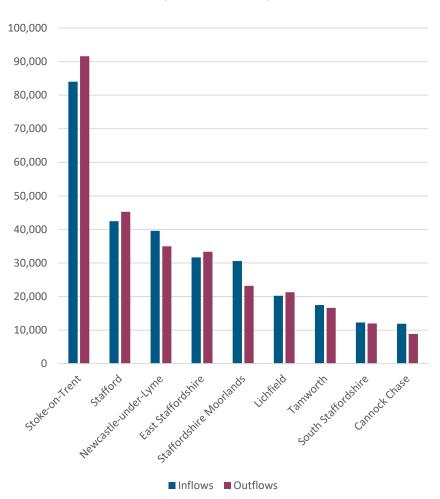
The highest numbers of Stoke-on-Trent and Staffordshire residents who commute out of the area for work commute to Birmingham (16,201) Wolverhampton (12,817) and Cheshire East (12,769). Birmingham and Wolverhampton, and Cheshire East as a productive and advanced economy are likely to act as employment hubs to commuters from neighbouring places in Stoke-on-Trent and Staffordshire.

The highest number of inward commuters to the area comes from South Derbyshire (8,434) closely followed by Cheshire East (8,446), perhaps reflecting the importance and pull of Burton-upon-Trent and Stoke-on-Trent as employment centres to both Cheshire East and South Derbyshire residents.



#### Main sources of inward commuters

Inflow of commuters by local authority (2011)



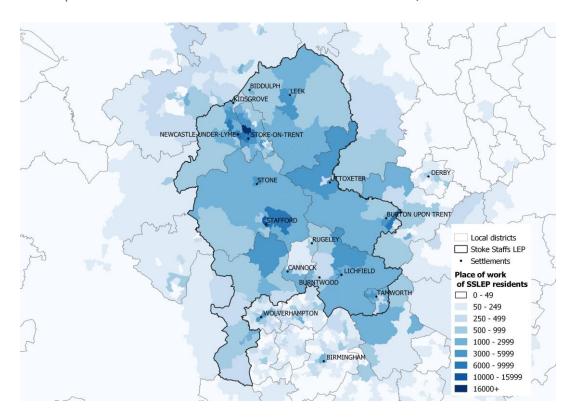
Stoke-on-Trent attracts the highest number of inward commuters (84,201) but also has the largest commuting outflow (91,588), giving it an overall net commuting outflow. This is the same case for Stafford, which has a higher outflow of workers than it receives in inward commuters.

The places which have a positive inflow of workers are Newcastle-under-Lyme, the Staffordshire Moorlands, Tamworth, South Staffordshire and Cannock Chase.

Stoke-on-Trent & Staffordshire
Enterprise Partnership

## Workplace distribution of local residents

Workplaces of Stoke-on-Trent and Staffordshire residents, 2011



This map shows with high granularity the main places of work of Stoke-on-Trent and Staffordshire LEP residents.

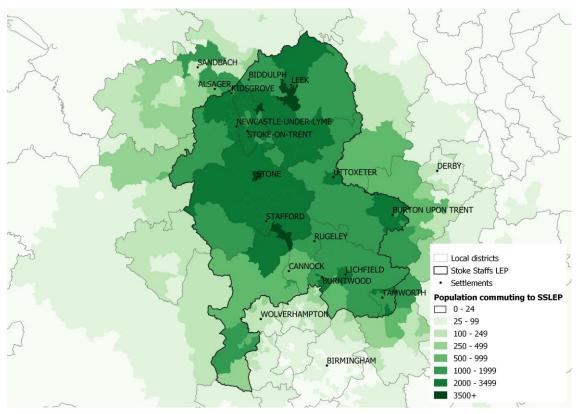
Larger number of Stoke-on-Trent and Staffordshire residents work within the LEP area than outside of it. The main employment destinations inside Stoke-on-Trent and Staffordshire are Stoke-on-Trent, Stafford and Burton-upon-Trent.

Birmingham and Wolverhampton are two of the important destinations outside of the area that attract Stoke-on-Trent and Staffordshire residents for work.



#### Place of residence of workers in the area

Places of residence of Stoke-on-Trent and Staffordshire workers, 2011



This map illustrates the main areas of residence of Stoke-on-Trent and Staffordshire workers.

Unsurprisingly, workers live mostly in the main urban centres in Stoke-on-Trent and Staffordshire.

Outside of the LEP, the area attracts workers who live immediately north of its boundaries around Sandbach and Alsager. In addition, workers also draw in from the east of Burton-upon-Trent.

Unlike the modest numbers of Stoke-on-Trent and Staffordshire residents we see commuting out to Birmingham and Wolverhampton, there is very little flow of residents living in these two authorities that commute into the LEP for work.

The largest concentrations of people who work in the LEP are found around Stafford and Leek.



## Commuting patterns of young workers

Inflows and outflows of workers aged 25-34, 2011

Total movements (25-34)	Total	%
Those living in the LEP and commuting within	55,163	57%
Those living in the LEP and commuting out	23,613	24.4%
Those living outside the LEP and commuting in	17,973	18.6%

The table above and the chart below illustrate commuting inflows and outflows made by young commuters aged 25-34.

Of the 78,776 25-34 year olds who live in the LEP area, 70% remain within it for work, and 30% commute out. 17,973 commute into the LEP area from outside of it.

A marginally higher proportion of young (25 to 34) who live outside of the LEP commute in for work when compared to all ages (17% against 18.6%).

The chart on the following page shows the main destinations and

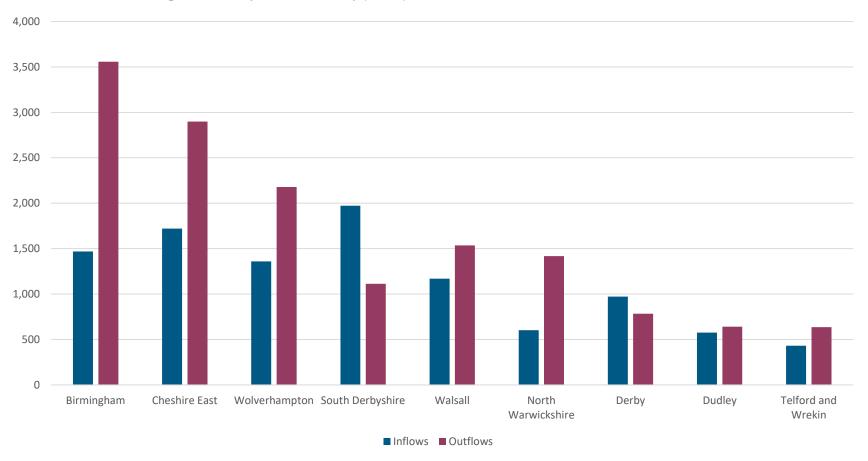
sources of young commuters. For ages 25 to 34, the local authorities with high net commuting outflows, i.e. the places where the highest numbers of Stoke-on-Trent and Staffordshire residents commuter to for work, are similar to that for the total commuting figures, with Birmingham, Cheshire East and Wolverhampton having the greatest pull.

The chart also indicates that Stoke-on-Trent and Staffordshire attracts younger workers from South Derbyshire and Derby.

Source: ONS Census (2011)

## Source and destination of young commuters

Inflow of commuters aged 25-34 by local authority (2011)





Source: ONS Census (2011)

## Index of Multiple Deprivation (IMD)

The IMD combines information from multiple domains of deprivation such as income, health and crime, and is used to identify areas of relative high and low deprivation in England. The table above shows the rank of average score and extent for Stoke-on-Trent and Staffordshire and its local authorities.

The rank of average score summarises the average level of deprivation across the higher level area, based on the scores of the LSOAs in the area. As all LSOAs in the higher level area are used to create the average score, this gives a measure of the whole area, covering both deprived and non deprived areas. Those with a rank of average score closer to 1 are the most deprived\*.

Stoke-on-Trent and Staffordshire is made up of a mix of highly deprived local authorities and some of the very least deprived. Stokeon-Trent is ranked 14th, meaning it is one of the most deprived places in the country, whereas Lichfield, ranked 247 is much less so.

Stoke-on-Trent and Staffordshire ranks 16th out of 38 LEPs when we look at its average score, a relatively high rank when compared to other LEPs.

Extent is one of the summary measures used to describe deprivation

in larger areas such as local authorities and LEPs. The extent measure focuses on the neighbourhoods in the larger area that are among the most deprived three deciles of deprivation (30%), but gives higher weight to the most deprived decile and gradually less weight to each individual percentile thereafter.

The rank for extent shows a similar outcome as the average score, with Stoke-on-Trent scoring highly and places such as Lichfield and South Staffordshire low in the ranking.

Stoke-on-Trent and Staffordshire has a rank of extent of 13th out of 38, showing that area's share of places in the most deprived 30% is high compared to the majority of LEP areas.

Looking at the seven domains of deprivation shows that crime and barriers to housing and services deprivation are relatively low in Stoke-on-Trent and Staffordshire with a rank of average score of 20th and 30th, respectively (out of 38 LEPs). Reflecting challenges around health, education and employment, Stoke-on-Trent and Staffordshire is ranked 13th for health, deprivation and disability, 13th for education, skills and training, and 15th for employment deprivation.

<sup>\*</sup> Local authorities are ranked out of 317 local authorities, whereas Stoke-on-Trent and Staffordshire is ranked out of 38 LEPs

## Index of Multiple Deprivation (IMD)

IMD in the Stoke-on-Trent and Staffordshire and its local authorities (2019)\*

Area	IMD – Rank of average score	IMD – Rank of extent
Cannock Chase	134	138
East Staffordshire	147	129
Lichfield	247	218
Newcastle-under-Lyme	151	146
South Staffordshire	239	248
Staffordshire Moorlands	230	198
Stafford	206	196
Stoke-on-Trent	14	12
Tamworth	126	126
Stoke-on-Trent and Staffordshire	16	13

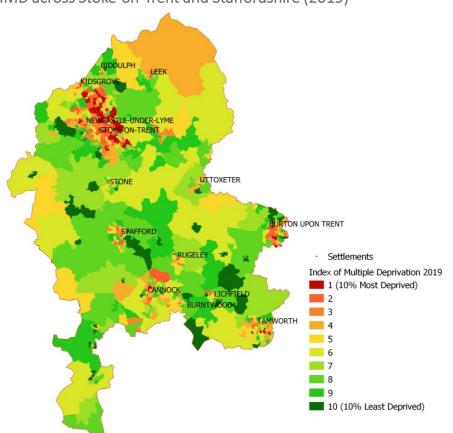
<sup>\*</sup> Local authorities are ranked out of 317 local authorities, whereas Stoke-on-Trent and Staffordshire is ranked out of 38 LEPs

Source: MHCLG IMD (2019)



#### IMD across Stoke-on-Trent and Staffordshire

IMD across Stoke-on-Trent and Staffordshire (2019)



The map to the left illustrates the IMD decile score at the local level across the Stoke-on-Trent and Staffordshire area. Areas in red and orange indicate higher levels of deprivation, whilst areas in green are less deprived.

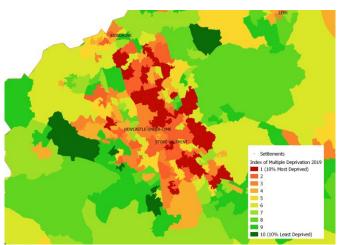
Deprivation in Stoke-on-Trent and Staffordshire is mixed, and there are areas with very high deprivation and those with very low. Stoke-on-Trent has very high levels of deprivation, with areas in the 10% most deprived. Deprivation occurs in both urban and rural areas, perhaps reflecting their isolation from key services, the area to the north of Leek in the Staffordshire Moorlands in the top 40% most deprived.

In contrast, rural areas surrounding Lichfield, Stafford and to the north of Burton-upon-Trent are some of the 10% least deprived.

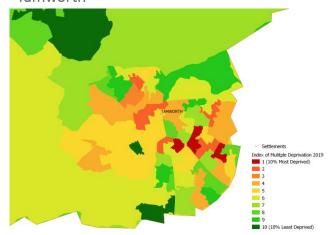


#### IMD in local areas, 2019

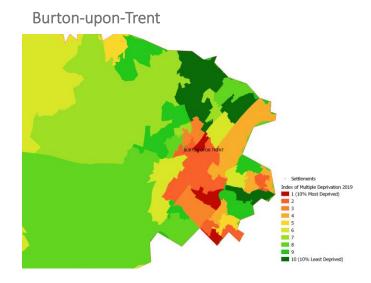




**Tamworth** 



Source: MHCLG IMD (2019)



# Appendix: Notes on Methodology and Data Used



#### Introduction

The analysis has considered Stoke-on-Trent and Staffordshire as a whole, but also variation within the area. This involves looking at differences between the local authorities, as well as identifying patterns at the small area level, data permitting.

Comparators have been used to provide context for performance against socio-economic indicators, data permitting, at two levels:

- Regional level West Midlands
- National level United Kingdom (UK), Great Britain (GB) or England. We have used England as our primary comparator where possible, but there is some variation throughout the evidence base due to the data collection processes for different datasets.

Where possible, temporal data and change over time has been used to contextualise current performance and show trends.

## Notes on data used

#### Geography, comparators and temporality

The analysis has considered Stoke-on-Trent and Staffordshire overall, but also variation within the area. This involves looking at differences between the local authorities, as well as identifying patterns at the small area level, data permitting.

Performance has been compared to the regional level of the West Midlands and the national level of the UK, GB or England, used to provide context for performance on social and economic indicators, data permitting. We have used England as our primary comparator where possible, but there is some variation throughout the evidence base due to the data collection processes for different datasets.

Where possible, temporal data and change over time has been used to contextualise current performance and show trends. In some cases, data is not available for previous years or may use a different methodology and not be comparable.

#### **GVA**

For GVA and GVA per head, chained volume measures in 2016 terms is used. This gives the most accurate local GVA figures, as a local deflator is applied for each place.

For GVA per hour worked, ONS nominal GVA per hour data is converted to real figures using year on year indexing values.

#### GVA and GVA per job (productivity) by the broad sector group

GVA and GVA per job at the broad sector group level (definitions set out

on page 9) are calculated using the ONS Regional GVA (balanced) tables and ONS Business Register and Employment Survey (BRES). This data was released in December 2018 for the year of 2017. We have also used jobs data from 2017 to calculate GVA per job. There are no overlaps where broad sector groups are used.

#### GVA and GVA per job (productivity) by sub-sector

GVA and GVA per job at the sub-sector level are calculated using the ONS Regional GVA (balanced) tables and ONS BRES.

Please note, that for GVA available at the SIC2 sub-sectoral level, some SIC2 codes are aggregated and only available at this level e.g. manufacture of metals, electrical products and machinery. Disaggregating these groups of SIC2 codes would undermine the robustness of the data.

# Notes on data used (2)

#### Business birth, death and churn rates

Business birth and death rates are expressed as a proportion of the active business population for that year. Business churn is calculated by summing business births and deaths and working this out as a proportion of the active business population for that year

#### **Qualifications and occupations**

An in house model is used to calculate qualification and occupation figures at the small area level using an in house model based on a combination of Census and Annual Population Survey data.

#### NINo country classifications

EU15 countries refer to member countries prior to the 2004 EU enlargement: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and Sweden. EU8 countries, refer to those that became members post 2004: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. EU2 countries refer to those that became members in 2014: Bulgaria and Romania.

The other EU category refers to Croatia, Cyprus and Malta. Other Europe refers to countries outside of the European Union. Rest of

the world refers to countries in the continents Oceania, Central and South America, North America and Africa.

#### Population clusters

We use an in house model, based on a range of socio-economic variables, to group small areas according to the socio-economic characteristics of their residents.

# Notes on data used (3)

#### **Exports: Definitions**

The Standard International Trade Classification definitions for the export categories on page 58 are listed below:

**Chemicals:** includes organic and inorganic chemical products, pharmaceutical products, oils and cleaning preparations, plastics and fertilisers.

**Crude materials:** broad category encompassing textiles, animal products, wood, rubber, ores, fertiliser, among others.

**Manufactured goods:** includes leather, rubber, cork and wood, paper, textiles, non-metallic minerals (e.g. glass, pottery), and metals, including iron and steel, non-ferrous metals and components made of metal.

**Miscellaneous manufactures:** broad category encompassing prefabricated buildings, sanitary, heating and

lighting fixtures; furniture; apparel, clothing and accessories; professional and scientific instruments; photo apparatus, optical goods, watches and clocks; and other manufactured goods, such as arms and ammunition, office and stationery supplies, toys and jewellery.

**Machinery and transport:** includes industrial machinery, telecommunications equipment, electrical machines/appliances, and transport vehicles and components.