

This report examines aspects of demography within Worcestershire, including the current population structure, migration patterns, and ONS population and CLG household projections.

Worcestershire Demographic Report 2011 with South Worcestershire Appendix

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1. Aim of the Report

This report updates parts of the demographic evidence base for Worcestershire.

It is intended that the data and analysis in this report will improve understanding of trends in population, migration and household formation to inform local decision-making.

2. Introduction

This report looks at many aspects of demography in Worcestershire, including;-

- Population estimates, by age, gender and urban/rural;
- Projected population change over time, by age group;
- Projected household change over time, by type of household.

3. About Worcestershire

Worcestershire County is located in the heart of England towards the south of the West Midlands Region. The county borders Herefordshire, Shropshire, Staffordshire, the West Midlands Metropolitan Area, Warwickshire and Gloucestershire. The county has two main rivers running through it, the Severn and the Avon. To the west of the county are the Malvern Hills, and to the south-east are the Cotswolds, both designated Areas of Outstanding Natural Beauty. The north of the county borders the West Midlands conurbation.

Worcestershire consists of six districts, namely: Bromsgrove; Malvern Hills; Redditch; Worcester City; Wychavon; and Wyre Forest. Worcester City is the main administrative and employment centre in Worcestershire, but the county also contains the towns of Kidderminster, Redditch, Bromsgrove, Stourport-on-Severn, Malvern, Evesham and Droitwich Spa.

By area Worcestershire is largely a rural county, although around 70% of the population lives in urban areas. Wychavon and Malvern Hills are the two most rural districts.

Throughout the report references will be made to 'North Worcestershire' and 'South Worcestershire'. North Worcestershire consists of the districts of Bromsgrove, Redditch and Wyre Forest, whilst South Worcestershire contains the districts of Malvern Hills, Worcester City and Wychavon.

4. Population Estimates and Population Structure

In mid-2009, the population of Worcestershire was an estimated 556,500. The local authority with the most residents is Wychavon with 116,700, whilst Malvern Hills has just 74,700 residents.

Figure 1 below shows the age structure in the county in comparison with both the West Midlands Region and the whole of England. The data are from the Office of National Statistics (ONS) which produces mid-year estimates annually.

It can be seen that the age structure in Worcestershire is rather different to both the regional and national averages, with a noticeably lower proportion of people in the 0-5 and 19-34 age ranges, and a notably higher percentage aged 45-plus.

The most pronounced difference between the age structure in the county and that seen in the national figures is amongst young adults. The 19-34 age group in Worcestershire represents 16.4% of the total population, compared to 21.3% nationally and 20.2% regionally. This is due to high levels of out-migration from Worcestershire, especially amongst those aged 19-24 years, in favour of larger towns and cities, to access higher education or better employment prospects.

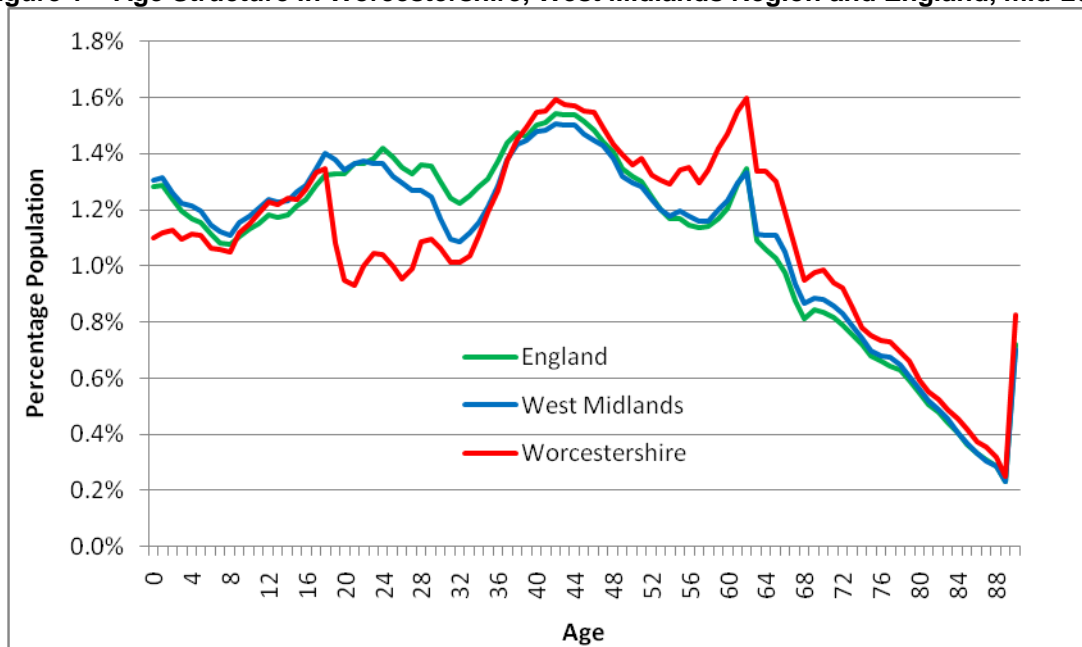
Worcestershire also has a slightly lower proportion of children aged 0-5 than the national average; since the county experiences a net gain in terms of young children due to the migration of families, this is due to there being a lower proportion of women of child-bearing age in the county, especially in the 19-34 age range.

The other noticeable difference is amongst people aged over 45, which is consistently higher in Worcestershire than either national or regional figures across all ages. People aged 45-plus in Worcestershire constitute 46.8% of the total

population, compared to 41.5% and 42.1% respectively in England and the West Midlands. Worcestershire therefore has an older age profile than the national average. This is due to people tending to settle in Worcestershire (and other areas that are more rural) when raising a family, or later in life, for example around retirement age.

Worcestershire, in line with national and regional patterns demonstrates a population "spike" amongst those in their early 60's. This is a product of the large increase in births seen just after World War II, known as the "baby boom". As these people start to move into retirement, this will have a marked impact upon the size of the working age population, whilst demand for services used by older people is likely to increase.

Figure 1 – Age Structure in Worcestershire, West Midlands Region and England, mid-2009



Source – ONS mid-year estimates, 2009

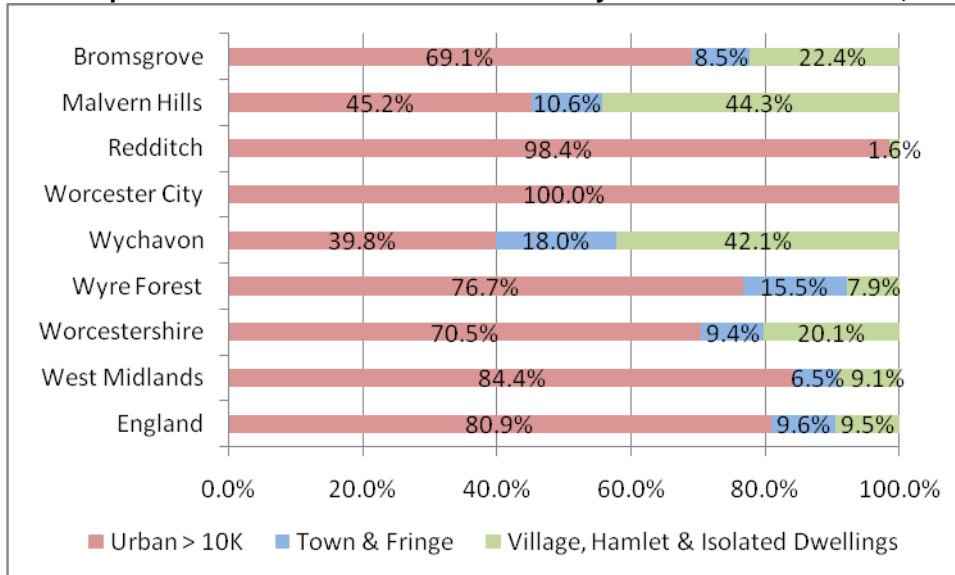
Almost 71% of people in Worcestershire live in urban areas, with 20% of the population living in rural villages, or hamlets. This illustrates that Worcestershire is "less urban" than either the West Midlands Region (in which over 84% of people live in larger urban areas) or the whole of England (in which 81% of the population live in larger urban areas).

The variation across the districts is considerable. Almost all of the population in Worcester City and Redditch live in urban areas, with the exception of Feckenham Parish in Redditch. Wyre Forest, which contains Kidderminster and Stourport-on-Severn, has around three-quarters of its population living in urban areas, whilst Bromsgrove has an urban population of almost 70%. This consists not only of those living in Bromsgrove town, but also includes many areas near the border with Birmingham, including Hagley, Hollywood, Drakes Cross, Waseley and Beacon near Rubery.

In contrast, the most rural districts of Malvern Hills and Wychavon have over 40% of people living in rural villages or hamlets. These areas do also each have around 40% of population in urban areas, mainly in Malvern town in Malvern Hills, and in Droitwich and Evesham in Wychavon.

Overall, North Worcestershire is more urban than South Worcestershire, with 80% of people living in urban areas compared to just 60% in the south of the county. North Worcestershire has 11% of people living in rural villages or hamlets, compared to 29% in South Worcestershire.

Figure 2 – Population for Worcestershire Districts by Urban/Rural Definition, mid-2008

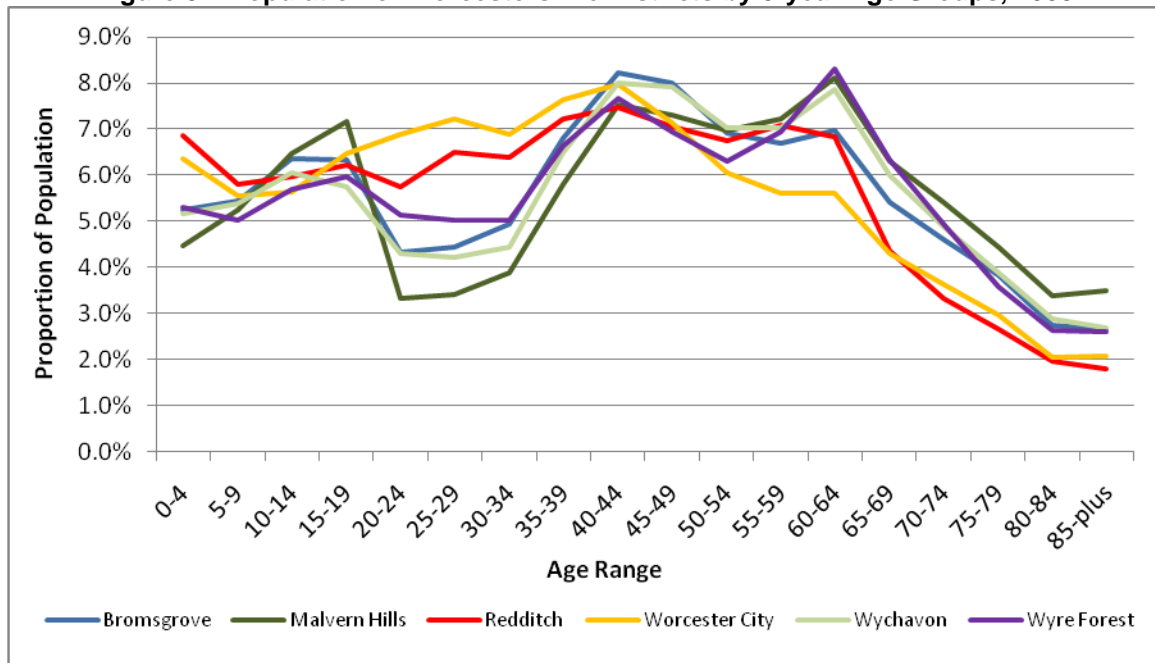


Source - ONS Urban/Rural Definition, mid-2008

Figure 3 illustrates the age structure of the Worcestershire districts in relation to each other. This highlights the marked decline between the 15-19 age band and the 20-24 age band, most notably in Malvern Hills but also in Bromsgrove and Wychavon, as families with children tend to move into these areas, but young adults aged 18-24 tend to move out of these areas in favour of urban areas for job opportunities or education.

The other interesting feature is in the 60-64 age group, where the population "spike" representing the "baby boomers" is prominent across the districts, albeit less so in the urban districts of Redditch and Worcester City as pre-retirement groups tend to migrate out of these areas.

Figure 3 – Population of Worcestershire Districts by 5-year Age Groups, 2008



Source – ONS 2009 mid-year estimates

Across the county as a whole 18.2% of people are aged 15 and under, whilst around 18.7% are aged 65-plus. This reinforces the fact that the age structure of the county is older than both the West Midlands Region (in which almost 17% are 65 and over) and England (in which 16.3% are 65-plus).

The urban districts of Redditch and Worcester City clearly have the youngest age structures in the county, with Redditch in particular having a high proportion of children resident (almost 20%), whilst Worcester City (18.7%) has a level of 0-15 year olds similar to the national average.

The student and young adult (16-24) age group in the county represents 10% of the population, which is around two percentage points lower than the national and regional figures. Only Worcester City has a proportion of 16-24 year olds comparable with the national average, due to the job and education opportunities that exist there, which includes the University of Worcester. Proportions of young adults are particularly low in the rural areas of Wychavon and Malvern Hills.

Across the county, 63.1% of the population is aged 16-64, which broadly represents the 'working age'. The proportion is highest in Worcester City and Redditch (66.3% and 66.0% respectively) and lowest in Malvern Hills (59.3%).

Proportions of older people are noticeably lower in the urban districts of Worcester City and Redditch and indeed are below the national and regional averages, whilst the rural districts, particularly Malvern Hills, have much higher proportions of residents aged 65 and over.

The county has an estimated 104,000 residents aged 65-plus (18.7%), and 14,200 persons aged 85 and over (2.5%). Again, the urban districts in the county, most notably Redditch, have a lower proportion of people aged 65-plus and 85-plus than the rural districts, especially Malvern Hills.

The result of the district patterns described is that South Worcestershire as a whole has a rather older age structure than North Worcestershire. While proportions of children are similar at around 18% (although are slightly higher in North Worcestershire), the percentage of people aged 65 and over is noticeably higher in South Worcestershire at 19.3%, compared to 18.0% in North Worcestershire.

Table 1 – Population of Worcestershire Districts by Broad Age Groups, 2009

Area	Aged 0-15	Aged 16-24	Aged 25-44	Aged 45-64	Aged 65-plus
Bromsgrove	18.3%	9.4%	24.4%	28.6%	19.3%
Malvern Hills	17.6%	9.1%	20.6%	29.6%	23.1%
Redditch	19.9%	10.7%	27.6%	27.7%	14.1%
Worcester City	18.7%	12.2%	29.7%	24.4%	15.0%
Wychavon	17.8%	8.9%	23.2%	29.8%	20.4%
Wyre Forest	17.2%	9.9%	24.3%	28.5%	20.1%
Worcestershire	18.2%	10.0%	25.0%	28.1%	18.7%
North Worcs	18.4%	10.0%	25.3%	28.3%	18.0%
South Worcs	18.0%	10.0%	24.7%	28.0%	19.3%
West Midlands	19.4%	12.2%	26.3%	25.2%	16.9%
England	18.7%	12.0%	27.8%	25.2%	16.3%

Source – ONS 2009 mid-year estimates

Table 2 – Mid-2009 Population Estimates – Key Age Groups (thousands)

Area	18-24	%	16-64	%	65-plus	%	85-plus	%	All Persons
Bromsgrove	6.2	6.7%	58.3	62.4%	18	19.3%	2.5	2.7%	93.4
Malvern Hills	4.4	5.9%	44.5	59.3%	17.3	23.1%	2.6	3.5%	75
Redditch	6.5	8.2%	51.9	66.0%	11.1	14.1%	1.4	1.8%	78.7
Worcester City	9.2	9.8%	62.8	66.3%	14.2	15.0%	2	2.1%	94.7
Wychavon	7.5	6.4%	72.2	61.9%	23.7	20.4%	3.1	2.7%	116.7
Wyre Forest	7.3	7.4%	61.5	62.7%	19.7	20.1%	2.6	2.6%	98.1
Worcestershire	41.2	7.4%	351.2	63.1%	104	18.7%	14.2	2.5%	556.5
North Worcs	20	7.4%	171.8	63.6%	48.8	18.0%	6.4	2.4%	270.2
South Worcs	21.1	7.4%	179.5	62.7%	55.2	19.3%	7.7	2.7%	286.3
West Midlands	520.8	9.6%	3,459.6	63.7%	918.3	16.9%	120.6	2.2%	5,431.10
England	4,929.50	9.5%	33,676.3	65.0%	8,434.50	16.30%	1,162.80	2.2%	51,809.70

Source – ONS mid-year estimates, 2009

Since 1991 the population of Worcestershire has increased by around 8.6%. This is a similar increase to that seen nationally, but rather higher than the regional equivalent. It is apparent that the relative growth in population in the county has slowed notably in more recent years. The change since 2001 in Worcestershire is 2.6%, noticeably lower than the national equivalent of 4.8% and on a par with the regional figure.

Table 3 – Population Change over Time, 1991 - 2009 (thousands)

Area	1991	2001	2005	2008	2009	Change 1991-09	Change 2001-09	Change 2008-09
Bromsgrove	83.2	87.9	91.1	93.0	93.4	12.2%	6.2%	0.4%
Malvern Hills	70.0	72.2	73.6	74.8	75.0	7.1%	3.8%	0.2%
Redditch	78.8	78.8	78.5	78.8	78.7	-0.1%	-0.1%	-0.2%
Worcester City	83.3	93.4	93.1	93.9	94.7	13.7%	1.4%	0.9%
Wychavon	101.9	113.1	115.2	116.5	116.7	14.5%	3.2%	0.2%
Wyre Forest	95.2	96.9	97.7	98.3	98.1	3.1%	1.3%	-0.1%
Worcestershire	512.4	542.2	549.3	555.3	556.5	8.6%	2.6%	0.2%
North Worcs	257.2	263.6	267.4	270.0	270.2	5.1%	2.5%	0.1%
South Worcs	255.2	278.7	281.9	285.2	286.3	12.2%	2.7%	0.4%
West Midlands	5,229.7	5,280.7	5,347.2	5,408.4	5,431.1	3.9%	2.8%	0.4%
England	47,875.0	49,449.7	50,466.2	51,464.6	51,809.7	8.2%	4.8%	0.7%

Source – ONS mid-year estimates, 1991-2009. All figures are for current boundaries

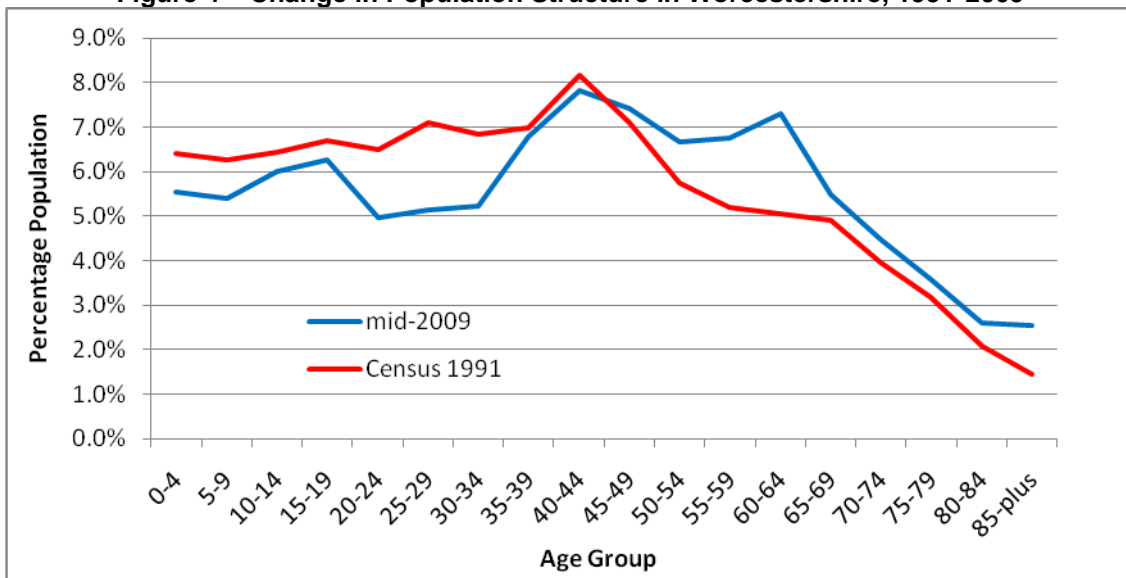
At a district level, the largest population increases since 1991 have been in Bromsgrove, Worcester City and Wychavon, each at over 12%. Bromsgrove has also had the greatest population growth since 2001 at 6.2%, with the rural districts of Malvern Hills and Wychavon each seeing increases since 2001 of over 3%. In contrast, the population in Redditch has stayed relatively stable over the whole of the time period, whilst Wyre Forest has experienced only a very small increase.

It can be seen that since 1991 the population in South Worcestershire has risen at a substantially greater rate than North Worcestershire, by 12.2% compared to just 5.1%.

As has been discussed, as well as a growing population, Worcestershire has an ageing population. Figure 4 below compares the age structure of Worcestershire in 1991 with the current estimate in 2009. It can be seen that between these two time periods the proportion of the population aged under 35 has decreased, most notably in the 20-34 range, whereas the proportion of the population aged 50-plus has increased.

The drop in population between those aged 15-19 and those aged 20-24 is far more prominent in 2009 than it was in 1991. This is due to the higher levels of people leaving Worcestershire to attend higher education, which is much more common now than it was in the past. The other, smaller element contributing to this is a lower birth rate amongst women, which although now rising is still low. This pattern in birth rates is replicated nationally.

Figure 4 – Change in Population Structure in Worcestershire, 1991-2009



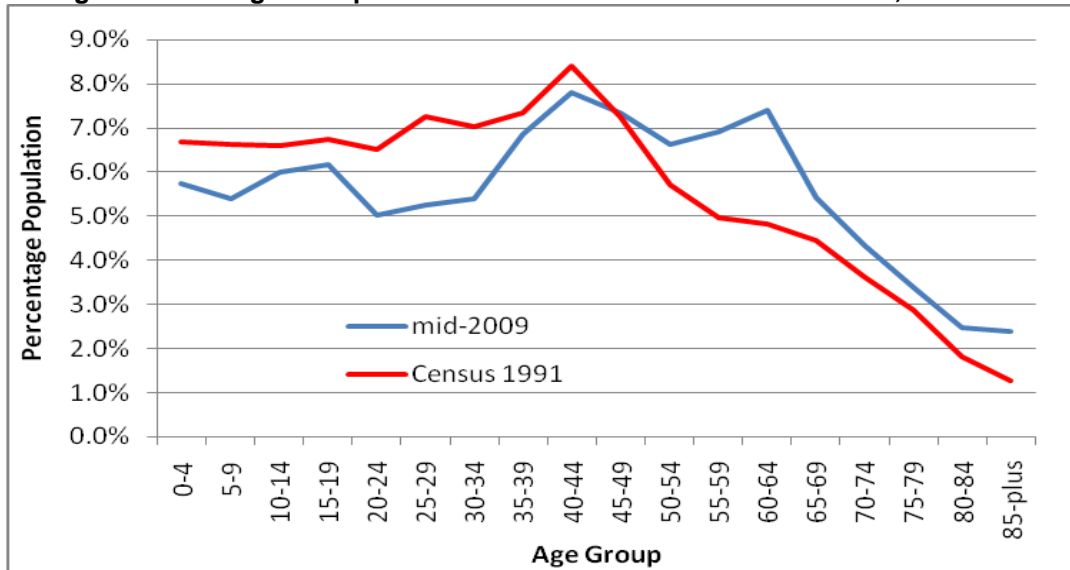
Source – ONS mid-year estimate 2009 & 1991 Census. All figures for current boundaries

It is noticeable that the population "spike" representing the "baby boomers" born just after World War II is prominent in the 40-44 age group in 1991, compared to the 60-64 age group in 2009 as these people have "aged on" in the time frame. This has contributed to the higher levels of persons aged over 65 in the county, although it can be seen in the 70-plus age range that there are a higher proportion of people living to an older age outside the "baby boomer" generation.

Similar graphs showing the change in population structure between 1991 and 2009 for North (Figure 5) and South (Figure 6) Worcestershire are presented below.

In North Worcestershire the decline in the proportion of people aged 20-34 is again evident, as is the population "spike" around ages 60-64 and the general increase in persons aged 50-plus.

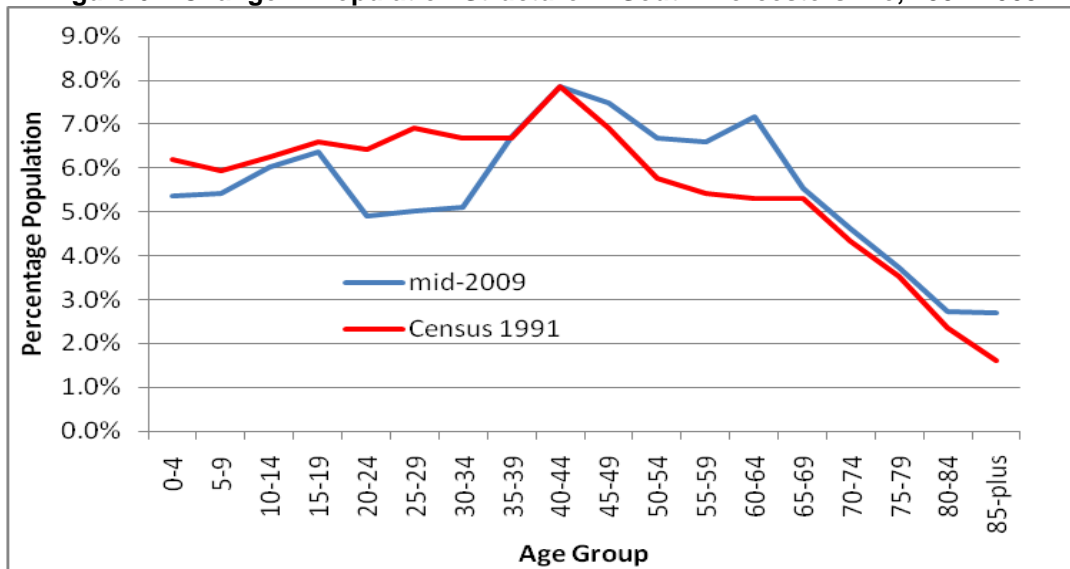
Figure 5 – Change in Population Structure in North Worcestershire, 1991-2009



Source – ONS mid-year estimate 2009 & 1991 Census. All figures for current boundaries

South Worcestershire has a very similar general pattern, with increases in the 50-64 age group and decreases amongst the 20-34 range, although there are some subtle differences; for instance, the increase in the proportion of people aged 65-plus, and the decrease in the proportion of children have been less marked than in the north of the county.

Figure 6 – Change in Population Structure in South Worcestershire, 1991-2009



Source – ONS mid-year estimate 2009 & 1991 Census. All figures for current boundaries

Table 4 below gives details of the components of change in each area. It can be seen that over the last five years Worcestershire has had an average population increase of around 1,800 per annum. About 1,200 of this growth is due to migration into the county, accounting for 65% of the total increase. In England just over half of the population increase is due to migration, whilst in the West Midlands Region migration into the area accounts for slightly less than one-quarter of the total population growth.

Table 4 – Components of Population Change over Time, annual average, 2004-09

	Natural Change (change due to births & deaths)	Migration & Other Changes	Total Average Annual Change
Bromsgrove	-78	630	552
Malvern Hills	-290	610	321
Redditch	451	-407	45
Worcester City	472	-107	365
Wychavon	31	361	393
Wyre Forest	34	93	127
Worcestershire	622	1,180	1,802
North Worcs	407	316	724
South Worcs	213	864	1,079
West Midlands	16,463	4,973	21,436
England	168,934	171,074	340,008

Source – ONS mid-year estimates, 2004-2009

It can be seen that the urban districts of Redditch and Worcester City have relatively high natural change levels. This is due to the younger age structure in those areas with higher numbers of people giving birth, and a lower number of deaths. The rural district of Malvern Hills has a large negative natural change with almost 300 more deaths than births per annum due to the older age structure in that district in comparison with the rest of the county. Bromsgrove is the only other district to have a negative natural change in this time period.

North Worcestershire as a whole has a relatively high level of natural change, at 400 per annum, almost double that of South Worcestershire. Natural change represents almost half of the observed population change in North Worcestershire, compared to just 20% in South Worcestershire. However, in terms of total average annual change, the South Worcestershire figure is higher than North Worcestershire at around 1,100 per annum, compared to 700 per annum. This is due to markedly higher levels of migration into South Worcestershire.

Changes due to migration are split along urban/rural lines, with the rural areas of Malvern Hills and Bromsgrove gaining over 600 persons per annum, and Wychavon gaining around half that number. By contrast the urban areas of Worcester City and most notably Redditch experience net outflows of 100 and 400 persons per annum respectively.

Table 5 – Population of Worcestershire by Age and Sex, 2009

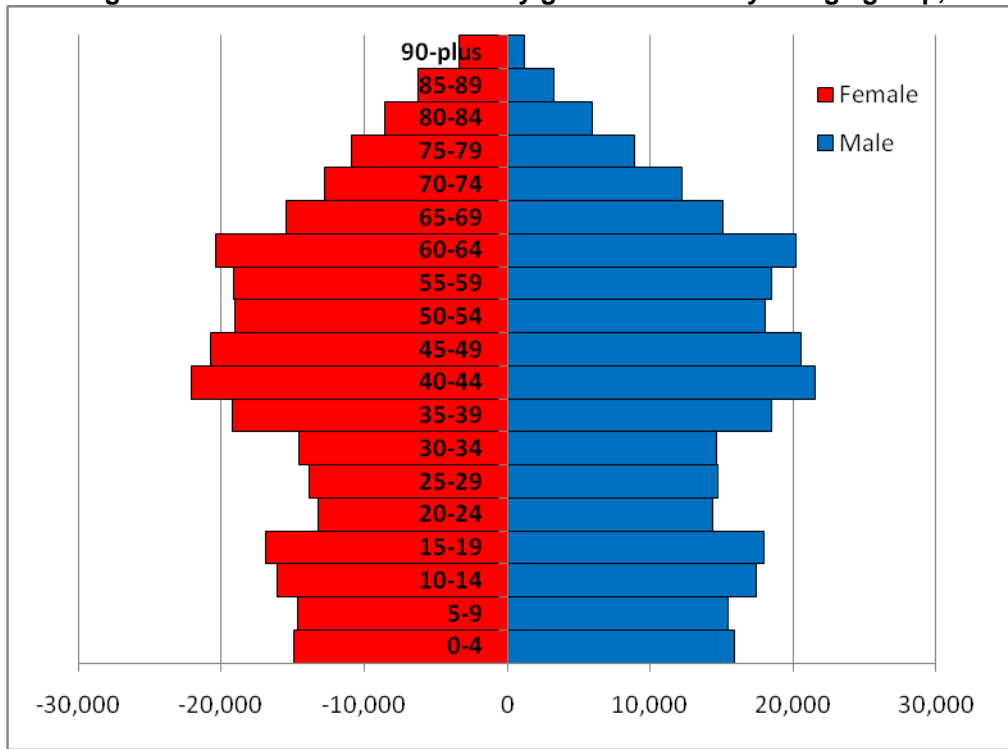
Age	Male	Female	Persons	Percent
Aged 0-4 years	15,900	15,000	30,900	5.5%
Aged 5-9 years	15,400	14,700	30,100	5.4%
Aged 10-14 years	17,400	16,100	33,500	6.0%
Aged 15-19 years	18,000	16,900	34,900	6.3%
Aged 20-24 years	14,400	13,200	27,600	5.0%
Aged 25-29 years	14,700	13,800	28,500	5.1%
Aged 30-34 years	14,600	14,600	29,200	5.2%
Aged 35-39 years	18,500	19,200	37,700	6.8%
Aged 40-44 years	21,500	22,100	43,600	7.8%
Aged 45-49 years	20,600	20,700	41,300	7.4%
Aged 50-54 years	18,100	19,000	37,100	6.7%
Aged 55-59 years	18,500	19,100	37,600	6.8%
Aged 60-64 years	20,200	20,400	40,600	7.3%
Aged 65-69 years	15,100	15,500	30,500	5.5%
Aged 70-74 years	12,200	12,800	25,000	4.5%
Aged 75-79 years	8,900	10,900	19,900	3.6%
Aged 80-84 years	5,900	8,600	14,500	2.6%
Aged 85-89 years	3,300	6,300	9,600	1.7%
Aged 90+ years	1,200	3,400	4,600	0.8%
All Ages	274,400	282,100	556,500	100.0%

Source – ONS mid-year estimates, 2009

Table 5 above shows five-year age groups by gender for the county. The highest percentages can be seen in the 40-49 and 60-64 groups. In older age groups, most notably those aged 75-plus, the female population is noticeably higher than the male, due to higher life expectancy of females in comparison to males. Around 50.7% of the Worcestershire population is female, a similar proportion to the national average.

Figure 7 below emphasises the population "bulge" in Worcestershire around the 35-64 age groups, with particularly high levels in the 40-49 and 60-64 age ranges, whilst the 20-34 age band is proportionally smaller.

Figure 7 - Age Structure in Worcestershire by gender and five-year age group, mid-2009



Source – ONS mid-year estimates, 2009

5. ONS Population Projections

ONS produce sub-national population projections, which estimate the likely population growth in an area in the future, whilst Communities and Local Government (CLG) produce household projections based on these projected populations.

It should be noted that the ONS/CLG projections are based on past trends, and therefore do not take into account any changes to policy or to the economic climate that might affect future population and household numbers. It should also be recognised that the ONS use figures from the five years prior to a projection base date to generate assumptions about migration, births and deaths. As a consequence, projections can vary markedly, especially during periods of rapid change such as those seen during the recent recession.

Table 6 – ONS 2008-based Population Projections, Worcestershire Districts, 2008-30 (thousands)

Area	2008	2010	2015	2020	2030	Change 2008-30	Percentage Change
Bromsgrove	93.0	93.8	96.4	99.6	105.8	12.8	13.6%
Malvern Hills	74.8	75.1	76.5	78.4	82.5	7.7	10.3%
Redditch	78.8	79.1	80.0	81.2	83.4	4.6	5.8%
Worcester City	93.9	94.5	95.9	99.9	100.2	6.3	6.7%
Wychavon	116.5	117.4	119.7	122.3	127.6	11.1	9.5%
Wyre Forest	98.3	98.7	100.3	102.1	105.3	7.0	7.1%
Worcestershire	555.3	558.6	568.8	581.0	604.8	49.5	8.9%
North Worcs	270.0	271.6	276.7	282.9	294.5	24.5	9.0%
South Worcs	285.2	287.0	292.1	220.6	310.3	25.1	8.7%
West Midlands	5,408.4	5,460.3	5,599.7	5,750.7	6,038.8	630.4	11.5%
England	51,464.6	52,198.2	54,087.9	56,039.9	59,738.3	8,273.7	15.9%

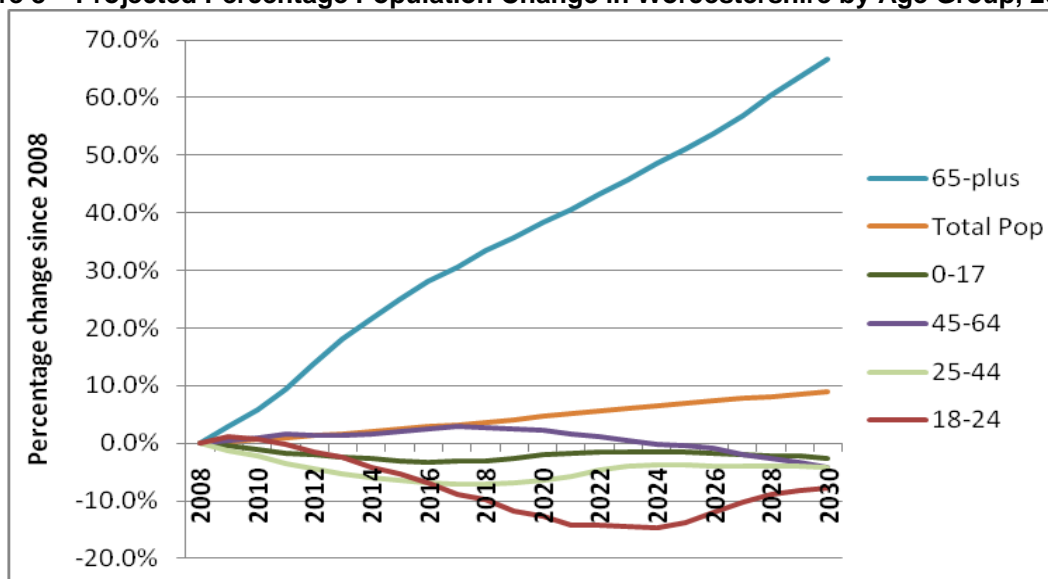
Source – ONS 2008-based Population Projections

It can be seen that by 2030 Worcestershire is projected to have a population of almost 605,000, representing an increase of 49,500 on the 2008 figure, or almost 9%. This is a smaller proportional increase than projected in the West Midlands Region as a whole (11.5%), and a notably smaller projected increase than the national average of almost 16%.

Within Worcestershire, Bromsgrove has the largest projected rise in population both in numerical and percentage terms, at around 12,800 people or 13.6%. Projected population increases are also relatively high in Wychavon, at over 11,000 people (9.5%), and in percentage terms in Malvern Hills, at over 10% (representing 7,700 people). In contrast, Redditch has the lowest projected rise of just 5.8% (around 4,600 people) whilst Wyre Forest and Worcester City also have relatively low projected increases of around 7% (7,000 and 6,300 people respectively).

Projected population increases are similar in North Worcestershire and South Worcestershire both in terms of numbers and percentage increase, at 9.0% (24,500 people) and 8.7% (25,100 people) respectively.

Figure 8 – Projected Percentage Population Change in Worcestershire by Age Group, 2008-30

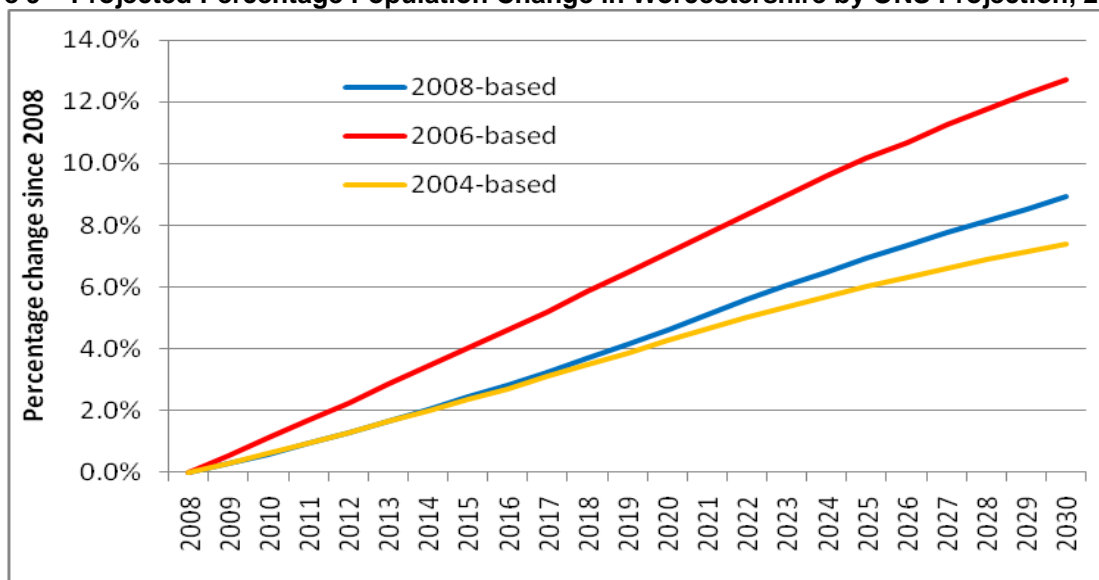


Source – ONS 2008-based Population Projections

Figure 8 shows that the projected increase in population within Worcestershire to 2030 is concentrated almost exclusively in the 65-plus age range. The number of people aged 65 and over is projected to rise by over 67,000 in the 2008-30 period. This represents growth of 67% amongst that age group. In comparison, the 18-24 age group is projected to decrease by 7.7%, whilst each of the other age ranges are projected to experience smaller decreases.

Whilst similar patterns have been projected to occur both nationally and within the West Midlands Region, growth in the 65-plus age range are smaller at 56% and 50% respectively. It is apparent that the large projected increase in the 65-plus age group coupled with relatively low increases in the working age groups will have an economic impact in the county.

Figure 9 – Projected Percentage Population Change in Worcestershire by ONS Projection, 2008-30



Source – ONS Population Projections 2008-based, 2006-based & 2004-based

Figure 9 above compares the last three ONS trend-based population projections for the county. It can be seen that the 2006-based figures projected the largest population increase of over 70,000 for the 2008-30 period, representing an increase of almost 13%. This compares to lower increases of almost 50,000 (9%) over the same timeframe in the 2008-based population projections, and projected increases of around 41,000 (just over 7%) in the 2004-based projections. These differences illustrate the volatility of the ONS trend-based projections.

There are several reasons for the marked differences between the projections:

- The five years prior to 2006 saw a period of economic growth and prosperity. High and rising house prices, low unemployment, affordable credit, and high consumer confidence contributed to a more mobile population within the country. As a consequence, migration levels were high, impacting upon Worcestershire, which is a net importer of persons, especially from the Metropolitan Area.
- In May 2004, eight countries from Eastern Europe joined the European Union and as a consequence their citizens had the right to work anywhere in Europe. Given the prevailing good economic climate at that time, the UK was a desirable destination for many people. The number of migrant workers from the 'Accession 8' countries coming to Worcestershire in search of work increased each year to 2006/7, and contributed to high migration assumptions in the 2006-based projections.
- During 2008 and 2009 the UK economy experienced a severe recession. Unemployment increased considerably, credit for individuals and businesses became unaffordable and difficult to obtain, and consumer confidence fell markedly. House sales dropped considerably, and as a result of reduced demand house prices fell. As a consequence levels of migration reduced notably. These lower levels of migration have been reflected in the 2008-based projections.
- ONS made changes to the way student migration was counted in 2008. Higher Education Statistics Agency data became available for the first time, meaning more student migration could be identified. These changes were incorporated into the 2008-based projections. Since Worcestershire is a net exporter of students, this means more migration out of the county amongst students is reflected in the 2008 figures.

6. CLG Household Projections

In conjunction with the population projections, CLG have produced 2008-based household projections, which project the number and type of households that will form in the future if current trends continue. These are consistent with the ONS population projections, so again do not take into account any local changes in policy such as the level of house building, and are reproduced in Table 7 below.

Table 7 – Household Projections for Worcestershire and the Districts, 2008-30 (thousands)

Area	2008	2010	2015	2020	2030	Change 2008-30	Percentage Change
Bromsgrove	37.7	38.4	40.1	42.0	45.7	8.0	21.1%
Malvern Hills	31.7	32.2	33.7	35.2	38.3	6.6	20.7%
Redditch	33.1	33.4	34.6	35.7	37.8	4.7	14.2%
Worcester City	40.3	40.7	42.1	43.6	46.1	5.8	14.5%
Wychavon	49.5	50.3	52.3	54.5	58.7	9.2	18.6%
Wyre Forest	42.4	43.0	44.7	46.5	49.5	7.1	16.7%
Worcestershire	234.6	238.0	247.5	257.6	275.9	41.4	17.6%
North Worcs	113.2	114.8	119.4	124.2	132.9	19.7	17.4%
South Worcs	121.4	123.2	128.1	133.3	143.1	21.6	17.8%
West Midlands	2,241.6	2,273.2	2,367.4	2,466.6	2,652.1	410.5	18.3%
England	21,731.0	22,152.0	23,359.0	24,601.0	26,912.0	5,181.0	23.8%

Source – CLG 2008-based Household Projections

On current trends, the projected increase in the number of households in the county as a whole is around 41,400 over the period 2008 to 2030. This represents a projected growth of around 17.6%, slightly lower than the average for the whole of the West Midlands Region and considerably lower than the national figure of 23.8%.

The projected household growth within the districts ranges from just over 21% in Bromsgrove, to less than 15% in Redditch and Worcester City, although the projected highest increase in terms of household numbers is in Wychavon, at 9,200.

North Worcestershire and South Worcestershire have similar projected increases in households in terms of both numbers and percentages (19,700 [17.4%] and 21,600 [17.8%] respectively).

Table 8 – Projected Percentage Household Change in Worcestershire by Household Type, 2008-30

Household Type	2008	2030	2008-30 Change	Percentage Change
One Person	70,300	104,300	33,900	48.2%
One family and no others: Couple, no dependent children	75,000	90,500	15,500	20.7%
One family and no others: Couple, one or more dependent children	43,600	40,000	-3,600	-8.2%
One family and no others: Lone parent	11,500	16,100	4,600	40.1%
A couple and one or more other adults, no dependent children	15,500	9,200	-6,300	-40.5%
A couple and one or more other adults, one or more dependent children	6,700	4,800	-1,800	-27.5%
A lone parent and one or more other adults	2,200	2,500	300	14.0%
Other households	9,800	8,500	-1,300	-13.2%
All Households	234,600	275,900	41,400	17.6%

Source – CLG 2008-based Household Projections

Table 8 shows that much of the projected household growth is due to an increase in One-person households. The number of households with just one person living in them is projected to rise by almost 34,000 during the 2008-30 period, increasing the number of One-person households in the county by almost 50%, and representing over 80% of the total household increase.

Total Couple households, when both those in which the couple are the only adults in the household and those in which other adults are present, are projected to remain about constant over between 2008 and 2030. Further breakdown of couple households reveal that the largest increase is in Couple households with no other adults and no dependent children, which has a projected increase of 15,500 (over 20%).

The number of Lone Parent households is also projected to increase, by almost 5,000 when those households with other adults also present are taken into account.

Table 9 – Projected Change of One-Person Households in Worcestershire by Age of Household Representative, 2006-26

	2008 Households	2030 Households	2008-30 Change	Percentage Change
15-24	1,800	2,000	200	9.7%
25-44	15,300	20,500	5,300	34.4%
45-64	19,800	24,200	4,400	22.2%
65-74	11,000	14,600	3,600	32.3%
75-plus	22,400	42,900	20,500	91.6%
All Ages	70,300	104,300	33,900	48.2%

Source – CLG 2008-based Household Projections

Table 9 shows the increase in One-person households split by age group. The biggest growth is in One-person households aged 65-plus, which is in line with the large projected increase in population in this age group. The number of One-person households in the 75-plus age group is particularly high, and is projected to rise by 20,500 (over 90%) over the 2008-30 period, representing about 60% of the total projected increase in One-person households.

However, it is noticeable that each of the other age groups with the exception of the 15-24 age range also have a notable projected increase in number of One-person households. The 24-44 and 45-64 age groups do not show substantial increases in terms of projected population, suggesting increases in One-person households here are due to changes in household composition.

The projected growth in One-person households is therefore due to a number of social and lifestyle factors. For example, people living longer and outliving their partner for a longer period of time, people choosing to marry later in life, and therefore spending longer living alone, or due to the separation from a spouse or partner.

The projected growth in One-person households is the main reason why there is a projected decrease in the average number of people in each household (or average household size) in the future. This aspect has been decreasing since the "baby boom" just after World War II and ONS project that it will further decrease in the future.

Table 10 – Estimated & Projected Average Household Size for Worcestershire, 1991-2030

Year	1991	2001	2008	2010	2015	2020	2030	Decrease 2008-30
Bromsgrove	2.54	2.44	2.40	2.38	2.33	2.30	2.24	-0.16
Malvern Hills	2.43	2.31	2.28	2.25	2.19	2.14	2.07	-0.21
Redditch	2.66	2.47	2.37	2.35	2.30	2.26	2.18	-0.18
Worcester City	2.45	2.36	2.30	2.29	2.24	2.20	2.14	-0.16
Wychavon	2.49	2.38	2.32	2.30	2.25	2.21	2.14	-0.19
Wyre Forest	2.52	2.37	2.29	2.26	2.21	2.16	2.09	-0.20
North Worcs	2.57	2.42	2.35	2.33	2.28	2.23	2.17	-0.18
South Worcs	2.46	2.36	2.30	2.28	2.23	2.19	2.12	-0.18
Worcestershire	2.51	2.39	2.32	2.30	2.25	2.21	2.14	-0.18

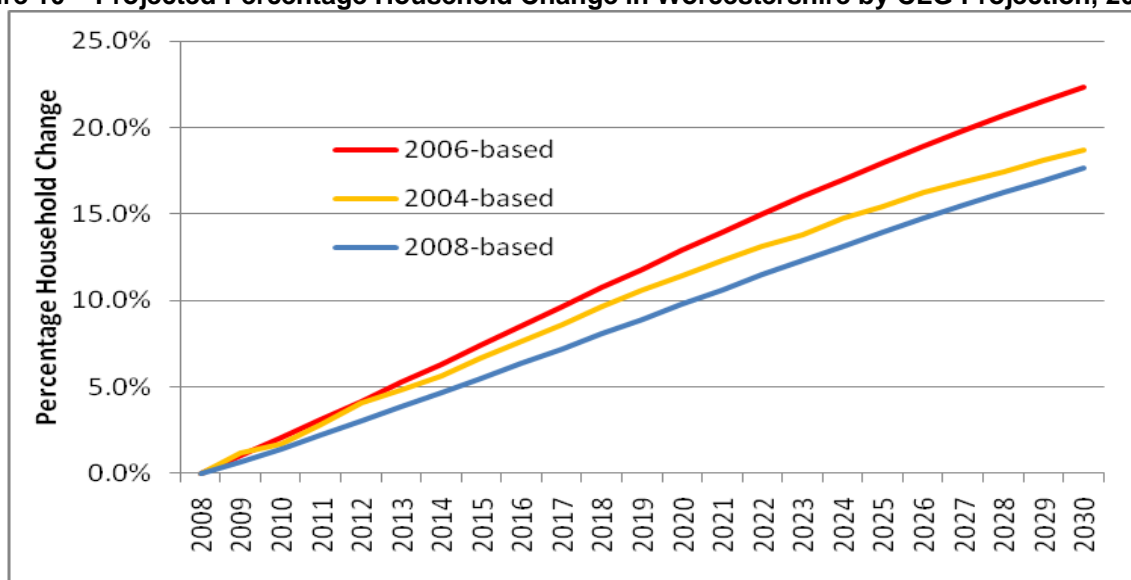
Source – 1991 & 2001 Census, and CLG 2008-based Household Projections

Table 10 shows the decrease in average household size from 2.51 in Worcestershire in 1991 to 2.39 in 2001. This decrease is projected to continue in future years, with the average household size projected to be 2.14 in Worcestershire by 2030. In 2001 the largest average household size was in Redditch at 2.47, whilst the smallest was in Malvern Hills at 2.31.

North Worcestershire has a rather higher average household size than South Worcestershire, 2.42 in 2001 compared to 2.36. This difference is projected to be maintained into the future, with average household size in North and South Worcestershire both projected to decrease by the same amount between 2008 and 2030.

It should be remembered that decreases in average household size apply to all of the households in the area, not just to the new (or extra) households that are created. Projected decreases in average household size are therefore a key element in the relationship between projected population and household change.

Figure 10 – Projected Percentage Household Change in Worcestershire by CLG Projection, 2008-30



Source – CLG Household Projections 2008-based, 2006-based & 2004-based

Figure 10 compares the last three CLG household projections for Worcestershire. It can again be seen that the 2006-based figures have the highest projected increase, at over 53,000 (over 22%) households for the 2008-30 period. This compares to almost 18% (41,000 households) in the 2008-based figures, and almost 19% (44,000 households) in the 2004-based figures.

As the CLG household projections are based upon the ONS population projections, many of the reasons for these differences are the same as those listed at the end of section 5 of this report. However, it is worth noting that the 2008-based figures give a lower household increase than the 2004-based figures, even though the projected population is higher in the 2008-based figures. This is because the decrease in average household size is less pronounced in the 2008-based figures than has been the case previously.

Table 11 – Comparison between 2008-based ONS Population Projections and 2008-based CLG household Projections in Worcestershire, 2008-2030 (thousands)

Year	Projected Population Change				Projected Household Change			
	2008	2030	Change 2008-30	Perc. Change	2008	2030	Change 2008-30	Perc. Change
Bromsgrove	93.0	105.8	12.8	13.6%	37.7	45.7	8.0	21.1%
Malvern Hills	74.8	82.5	7.7	10.3%	31.7	38.3	6.6	20.7%
Redditch	78.8	83.4	4.6	5.8%	33.1	37.8	4.7	14.2%
Worcester City	93.9	100.2	6.3	6.7%	40.3	46.1	5.8	14.5%
Wychavon	116.5	127.6	11.1	9.5%	49.5	58.7	9.2	18.6%
Wyre Forest	98.3	105.3	7.0	7.1%	42.4	49.5	7.1	16.7%
North Worcs	270.0	294.5	24.5	9.0%	113.2	132.9	19.7	17.4%
South Worcs	285.2	310.3	25.1	8.7%	121.4	143.1	21.6	17.8%
Worcestershire	555.3	604.8	49.5	8.9%	234.6	275.9	41.4	17.6%

Source – ONS 2008-based Population Projections & CLG 2008-based Household Projections

Table 11 above brings together the 2008-based ONS population projections and related CLG household projections. In Worcestershire, a projected population increase of 49,500 results in a projected household change of 41,400 between 2008 and 2030. The projected household change in percentage terms (almost 18%) is much higher than the projected population change (almost 9%) because of the projected decrease in average household size in future years, which applies to all households and not just the new households that have been formed.

7. Conclusions

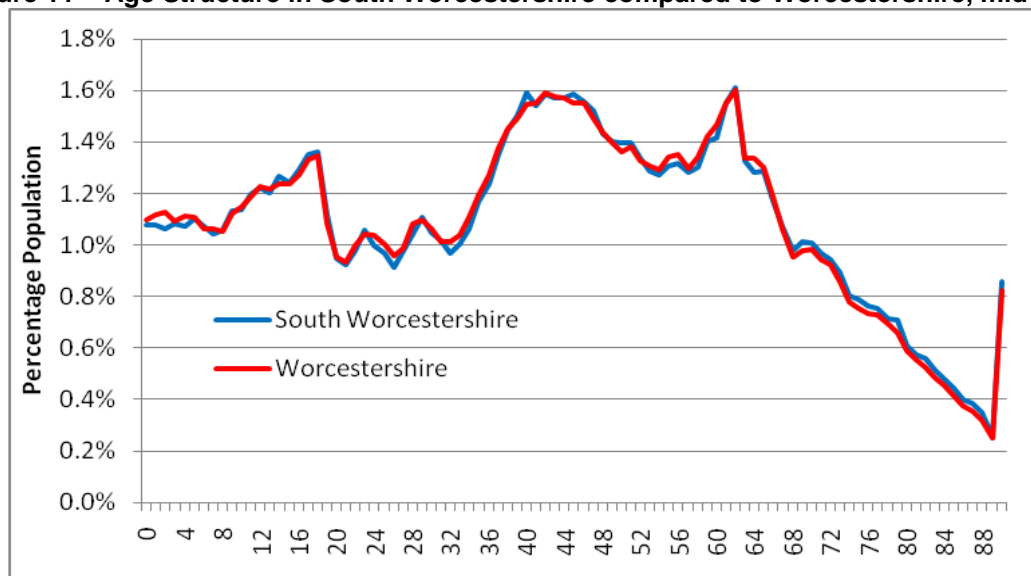
Conclusions from this report are brought together below:-

- In mid-2009, the population of Worcestershire was an estimated 556,500. Population estimates in North Worcestershire and South Worcestershire were 270,200 and 286,300 respectively.
- The age structure in Worcestershire is considerably younger than both regionally and nationally. There is a noticeably lower proportion of people in Worcestershire aged 0-34, and a considerably higher percentage of people aged 45-plus. There is also a population "spike" at around 60 due to the high level of births in the aftermath of World War II.
- In Worcestershire just over 70% of people live in areas defined as urban, noticeably lower than regional and national figures. Whilst Worcester City is completely urban and Redditch almost completely urban, the least urban districts are Wychavon and Malvern Hills. North Worcestershire is more urban than South Worcestershire, with 80% of people living in urban areas in North Worcestershire compared to 60% in South Worcestershire.
- At a district level Worcester City and Redditch have a markedly younger age structure than the other more rural districts.
- Across the county as a whole 18.2% of people are aged 15 and under, whilst around 18.7% of people are over 65. Proportions of older people are noticeably lower in the urban districts of Worcester City and Redditch
- South Worcestershire has a rather older age structure than North Worcestershire. Proportions of children are similar at around 18% but the percentages of people aged 65 and over are noticeably higher in South Worcestershire at 19.3%, compared to 18.0% in North Worcestershire.
- Over the last five years Worcestershire has had an average population increase of around 1,800 per annum. About 1,200 of this growth is due to migration into the county, accounting for 65% of the total increase, with the rest due to natural change.
- Natural change represents almost half of the observed population change in North Worcestershire, compared to just 20% in South Worcestershire. However, in terms of total average annual change, South Worcestershire has a higher level at around 1,100 per annum, compared to 700 per annum in North Worcestershire.
- ONS population projections suggest that by 2030 Worcestershire is projected to have a population of almost 605,000, representing an increase of 49,500 (9%) on the 2008 figure. This is lower than the projected increase in both the West Midlands Region (11.5%) and England (16%).
- Projected population increases are similar in North Worcestershire and South Worcestershire both in terms of numbers and percentage increase, at 9.0% and 8.7% respectively.
- The number of people aged 65 and over in Worcestershire is projected to rise by over 67,000 in the 2008-30 period. This represents growth of 67% among that age group. In comparison, each of the other age ranges are projected to experience decreases.
- The ONS trend-based population projections are based on the previous five years trends, and can differ markedly each time they are produced due to economic and other factors at the time. The 2006-based figures projected a population increase of over 70,000 for the 2008-30 period, compared to lower increases of almost 50,000 in the 2008-based figures, and 41,000 in the 2004-based projections.
- In conjunction with the ONS population projections, the CLG household projections suggest that the projected increase in the number of households in the county is around 17.6% (41,400) over the period 2008 to 2030. This is slightly lower than the average for the whole of the West Midlands Region and considerably lower than the national figure.
- Similar levels of household increase are projected for North Worcestershire and South Worcestershire, at 19,700 (17.4%) in North Worcestershire, and 21,600 (17.8%) in South Worcestershire.
- The number of One-person households in the county is projected to rise by almost 34,000 during the 2008-30 period, increasing the number of One-person households in the county by almost 50%, and representing over 80% of the total household increase.

- The projected growth in One-person households results in a projected lower average household size in the future. Average number of persons in each household in Worcestershire was 2.51 in 1991 and 2.39 in 2001. This compares to a projected figure of 2.14 in 2030. North Worcestershire has a slightly higher average household size than South Worcestershire.
- The 2008-based household figures project an increase of 18%, or 41,000 households in Worcestershire. This compares to the 2006-based figure of over 53,000 (22%) households, and almost 19% (44,000 households) in the 2004-based figures.
- It is noticeable that the 2006-based population and household projections are considerably higher than projections calculated in other years. This is due to the high level of migration into the county in the five years previous that formed the assumptions in these projections.
- It is also evident that the 2008-based population projections are higher than the 2004 figures, but the 2008-based household projections are lower than the 2004 figures. This is because the projected decrease in average household size is not as pronounced in 2008 than it was in 2004.
- In Worcestershire, a projected population increase of 49,500 results in a projected household change of 41,400. This is because of the projected decrease in average household size in future years, which applies to all households and not just the new households that have been formed.

8. Appendix – South Worcestershire

Figure 11 – Age Structure in South Worcestershire compared to Worcestershire, mid-2009



Source – ONS 2009 mid-year estimates

Figure 11 above shows a comparison between the age structures of South Worcestershire and Worcestershire as a whole. Although differences between the two areas are not great, the South Worcestershire area does have a slightly lower proportion of children (most noticeably in the 0-4 age group), and a slightly higher proportion of adults over the age of 65.

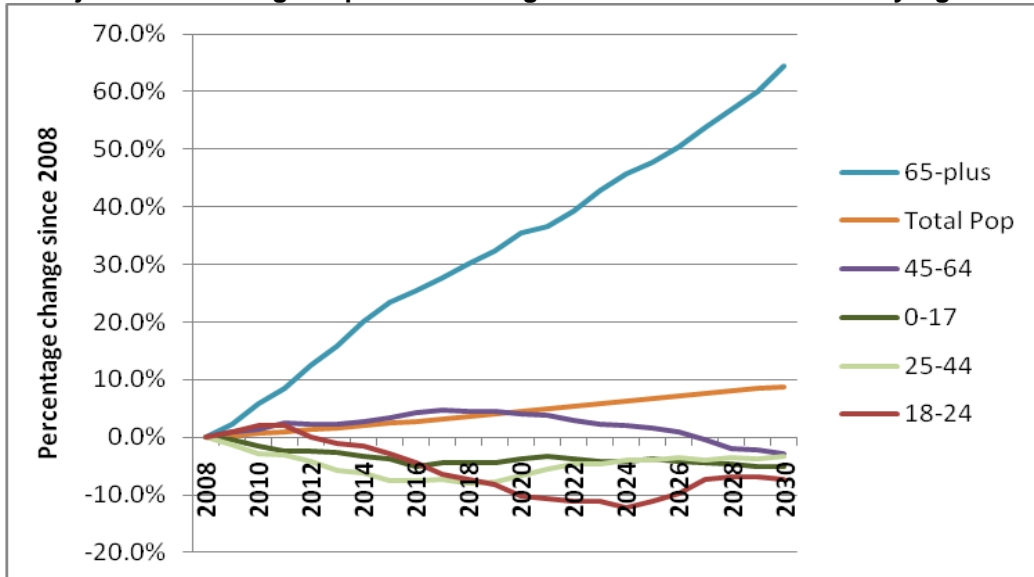
Table 12 – Population of South Worcestershire by Age and Sex, 2009

Age	Male	Female	Persons	Percent
Aged 0-4 years	7,900	7,500	15,400	5.4%
Aged 5-9 years	7,900	7,600	15,500	5.4%
Aged 10-14 years	8,900	8,400	17,300	6.0%
Aged 15-19 years	9,300	9,000	18,200	6.4%
Aged 20-24 years	7,400	6,700	14,000	4.9%
Aged 25-29 years	7,500	6,900	14,300	5.0%
Aged 30-34 years	7,300	7,300	14,600	5.1%
Aged 35-39 years	9,300	9,900	19,200	6.7%
Aged 40-44 years	11,100	11,400	22,500	7.9%
Aged 45-49 years	10,700	10,700	21,500	7.5%
Aged 50-54 years	9,400	9,700	19,200	6.7%
Aged 55-59 years	9,300	9,600	18,900	6.6%
Aged 60-64 years	10,200	10,400	20,600	7.2%
Aged 65-69 years	7,700	8,100	15,800	5.5%
Aged 70-74 years	6,400	6,800	13,200	4.6%
Aged 75-79 years	4,800	5,800	10,700	3.7%
Aged 80-84 years	3,200	4,600	7,800	2.7%
Aged 85-89 years	1,800	3,400	5,300	1.8%
Aged 90+ years	700	1,800	2,500	0.9%
All Ages	140,900	145,400	286,300	100.0%

Source – ONS mid-year estimates, 2009

Table 12 shows the number of males, females and persons in each five-year age group in South Worcestershire, along with percentages of persons. The highest proportions can be found in the 35-64 age range, and percentages of those aged 40-49 are particularly high. There are slightly more females than males resident in South Worcestershire, with number of females especially high in the 70-plus age groups due to a higher average life expectancy for females. Males outnumber females among younger age groups, especially those aged under 30.

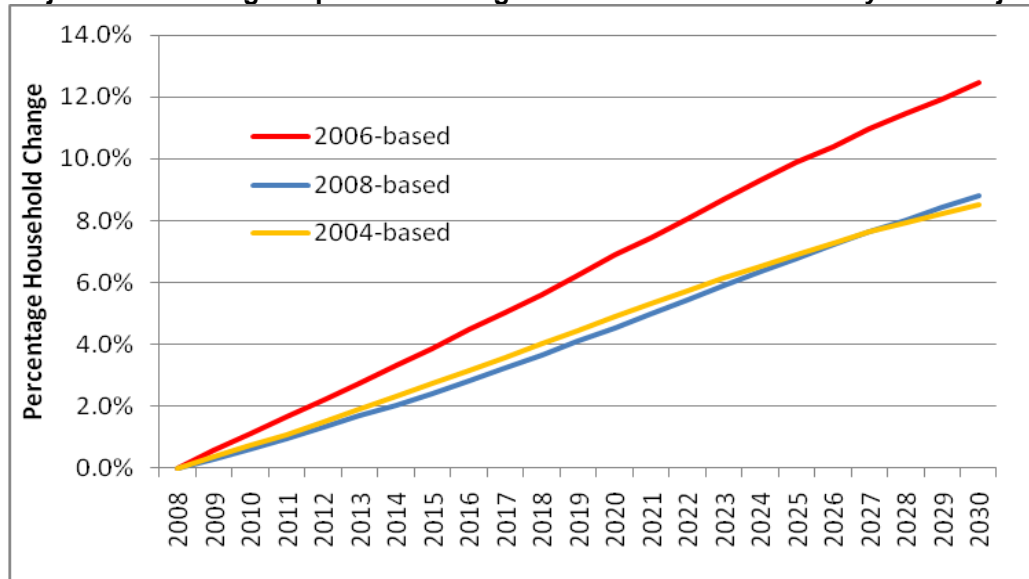
Figure 12 – Projected Percentage Population Change in South Worcestershire by Age Group, 2008-30



Source – ONS 2008-based Population Projections

Figure 12 shows the projected population change in South Worcestershire for 2008-30 split by age group. It can be seen that the 65-plus population has the greatest projected change, at almost 65%, representing an increase of around 35,000. This compares to a total population increase of 25,000, or just less than 9%. The other age groups are all projected to have decreased by 2030, with the number of people aged 18-24 projected to decrease the most, at over 7%.

Figure 13 – Projected Percentage Population Change in South Worcestershire by ONS Projection, 2008-30



Source – ONS Population Projections 2008-based, 2006-based & 2004-based

Figure 13 shows the differences between the three most recent ONS population projections.. It is evident that the 2006-based projections suggest the greatest population increase in South Worcestershire between 2008 and 2030 (around 12.5%, or over 35,000 persons). The 2008-based and 2004-based figures have similar levels of projected growth, at just under 9%, representing an increase of around 25,000 persons. This is because the 2006-based projections were calculated at a time of economic stability, meaning that a high level of migration into the county was built into the assumptions.

Table 13 – Projected Percentage Household Change in South Worcestershire by Household Type, 2008-30

Household Type	2008	2030	2008-30 Change	Percentage Change
One Person	36,600	52,200	15,600	42.7%
One family and no others: Couple, no dependent children	40,100	50,200	10,100	25.3%
One family and no others: Couple, one or more dependent children	22,700	21,000	-1,700	-7.4%
One family and no others: Lone parent	5,600	7,600	2,000	34.8%
A couple and one or more other adults, no dependent children	7,100	4,100	-3,000	-42.3%
A couple and one or more other adults, one or more dependent children	3,200	2,200	-1,000	-31.9%
A lone parent and one or more other adults	1,000	1,200	100	12.7%
Other households	5,200	4,600	-500	-10.3%
All Households	121,400	143,100	21,600	17.8%

Source – CLG 2008-based Household Projections

Table 13 shows the projected household change for South Worcestershire for the period 2008-30. The CLG projections suggest that the number of households in South Worcestershire will increase by 21,600 (almost 18%). The majority of the household increase will be due to the increase in One-person households, which are projected to increase by 15,600, representing over 70% of the total projected household increase.

Table 14 – Projected Change of One-Person Households in South Worcestershire by Age of Household Representative, 2006-26

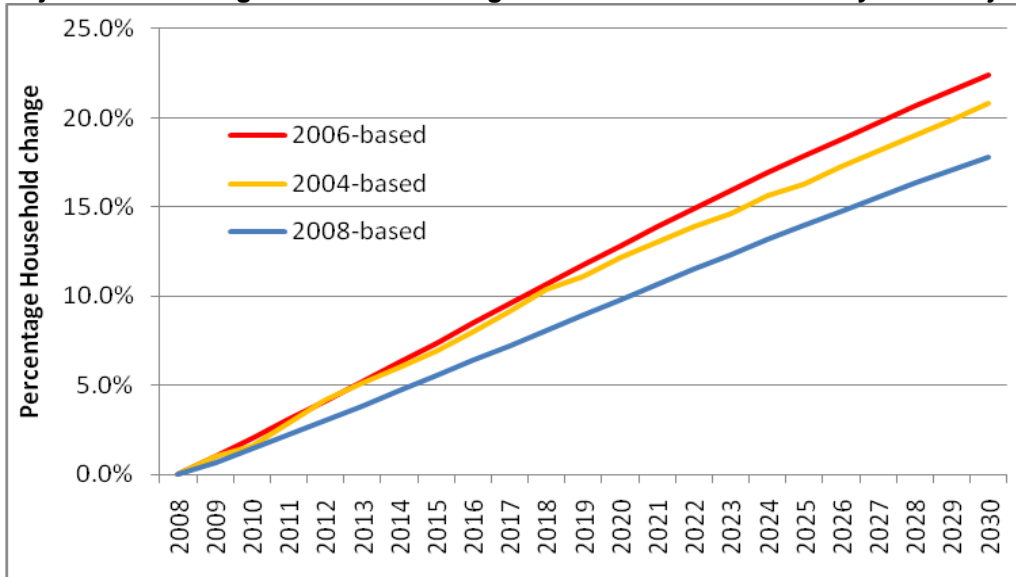
	2008 Households	2030 Households	2008-30 Change	Percentage Change
15-24	900	1,000	0	3.3%
25-44	8,000	10,500	2,500	30.9%
45-64	10,000	11,800	1,800	17.9%
65-74	5,800	7,600	1,700	29.7%
75-plus	11,900	21,500	9,600	81.1%
All Ages	36,600	52,200	15,600	42.7%

Source – CLG 2008-based Household Projections

Table 14 above shows the projected household increase in One-person households split by age. The largest increase is amongst persons aged 75-plus, which has a projected increase of 9,600, representing over 60% of the total One-person household increase.

It should be noted that the age groups under 65 also have a projected increase in One-person households, even though the projected populations in these age groups are projected to decline. The increase in One-person households is therefore due to a change in household composition, and not just because of increases in population.

Figure 14 – Projected Percentage Household Change in South Worcestershire by CLG Projection, 2008-30



Source – CLG Household Projections 2008-based, 2006-based & 2004-based

Figure 14 above shows the last three sets of household projections produced by CLG. It is noted that the 2006-based figures project the largest household increase, of around 22% (almost 28,000 households) in the 2008-30 period. This compares to increases of 25,600 in the 2004-based figures, and 21,600 in the 2008-based projections.