

Article

# **Combined Authority economic indicators**

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Next release: To be announced

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### 1. Main points

- Greater Manchester and the West Midlands had the largest economies of the 6 combined authorities, each contributing 3.6% to UK gross value added (GVA) in 2015.
- Both Peterborough and Cambridgeshire and West of England had employment rates above the national average at 77.6% and 76.8% respectively (compared with 73.9% in Great Britain); the remaining 4 combined authorities had employment rates below average with the West Midlands lowest at 65.1%.
- The West of England had the largest population growth from 2011 to 2015 at 4.8%; the lowest growth was in Tees Valley (0.7%).

### 2. Introduction

This article examines the 6 combined authority areas of Liverpool City Region, Greater Manchester, West Midlands, West of England, Tees Valley and Peterborough and Cambridgeshire. These combined authorities are of particular interest at the present time as they are each due to elect a mayor in May 2017. This first section of this article provides an overview and comparison of key economic and socio-economic data for each of the combined authorities with national data shown for comparison purposes. The following sections of the article provide key economic data for each of the constituent local authorities within each combined authority.

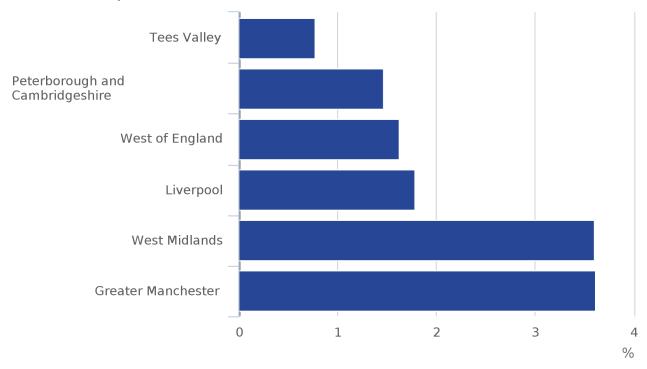
The geographical boundaries that represent the combined authorities in this article are the existing combined authority boundaries for Liverpool City Region, Greater Manchester and Tees Valley as well as the boundaries for the proposed combined authorities for the West Midlands, West of England and Peterborough and Cambridgeshire. With the exception of Peterborough and Cambridgeshire, these combined authority areas are also commonly known as city regions due to their geographical location and coverage of predominantly core urban areas.

# 3. Combined authority comparisons

Greater Manchester and the West Midlands had the largest economies of the combined authorities in 2015, each contributing 3.6% to UK gross value added (GVA) as shown in figure 1. Tees Valley had the smallest economy and contributed 0.8% of UK GVA in 2015. In combination, therefore, the 6 areas with mayoral elections in May 2017 contributed 12.9% of UK GVA in 2015. This is a similar share to that of Scotland, Wales and Northern Ireland combined (13.2%), but less than London (22.9%).

Figure 1: Gross value added as a percentage of UK GVA

#### **Combined Authorities, 2015**



**Source: Office for National Statistics** 

#### Notes:

1. Data shows the share of United Kingdom less extra-regio GVA.

Looking at GVA by industry, table 1 shows there is some variability in the industrial structure between the combined authority areas. Greater Manchester (10.2%) and the West of England (10.1%) had the smallest share of their GVA produced by manufacturing in 2015, while the West Midlands had the highest share (14.8%).

Peterborough and Cambridgeshire and West of England had the highest share of output produced by Business service activities, Financial and insurance activities and Information and communication (combined shares of 27.1% and 29.9% respectively), while Tees Valley (17.8%) and Liverpool (19.6%) had the lowest shares.

Table 1: Share of GVA by selected industry by Combined Authority, 2015

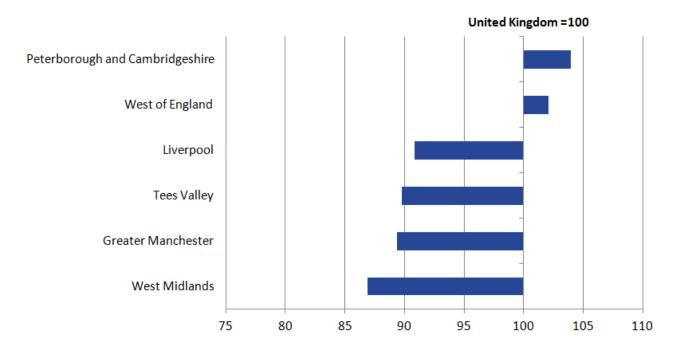
Combined Authority	Manufacturing (C)	Distribution, transport, accommodation and food (GHI)	Information and communication, Financial and insurance activities, Business service activities (J, K, MN)	Public administration, education, health (OPQ)
Greater Manchester	10.2	21.0	24.5	20.3
Liverpool	14.1	19.8	19.6	25.0
Peterborough and Cambridgeshire	12.9	16.9	27.1	19.7
Tees Valley	13.5	17.9	17.8	25.4
West Midlands	14.8	18.9	21.0	21.1
West of England	10.1	17.3	29.9	20.4
UK	10.1	18.8	26.4	18.7

Source: Office for National Statistics

Industrial structure is one of the factors that can have an influence on productivity for an area <sup>1</sup>. Figure 2 shows labour productivity measured by nominal GVA per hour worked for each combined authority.

Figure 2: GVA per hour worked (Index UK =100)

**Combined Authorities, 2015** 



The West of England and Peterborough and Cambridgeshire had productivity above the UK average. For the remaining combined authority areas productivity was 9% to 13% below the UK level in 2015.

Another factor that can influence labour productivity is skills levels. West of England had the highest share of residents with a degree-level qualification at 45% and the lowest share of residents with no qualifications at just over 5%. By contrast the West Midlands had over 3 times the share of population with no qualifications (16.3%) and a much lower share of residents with a degree-level qualification (28.3%).

Figure 3: Share of population aged 16-64 by qualification level

Combined Authorities, January to December 2015

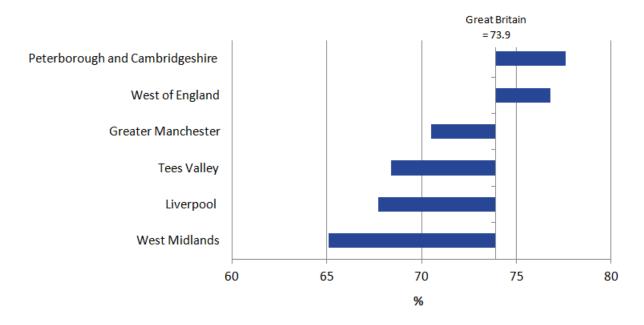


**Source: Office for National Statistics** 

Figure 4 shows the employment rates in the combined authority areas from October 2015 to September 2016. Both Peterborough and Cambridgeshire and West of England had employment rates above the national average at 77.6% and 76.8% respectively (compared with 73.9% in Great Britain). The remaining 4 combined authorities had employment rates below average with the West Midlands lowest at 65.1%.

Figure 4: Employment rate (age 16 to 64)

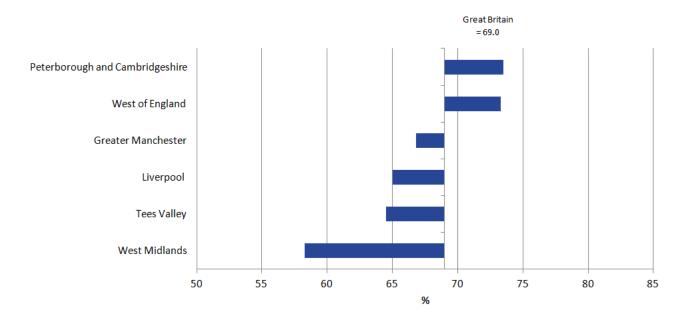
#### Combined Authorities, October 2015 to September 2016



The low employment rate in the West Midlands was particularly impacted by a low female employment rate which was more than 10 percentage points below that of Great Britain at 58.3% compared to 69%. This was also 6.2 percentage points below the female employment rate in the city region with the next lowest rate, Tees Valley.

Figure 5: Female employment rate (age 16 to 64)

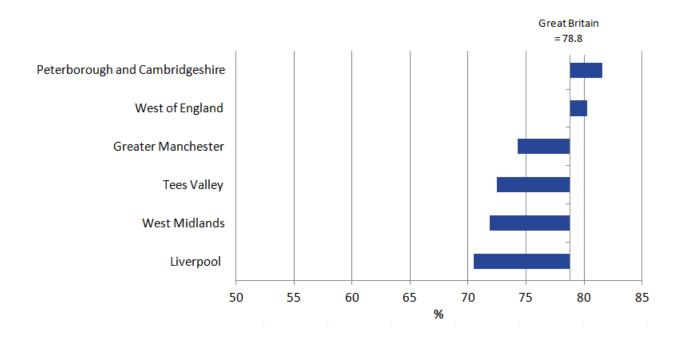
#### Combined Authorities, October 2015 to September 2016



At 71.9%, the male employment rate in the West Midlands was the second-lowest of the combined authorities, shown in figure 6, and 6.9 percentage points below the Great Britain average. The male employment rate was lowest in Liverpool Combined Authority at 70.5 %.

Figure 6: Male employment rate (age 16 to 64)

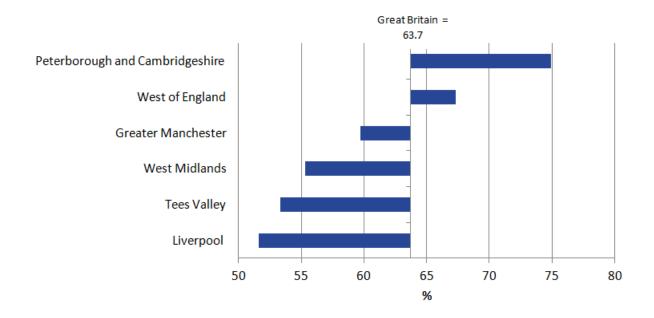
Combined Authorities, October 2015 to September 2016



One contributing factor towards the low employment rate in the West Midlands is a low ethnic minority employment rate (note as sample sizes are smaller estimates for ethnic minority employment rates are subject to wider confidence intervals). Nearly a third of residents in the West Midlands Combined Authority were from an ethnic minority group according to the 2011 Census and the 16 to 64 employment rate for those from an ethnic minority from October 2015 to September 2016 was 55.3%. This was over 8 percentage points below the average employment rate for ethnic minorities in Great Britain (63.7%) but Liverpool and the Tees Valley also had low ethnic minority employment rates however they also have much lower shares of residents from an ethnic minority group (both just over 5% in 2011), and therefore this had much less of an impact on employment in these combined authorities. In Peterborough and Cambridgeshire and the West of England, ethnic minority employment rates were above average in the UK.

Figure 7: Ethnic minority employment rate (age 16 to 64)

Combined Authorities, October 2015 to September 2016



Unemployment rates for each of the combined authorities are shown in figure 8. Here the West Midlands and Tees Valley had the highest unemployment rates, both over 7%. Although Peterborough and Cambridgeshire had the highest employment rate, it is the West of England which had the lowest unemployment rate at 3.6%, below the unemployment rate overall in Great Britain of 4.9%.

Figure 8: Unemployment rate (age 16+)

#### Combined Authorities, October 2015 to September 2016

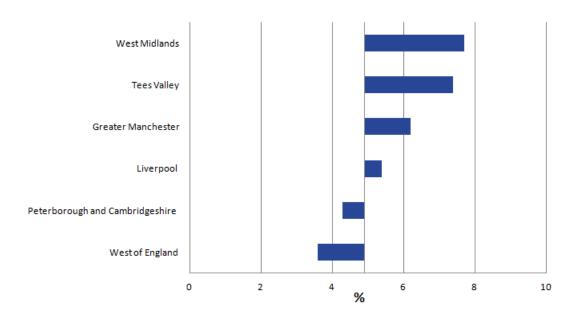
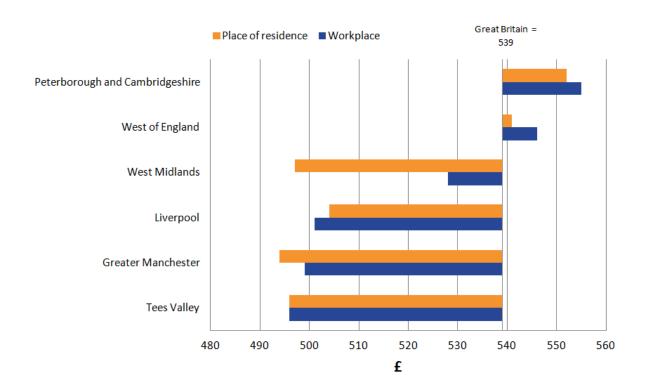


Figure 9 shows the median weekly earnings for each of the combined authorities by workplace and by place of residence. Workplace earnings refer to the earnings of people who are employed in an area and indicate the average pay for an area as a labour market. Residence based earnings refer to the earnings of people who live in an area. Earnings of full time employees who worked in Peterborough and Cambridgeshire were highest compared to the earnings of workers in the other combined authorities at £555 a week. Workplace earnings were all between £35 to £45 below the UK average in Liverpool, Greater Manchester and Tees Valley.

Residents of Peterborough and Cambridgeshire also had the highest median weekly earnings at £552. Generally differences between workplace and residence based earnings in the combined authorities were very small at £5 or less, although in the West Midlands the difference was more noticeable. Median workplace earnings in the West Midlands were the highest after Peterborough and Cambridgeshire and the West of England at £528, however the median earnings of residents were £31 lower at £497 per week. This partly reflects that many well paid workers in the West Midlands Combined Authority commute into the area from surrounding areas.

Figure 9: Median weekly earnings for full time employees shown on both a residence and workplace basis

Combined Authorities, 2016 (provisional)



Gross disposable household income (GDHI) per head, given in figure 10, shows a similar pattern. Residents in Peterborough and Cambridgeshire had the highest GDHI per head in 2014 at just under £18,900 whilst residents in the West Midlands had the lowest (£14,100). GDHI is the amount of money that all of the individuals in the household sector have available for spending or saving after income distribution measures (for example, taxes, social contributions and benefits) have taken effect.

Figure 10: Gross Disposable Household Income (GDHI) per head

**Combined Authorities, 2014** 

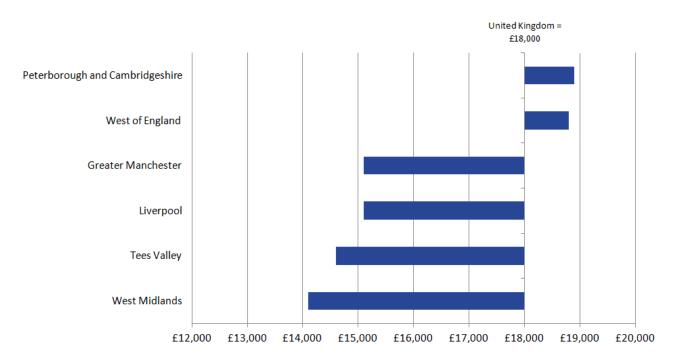


Table 2 gives population estimates for each of the combined authority areas alongside population growth from mid-2011 to mid-2015. The West of England has seen the largest growth in population having increased by nearly 5% from 2011 and it also had the largest positive net internal migration in 2015. The West of England also has the highest share of its population aged 16 to 64.

The West Midlands had the largest population of the combined authority areas with 2.8 million residents at the latest 2015 mid-year estimates, having grown by 3.4% since 2011. In Liverpool and Tees Valley, population growth over the period was positive but well below the UK average. These two combined authorities are also the only areas shown in table 2 with an above average share of population aged 65 and over.

Table 2: Mid-year population estimates by Combined Authority, 2015

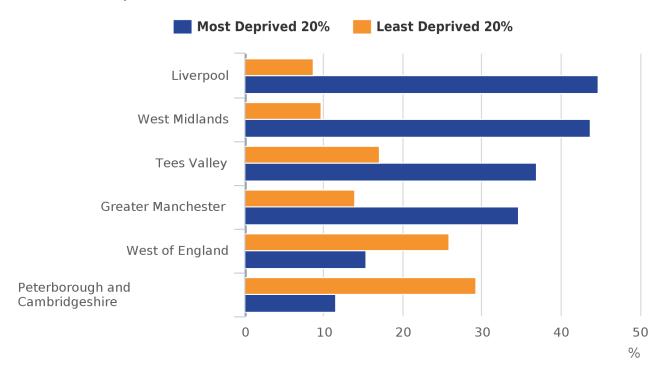
Combined Authority	Population mid- 2015	Growth (mid 2011 to mid 2015) %	Share aged 16 to 64 (%)	Share aged (65+) %
West Midlands	2834000	3.4	63.1	15.6
Greater Manchester	2756000	2.6	64.2	15.6
Liverpool	1525000	1.2	63.7	18.4
West of England	909000	4.8	65.9	15.9
Peterborough and Cambridgeshire	841000	4.3	63.7	17.1
Tees Valley	668000	0.7	62.1	18.4
UK	65110000	2.9	63.3	17.8

Source: Office for National Statistics

Amongst many other factors, earnings, income and the affordability of an area all contribute towards the overall level of deprivation in an area as measured by the Index of Multiple Deprivation (IMD). Levels of deprivation experienced by people living in combined authorities can be compared using the IMD which has been calculated for every lower layer super output area (LSOA) in England (LSOAs are areas averaging a population of around 1,500 or 650 households). Every LSOA has then been ranked according to its level of deprivation relative to that of other areas. For combined authorities, the share of LSOAs falling in each decile of the IMD, from the most deprived 10% to the least deprived 10%, can be measured. Figure 11 shows the share of LSOAs in deciles 1 and 2 and deciles 9 and 10, the most deprived and least deprived 20% of LSOAs nationally for each combined authority.

Figure 11: Share of LSOAs in the most and least deprived 20% of LSOAs nationally

#### **Combined Authorities, 2015**



Source: Department for Communities and Local Government

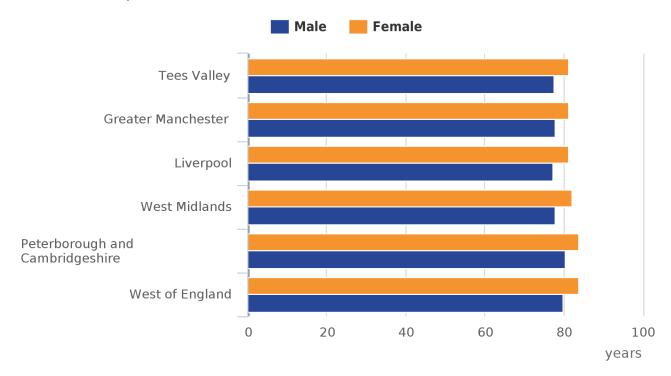
If an area had average distribution of deprivation they would have 20% of LSOAs in the most deprived 20% of LSOAs nationally and 20% of LSOAs in the least deprived 20% of LSOAs nationally. Liverpool City Region Combined Authority had over double this share with 45% of its neighbourhoods in the most deprived 20% nationally. The West Midlands also had over double the share of neighbourhoods in the most deprived 20% nationally, just below Liverpool at 44%. The West of England and Peterborough and Cambridgeshire by contrast have less than 20% of neighbourhoods in the most deprived 20% nationally at 15.3% and 11.5% respectively.

Peterborough and Cambridgeshire also has the highest share of neighbourhoods in the least deprived 20% nationally at 29.2%. Similarly it is Liverpool City Region which has the lowest share of neighbourhoods in the least deprived 20% nationally at just under 9%.

These findings for deprivation are also reflected in the life expectancies for the combined authorities. Figure 12 gives the life expectancy at birth for males and females for each of the combined authority areas. Here Peterborough and Cambridgeshire and the West of England had the highest life expectancies at birth for both males and females and both were above the national averages of 79.2 years for males and 82.9 years for females. The life expectancy at birth in all other combined authorities was below the UK average with Tees Valley and Liverpool the lowest.

Figure 12: Life expectancy at birth for males and females

Combined Authorities, 2013 to 2015



**Source: Office for National Statistics** 

### **Notes for: Combined Authority comparisons**

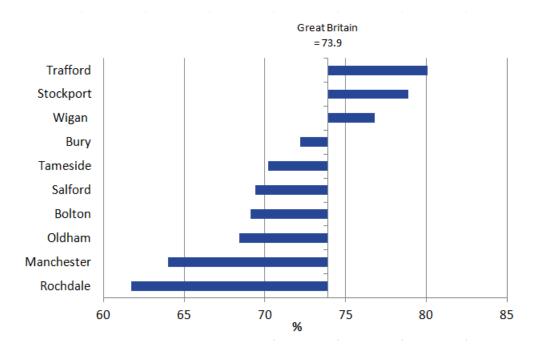
1. While industrial structure can influence average productivity in an area, <u>recent ONS analysis</u> illustrated that it is typically differences in productivity in firms within the same industries that account for a larger proportion of differences for most areas

# 4 . Greater Manchester Combined Authority

Across the range of indicators explored, Greater Manchester Combined Authority tended to perform well relative to the other combined authority areas in the North and Midlands, although fell behind the West of England and Peterborough and Cambridgeshire. As one of the largest combined authorities by population, examining these indicators for the 10 constituent local authorities within Greater Manchester (given in table 4) reveals some large disparities.

Figure 13: Employment rate (aged 16 to 64)

by Local Authority, Greater Manchester Combined Authority, October 2015 to September 2016



Firstly looking at the employment rates shown in figure 13, the employment rate in Trafford at 80.1% was nearly 20 percentage points higher than the employment rate in Rochdale (61.7%) for the period from October 2015 to September 2016. Alongside Trafford, Stockport and Wigan also had employment rates above the national average. The local authority of Manchester had the second-lowest employment rate overall, but the lowest male employment rate at 67%. Rochdale had the lowest employment rate overall though due to its particularly low female employment rate of 56.3% compared with 60.9% in Manchester.

Considerable differences in the level of qualification and educational attainment of residents in the different local authorities within Greater Manchester can also be seen. Looking at the shares of residents with a degree-level qualification shown in table 3, in 2015 Trafford's share (48.5%) was almost double that of Tameside (25.1%). Manchester was the only other local authority with the share of residents with a degree-level qualification above the national average at 39.5% although this was still nine percentage points lower than the share in Trafford. Differences in the share of residents with no qualifications were less pronounced although Trafford again, along with Stockport, stood out as having the lowest share of residents with no qualifications, both 5%, and Rochdale the highest at 13.9%.

Table 3: Qualifications and education indicators, by Local Authority, Greater Manchester Combined Authority

	Level 4+ Qualifications (16- 64) % January to December 2015	No Qualifications (16-64) % January to December 2015	Estimated % who entered HE[1]	Average Attainment 8 score per pupil[2] (2015 /16)
Bolton	30.5	9.7	40.0	48.5
Bury	37	8.2	41.0	50.8
Manchester	39.5	12.4	35.0	46.9
Oldham	27.6	15.0	37.0	45.8
Rochdale	25.4	13.9	37.0	48.0
Salford	31.1	9.1	33.0	46.6
Stockport	36.2	5.0	38.0	51.3
Tameside	25.1	12.6	31.0	49.1
Trafford	48.5	5.0	50.0	56.6
Wigan	28.4	8.4	37.0	50.3
Greater Manchester	33.7	10.1	-	-
England	36.8	8.4	37.0	48.2

Source: Office for National Statistics and Department for Education

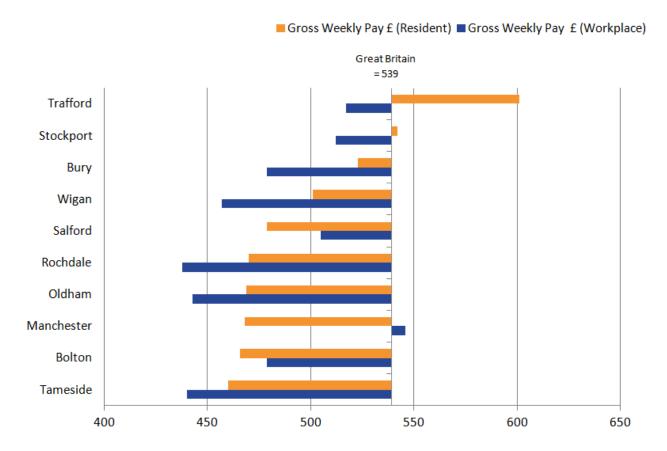
#### Notes:

- 1. Estimated percentage of pupils from state-funded schools aged 15 in 2009/10 by Free School Meal status who entered HE in 2012/13 at age 18 or 2013/14 at age 19
- 2. Attainment 8 is part of the new secondary accountability system which was implemented for all schools from 2016. Attainment 8 Score measures a pupils achievement across 8 qualifications including Maths and English (both double weighted), 3 further qualifications that count in the English Baccalaureate (EBacc) measure and 3 further qualifications that can be GCSE qualifications (including EBacc subjects) or technical awards from the DfE approved list.

This pattern continues to be seen in the attainment of school students as Trafford was highest for average attainment 8 scores (56.6) and pupil entry into higher education (50%), also shown in table 3. Oldham reported the lowest average attainment 8 score per pupil in 2015/16 at 45.8, 2.5 points below the average across England of 48.2. Generally the percentages of pupils entering into higher education in the local authorities were average (37%) or above. The exceptions to this were Tameside (31%), Salford (33%) and Manchester (35%).

Figure 14: Median weekly earnings for full time employees

by Local Authority, Greater Manchester Combined Authority, 2016 (provisional)



With the exception of Manchester, median weekly earnings for those working in the remaining local authorities in the combined authority were below average. The lowest median workplace pay was £438 per week in Rochdale, £108 below the median weekly pay in Manchester (£546) which has a large share of jobs in the Professional, Scientific and Technical activities sector.

Comparing the earnings of those employed in the local authority against the earnings of those who live there gives a different picture. There was a greater range in resident based pay between the local authorities with median weekly pay in Trafford (£601) £141 higher than median weekly pay in Tameside (£460).

Trafford has so far been shown as typically the highest-performing local authority within Greater Manchester. It is therefore unsurprising Trafford has experienced the highest growth in median house prices over the last 5 years, having increased by 42.4% from an average property price of £184,000 in Dec 2011 to £261,000 in Dec 2016 (table 4).

Table 4: Average property price by Local Authority (December 2011 and December 2016), Greater Manchester Combined Authority

Local		Average property price				
Authority	Dec 2016 (£)	Growth (Dec 11 – Dec 16)	Detached houses (£) Dec 2016	Flats/maisonettes (£) Dec 2016		
Bolton	124,000	14.1	220,000	84,000		
Bury	153,000	18.2	258,000	91,000		
Manchester	157,000	35.7	278,000	143,000		
Oldham	122,000	13.7	215,000	92,000		
Rochdale	121,000	11.6	207,000	70,000		
Salford	145,000	33.1	260,000	120,000		
Stockport	202,000	29.1	345,000	130,000		
Tameside	133,000	22.2	228,000	92,000		
Trafford	261,000	42.4	475,000	172,000		
Wigan	125,000	17.2	208,000	73,000		

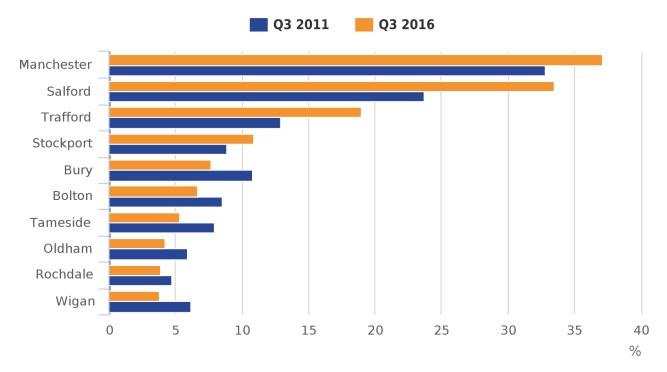
Source: Office for National Statistics

As shown in figure 15, Trafford has also seen over a 6 percentage point increase in the share of flats sold to 19.0% over the same 5-year period.

However, it was Manchester and Salford which had the largest shares of property sales which were flats in Quarter 3 (July to Sept) 2016 at 37.1% and 33.5% respectively. For Manchester this was around a 4 percentage point increase on the share in Quarter 3 2011 whilst for Salford the share of sales which were flats increased by nearly 10 percentage points in the last 5 years. By contrast the share of flat sales decreased in many of the majority of local authorities in Greater Manchester.

Figure 15: Share of property sales for flats/maisonettes

by Local Authority, Greater Manchester Combined Authority, Quarter 3 (July to Sept) 2011 and Quarter 3 2016

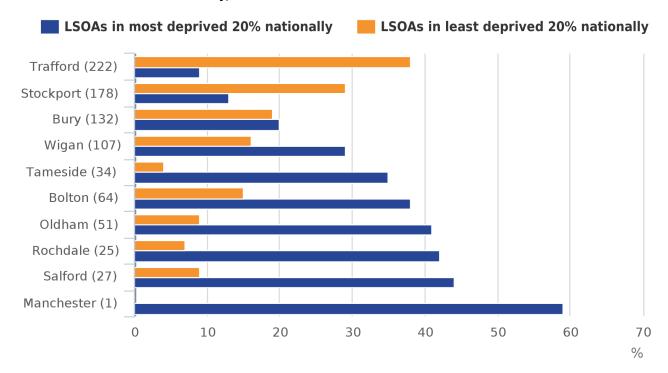


**Source: Office for National Statistics** 

Looking at data from the Index of Multiple Deprivation (IMD) for within Greater Manchester provides a picture of the living standards in different areas within the combined authority. By local authority, Manchester was ranked at number 1 as the most deprived in England with 59% of its neighbourhoods within the top 20% of the most deprived neighbourhoods nationally. Trafford and Stockport were ranked at 222 and 178 respectively out of a total of 326 local authorities in England and had substantially lower shares of its neighbourhoods within the 20% most deprived with values of 9% and 13% respectively.

Figure 16: Index of Multiple Deprivation rank by Local Authority and share of LSOAs by decile

**Greater Manchester Combined Authority, 2015** 

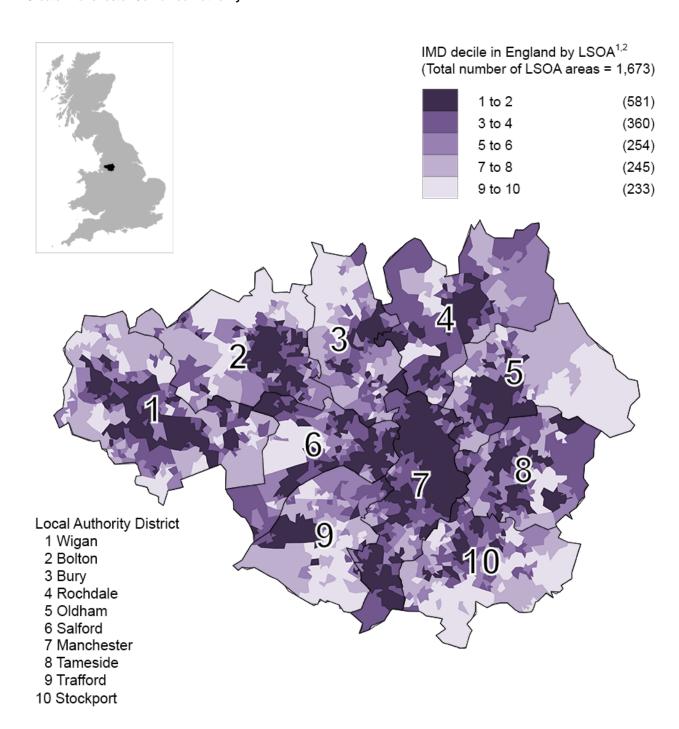


Source: Department for Communities and Local Government

The map in figure 17 visualises the patterns in relative deprivation across the combined authority. Clusters of the most deprived neighbourhoods can be seen in central Manchester, parts of Wigan, Bolton, Tameside and Rochdale. Along the outskirts of Greater Manchester were where the relatively less deprived neighbourhoods were located, particularly in parts of Trafford and Stockport.

Figure 17: Deprivation decile by Lower Layer Super Output Area (LSOA) in 2015

#### **Greater Manchester Combined Authority**



Source: Department of Communities and Local Government (DCLG); Office for National Statistics Office for National Statistics licensed under the Open Government Licence v.3.0. Contains OS data © Crown copyright 2017

<sup>1</sup> In the Index of Multiple Deprivation, deciles are calculated by ranking the 32,844 LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups.

<sup>2</sup> LSOAs in decile 1 and 2 fall within the most deprived 20% of LSOAs nationally and LSOAs in deciles 9 and 10 fall within the least deprived 20% of LSOAs nationally.

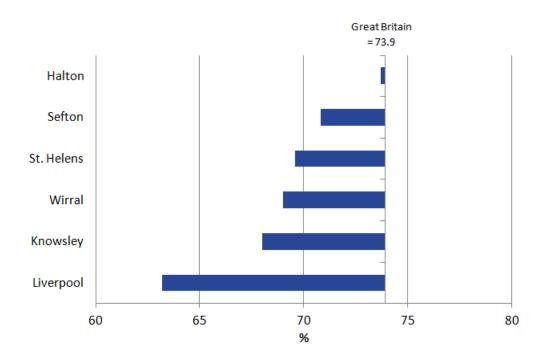
### 5. Liverpool City Region Combined Authority

Liverpool City Region Combined Authority consists of the 6 local authorities of Halton, Knowsley, Liverpool, Sefton, St. Helens and Wirral. In contrast to some of the other combined authority areas, there is not one local authority which consistently performs the highest across the indicators.

For the year up to September 2016, Liverpool City Region Combined Authority was shown in figure 5 to have the second-lowest employment rate of the combined authority areas at 67.7%. This was due to Liverpool Combined Authority having the lowest male employment rate (figure 6) of 70.5%. Within the combined authority, Liverpool Local Authority had the lowest employment rate at 63.2% whilst Halton had the highest employment rate at 73.7%, which is the same as the UK average. The employment rates for all other local authorities were below the UK average.

Figure 18: Employment rate (aged 16 to 64)

by local authority Liverpool Combined Authority, October 2015 to September 2016



Knowsley, which had the second-lowest employment rate, had the highest percentage of 16- to 64-year-olds without any qualifications (16%). This was nearly double the average for England (8.4%) and Wirral which had the lowest share in the combined authority (8.9%). Again in Knowsley 22.5% of 16- to 64-year-olds had a degree-level qualification, Halton had a similarly low share at 22.3%. In fact all local authorities had above average shares of residents with no qualifications and below average shares of residents with a degree-level qualification relative to England.

The contrast between Knowlsey and the rest of the constituent local authorities is particularly stark in educational attainment. In fact Knowlsey reports as the lowest-performing local authority in England for the 3 education measures displayed in table 10. The percentage of students at the end of Key Stage 4 who achieved 5 A\* - C including English and Maths at GSCE level showed 35.7% of students who go to school in Knowsley achieved the standards measured for GCSE achievement, 17 percentage points lower than the national level. The highest performing local authority in Liverpool City Region Combined Authority, which again was Wirral, had 61.5%. Other local authorities in the combined authority were around the national average for school results.

Table 5: Qualifications and education indicators by Local Authority, Liverpool Combined Authority

	Level 4 qualifications % January to December 2015	No qualifications % January to December 2015	% of students entering HE, 2013/14[1]	% of students achieving 5 A* - C GCSEs, 2015/16	Average Attainment 8 score per pupil, 2015/16 [2]
Halton	22.3	9.1	32.0	54.9	49.1
Knowsley	22.5	16.0	22.0	35.7	38.8
Liverpool	30.6	13.6	36.0	51.0	47.1
Sefton	31.2	9.0	39.0	54.2	49.0
St. Helens	26.2	11.5	35.0	52.8	48.3
Wirral	32.2	8.9	41.0	61.5	51.7
England	36.8	8.4	37.0	52.8	48.2

Source: Office for National Statistics and Department for Education

#### Notes:

- 1. Estimated percentage of pupils from state-funded schools aged 15 in 2009/10 by Free School Meal status who entered HE in 2012/13 at age 18 or 2013/14 at age 19.
- 2. Attainment 8 Score measures a pupils achievement across 8 qualifications including Maths and English (both double weighted), 3 further qualifications that count in the English Baccalaureate (EBacc) measure and 3 further qualifications that can be GCSE qualifications (including EBacc subjects) or technical awards from the DfE approved list.

These patterns seen in level of qualification and educational attainment are reflected in earnings for the local authorities. When looking at the earnings of residents, Wirral had the highest median weekly earnings (£526) and Knowsley the lowest (£475). However for median weekly earnings based on those employed in the local authority, the relative earnings change noticeably. Knowsley, the local authority with the lowest median weekly earnings of residents, was second to Halton (£525). On both a resident and workplace basis, all the local authorities in Liverpool Combined Authority were below the UK level of median weekly earnings of £539 in 2016.

Figure 19: Median weekly earnings for full time employees

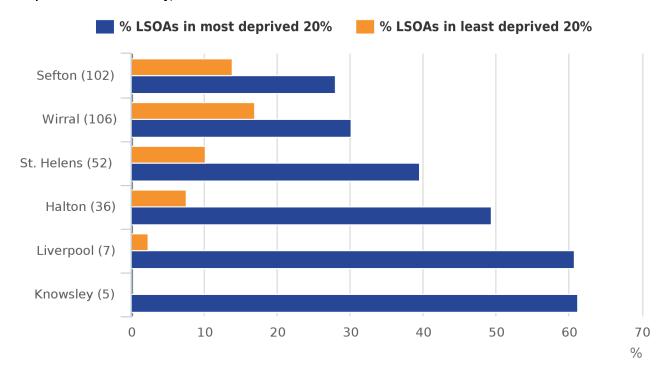
by Local Authority, Liverpool Combined Authority, 2016 (provisional)



Earlier in figure 11, Liverpool Combined Authority was shown to have the highest share of LSOAs amongst the most deprived LSOAs nationally and the lowest share of LSOAs in the least deprived LSOAs nationally out of the combined authority areas. Liverpool and Knowsley local authorities both had over 60% of their neighbourhoods in the most deprived 20% and rank among the 10 most deprived local authorities in England. Wirral and Sefton however had the lowest share of LSOAs in the most deprived 20% and the highest share of LSOAs in the least deprived 20% amongst the local authorities in Liverpool Combined Authority. When analysing deprivation via towns and cities, Southport (in Sefton) was also the least deprived major town in the North West.

Figure 20: Index of Multiple Deprivation rank by Local Authority and share of LSOAs by decile

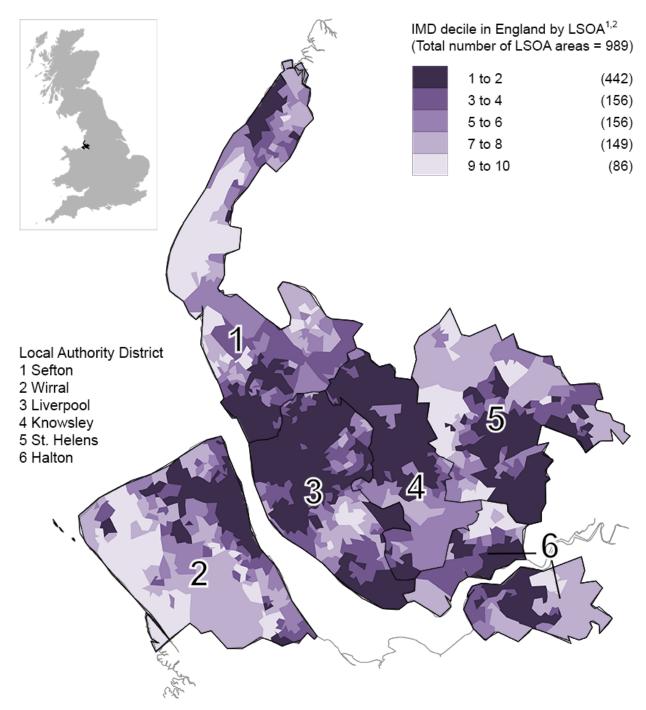
Liverpool Combined Authority, 2015



Source: Department for Communities and Local Government

Figure 21: Deprivation decile by Lower Layer Super Output Area (LSOA) in 2015

#### **Liverpool City Region Combined Authority**



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<sup>1</sup> In the Index of Multiple Deprivation, deciles are calculated by ranking the 32,844 LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups.

<sup>2</sup> LSOAs in decile 1 and 2 fall within the most deprived 20% of LSOAs nationally and LSOAs in deciles 9 and 10 fall within the least deprived 20% of LSOAs nationally.

### 6. Peterborough and Cambridgeshire Combined Authority

Peterborough and Cambridgeshire Combined Authority consistently performs above the national average across the range of indicators explored in the Combined Authority Comparisons section. It is most comparable to the West of England Combined Authority and both areas stood apart from the remaining combined authority areas. Peterborough and Cambridgeshire is different from the other combined authority areas with a mayoral election in that it is not a traditional "city region" as parts of the area span a more rural geography. Cambridge, East Cambridgeshire, Fenland, Huntingdonshire, Peterborough and South Cambridgeshire are the 6 local authorities which make up the combined authority. The 2 largest local authorities (by population), Cambridge and Peterborough, are very different in terms of their area profile.

Peterborough and Cambridgeshire had the highest employment rate of the combined authority areas at 77.6%. Within the combined authority, employment rates were consistently high across the local authorities and only Fenland had an employment rate below the UK average at 71.1% compared to 73.7%. South Cambridgeshire had a particularly high employment rate of 83.4%, at almost ten percentage points above the UK average. The employment rate for South Cambridgeshire was also the highest employment rate for all local authorities within the combined authority areas. In Fenland the male employment rate was around the average UK male employment rate, however, the female employment rate in Fenland was over 5 percentage points below the UK average contributing towards its lower overall employment rate.

Table 6: Employment rates (age 16 to 64) by Local Authorities, Oct 2015 - Sep 2016

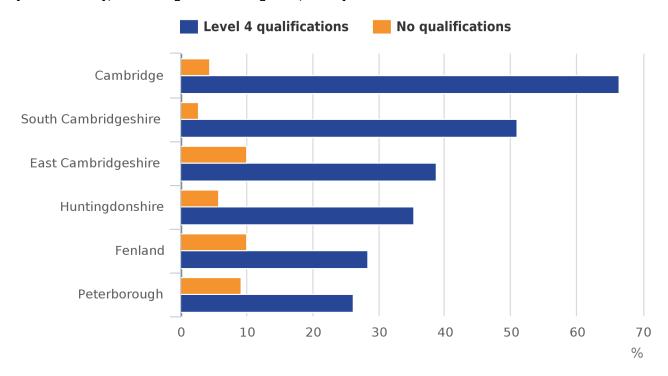
Local Authority	Employment rate (16-64) %	Male Employment rate (16-64) %	Female Employment rate (16-64) %
Cambridge	75.4	78.2	72.2
East Cambridgeshire	76.9	82.8	71.2
Fenland	71.1	78.9	63.5
Huntingdonshire	80.2	84.6	76.0
Peterborough	76.0	78.8	73.2
South Cambridgeshire	83.4	86.8	80.0
Peterborough and Cambridgeshire	77.6	81.6	73.5
United Kingdom	73.7	78.7	68.8

Source: Office for National Statistics

As well as very high employment, Peterborough and Cambridgeshire is also characterised by the high qualifications of residents. In fact in 2015, the share of residents with a degree-level qualification in Cambridge Local Authority was the fourth-highest overall in the country and the highest outside of London at 66.5%. Here the differences within the combined authority are particularly stark between Peterborough and Fenland and Cambridge. By comparison, 26.1% of residents in Peterborough had a degree-level qualification, 40 percentage points lower than the share in Cambridge. Similarly in Fenland the share of residents with a degree-level qualification was 28.4% which was 8.5 percentage points below the national average.

Figure 22: Share of residents by highest level of qualification

by Local Authority, Peterborough and Cambridgeshire, January to December 2015



**Source: Office for National Statistics** 

The difference between the local authorities with the highest and lowest median weekly earnings is also greater than for any other of the Combined Authorities. Resident weekly earnings were highest by far in South Cambridgeshire at £672, nearly £100 above Cambridge which had the second-highest earnings (£589) and over £200 higher than Peterborough (£467). Workplace earnings were also highest in South Cambridgeshire although the differences between earnings in the local authorities were smaller. These differences in earnings can partly be explained by differences in the industrial structure of the local authorities. South Cambridgeshire and Cambridge, the 2 areas with the highest workplace earnings, had the greatest shares of employment in Scientific and Technical activities at 26.7% and 15.9% respectively. In Cambridge, Education was the industrial group with the highest share of employment at 21.7%.

Table 7: Median weekly earnings for full time employees by Local Authority, Peterborough and Cambridgeshire, 2016 (provisional) and BRES data, jobs (full time employees, 2015)

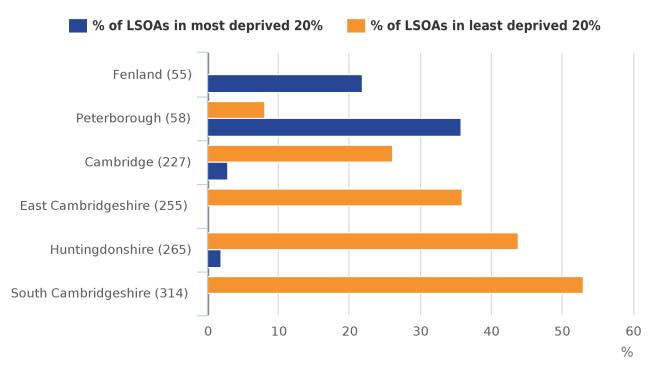
Local Authority	Resident Earnings (£) 2016 (provisional)	Workplace Earnings (£) 2016 (provisional)	Sector with the highest share of employment (2015) %
Cambridge	589	613	P: Education
East Cambridgeshire	565	476	C: Manufacturing & G: Wholesale and retail trade
Fenland	504	456	C: Manufacturing & G: Wholesale and retail trade
Huntingdonshire	566	541	C: Manufacturing & G: Wholesale and retail trade
Peterborough	467	507	G: Wholesale and retail trade
South Cambridgeshire	672	633	M: Professional, scientific and technical

Source: Office for National Statistics

In the Index of Multiple Deprivation (IMD) South Cambridgeshire ranks as one of the least deprived local authority in England at 314 out of a total of 326 local authorities. The remaining local authorities in Cambridgeshire also ranked relatively well in the index. By contrast Fenland and Peterborough were ranked at 55 and 58 respectively. Although the share of neighbourhoods in the most deprived 20% nationally was not particularly high in Fenland at 21.8%, none of the neighbourhoods in Fenland fell in the least 20% deprived nationally. Peterborough had 8% of neighbourhoods in the least deprived 20% nationally but a much higher share of LSOAs in the most deprived 20% nationally at 35.7%.

Figure 23: Index of Multiple Deprivation rank by Local Authority and share of LSOAs by decile

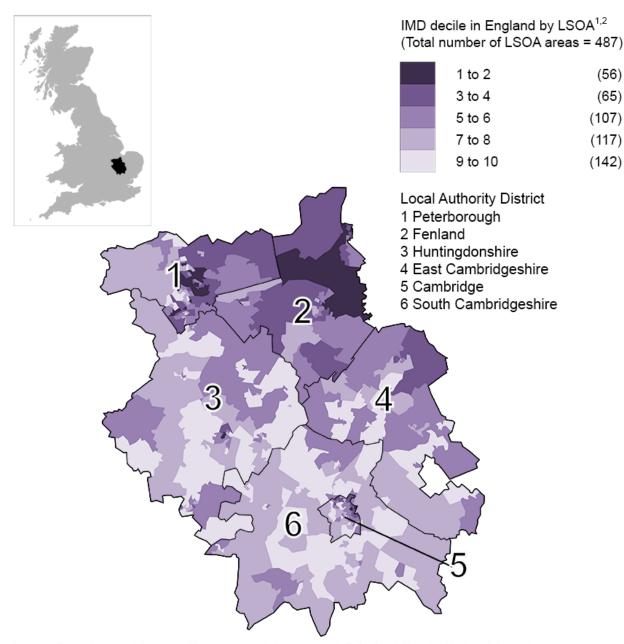
Peterborough and Cambridgeshire Combined Authority, 2015



Source: Department for Communities and Local Government

Figure 24: Deprivation decile by Lower Layer Super Output Area (LSOA) in 2015

#### **Peterborough and Cambridgeshire Combined Authority**



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- 1 In the Index of Multiple Deprivation, deciles are calculated by ranking the 32,844 LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups.
- 2 LSOAs in decile 1 and 2 fall within the most deprived 20% of LSOAs nationally and LSOAs in deciles 9 and 10 fall within the least deprived 20% of LSOAs nationally.

Property prices in the combined authority were highest in the local authority of Cambridge at £404,000 in December 2016, more than double the average property price in both Peterborough and Fenland. Indeed, the average price of a flat sold in Cambridge was higher than the average price of a detached house in Fenland.

Table 8: Average price by property type, by local authority, Peterborough and Cambridgeshire combined authority December 2016

Local Authority	Dec 2016 (£)	Growth (Dec 2011 – Dec 2016) %	Detached houses (£)	Flats/maisonettes (£)
Peterborough	174,000	32	277000	98000
Cambridge	404,000	38	794000	273000
East Cambridgeshire	269,000	44	365000	152000
Fenland	173,000	35	232000	80000
Huntingdonshire	247,000	41	381000	139000
South Cambridgeshire	365,000	45	507000	208000
UK	220,000	31	333000	198000

Source: Office for National Statistics

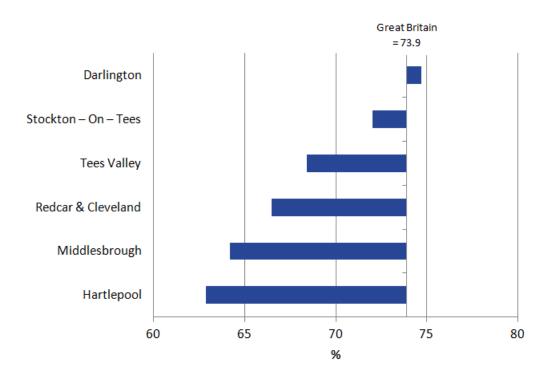
### 7. Tees Valley Combined Authority

The Tees Valley Combined Authority consists of the 5 local authorities of Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland, and Stockton- On-Tees. As shown in section 1, by population and by size of the economy it is the smallest of the combined authorities electing a mayor, and tends to perform below the national average across the indicators featured here. Tees Valley has not seen the population growth experienced by the other smaller combined authorities the West of England and Peterborough and Cambridgeshire, and is different demographically as it has an older population.

Figure 25 shows the employment rate for Tees Valley from October 2015 to September 2016 was below the UK average at 68.1%. Darlington was the only local authority within the Tees Valley for which the employment rate was above the UK average at 74.7%. The employment rate in Stockton-on-Tees was slightly below average (72.0%) whilst the employment rate in the remaining local authorities were all between 7 and 11 percentage points below the UK average with the lowest 62.9% in Hartlepool.

Figure 25: Employment rate (aged 16-64)

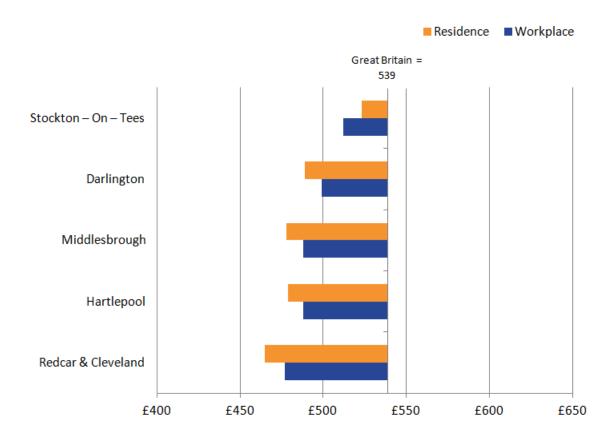
by Local Authority, October 2015 to September 2016



Shown in figure 26, median weekly earnings were highest on both a workplace and a residence basis in Stockton-on-Tees. In other words the earnings of those employed in Stockton-on-Tees and the earnings of those who live in Stockton-on-Tees were the highest of the local authorities within Tees Valley. However differences between earnings in the local authorities were comparatively small and earnings averaged below the UK average of £539 a week in all of the local authorities within the combined authority.

Figure 26: Median weekly earnings for full time employees

by Local Authority, Tees Valley, 2016



With a relatively weak labour market and low earnings, net internal migration to Tees Valley is negative with outflows exceeding the number of inflows. Further to this, population estimate growth rates between 2011 and 2015 show that all 5 local authorities have experienced very low population growth and the population of Darlington decreased. Darlington, Hartlepool and Redcar and Cleveland also saw increases in the share of residents in the 65 and over age group. In particular, the share of residents aged 65 and over in Redcar and Cleveland was 4 percentage points above the share in the UK at 21.6% having increased by 2 percentage points from 2011.

Table 9: Mid-year population estimates by Local Authority, Tees Valley, 2011 and 2015

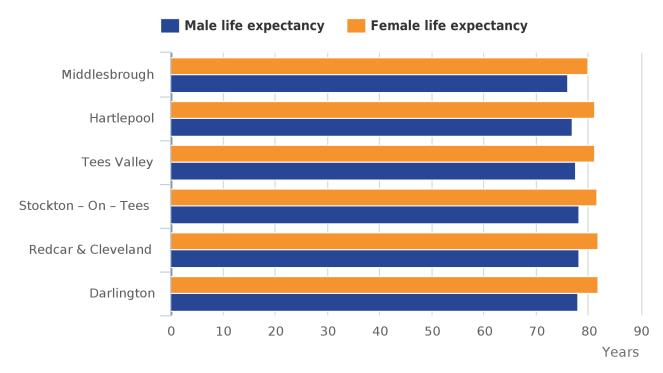
Local Authority	Population Mid 2015	Population change mid 2011 to mid 2015 %	Share of population aged 65+ 2011 %	Share of population aged 65+ 2015 %
Darlington	105,000	-0.2	17.6	19.5
Hartlepool	92,000	0.4	17	18.7
Middlesborough	140,000	0.8	15.1	15.8
Redcar and Cleveland	135,000	0.1	19.6	21.6
Stockton-on- Tees	195,000	1.6	15.7	17.4
Tees Valley	668,000	0.7	16.8	18.4
United Kingdom	65,110,000	2.9	16.5	17.8

Source: Office For National Statistics

Tees Valley was shown in the first section of this article to have the lowest life expectancy at birth for both males and females of the combined authorities. Table 21 shows life expectancy across the local authorities was below the national average for both males and females and lowest for both in Middlesbrough at 76.1 and 79.8 years respectively.

Figure 27: Life expectancy at birth

by Local Authority, Tees Valley, 2013 to 2015

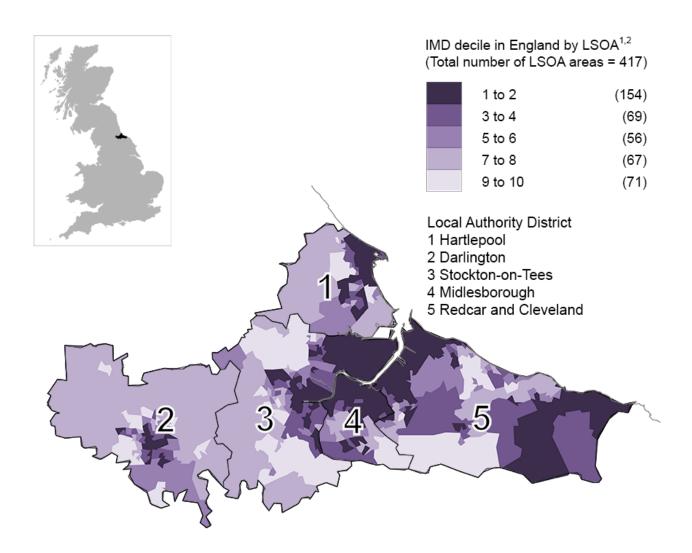


**Source: Office for National Statistics** 

All local authorities within Tees Valley also ranked relatively poorly in the Index of Multiple of Deprivation (IMD). Middlesbrough was the most deprived local authority in the combined authority ranked as the 16th most deprived local authority in England whilst Stockton-on-Tees was the least deprived but still ranked at 130 out of a total of 326 local authorities. Patterns in relative deprivation, mapped in figure 17, show the most deprived neighbourhoods were clustered around Middlesbrough, Redcar and Cleveland, and Hartlepool. There was also a cluster of neighbourhoods amongst the most deprived nationally around the centre of Darlington. Parts of Darlington and Redcar and Cleveland and Stockton-on-Tees also ranked among some of the least deprived neighbourhoods in the country.

Figure 28: Deprivation decile by Lower Layer Super Output Area (LSOA) in 2015

**Tees Valley Combined Authority** 



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- 2 LSOAs in decile 1 and 2 fall within the most deprived 20% of LSOAs nationally and LSOAs in deciles 9 and 10 fall within the least deprived 20% of LSOAs nationally.

## 8. The West Midlands Combined Authority

The West Midlands is the largest of the combined authorities in this report with a population of 2.8 million at the latest 2015 mid-year estimates. Birmingham is the largest local authority in the combined authority home to 1.1 million residents. The remaining population is more or less evenly distributed between the other 6 constituent local authorities: Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton. For many of the indicators explored earlier in the article, the West Midlands performed below the other combined authorities. However, similar to Greater Manchester, within the West Midlands Combined Authority there were large differences between the 7 constituent local authorities.

As seen in figure 4, the employment rate in the West Midlands city region from Oct 2015 to Sept 2016 was the lowest of all city regions at 65.1%, 8.8 percentage points lower than the Great Britain average. Table 10 shows there were large differences in employment rate between the constituent local authorities, ranging by 11.2 percentage points from 61.9% in Birmingham to 73.1% in Solihull. The employment rate for Great Britain was 73.9%.

Table 10: Employment rate (aged 16 to 64) for local authorities in the West Midlands Combined Authority, October 2015 to September 2016

	Employment rate 16-64 %	Female employment rate 16-64 %	Male employment rate 16-64 %
Birmingham	61.9	54.5	69.4
Coventry	68.1	62.7	73.1
Dudley	68.6	62.3	75.1
Sandwell	63.0	55.7	70.2
Solihull	73.1	69.4	77.0
Walsall	66.4	58.8	73.9
Wolverhampton	65.1	57.5	72.7
West Midlands	65.1	58.3	71.9
Great Britain	73.9	69.0	78.8

Source: Office for National Statistics

The West Midlands was also shown to have the lowest female employment rate of all combined authorities. There were particularly large differences in female employment rate within the combined authority with the lowest in Birmingham at 54.5%, and the highest 69.4% in Solihull which was similar to the national average.

Solihull was the only local authority in the combined authority with a lower share of residents with no qualifications than Great Britain (shown in figure 29). It also has the highest share of residents with a level 4 qualification (degree level). In Sandwell, by contrast, there are more residents with no qualifications than with level 4 qualifications. Sandwell is in fact the only local authority in Great Britain for which the share of residents with no qualifications is higher than the share of residents with a degree-level qualification. In Great Britain overall there are more than 4 times as many residents with level 4 qualifications than with no qualifications.

Figure 29: Share of residents by highest level of qualification (age 16 to 64)

by Local Authority, West Midlands Combined Authority, January to December 2015



**Source: Office for National Statistics** 

Low qualifications also inevitably have an impact on earnings, shown earlier in figure 9 to be comparatively low for the combined authority. Table 11 shows earnings for residents in the West Midlands Combined Authority were below the UK average in 5 of the 7 local authorities. Gross weekly earnings of residents in Coventry were on par with the UK average at £539 and above average in Solihull at £617. Earnings of residents were lowest in Wolverhampton, nearly £180 below Solihull at £441 a week.

Table 11: Gross median weekly earnings for full time employees by local authority, 2016 (provisional)

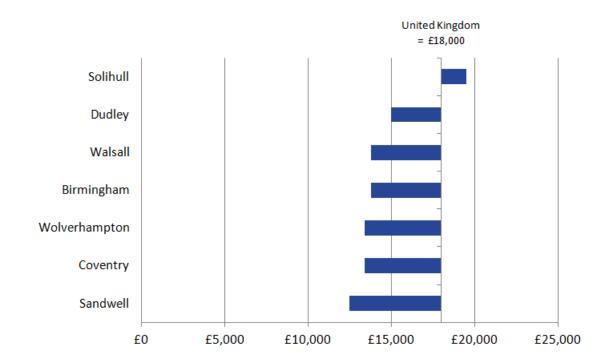
	Gross weekly earnings (workplace) £	Gross weekly earnings (residence) £
Birmingham	544	497
Coventry	558	539
Dudley	477	512
Sandwell	474	456
Solihull	587	617
Walsall	490	464
Wolverhampton	493	441
West Midlands	528	497
UK	539	539

Source: Office for National Statistics

This combination of low employment rates and inward commuting contributed towards the West Midlands having the lowest gross disposable household income (GDHI) per head in 2014 as shown in figure 10. GDHI per head for each local authority is shown in figure 30. Only Solihull had GDHI greater than the UK average at over £19,000 per head. Sandwell had the lowest GDHI per head at £12,505 per head in 2014.

Figure 30: Gross Disposable Household Income (GDHI) per head

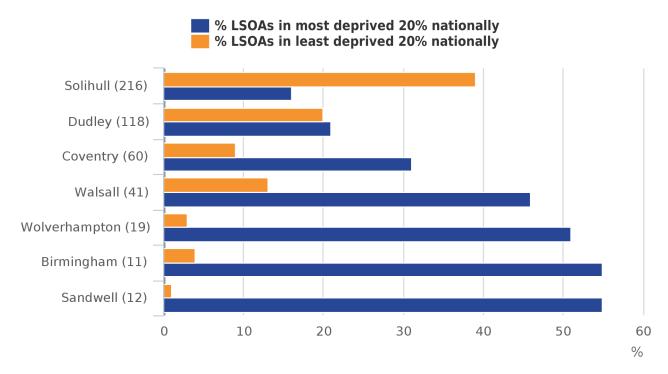
by Local Authority, West Midlands Combined Authority, 2014



The Index of Multiple Deprivation (IMD) allows the comparison of living standards between neighbourhoods within the combined authority. Slightly below Liverpool Combined Authority (45%), the West Midlands had 44% of its neighbourhoods in the most deprived 20% nationally, shown in figure 12. Much of the combined authority consists of neighbourhoods falling amongst the more deprived deciles with the exception of the areas around Sutton Coldfield and Solihull.

Figure 31: Index of Multiple Deprivation rank and share of LSOAs in the most deprived decile

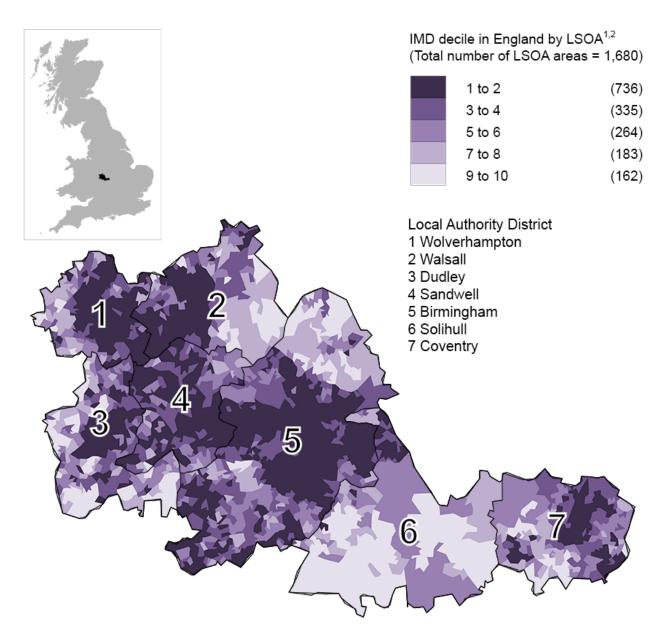
by Local Authority, 2015



Source: Department for Communities and Local Government

Figure 32: Deprivation decile by Lower Layer Super Output Area (LSOA) in 2015

**West Midlands Combined Authority** 



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- 2 LSOAs in decile 1 and 2 fall within the most deprived 20% of LSOAs nationally and LSOAs in deciles 9 and 10 fall within the least deprived 20% of LSOAs nationally.

Birmingham (11th), Sandwell (12th) and Wolverhampton (19th) all rank amongst the 20 most deprived local authorities in England, consistently appearing among the most deprived local authorities across a number of the domains including employment and income. By contrast, Solihull ranks the least deprived in the IMD out of the local authorities in the Combined authority at 178th out of the 326 local authorities in England.

### 9. The West of England Combined Authority

The West of England Combined Authority comprises the 3 local authorities of Bath and North East Somerset, City of Bristol and South Gloucestershire. As seen in the combined authority comparisons section, the West of England is characterised by a high-performing labour market and economy. The West of England has also experienced the largest recent population growth of the combined authorities having increased by nearly 5% since 2011. This population growth was relatively evenly spread between the 3 local authorities. All 3 local authorities also perform consistently above the national average across a variety of indicators such as employment rates shown in table 12.

Table 12: Employment rates (aged 16 to 64), October 2015 to September 2016

Local Authority	Employment rate %	Male employment rate %	Female employment rate %
Bath and North East Somerset	75.7	78.7	72.8
City of Bristol	75.9	78.7	73.0
South Gloucestershire	79.3	84.3	74.1
West of England	76.8	80.3	73.3
UK	73.7	78.7	68.8

Source: Office for National Statistics

South Gloucestershire had the highest employment rate of the 3 local authorities at 79.3%. Male and female employment rates in South Gloucestershire were also both well above average. For Bristol and Bath and North East Somerset, the male employment rates were the same as the UK average at 78.7% however the female employment rates were above average, contributing to the combined authorities overall high employment rate.

The West of England's performance and accompanying population growth has had a noticeable impact on the affordability of housing in the combined authority. The average property price in Bath and North East Somerset in December 2016 was £330,000, £110,000 greater than the median price in the UK. Bristol has seen the largest growth in median price paid however, having risen by 50% from 2011.

Table 13: Average property price December 2016 and growth in average price Dec 2011 – Dec 2016 by Local Authority, West of England Combined Authority

Local Authorities, West of England Combined Authority, December 2011 to December 2016

	Median house price growth % December 2011 to December 2016	Average price December 2016 £
Bath and North East Somerset	40	330000
City of Bristol	50	260000
South Gloucestershire	39	255000
UK	31	220000

Source: Office for National Statistics

Despite the combined authority's overall success, looking at smaller geographies reveals inequalities between areas within the combined authority, particularly within local authorities. Disparities can firstly be seen in the Index of Multiple Deprivation where Bath and North East Somerset and South Gloucestershire rank amongst the least deprived local authorities in the country at 268 and 274 respectively (out of 326). Bristol ranks substantially lower down at 77, with 29.4% of neighbourhoods in the most deprived 20% nationally compared to just 0.6% in South Gloucestershire and 4.3% in Bath and North East Somerset.

Table 14: Index of Multiple Deprivation rank and share of LSOAs in the most and least deprived 20% of LSOAs nationally by Local Authority, 2015

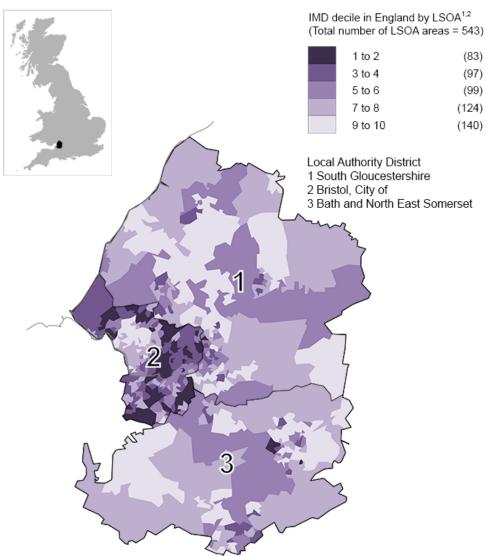
Local Authorities, West of England Combined Authority, 2015

Local Authority	LSOAs in most deprived 20%	LSOAs in least deprived 20%	IMD rank
Bath and North East Somerset	4.3	40.0	268
City of Bristol	29.3	9.0	77
South Gloucestershire	0.6	43.0	274
West of England	15.3	25.8	-
England	20.0	20.0	-

Source: Office for National Statistics and Department for Communities and Local Government

Figure 33: Deprivation decile by Lower Layer Super Output Area (LSOA) in 2015

#### **West of England Combined Authority**



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Inequality can also be seen in income looking at the latest income estimates for middle layer super output areas (MSOAs) in 2013 to 2014 (MSOAs are areas averaging a population of around 10,000 or around 4,000 households). Table 34 shows that Bristol had the greatest disparity in income between its MSOAs with 11% of MSOAs in the 2 lowest income brackets and 9% of MSOAs in the 2 highest income brackets. By contrast there were no MSOAs in South Gloucestershire or Bath and North East Somerset in the2 lowest income brackets and just 4% of MSOAs in Bath and North East Somerset in the highest income brackets.

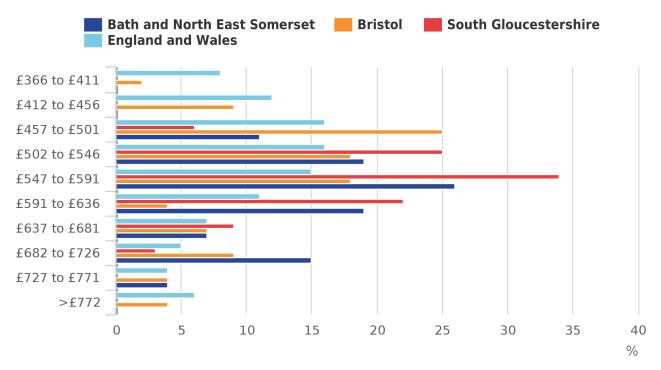
<sup>1</sup> In the Index of Multiple Deprivation, deciles are calculated by ranking the 32,844 LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups.

2 LSOAs in decile 1 and 2 fall within the most deprived 20% of LSOAs nationally and LSOAs in deciles 9 and 10

fall within the least deprived 20% of LSOAs nationally.

Figure 34: Share of MSOAs by income bracket

Local Authorities, West of England Combined Authority, 2013/14



**Source: Office for National Statistics** 

The modal income group for Bristol was £457 to £501 where 25% of MSOAs fell. For South Gloucestershire and Bath and North East Somerset the £547 to £591 income bracket was where the greatest share of MSOAs fell at 34% and 26% respectively.

As well as disparities in income, the West of England Combined Authority also has differences in both its share of residents with a degree-level qualification and the share of pupils entering into higher education. As shown in figure 3 the West of England had the highest share of residents with a degree-level qualification out of the combined authority areas at 45%. However, only 5 local authorities in England had a lower share of pupils entering higher education than in Bristol which had a share of 26%, more than 10 percentage points below the average for England (37%). South Gloucestershire (31%) and Bath and North East Somerset (35%) also have shares below the national average.

Table 15: Qualifications and education variables by Local Authority, West of England Combined Authority

Pupils entering higher education %

Local Authority	Level 4 Qualifications (Jan – Dec 2015)	Total	FSM	Non FSM
Bath and North East Somerset	47.8	35	11	36
City of Bristol	47.9	26	13	30
South Gloucestershire	37.7	31	17	32
West of England	45	-	-	-
England	36.8	37	22	39

Source: Office for National Statistics and Department for Education

#### Notes:

1. Estimated percentage of pupils from state-funded schools aged 15 in 2009/10 by Free School Meal status who entered HE in 2012/13 at age 18 or 2013/14 at age 19

The low levels of entry to higher education are particularly seen in students from lower income families (students receiving free school meals (FSM)) progressing to higher education. This was substantially lower than the national average (22%), and other major local authorities in city regions such as Birmingham (30%), Manchester (25%), and Liverpool (20%). In Bath and North East Somerset, students not receiving FSM are around 3 times more likely to enter into higher education than students receiving FSM.