

Worcestershire Health and Wellbeing Board Joint Strategic Needs Assessment Briefing on Rural Health

Information Lead: Janette Fulton

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Written By: Tafara Ruvaro

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By its nature this briefing is not an exhaustive resource on rural health and should be read alongside other Joint Strategic Needs Assessment (JSNA) outputs.

Summary

- Worcestershire is a predominantly rural county by area, though much of the population live in its urban city and town areas.
- Wychavon is the most rural district with at least 80% of the population living in rural areas including hub towns.
- In general health is better in rural areas than in urban areas. However, using broad-brush measures can mask pockets of significant deprivation and poor health.
- Overall Worcestershire is ranked 8th out of 15 against similar areas for premature mortality deaths between 2014 and 2016, 42nd out of 150 nationally. Consequently, Worcestershire compares worse than average against similar areas, yet it is amongst the best in the country.
- Nationally, a number of risk factors for rural health have been identified. These include: changing population structure, lack of infrastructure, digital exclusion, poor air quality, poor access to health and related services, isolation and social exclusion, poor quality housing and fuel poverty, unemployment and under-employment.
- Outward migration of young people and inward migration of older people is leading to a rural population that is increasingly older than the urban population, with accompanying health and care needs.
- Sparsity and the increasing scarcity of public transport links have a significant impact both on daily living costs of rural households and on access to services.

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- A combination of the older demographic and the unavailability of high-speed broadband and mobile phone networks is leading to an increasing digital gap between urban and rural areas.
- Digital exclusion is likely in Malvern Hills due to poor infrastructure, lack of basic skills and an ageing population.
- Annual concentration of human-made fine particulate matter (PM2.5) in Worcestershire is 8.6 micrograms per cubic metre ($\mu\text{g}/\text{m}^3$). This means Worcestershire has better than average air quality by this measure.
- The average PM2.5 concentration varies across the county. The highest concentration is recorded in Bromsgrove at 9.1 $\mu\text{g}/\text{m}^3$, this is followed by Redditch (8.9 $\mu\text{g}/\text{m}^3$), Worcester (8.8 $\mu\text{g}/\text{m}^3$), Wychavon (8.4 $\mu\text{g}/\text{m}^3$), Wyre Forest (8.3 $\mu\text{g}/\text{m}^3$) and Malvern Hills (7.8 $\mu\text{g}/\text{m}^3$).
- Worcestershire has small pockets, called Air Quality Management Areas (AQMA) where the local air quality is unlikely to meet the Government's national NO₂ thresholds. Across the county, there are seven AQMA including three in Bromsgrove, one in Worcester, one in Wychavon and two in Wyre Forest.
- In 2016 there was a strong association between NO₂ levels and hospital admissions at county level and in 2017, data for Bromsgrove, Wychavon, Malvern and Redditch showed a strong association between hospital admissions and NO₂ concentrations.
- The percentage of households with access to a GP within 15 minutes by public transport or walking is 64.1%. This is worse than England's average at 80%. This translates to 72,160 households in Worcestershire that do not have access to a GP within 15 minutes by public transport and walking.
- Access to health and related services is a significant health risk factor in most parts of Worcestershire due to distance, infrastructure sparsity and scarcity of public transport.
- Most households (97.7%) have access to a GP within 15 minutes by car which leaves 4,712 households needing more than 15 minutes to reach a GP. The ratio of households to health service facility (GP, Health centre or Pharmacy) is 940:1.
- Our JSNA on loneliness provides detailed evidence on the health impact of loneliness. A surprising finding of the work was that the risk factors for loneliness are concentrated in the urban areas of Worcestershire. The risk map for Worcestershire shows higher risk of loneliness within less rural locations such as Worcester City, north Redditch, and across Wyre Forest.
- Social exclusion is likely in Wyre Forest due to age and income.
- Respondents from all districts generally feel safe during the day compared to after dark. Perceptions of safety seem to be lowest in Redditch during the day and Wyre Forest at night.
- The percentage of households living in fuel poverty is highest in areas classified as rural.
- Worcestershire's low unemployment combined with high and increasing job density is indicative of positively performing economy, with lots of jobs for the population.

Background

Worcestershire is a predominantly rural county (85% of the area is classified as rural), though the majority of the population lives in urban areas.¹ The six Worcestershire districts can be classified and described as follows:

Table 1. Rural Urban Classification (RUC2011)

Area	Category	Description
Worcestershire	Urban with significant rural	26% to 49% of the resident population lives in the rural areas or rural related hub town
Bromsgrove	Urban with city and town	Less than 25% of the population live in rural areas including hub towns
Malvern Hills	Largely rural	50 to 79% of the population live in rural areas including hub towns
Redditch	Urban with city and town	Less than 25% of the population live in rural areas including hub towns
Worcester	Urban with city and town	Less than 25% of the population live in rural areas including hub towns
Wychavon	Mainly rural	Greater/equal to 80% of the population live in rural areas including hub towns
Wyre Forest	Urban with significant rural	26 to 49% of the population live in rural areas including hub towns

Source: Office for National Statistics RUC 2011

¹ According to the Office for National Statistics Rural Urban Classification (RUC) 2011 (ONS/DEFRA, 2016), settlements with a population of 10,000 or more should be treated as 'urban'; all smaller settlements are to be treated as 'rural'. The density is also taken into account i.e. whether a settlement is in a 'sparse setting'.

In general health is better in rural areas than in urban areas. However, rural areas can be very diverse in relation to their level of affluence and their health outcomes.² Using broad-brush measures can mask pockets of significant deprivation and poor health.³ Statistics on rural geographies are often not sufficiently fine-grained to pinpoint the pockets of deprivation that exist.

In Worcestershire, avoidable and unfair differences in health exist between groups that differ on a range of social and demographic factors, including: income, social class, occupation and parental occupation, level of education, housing condition, neighbourhood quality, geographic region, gender and ethnicity.

There are social and economic factors that are known to have a disproportionate impact on people's health, and these are: poverty, housing, employment and access to transport, particularly in rural communities, where both sparsity and rurality appear to affect poverty levels.

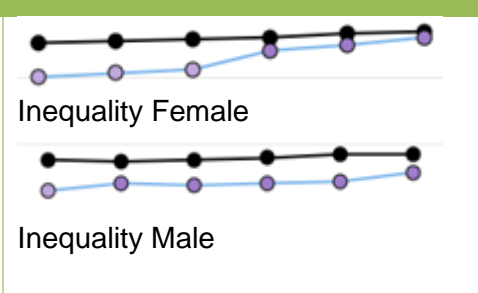
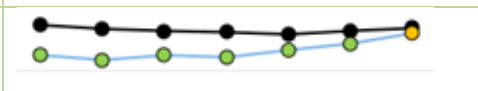
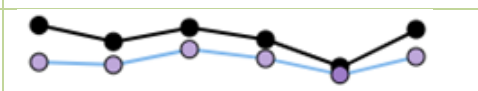

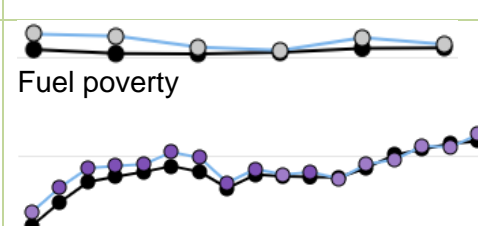
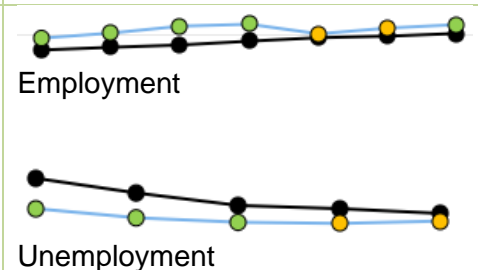
A number of risk factors for rural health have been identified⁴. Table 2 shows these risk factors, related measures and Worcestershire trends against the national averages

² Department for Environment, Food and Rural Affairs (Defra) (2013), Statistical Digest of Rural England: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221038/pb13822-stat-digest-rural-201302.pdf

³ PHE, 2017: LGA, Health and Well-being in rural areas Available online from https://www.local.gov.uk/sites/default/files/documents/1.39_Health%20in%20rural%20areas_WEB.pdf, Accessed : 10/12/19

⁴ PHE, 2017: LGA, Health and Well-being in rural areas Available online from https://www.local.gov.uk/sites/default/files/documents/1.39_Health%20in%20rural%20areas_WEB.pdf, Accessed : 10/12/19

Table 2. Risk Factors for Rural Health

Risk Factor	Indicator	Trend Against England ⁵
Changing population patterns	<ul style="list-style-type: none"> Inequalities in life expectancy at birth at birth for males and females Increasing population 65yrs and over 	 <p>Inequality Female</p> <p>Inequality Male</p>
Infrastructure	<ul style="list-style-type: none"> Killed or Seriously Injured (KSI) on the Roads 	
Digital access and exclusion	Digital and Social indicators	See section below
Air quality	Fine Particulate Matter	
Access to health and related services	Distribution and Travel times	See section below
Community support, isolation and social exclusion	Social Isolation: percentage of adult carers who have as much social contact as they would like (18+ yrs.)	
Housing and fuel poverty	<ul style="list-style-type: none"> Fuel poverty Affordability of home ownership 	 <p>Fuel poverty</p> <p>Housing affordability (a higher ratio indicates that on average, it is less affordable for a resident to purchase a house).</p>
Employment and under-employment	<ul style="list-style-type: none"> Percentage of people aged 16-64 in employment Unemployment 	 <p>Employment</p> <p>Unemployment</p>

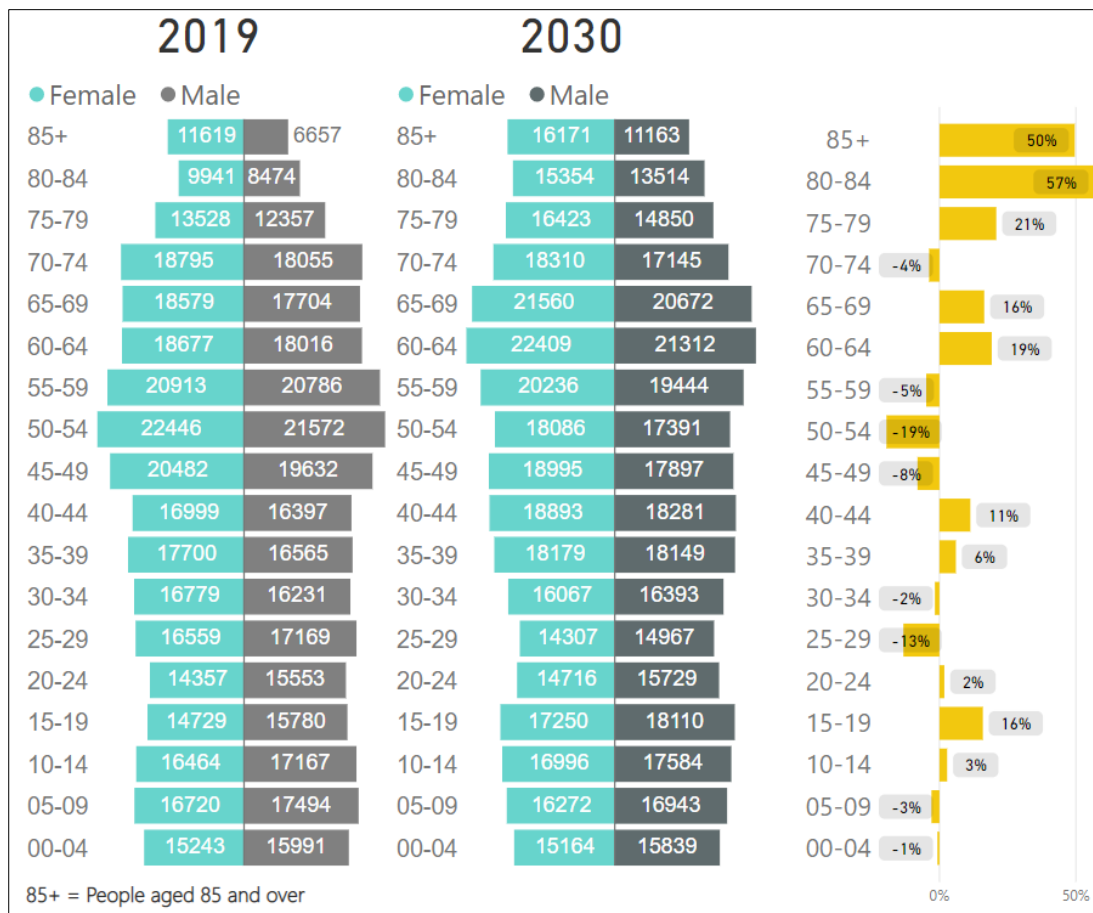
⁵ Source: Public Health England Profiles. England is shown as the black line.

Changing Population Patterns

According to Public Health England, the health of the rural population is on average better than that of urban areas. Overall, average life expectancy is higher, infant mortality is lower and the number of potential years of life lost from common causes such as cancers, coronary heart disease and stroke is lower.⁶

Changing population patterns, including outward migration of young people and inward migration of older people, are leading to a rural population that is increasingly older than the urban population, with accompanying health and care needs. The population of Worcestershire is expected to increase, particularly the very oldest age groups, increasing the demand for health and care services. The percentage changes are highlighted in the graph below

Figure 1. Projected Population for Worcestershire- 2018 Mid-Year Based



Source: ONS Mid-year 2018 population estimates

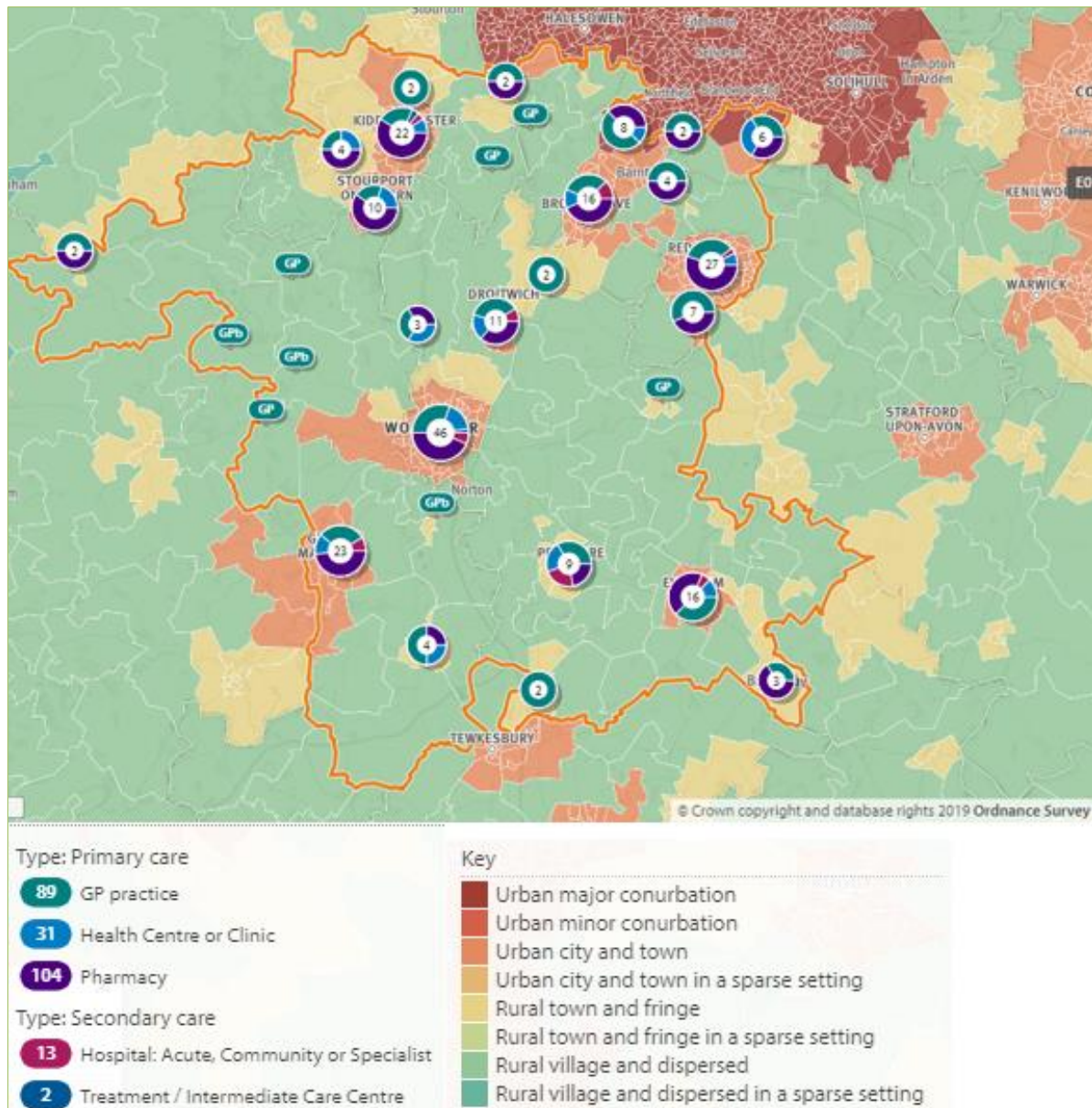
⁶ Public Health England, mortality statistics: <http://healthierlives.phe.org.uk/topic/mortality>

Infrastructure

Sparsity and the increasing scarcity of public transport links have a significant impact both on daily living costs of rural households and on access to services. These factors cut across the whole of the life course – affecting people of all ages.

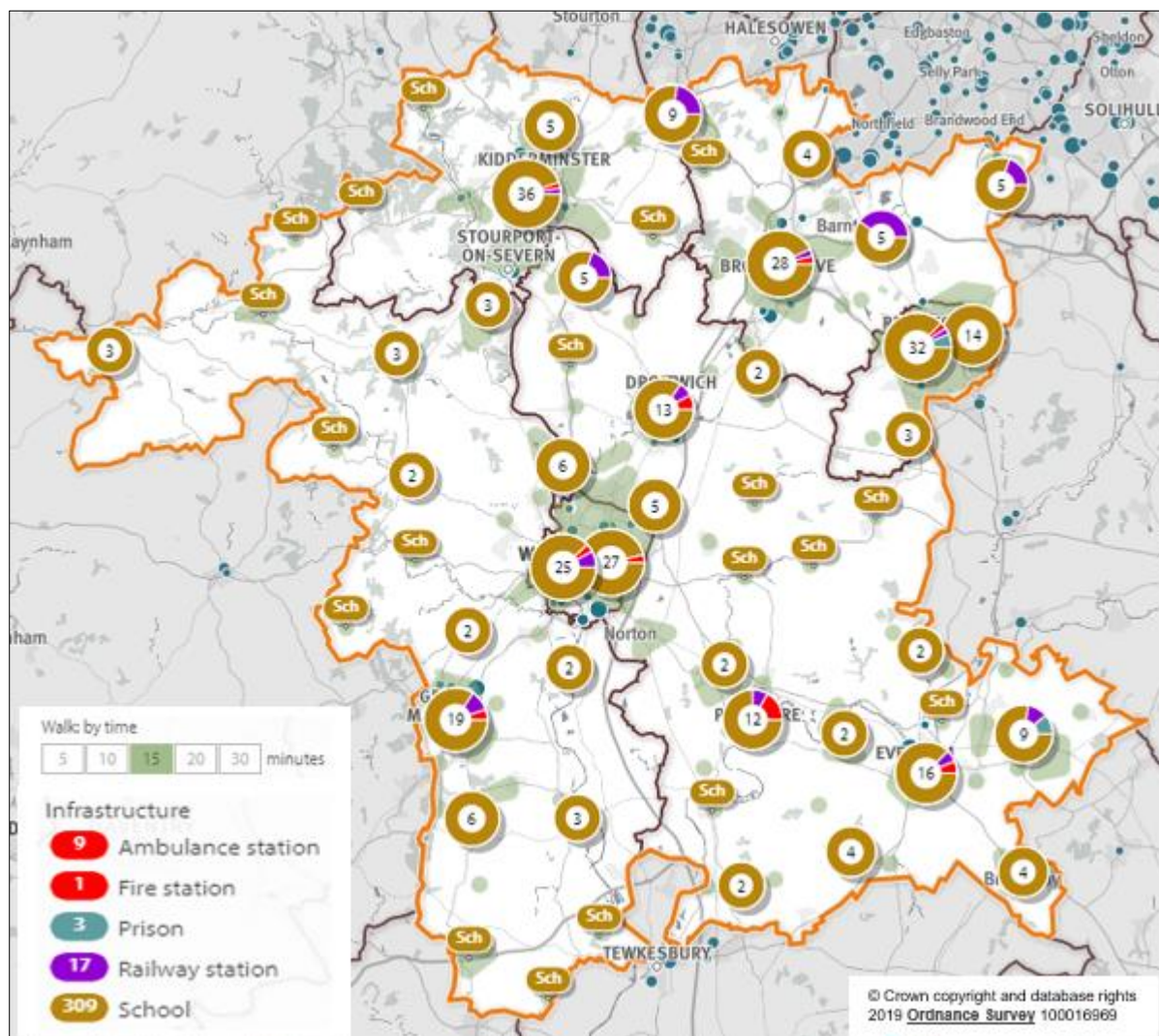
In Worcestershire there are approximately 214 primary care health services that include GPs, health centres, clinics, walk-in-centres and pharmacies. Other forms of infrastructure that contribute to good health include facilities for learning such as schools and libraries.

Figure 2. Health Services in Worcestershire



Source: [SHAPE](#)

Figure 3. Other Infrastructure in Worcestershire



Source: [SHAPE](#)

In addition to the 214 primary care services across Worcestershire there are other forms of infrastructure that include 309 schools, 17 railway stations, 9 ambulance stations, 3 prisons and 1 fire station all relevant to the health and wellbeing.

Digital Access and Exclusion







A combination of the older demographic and the unavailability of high-speed broadband and mobile phone networks is leading to an increasing digital gap between urban and rural areas.

This is made more serious by the growing number of important services, such as job search opportunities, banking and increasingly, health-related services, that are available online.

The digital gap disproportionately affects vulnerable people, low-income groups, the elderly and the more marginalised communities in our society. There is a strong correlation between digital exclusion and social exclusion.

The economic impact of digital exclusion is challenging at a time when it is forecast that 90% of all jobs will soon require some form of digital capability and the UK faces a major shortage of digital skills at all levels⁷.

Table 3. Digital Exclusion: Digital indicators (2017)

District	% without broadband 10Mbps	% without 4G mobile data	% offline in the last 3 months	% with basic digital skills	% with basic digital skills used in last 3 months	Combined digital indicator. (the combined digital indicator is made up of four metrics that indicate digital exclusion)
Bromsgrove	1	7.5	9.3	78	45	
Malvern Hills	11	34.5	9.3	75	43	
Redditch	0	3.27	9.3	78	42	
Worcester	0	2.35	9.3	79	45	
Wychavon	4	19.18	9.3	75	44	
Wyre Forest	2	21.15	9.3	77	44	







Source: Local Government Association: <http://heatmap.thetechpartnership.com/>

The combined digital indicator is made up of four metrics that indicate digital exclusion, and these are infrastructure, the number of people who have never been online, Basic Digital Skills and Basic Digital Skills used. The likelihood of overall digital exclusion is medium for

⁷ Lloyds Bank, 2019: UK Consumer Digital Index 2019, Available online from https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/LB-Consumer-Digital-Index-2019-Report.pdf, Accessed on: 10/12/19

Worcestershire however digital exclusion is likely in Malvern Hills due to poor infrastructure, lack of basic skills and an ageing population.

Table 4. Digital Exclusion: Social Indicators (2017)

District	Age (% of adults over 65)	Education (% adults without any qualifications)	Income (Average per taxpayer %)	Health (% adults with long-term illness or disability)	Combined social indicator (The combined social indicator is made up of four social metrics that indicate digital exclusion).
Bromsgrove	22.4	34.1	22,700	17.6	Exclusion unlikely  Exclusion likely
Malvern Hills	27.6	31.5	24,400	19.5	Exclusion unlikely  Exclusion likely
Redditch	17.7	40.9	20,600	17.1	Exclusion unlikely  Exclusion likely
Worcester	16.7	34.0	21,800	16.2	Exclusion unlikely  Exclusion likely
Wychavon	24.5	35.2	22,900	17.6	Exclusion unlikely  Exclusion likely
Wyre Forest	24.4	42.0	20,500	19.9	Exclusion unlikely  Exclusion likely

Source: [Local Government Association](#):

The combined social indicator is made up of four social metrics that indicate digital exclusion, and these are age, education, income and health. The likelihood of overall digital exclusion is medium for Worcestershire however social exclusion is likely in Wyre Forest due to age and income.

Air Quality

According to Public Health England⁸, poor air quality is a major public health risk, ranking alongside cancer, heart disease and obesity. More than five per cent of deaths in England are attributable to long-term exposure to particulate air pollution⁹. This estimate makes air pollution the largest environmental risk linked to deaths every year.

Emissions of primary pollutants are significantly greater in urban areas and despite Worcestershire being classified as predominantly rural, there are seven AQMAs including three in Bromsgrove, one in Worcester, one in Wychavon and two in Wyre Forest. AQMAs are places in which the local authority for the area finds that the national air quality objectives are unlikely to be achieved by agreed deadlines.

Although there are no declared AQMAs in areas classified as 'rural' in Worcestershire, the presence of farming activities in rural Worcestershire increases the risk of Particulate Matter (PM2.5), Ammonia and Nitrogen Dioxide (NO₂).

A recent review by Public Health England (PHE) found that although emissions from the agriculture sector are not significant when considering NO_x or SO₂ (sulphur dioxide), most emissions of NH₃ (ammonia) come from agriculture, with the sector accounting for 88% of total UK emissions in 2016.

Both short and long-term exposure to air pollution can affect health. Short-term exposure to elevated levels of air pollution can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in respiratory and cardiovascular hospital admissions and mortality. Long-term exposure reduces life expectancy, mainly due to cardiovascular and respiratory diseases and lung cancer.¹⁰ Air quality is therefore of significant importance to Worcestershire due to not only the ageing population but the young who are most vulnerable.

Many pollutants affect air quality, but the five most damaging pollutants are:

- Particulate Matter (PM2.5),
- Ammonia,
- Sulphur Dioxide,
- Nitrogen Dioxide (NO₂)
- Non-Methane Volatile Organic Compounds (NMVOCs)

Pollutants can travel long distances and combine with each other to create different pollutants. Of the five pollutants listed above, data is available for PM2.5 and NO₂ in a format that allows comparisons to be made.

Fine Particulate Matter (PM2.5)

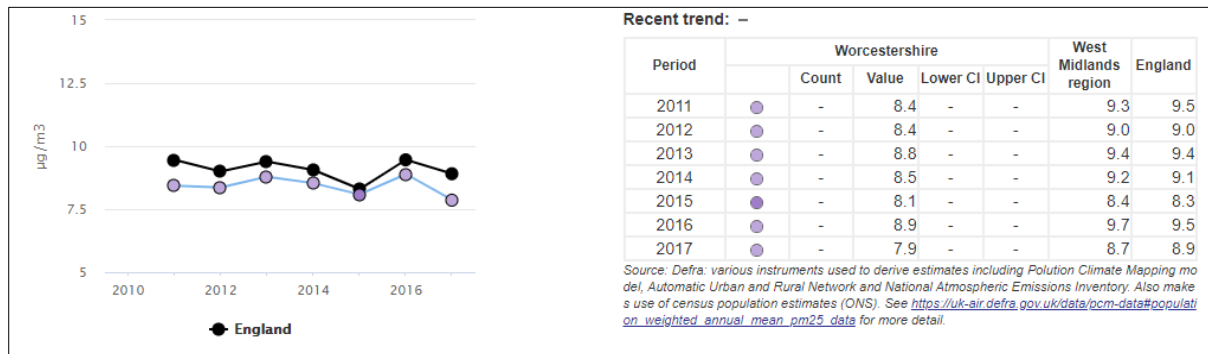
Annual concentration of human-made fine particulate matter (PM2.5) in Worcestershire is 8.6 micrograms per cubic metre (µg/m³). This means Worcestershire has better than average air quality by this measure (it is in the second-best fifth in England).

⁸ Public Health England **Health and wellbeing in rural areas**
<https://www.local.gov.uk/health-and-wellbeing-rural-areas>

⁹ Public Health England (2015): 'Understanding the impact of particulate air pollution',
<https://publichealthmatters.blog.gov.uk/2015/11/03/understanding-the-impact-of-particulate-air-pollution/>

¹⁰ Public Health England. Health Matters: Air Pollution Nov 18. Available at:
<https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>

Figure 4. Air Pollution: Fine Particulate Matter (Mean - µg/m3) – Worcestershire 2011-17



Source: Public Health England, Public Health Outcomes Framework

The average PM2.5 concentration varies across the county. The highest concentration is recorded in Bromsgrove at 9.1 µg/m³, this is followed by Redditch (8.9 µg/m³), Worcester (8.8 µg/m³), Wychavon (8.4 µg/m³), Wyre Forest (8.3 µg/m³) and Malvern Hills (7.8 µg/m³).

Nitrogen Dioxide (NO₂)

Pollution from traffic is increasing in rural areas where levels of ozone are generally higher and Worcestershire has small pockets, called Air Quality Management Areas (AQMA) where the local air quality is unlikely to meet the Government’s national NO₂ thresholds.¹¹

In 2017, 0.3% of the Worcestershire population was living in an AQMA, which is higher than the England average of 0.2%. The changes to the Worcester AQMA have contributed to an increase in this figure.

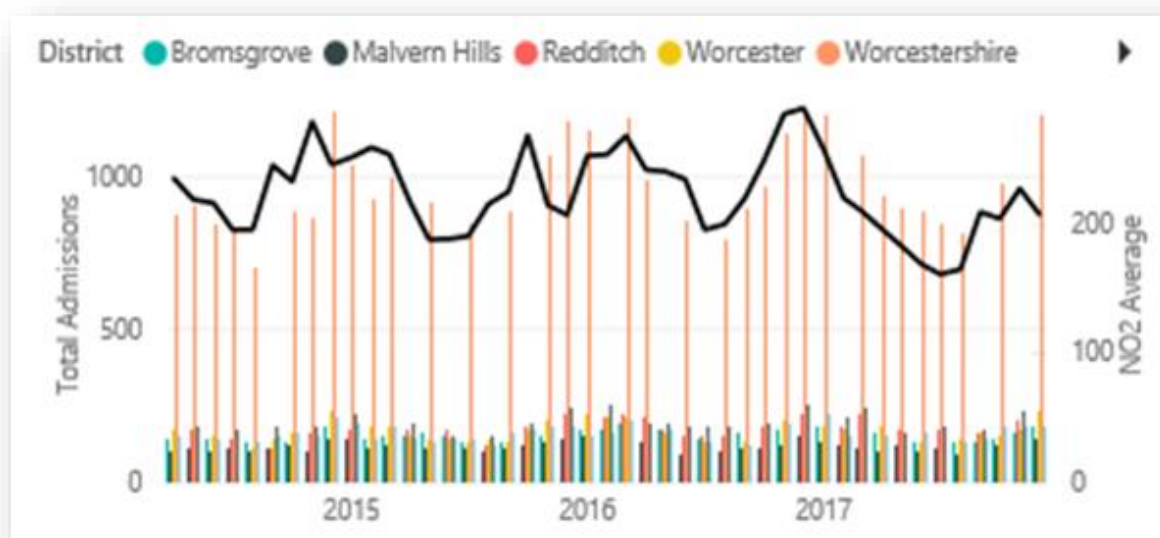
Recently the Worcestershire Public Health Team studied the strength of association between average NO₂ levels and hospital admissions for conditions linked to poor air quality¹² and cardio-vascular admissions¹³. The results of this investigation are shown in Figure 5.

¹¹ There are two air quality objectives for nitrogen dioxide. The long-term objective is 40 µg/m³ averaged over a year and the short-term objective is 200 µg/m³ averaged over one hour.

¹² ICD 10: 100-109

¹³ ICD 10: J00-J99

Figure 5. Total Admissions and NO₂



Source: Worcestershire JSNA [Air quality dashboard](#)

In 2016 there was a strong association between NO₂ levels and hospital admissions at county level and in 2017, Bromsgrove, Wychavon, Malvern and Redditch showed a strong association between hospital admissions and NO₂ concentrations.

The Clean Air Strategy published in January 2019 sets out comprehensive actions required across all parts of government and society to improve air quality.¹⁴

Public Health England has published a review of actions providing local practitioners and policy-makers with an indication of the range of interventions that can be used to address problems arising from different sources of air pollution.¹⁵ A partnership group to consider the implementation of these actions at a local level has recently been set up by the Public Health Team.

¹⁴ Department of Environment, Food and Rural Affairs. Clean Air Strategy 2019. Available at: <https://www.gov.uk/government/publications/clean-air-strategy-2019>

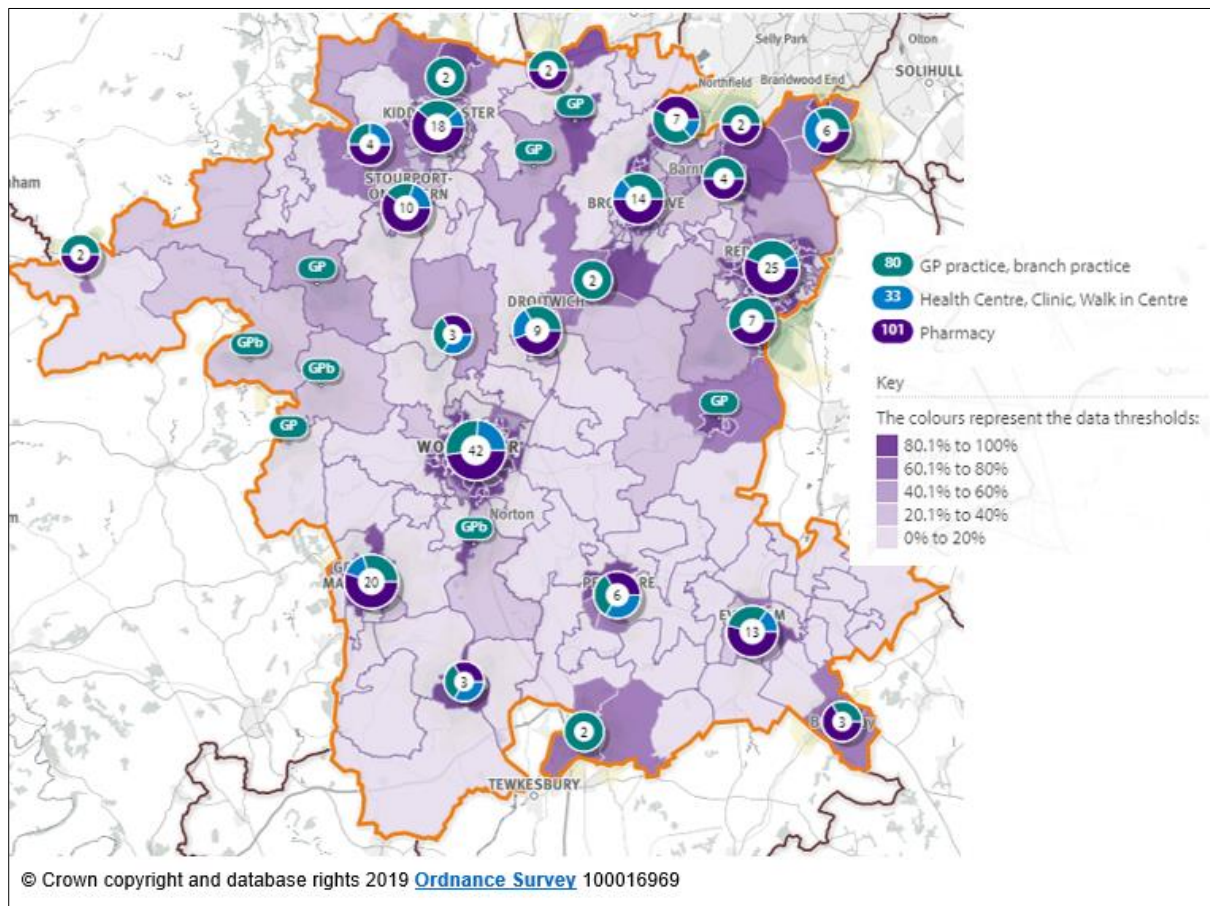
¹⁵ <https://www.gov.uk/government/publications/improving-outdoor-air-quality-and-health-review-of-interventions>

Access to Health and Related Services

Rural areas have worse access in terms of distance to health, public health and care services. Longer distances to GPs, dentists, hospitals and other health facilities mean that rural residents can experience ‘distance decay’ where service use decreases with increasing distance. Different models of service delivery may be needed for rural areas, including the development of rural hubs providing a range of services, and more services provided on and through the internet.

Accessibility is central to many factors including distance, cost, safety, knowledge, reliability and availability. Transport alone solves many of the accessibility problems however, walking and cycling as part of physical activity contribute positively in promoting good health and preventing a person’s risk of some chronic conditions and diseases.¹⁶

Figure 6. Percentage of households with access to GPs within 15 minutes by public transport or walking - Worcestershire



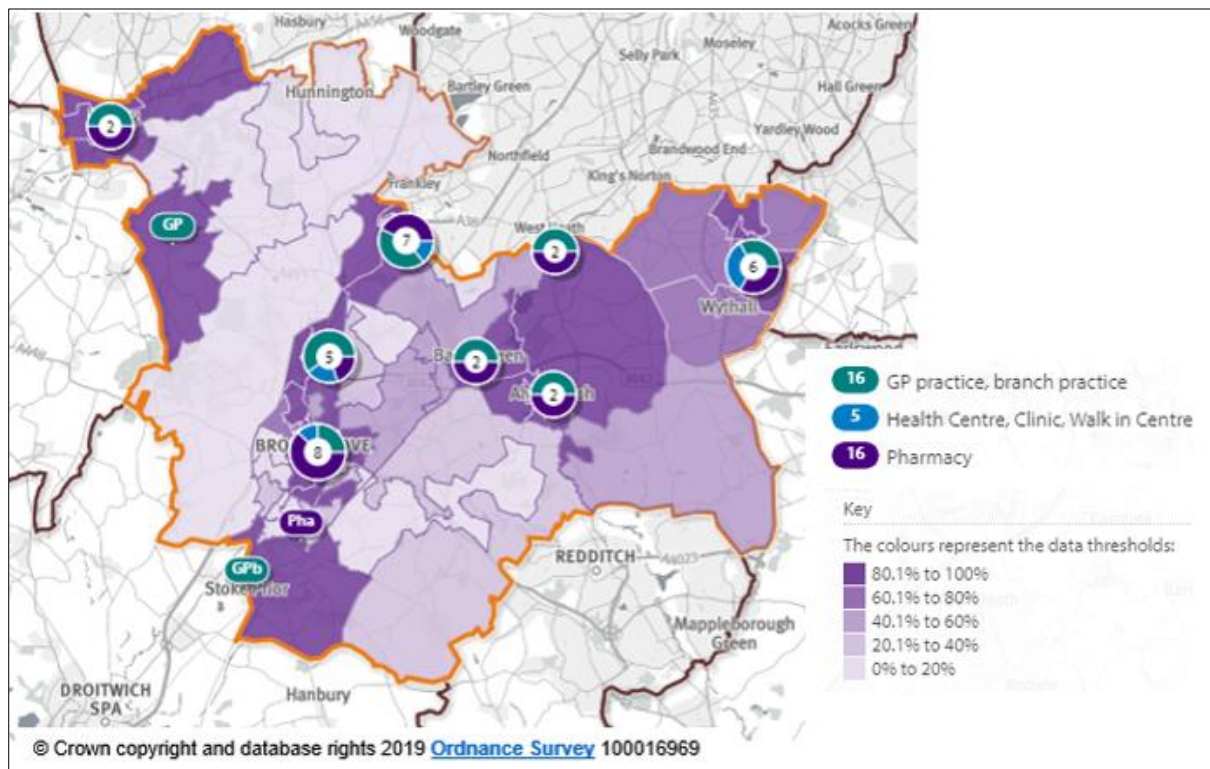
Source: [SHAPE](#)

¹⁶ Public Health England Everybody active, every day
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/374914/Framework_13.pdf

The percentage of households with access to a GP within 15 minutes by public transport or walking is 64.1%. This is worse than England’s average at 80%. This translates to 72,160 households in Worcestershire that do not have access to a GP within 15 minutes by public transport and walking.

Most households (97.7%) have access to a GP within 15 minutes by car which leaves 4,712 households needing more than 15 minutes to reach a GP. The ratio of households to health service facility (GP, Health centre or Pharmacy) is 940: 1.

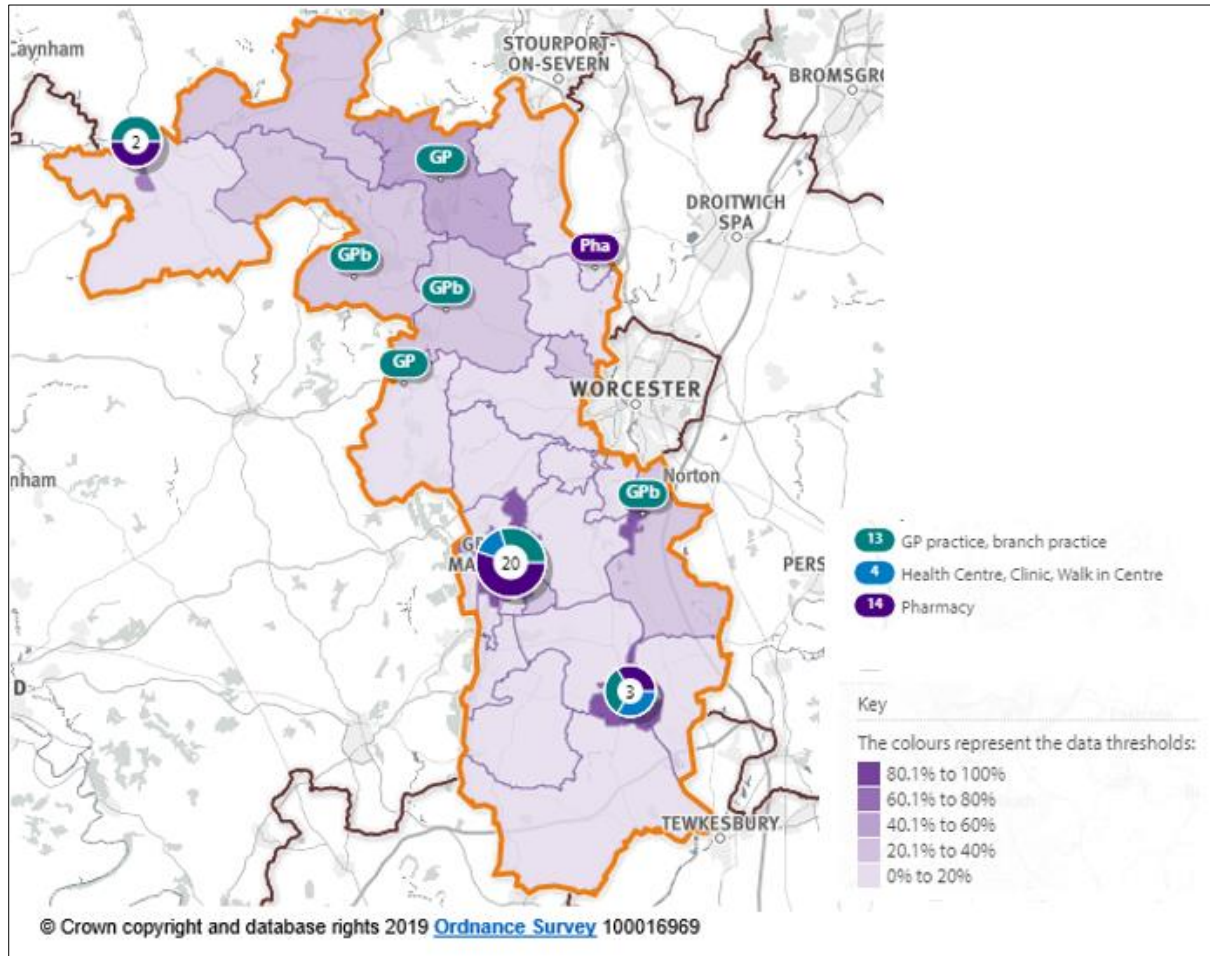
Figure 7. Percentage of households with access to GPs within 15 minutes by public transport or walking - Bromsgrove



Source: [SHAPE](#)

The percentage of households with access to a GP within 15 minutes by public transport or walking in Bromsgrove is 63.8%. This is similar to the county average at 64.1% but worse than England’s average at 81%. There are 11,623 households without access to a GP within 15 minutes by public transport and walking. There are approximately 101 households needing more than 15 minutes to access a GP by car. The ratio of household to health service facility (GP, Health centre or Pharmacy) is 869: 1 which is better than the county ratio.

Figure 8. Percentage of households with access to GPs within 15 minutes by public transport or walking - Malvern Hills



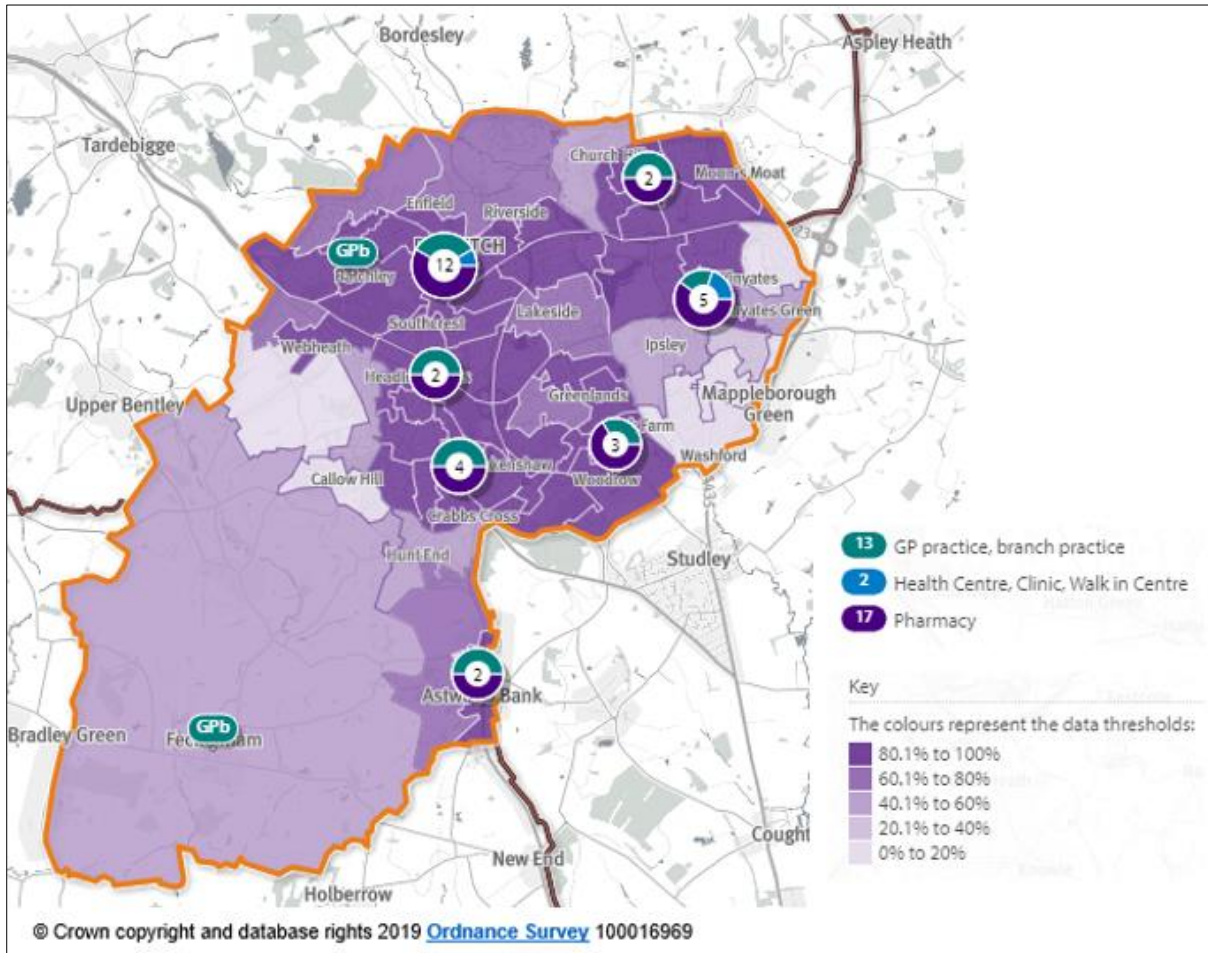
Source: [SHAPE](#)

The percentage of households with access to GPs within 15 minutes by public transport or walking in Malvern Hills is 47.5%. This is worse than the county average at 64.1%.

More than half of the total households, 14,796 are without access to GPs within 15 minutes by public transport and walking. Approximately 4.5% (1,256 households) need more than 15 minutes to access a GP by car, the second highest in the county behind Wychavon.

The ratio of household to health service facility (GP, Health centre or Pharmacy) is 910: 1 which is similar to the county ratio.

Figure 9. Percentage of households with access to GPs within 15 minutes by public transport or walking - Redditch



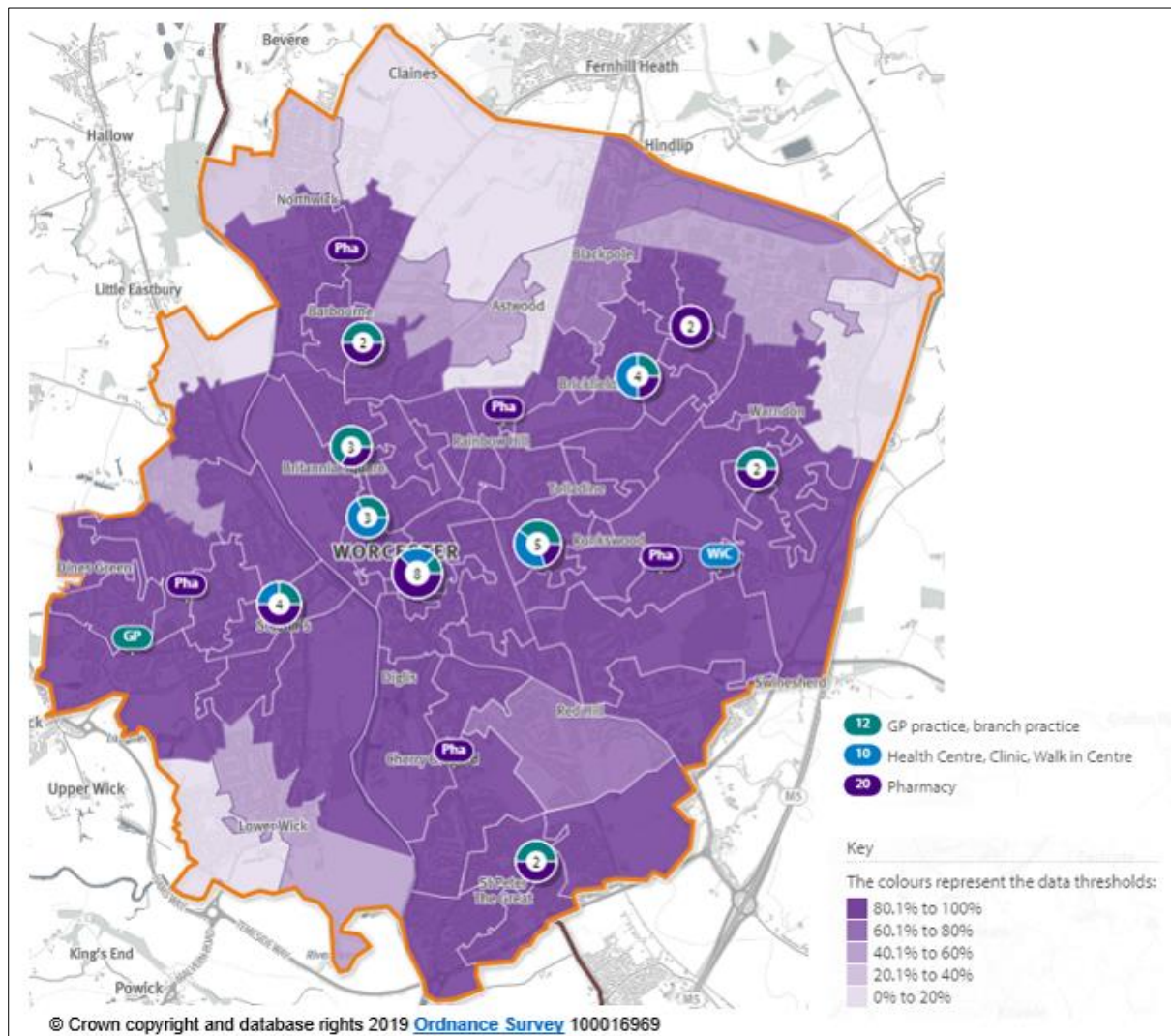
Source: [SHAPE](#)

The percentage of households with access to GPs within 15 minutes by public transport and walking in Redditch is 81.8%.

This is better than England’s average at 81%, however approximately 5,327 households are without access to GPs within 15 minutes by public transport and walking in a district considered deprived compared to Malvern Hills or Bromsgrove. Every household has access to a GP within 15 minutes by car.

Considering Redditch is a relatively deprived district more is needed to improve access by public transport and walking as it may be expensive to drive for residents. The ratio of household to health service facility (GP, Health centre or Pharmacy) is 912: 1 which is similar to the county ratio.

Figure 10. Percentage of households with access to GPs within 15 minutes by public transport or walking - Worcester



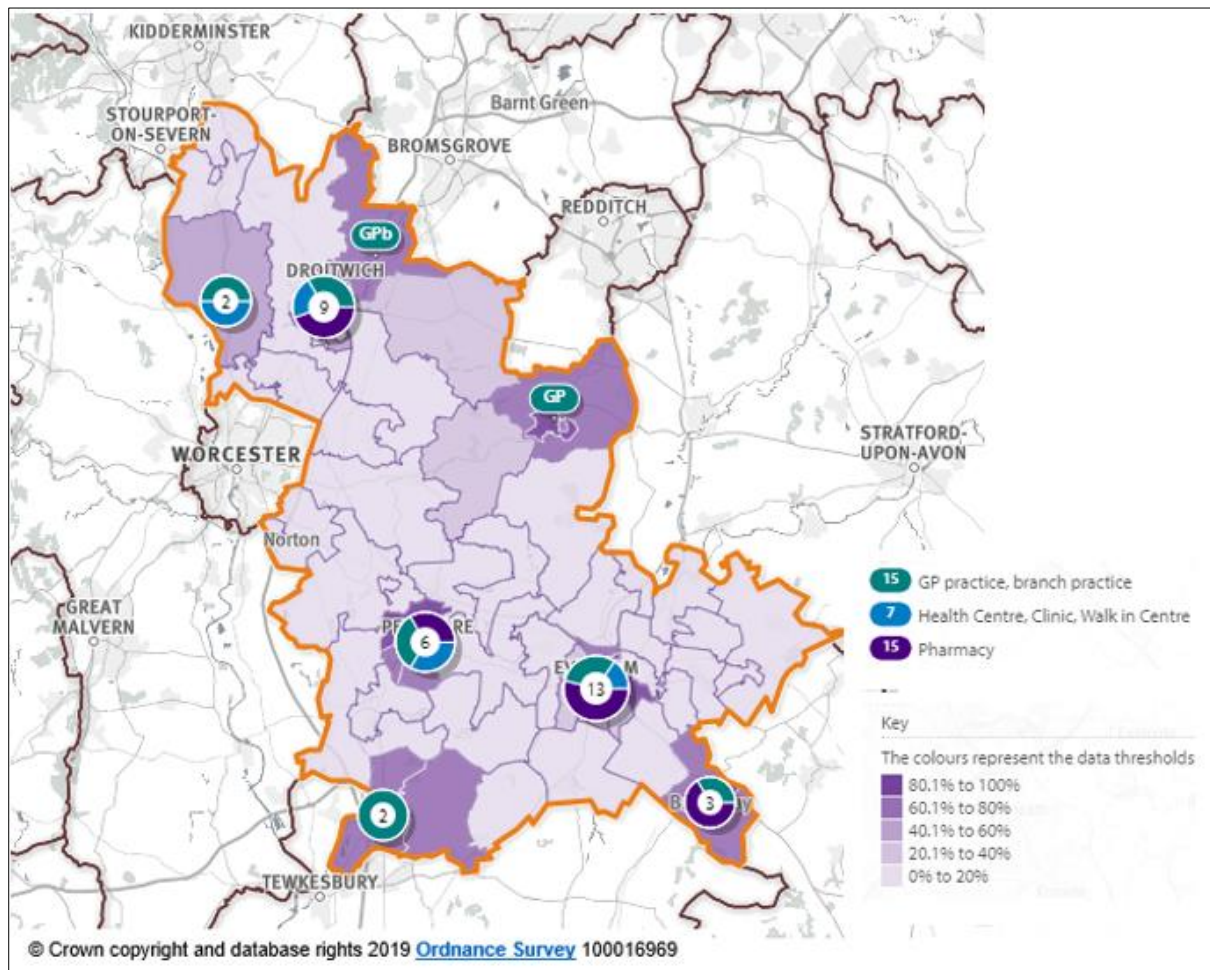
Source: [SHAPE](#)

As the most urban of the six Worcestershire districts, the percentage of households with access to GPs within 15 minutes by public transport or walking in Worcester is 87.8%.

This is significantly better than England's average at 81%, however approximately 4,433 households are without access to GPs within 15 minutes by public transport and walking in a district considered urban.

Every household has access to a GP within 15 minutes by car. Considering Worcester is considered urban more is needed to improve access by other modes of transport such as cycling. Currently, 97.1% of the households in Worcester can cycle to a GP within 15 minutes. The ratio of household to health service facility (GP, Health centre or Pharmacy) is 862: 1 better than the county ratio.

Figure 11. Percentage of households with access to GPs within 15 minutes by public transport or walking - Wychavon

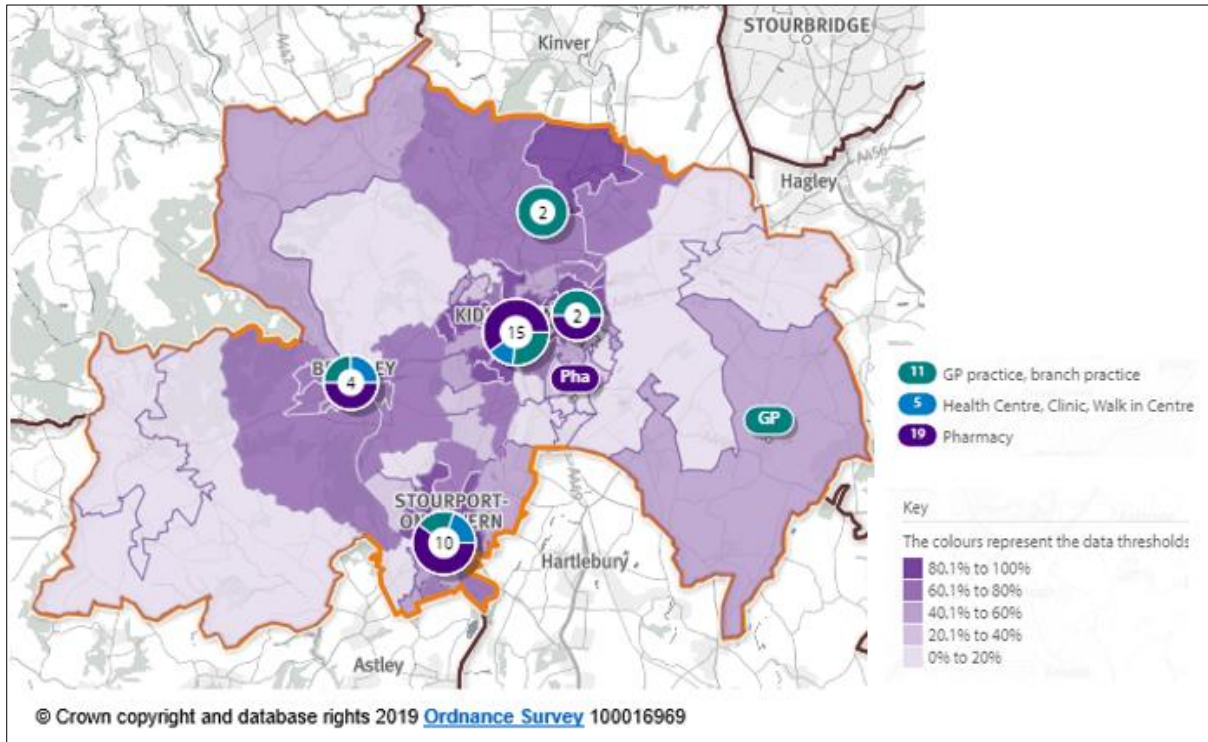


Wychavon is considered mainly rural

Only 45.5% of households have access to GPs within 15 minutes by public transport or walking which translate to approximately 22,822 households excluded. 93% of households in Wychavon has access to a GP within 15 minutes by car.

Approximately 7.1% (2,951 households) need more than 15 minutes to access a GP by car, the highest in the county. The ratio of household to health service facility (GP, Health centre or Pharmacy) is 1131: 1 which is worse than the county ratio.

Figure 12. Percentage of households with access to GPs within 15 minutes by public transport or walking - Wyre Forest

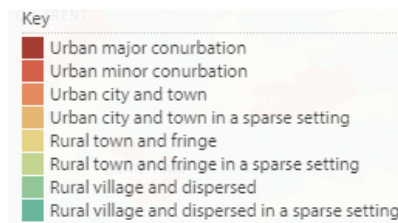
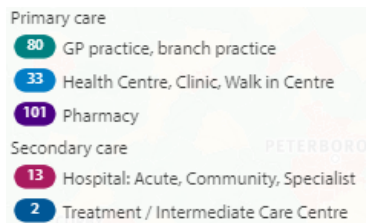


Source: [SHAPE](#)

Wyre Forest’s percentage of households with access to GPs with 15 minutes by public transport or walking is 60.7%.

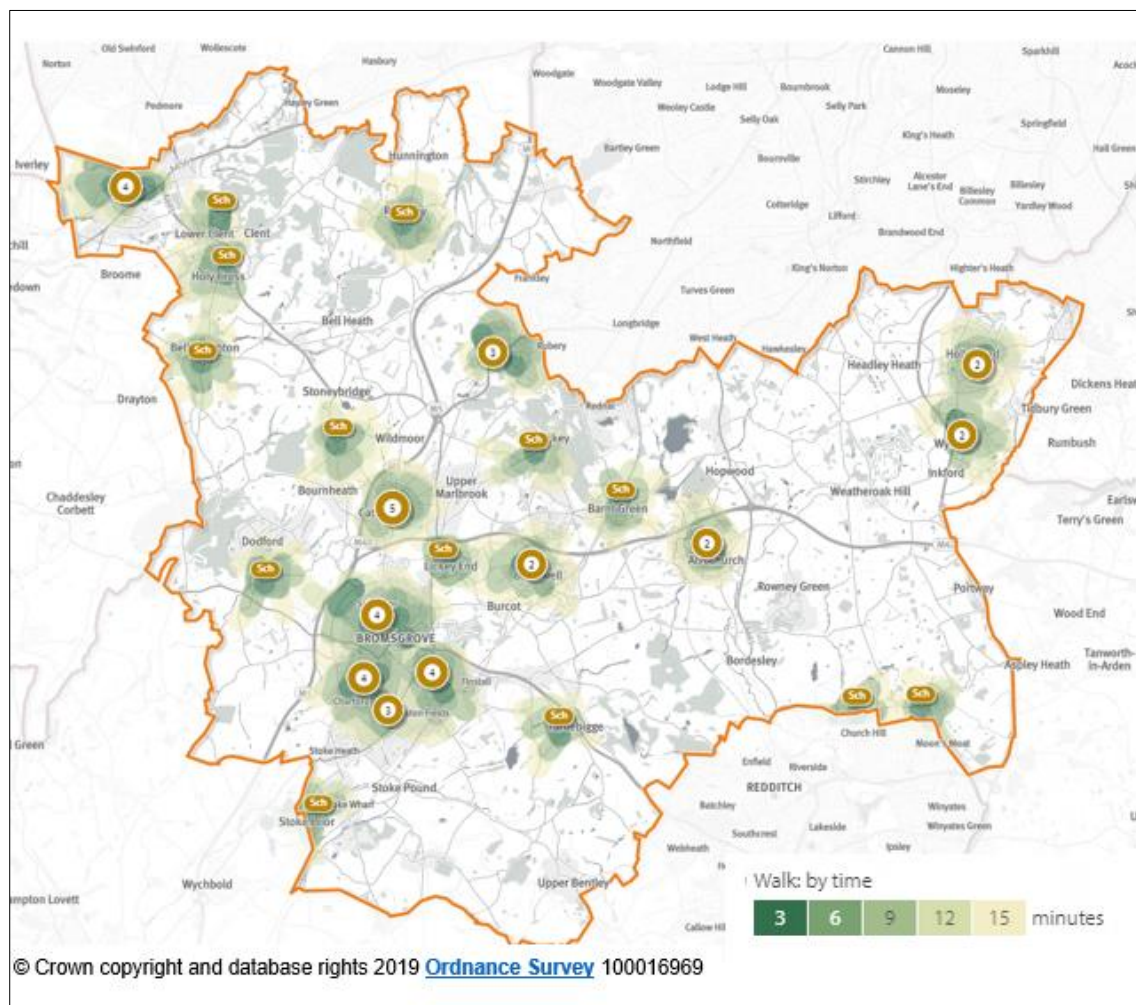
The percentage of household with with access to GPs with 15 minutes by car is 98.8% which is very similar to England average at 99.2%.

The ratio of household to health service facility (GP, Health centre or Pharmacy) is 957: 1 which is similar to the county ratio.



Walking to School

Figure 13. Walk to School: by time 15 minutes - Bromsgrove¹⁷

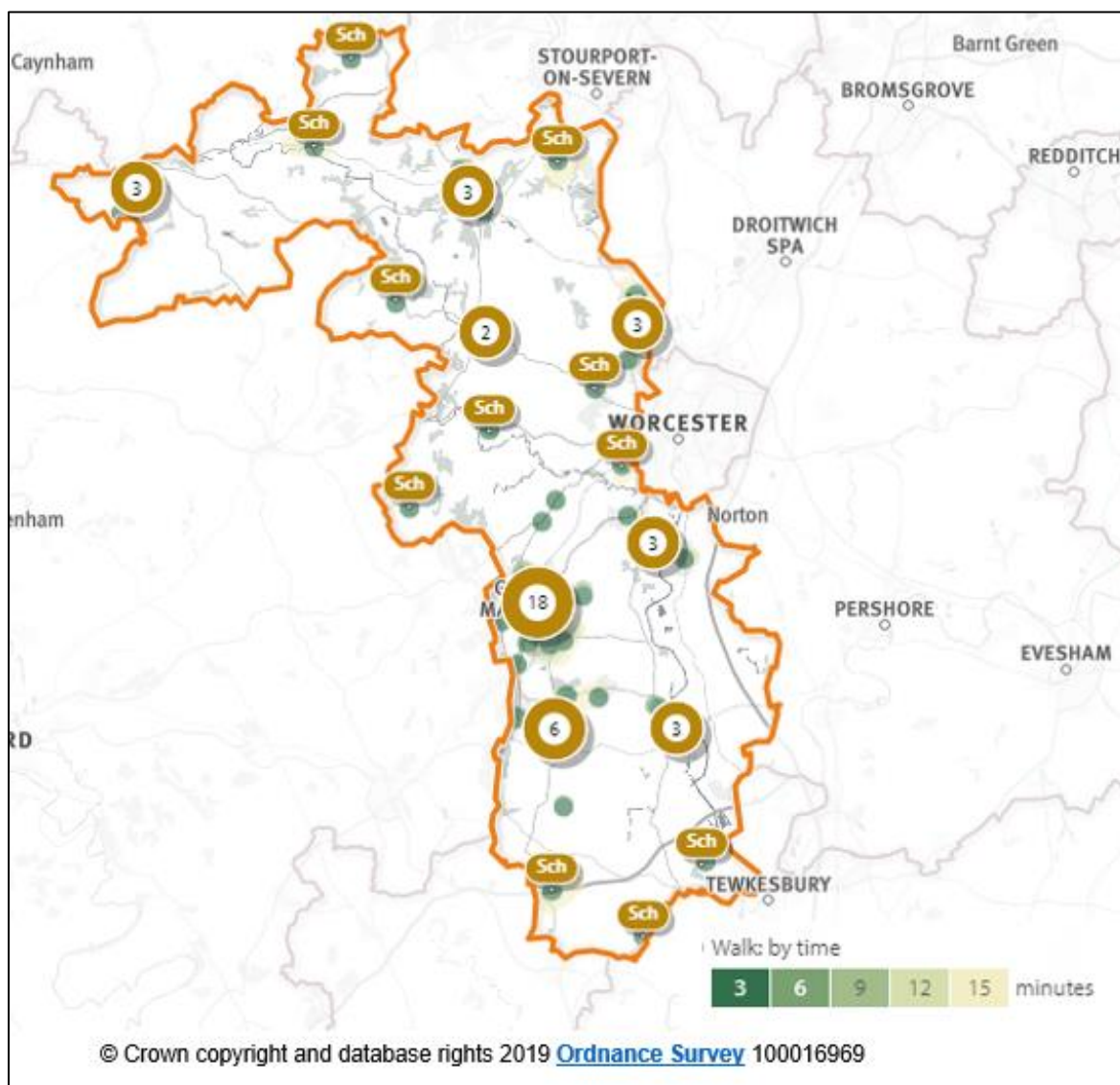


Source: [SHAPE](#)

- An estimated 79.8% of the population can access a school by walking 15 minutes.
- Approximately 19,721 people have no access to a school by walking 15 minutes.
- Approximately 4,181 of the population can access schools within 15 minutes walking time.
- There are currently 48 schools in Bromsgrove.

¹⁷ Walking time or distance covered assumes a speed of 5km per hour

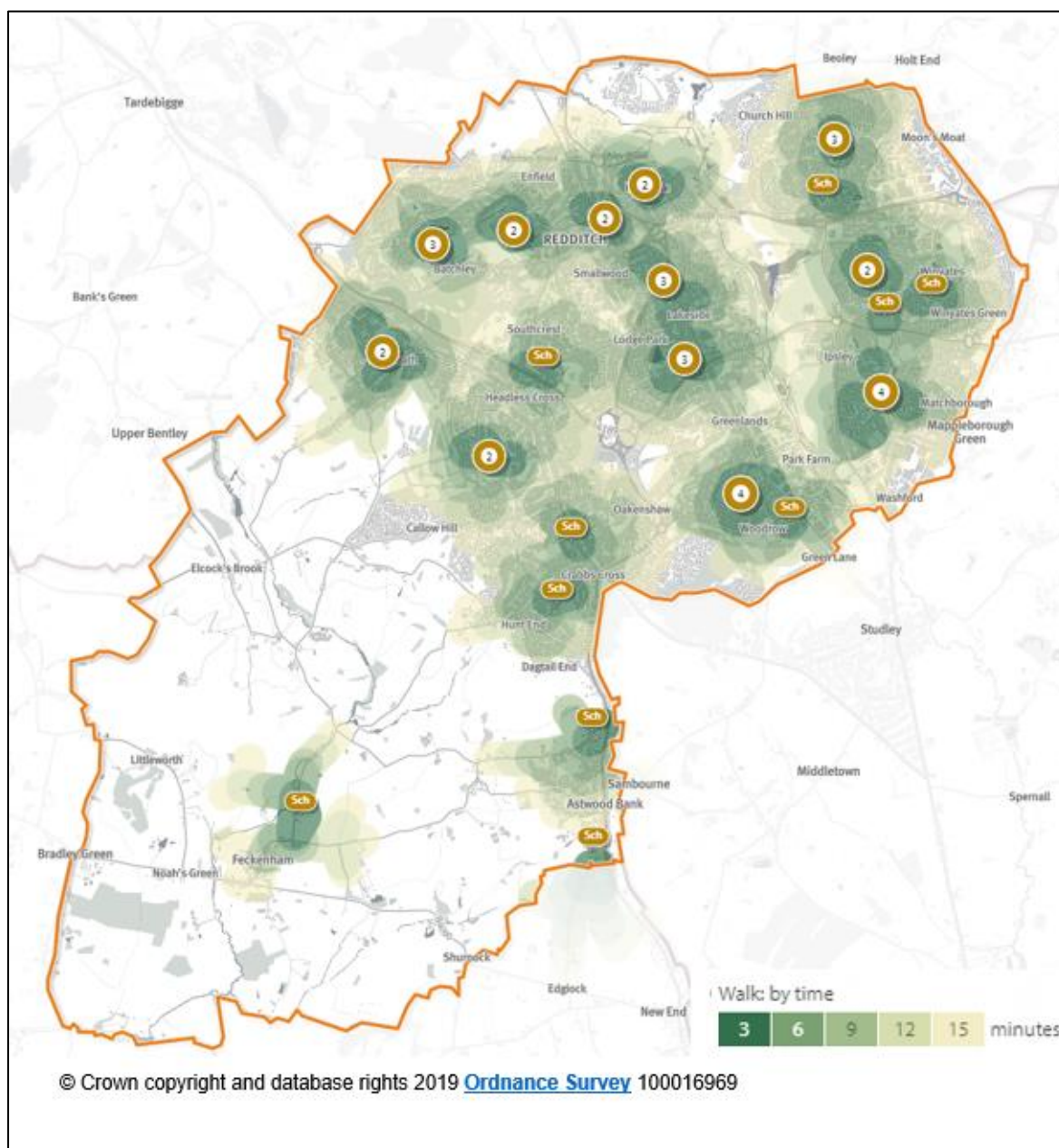
Figure 14. Walk to School: by time 15 minutes - Malvern Hills



Source: [SHAPE](#)

- An estimated 78% of the population can access a school by walking 15 minutes.
- Approximately 17,004 people have no access to a school by walking 15 minutes.
- Approximately 2,323 of the population can access schools within 15 minutes walking time.
- There are currently 52 schools in Malvern Hills.

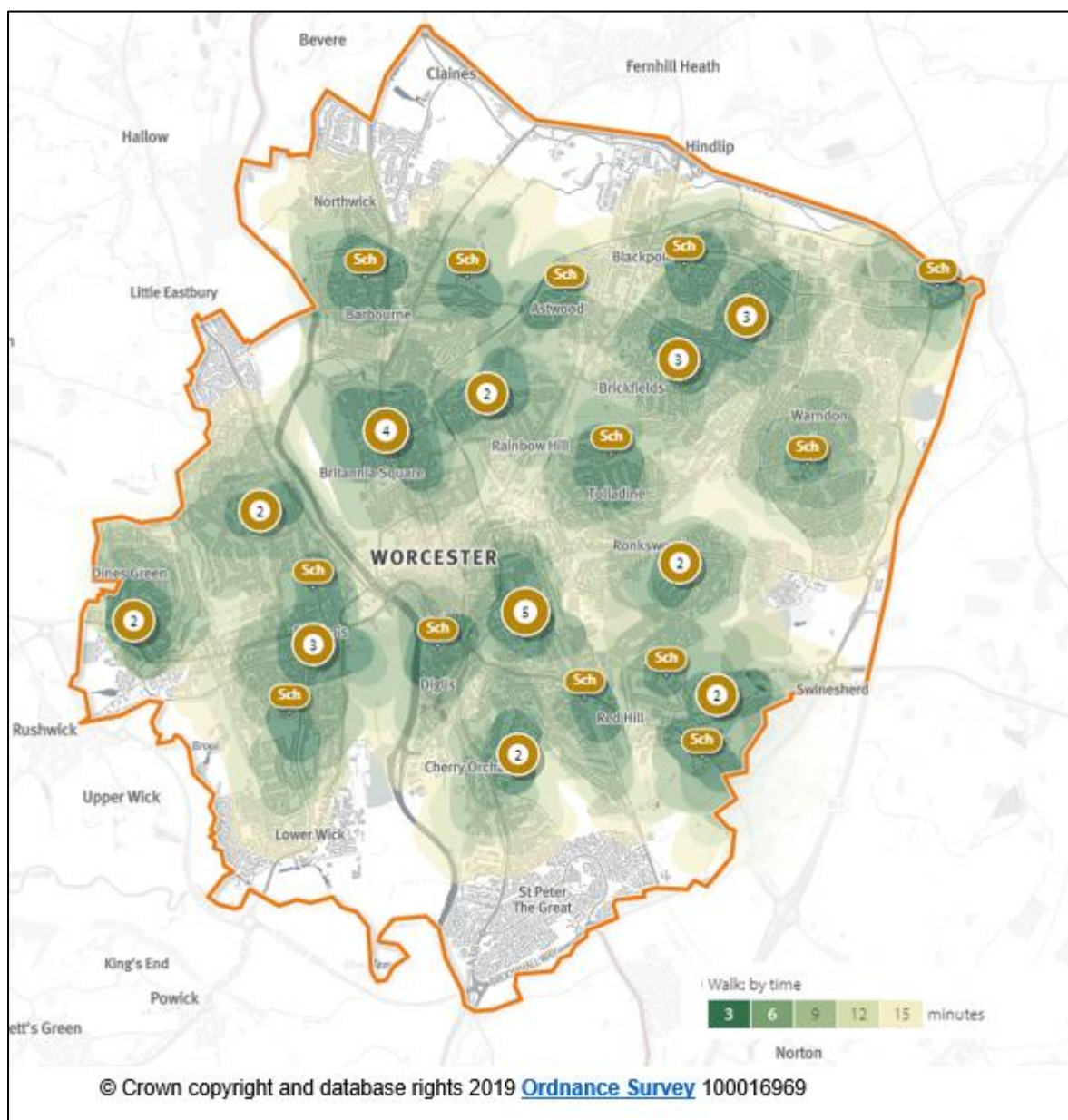
Figure 15. Walk to School: by time 15 minutes - Redditch



Source: [SHAPE](#)

- An estimated 97.03% of the population can access a school by walking 15 minutes.
- Approximately 2,453 people have no access to a school by walking 15 minutes.
- Approximately 80,083 of the population can access schools within 15 minutes walking time.
- There are currently 42 schools in Redditch.

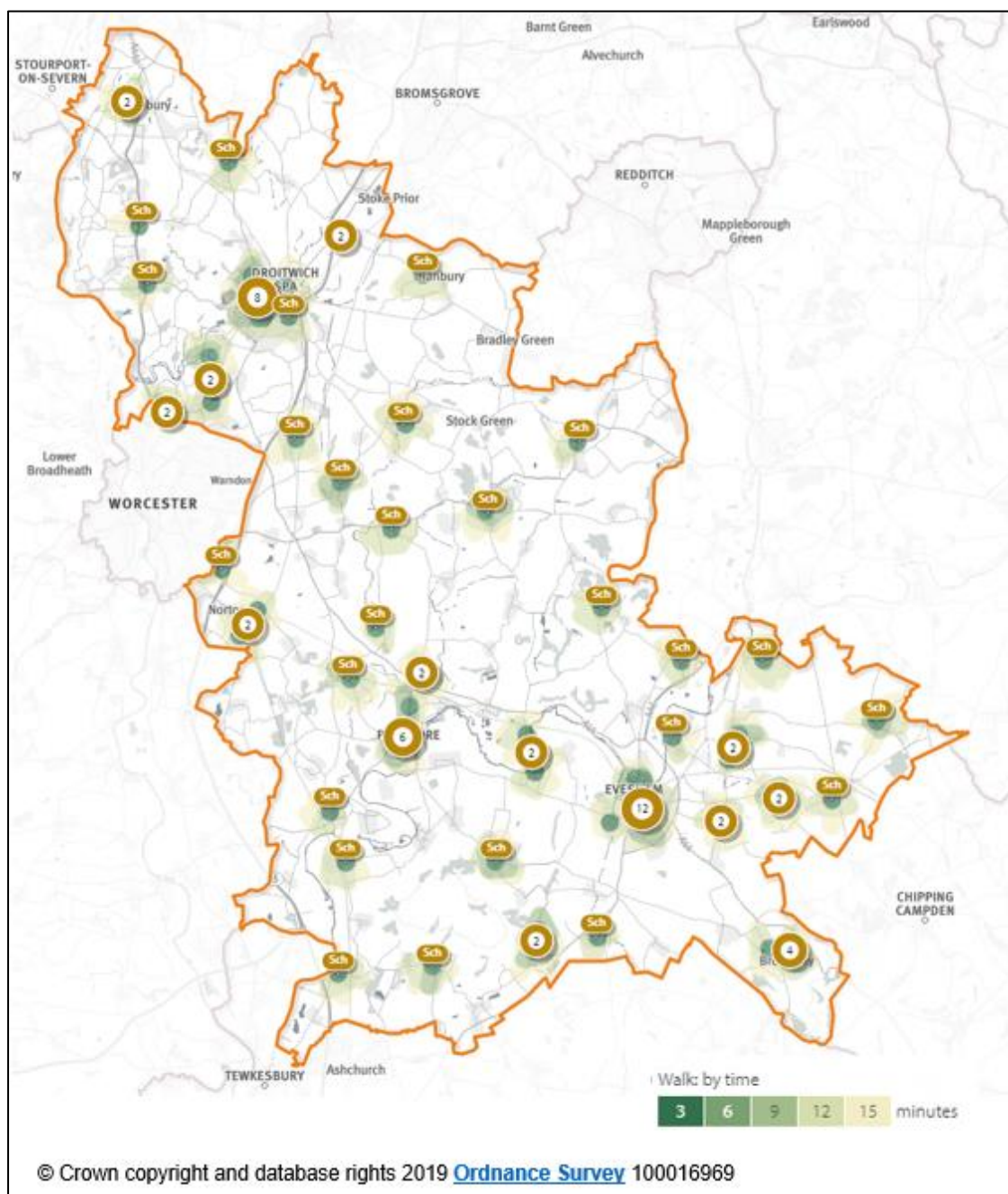
Figure 16. Walk to School: by time 15 minutes - Worcester



Source: [SHAPE](#)

- An estimated 91.2% of the population can access a school by walking 15 minutes.
- Approximately 8,203 people have no access to a school by walking 15 minutes.
- Approximately 85,485 of the population can access schools within 15 minutes walking time.
- There are currently 43 schools in Worcester.

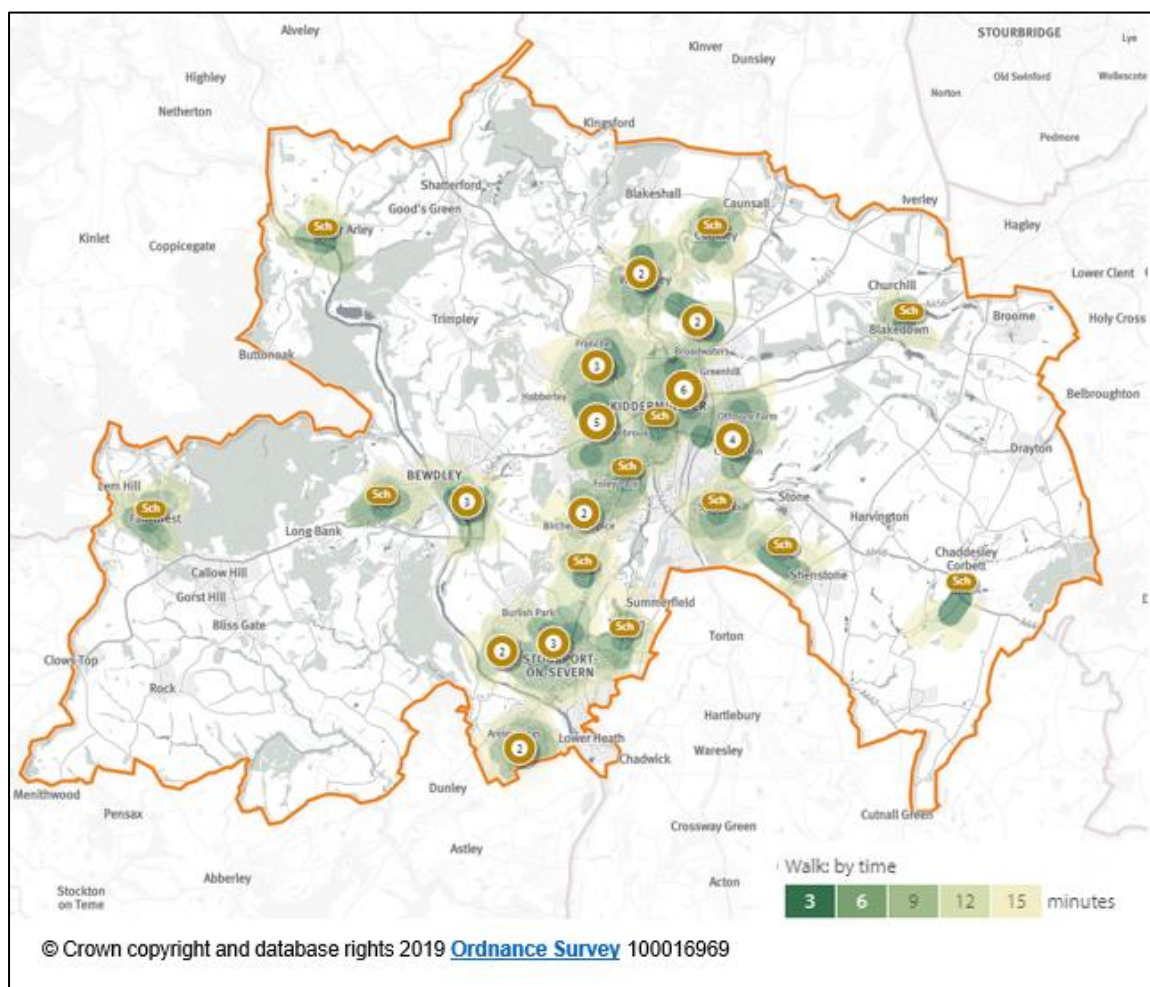
Figure 17. Walk to School: by time 15 minutes- Wychavon



Source: [SHAPE](#)

- An estimated 82.3% of the population can access a school by walking 15 minutes.
- Approximately 22,182 people have no access to a school by walking 15 minutes
- Approximately 3,094 of the population can access schools within 15 minutes walking time.
- There are currently 78 schools in Wychavon.

Figure 18. Walk to School: by time 15 minutes- Wyre Forest

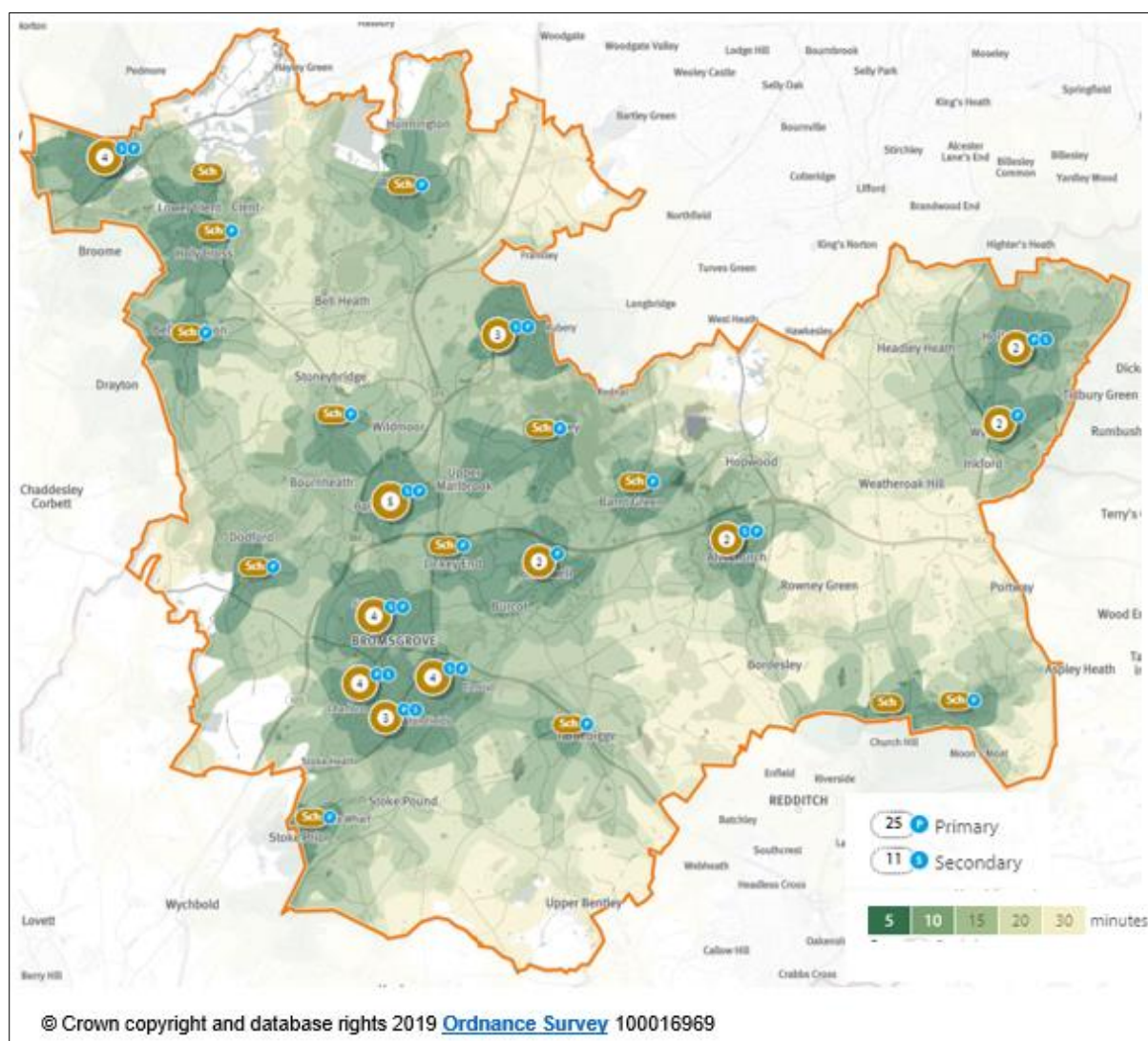


Source: [SHAPE](#)

- An estimated 77.6% of the population can access a school by walking 15 minutes.
- Approximately 18,503 people have no access to a school by walking 15 minutes
- Approximately 64,056 of the population can access schools within 15 minutes walking time.
- There are currently 46 schools in Wyre Forest.

Cycling to School

Figure 19. Cycle to School: by time 15 minutes - Bromsgrove¹⁸

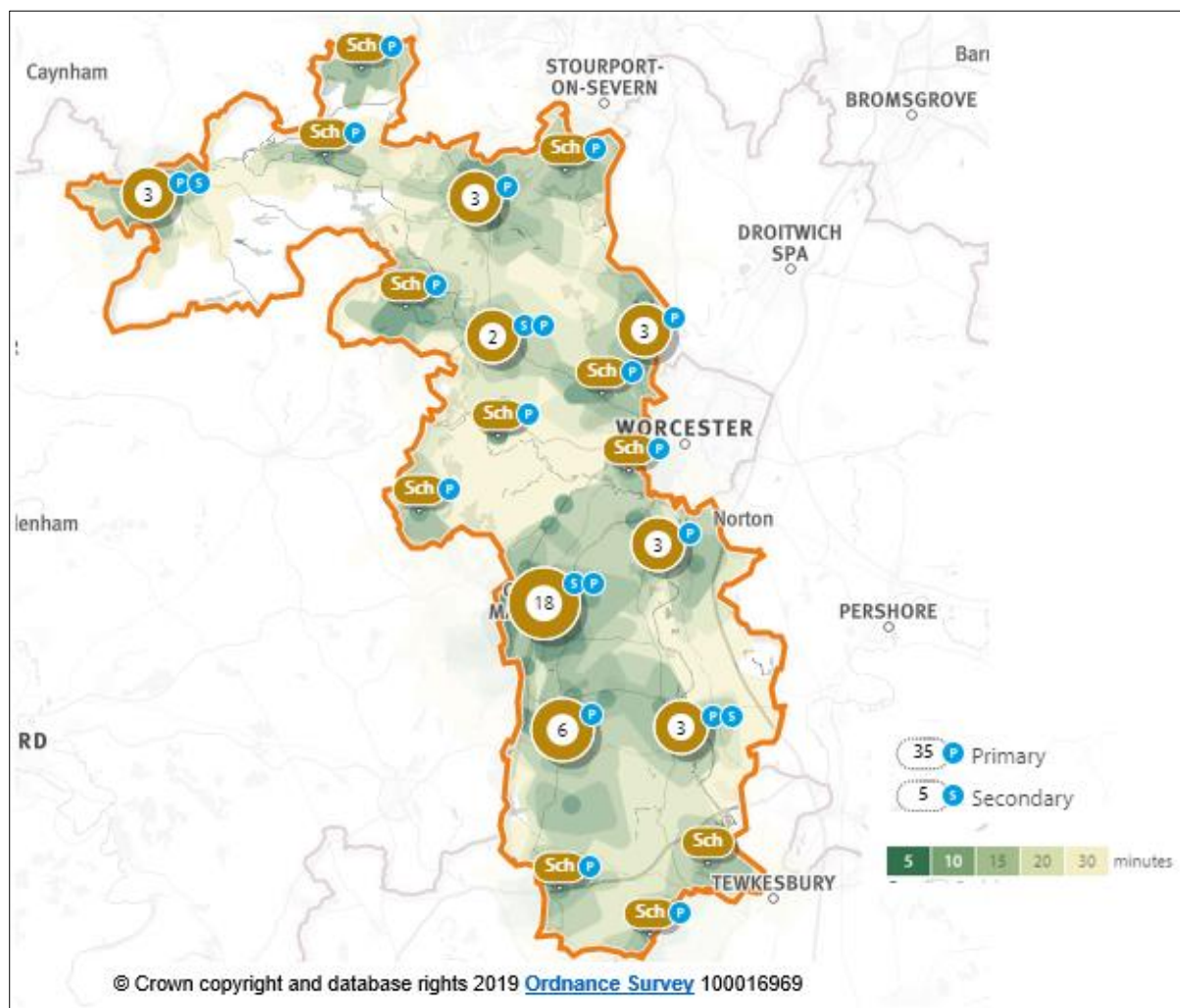


Source: [SHAPE](#)

- An estimated 98.2% of the population can access a school by cycling 15 minutes.
- Approximately 1,748 people have no access to a school by cycling 15 minutes.
- Approximately 47,770 of the population can access schools within 15 minutes cycling time.
- There are currently 48 schools in Bromsgrove.

¹⁸ Cycle to school assumes cycling speed of 15km/hour
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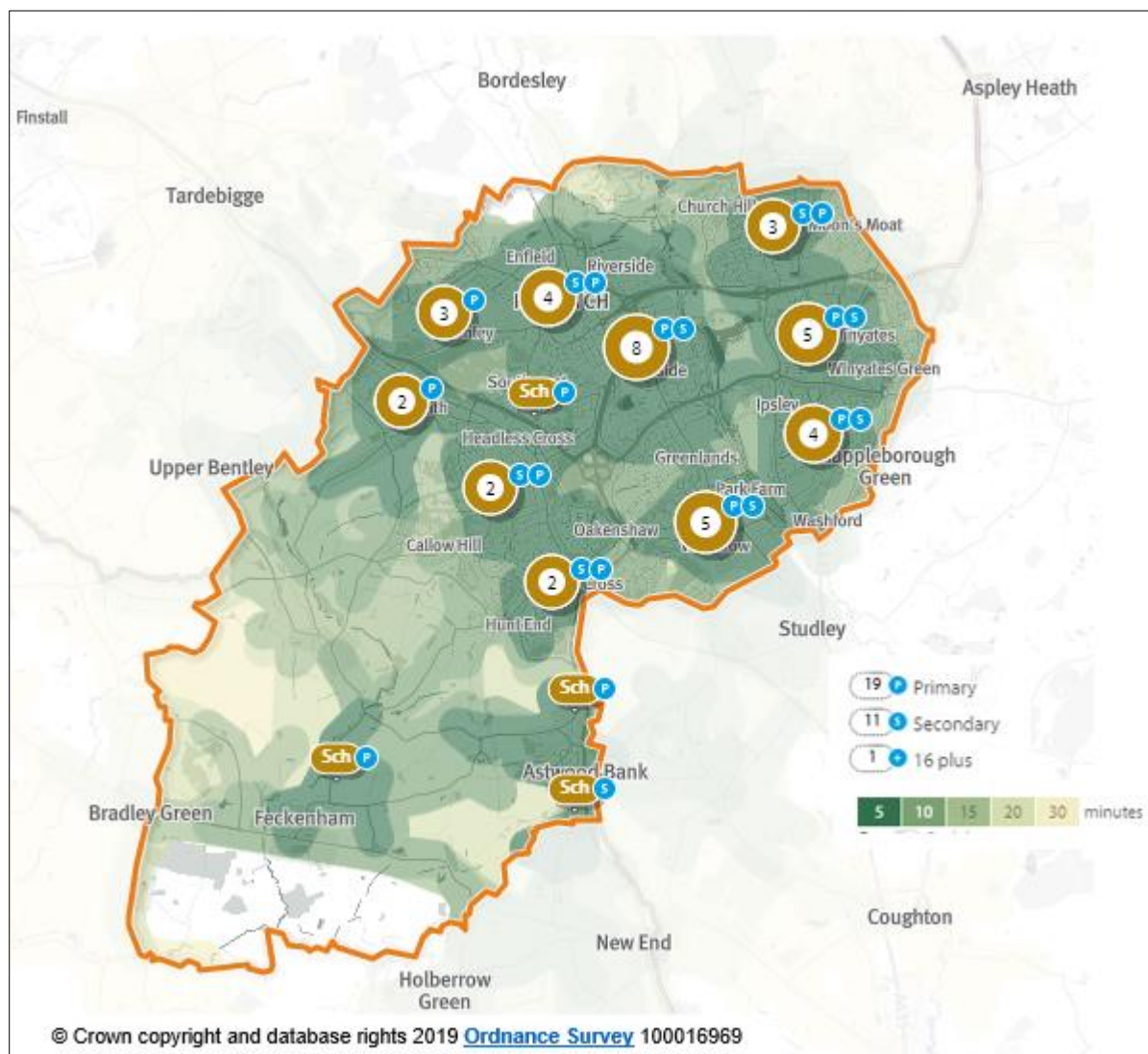
Figure 20. Cycle to School: by time 15 minutes - Malvern Hills



Source: [SHAPE](#)

- An estimated 82.7% of the population can access a school by cycling 15 minutes.
- Approximately a population of 13,355 residents have no access to a school by cycling 15 minutes.
- Approximately 21,369 of the population residents outside Malvern Hills can access schools within 15 minutes cycling time.
- There are currently 52 schools in Malvern Hills.

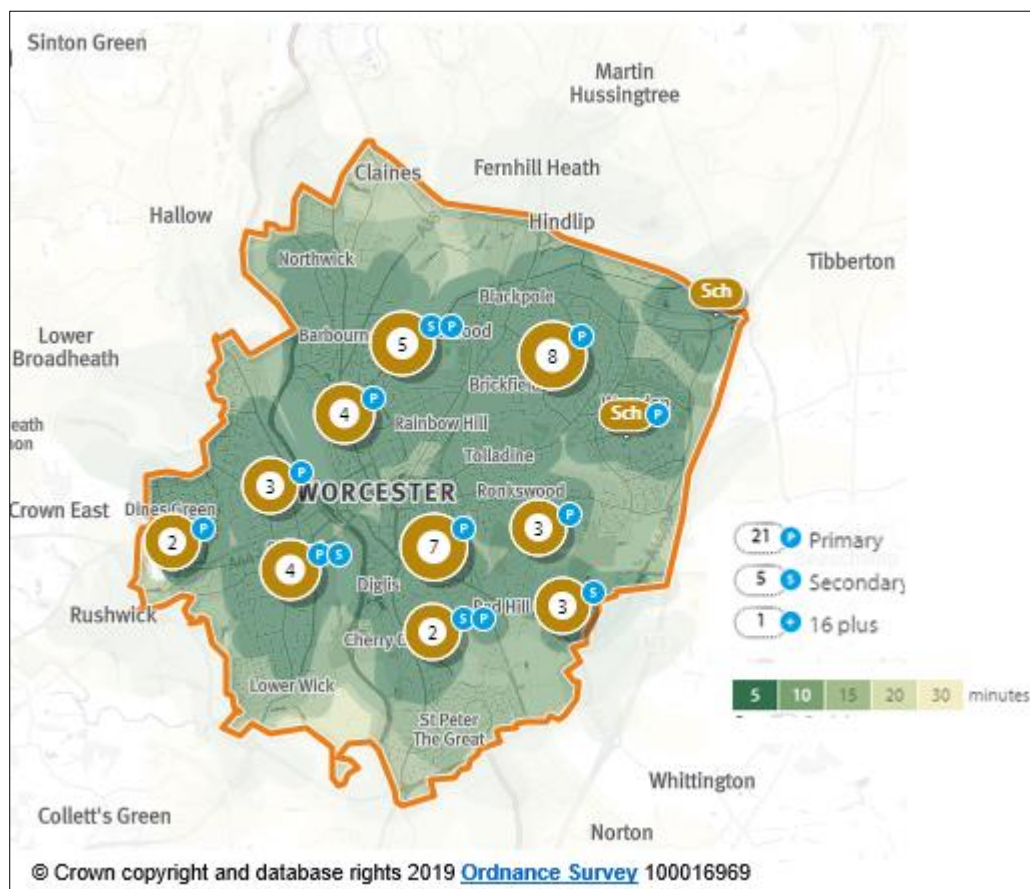
Figure 21. Cycle to School: by time 15 minutes - Redditch



Source: [SHAPE](#)

- All the population in Redditch can access a school by cycling 15 minutes.
- There are currently 42 schools in Redditch.

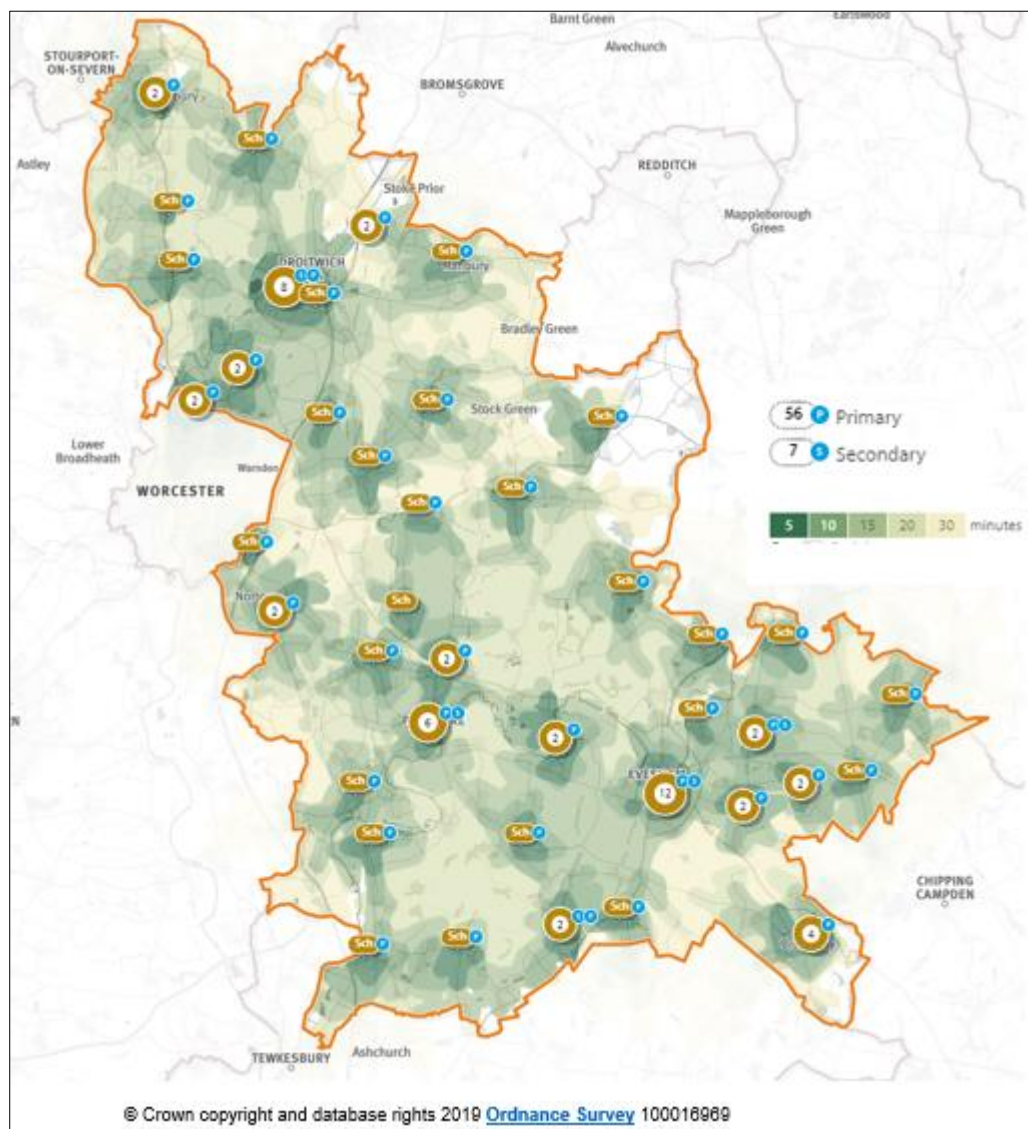
Figure 22. Cycle to School: by time 15 minutes - Worcester



Source: [SHAPE](#)

- All the population in Worcester can access a school by cycling 15 minutes.
- There are currently 42 schools in Worcester.

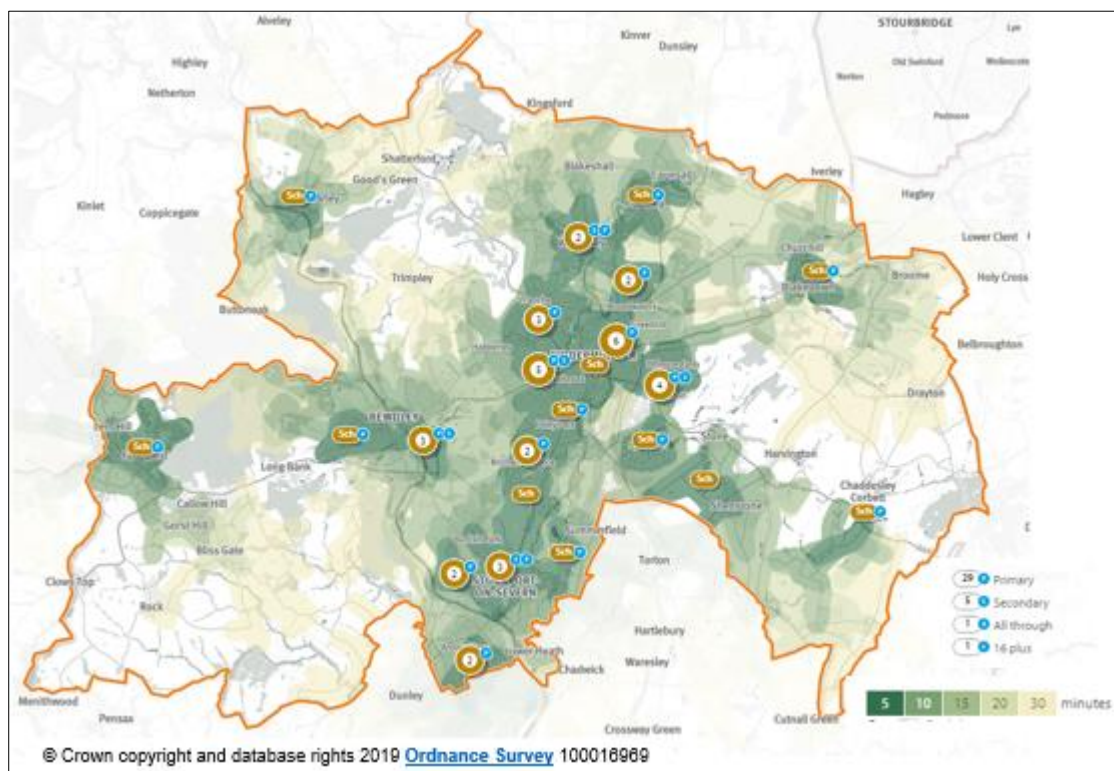
Figure 23. Cycle to School: by time 15 minutes - Wychavon



Source: [SHAPE](#)

- An estimated 95.3% of the population can access a school by cycling 15 minutes.
- Approximately 5,872 people have no access to a school by cycling 15 minutes.
- Approximately 33,031 of the population can access schools within 15 minutes walking time.
- There are currently 78 schools in Wychavon.

Figure 24. Cycle to School: by time 15 minutes - Wyre Forest



Source: [SHAPE](#)

- An estimated 94.7% of the population can access a school by cycling 15 minutes.
- Approximately 5,325 people have no access to a school by cycling 15 minutes.
- There are currently 46 schools in Wyre Forest.

Community Support, Isolation and Social Exclusion

The quality and quantity of social relationships affect physical and mental health and risk of mortality and are therefore relevant to a discussion on social isolation. People can become disconnected from social groups as a result of a range of factors including aspects of built and natural environments.¹⁹

Rural social networks are breaking down with a consequent increase in social isolation and loneliness, especially among older people.²⁰

It is important to note that although social isolation and loneliness are related concepts, they are distinctly different. Loneliness is not always a result of a lack of contact with people but can also arise as a result of a lack of meaningful relationships - conversely, someone may be physically or socially isolated but not see this as a negative thing and not feel that they are lonely. Although the terms differ in both concept and meaning, the experience of both is generally negative and the resulting impacts on health are undesirable.²¹

Public Health England (2015) has provided the following definitions to differentiate between the two:

- **Social isolation:** "the inadequate quality and quantity of social relationships with other people at the different levels where human interaction takes place"
- **Loneliness:** "an emotional perception that can be experienced by individuals regardless of the breadth of their social networks"

Our JSNA on loneliness provides detailed evidence on the health impact of loneliness. A surprising finding of the work was that the risk factors for loneliness are concentrated in the urban areas of Worcestershire.²² The risk map for Worcestershire shows higher risk of loneliness within less rural locations such as Worcester City, north Redditch, and across Wyre Forest.²³

Public Health England identified indicators related to social isolation (using social contact as a proxy) for both users of social care and carers²⁴:

- Social isolation – percentage of adult social care users who have as much social contact as they would like (18+ years)
- Social isolation – percentage of adult carers who have as much social contact as they would like (18+ years)

¹⁹ Institute of Health Equity: <http://www.instituteofhealthequity.org/resources-reports/review-of-social-determinants-and-the-health-divide-in-the-who-european-region-final-report>

²⁰ The Marmot Review Team. Fair Society, Healthy Lives: Strategic review of health inequalities in England post-2010. London: Marmot Review Team, 2010.

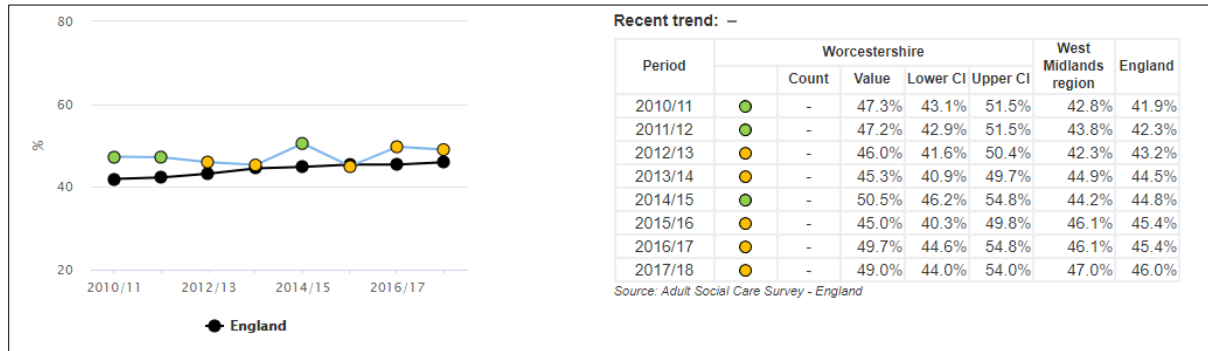
²¹ The Marmot Review Team. Fair Society, Healthy Lives: Strategic review of health inequalities in England post-2010. London: Marmot Review Team, 2010.

²² Worcestershire JSNA: http://www.worcestershire.gov.uk/homepage/301/jsna_briefings

²³ WCC Research Team: http://www.worcestershire.gov.uk/homepage/301/jsna_briefings

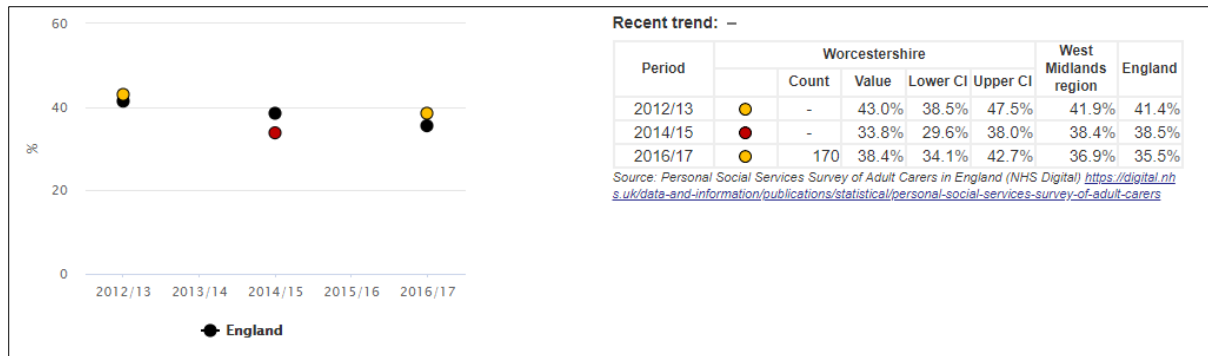
²⁴ Public Health England. Public Health Outcomes Framework: <https://fingertips.phe.org.uk/search/isolation#page/3/gid/1/pat/6/par/E12000004/ati/102/are/E06000015/iid/90280/age/168/sex/4>

Figure 25. Social Isolation: percentage of adult social care users who have as much social contact as they would like (18+ yrs)- (proportion %)



Source: [Public Health Outcomes Framework](#)

Figure 26. Social Isolation: percentage of adult carers who have as much social contact as they would like (18+ yrs)- (proportion %)



Source: [Public Health Outcomes Framework](#)

The percentage of adult social care users and carers who have as much social contact as they would like is similar to England.

Table 5. Social Isolation Indicators for Worcestershire Against its CIPFA Nearest Neighbours (2019)

		Worcestershire (%)	CIPFA nearest neighbours (2019) (%)	West midlands (%)	National Average (%)
Social Isolation: percentage of adult social care users who have as much social contact as they would like (18+ yrs)	2017/18	49	45.35	47	46
Social Isolation: percentage of adult carers who have as much social contact as they would like (18+ yrs)	2016/17	38.4	33.9	36.9	35.5
Social Isolation: percentage of adult social care users who have as much social contact as they would like (65+ yrs)	2017/18	45.4	42.8	43.6	44
Social Isolation: percentage of adult carers who have as much social contact as they would like (65+ yrs)	2016/17	36	35.3	39.2	38.3

Source: [Public Health Outcomes Framework](#)

Against other counties considered statistically similar, Worcestershire has performed above average.

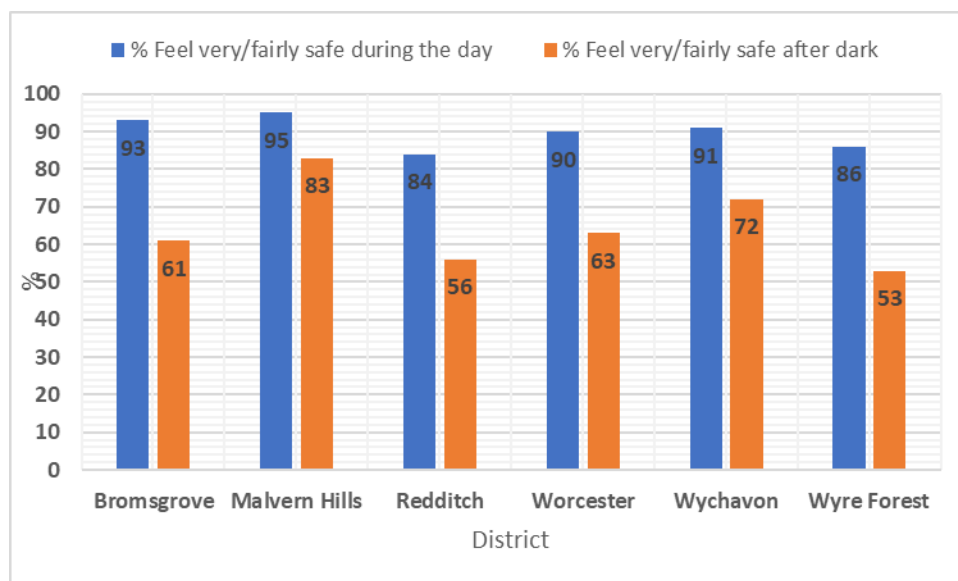
Community Safety

Safe public spaces, with pavements to walk on and lighting, are also part of the physical infrastructure that helps people to maintain social connections.

Community factors influenced by societal factors such as political climate, levels of crime and anti-social behaviour all influence personality, confidence and resilience, which in turn influence relationships and inhibit the quantity and quality of social networks.²⁵ A survey conducted by the Worcestershire County Council Research Team including questions on community safety provided the data presented in Figure 27.

The question asked was: **How safe or unsafe do you feel when outside in your local area after dark and during the day?**

Figure 27. Perceptions of Community Safety by District - 2018



Worcestershire County Council – [Viewpoint Survey](#)

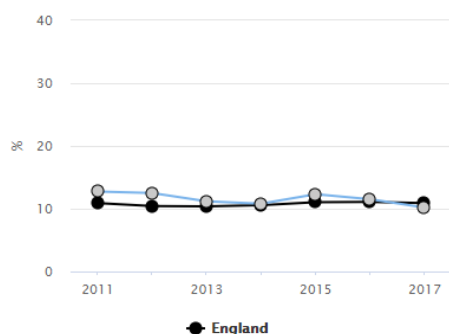
Respondents from all districts generally feel safe during the day compared to after dark. Perceptions of safety seem to be lowest in Redditch during the day and Wyre Forest at night.

Housing and Fuel Poverty

Affordability, poor quality housing and significant fuel poverty in the most rural areas are threatening the wellbeing and sustainability of communities. House prices are higher in rural areas and there is much less housing association and council housing. There is a much higher proportion of ‘non-decent’ homes and of houses which are energy inefficient and many areas are not on the gas grid which leads to higher energy prices.

²⁵ Clarke D, McDougall E. Social Isolation in Bristol: Risks, Interventions and Recommendations Report 2014

Figure 28. Fuel Poverty Trend – Worcestershire vs England 2011-2017



Recent trend: ↓

Period	Worcestershire				West Midlands region	England
	Count	Value	Lower CI	Upper CI		
2011	30,613	12.8%	-	-	13.8%	10.9%
2012	29,302	12.5%	-	-	15.2%	10.4%
2013	26,915	11.2%	-	-	13.9%	10.4%
2014	26,159	10.8%	-	-	12.1%	10.6%
2015	30,001	12.3%	-	-	13.5%	11.0%
2016	28,694	11.5%	-	-	13.7%	11.1%
2017	25,695	10.2%	-	-	12.6%	10.9%

Source: Department for Business, Energy and Industrial Strategy

Source: [Public Health Outcomes Framework](#)

Around 1 in 10 households in Worcestershire experience fuel poverty based on the "Low income, high cost" methodology. This may be due to a number of factors including:

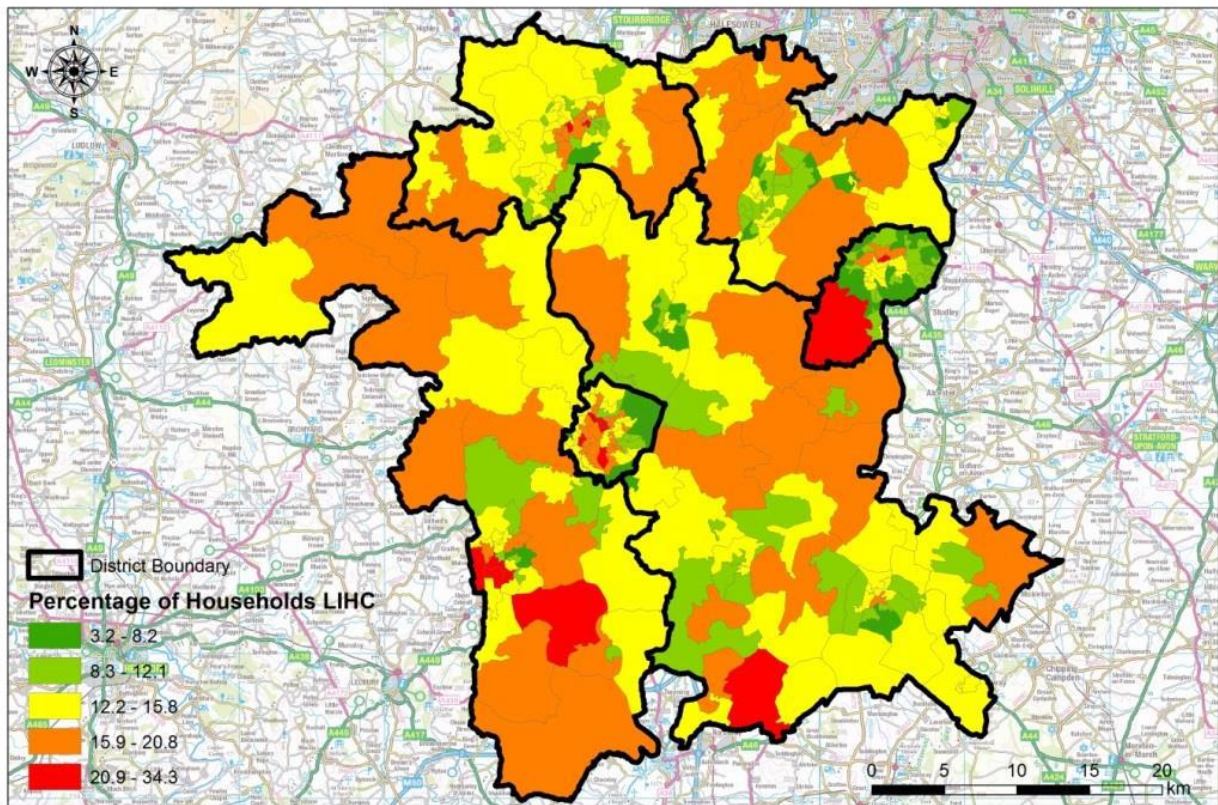
- The dominance of rurality in many parts of Worcestershire would increase the possibility of fuel poverty in the county. Using the Standard Assessment Procedure for energy rating of dwellings (SAP) there is evidence that suggest that people living in properties with a SAP of <35 tend to experience fuel poverty²⁶. Many in fuel poverty live in houses with solid walls (particularly common in rural areas) and may also be outside the mains gas network, hence relying on more expensive forms of heating and old inefficient boilers.
- There is a high population of older people aged 65 plus in Worcestershire which increases the possibility of higher single occupancy households. Under occupancy is a key factor, frequently representing older people living alone who are more likely to have lower income and live in larger houses which are more costly to heat.
- The cost of energy has increased over the years putting the most vulnerable groups at risk particularly the 65s and over that rely on income from pensions. It is also known that those most at risk of fuel poverty are paying higher prices for fuel due to poor internet usage and connectivity in rural areas. The older population tend to use traditional payment methods e.g. paying by cash or cheque which generally cost more than paying by direct debit or online.²⁷

Recently the trend has been downwards.

²⁶ On a scale from 10 to 100 – a higher SAP means better thermal efficiency

²⁷ Director of Public Health Annual Reports <http://www.worcestershire.gov.uk/info/20122/joint>

Figure 29. Fuel Poverty by LSOA (New Method)



Fuel Poverty by LSOA in Worcestershire (New Measure)

Source: Worcestershire County Council

Figure 29 shows the percentage of households living in fuel poverty. The highest percentages are predominantly in areas classified as rural.

Figure 30. Fuel Poverty -Worcestershire Districts Recent Trend 2016

Compared with benchmark Not compared

Areas All in Worcestershire

1.17 - Fuel poverty 2016 Proportion - %

Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	▲	2,550,565	11.1	-	-
Worcestershire	▼	28,694	11.5	-	-
Bromsgrove	▼	3,978	10.0	-	-
Redditch	▶	3,820	10.6	-	-
Wychavon	▼	5,521	10.7	-	-
Wyre Forest	▼	5,583	12.5	-	-
Malvern Hills	▼	4,244	12.6	-	-
Worcester	▼	5,548	12.7	-	-

Source: Department for Business, Energy and Industrial Strategy

Source: [Public Health Outcomes Framework](#)

Recent trend shows an improvement for all districts except Redditch whose trend remain constant.


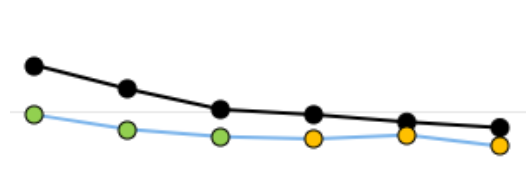
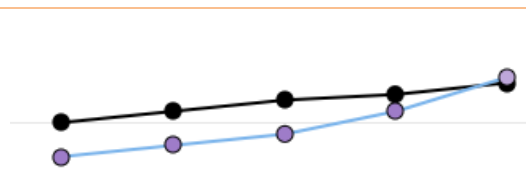
Employment and Unemployment

The economic inactivity rate, together with the unemployment rate and employment rate provide information of the labour market status of all people in the population range.²⁸

Employment status has both an associative and a causal relationship with a range of health outcomes and therefore indicators of these statuses form an important part of understanding wider determinants of health.

Job density and unemployment when interpreted together provide insight into the local make-up of the labour market and wider economy.

Figure 31. Selected work and the labour market indicators

Indicator	Description	Trend against England ²⁹
Employment	Percentage of people aged 16-64 in employment	
Unemployment	Percentage of the economically active population aged 16+ without a job	
Job Density	Jobs are present in a given area relative to the resident population	

Source: [Public Health Outcomes Framework](#)

The overall economic picture for Worcestershire is very positive³⁰. Jobs available relative to the resident population is increasing at a faster rate compared to England. For local insight, job density is particularly useful with the unemployment rate.

Worcestershire’s low unemployment combined with high and increasing job density is indicative of positively performing economy, with lots of jobs for the population.

Best Practice

The **Department for Environment, Food & Rural Affairs** has the responsibility of safeguarding our natural environment, supporting the food and farming industry, and sustaining a thriving rural economy. More information is available from:

²⁸ NOMIS <https://www.nomisweb.co.uk/reports/lmp/lep/contents.aspx>

²⁹ England shown in black

³⁰ NOMIS <https://www.nomisweb.co.uk/reports/lmp/lep/contents.aspx>

<https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/services-information>

Associated Documents and Links

The Statistical Digest of Rural England

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/566779/Statistical_Digest_of_Rural_England_2016_September_edition_-_v2.pdf

Public Health England Health Profiles

<https://fingertips.phe.org.uk/profile/public-health-outcomes-framework>

Worcestershire County Council Joint Health and Well-being Strategy 2016 to 2021

http://www.worcestershire.gov.uk/downloads/file/7051/joint_health_and_well-being_strategy_2016_to_2021

Worcestershire Joint Strategic Needs Assessment (JSNA)

http://www.worcestershire.gov.uk/homepage/301/jsna_briefings

Who Might Find this Report Useful?

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Children's Social Care

Environmental Services

Libraries, Archive and Archaeology

Schools Education and Learning

Travel and Roads Services

Data Notes

Organisations who carried out the original collection and analysis of the data bear no responsibility for its further analysis or interpretation.

Further Information and Feedback

This report has been written by Worcestershire County Council's Public Health Team. We welcome your comments on these reports and how they could better suit your requirements, please do contact us with your ideas.

Email: jfulton@worcestershire.gov.uk Tel: 01905 843359

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