

This report examines aspects of demography, primarily within South Worcestershire but also within the whole of the County and each of the districts. Details include current population structure, migration patterns, and the 2008 based ONS population and CLG household projections.

South Worcestershire Development Plan Demographic Background Paper

www.worcestershire.gov.uk

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1. Introduction

This report is primarily targeted to provide the demographic evidence base for Worcestershire, to inform the South Worcestershire Development Plan process. It is intended that the data and analysis covered in this report will contribute to the knowledge on demographics in the County, and will aid in supporting the people of Worcestershire.

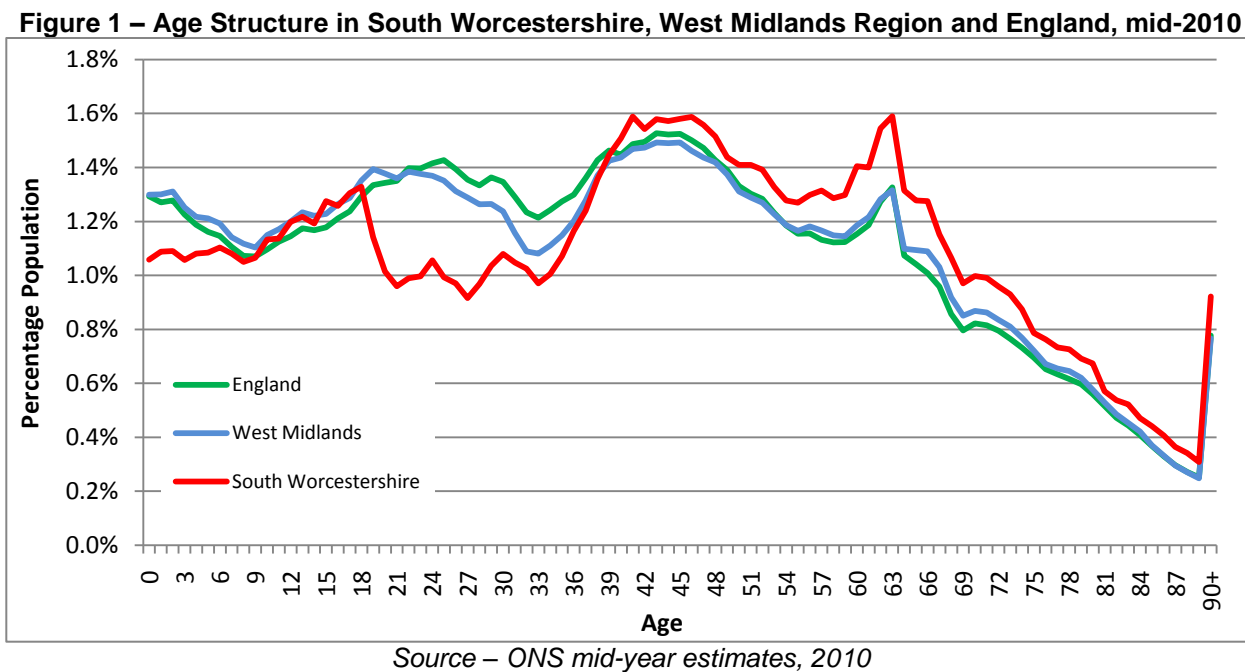
This report looks at many aspects of demography in South Worcestershire and the districts therein. This includes the fundamental aspect of population in South Worcestershire, including:-

- Population estimates, including age and gender splits. Urban/rural population in the County is also considered;
- Projected future population change over time, including split by age group;
- Projected household changes over time, including change by type of household.

2. Population – Evidence base

In mid-2010, the population of South Worcestershire was an estimated 287,200. The Local Authority with the most residents is Wychavon with 116,700, whilst Malvern Hills has the lowest number of residents with 74,700.

Figure 1 below shows the age structure in South Worcestershire in comparison with both the West Midlands Region and the whole of England. The data is from the Office of National Statistics (ONS) which produces mid-year estimates each year. It can be seen that the age structure in South Worcestershire is rather different to that of 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 noticeable difference between the age structure in South Worcestershire and that seen in the national figures is among young adults. The 19-34 age group in South Worcestershire represents 16.2% of the total population, compared to 21.3% nationally and 20.2% regionally. This is due to a considerable out-migration from South Worcestershire in favour of large cities and urban areas or to university towns for access to higher education or better job prospects, especially among the 19-24 age range – note the marked drop in population as people reach 18-21.

The other noticeable difference is among people aged over 45, which is consistently higher in South Worcestershire than either national or regional figures across all ages. People aged 45-plus in South Worcestershire constitute 48.0% of the total population, compared to 41.5% and 42.1% respectively in England and the West Midlands. South Worcestershire therefore has an older age profile than the national average. This is due to people tending to settle in South Worcestershire (and other areas that are rural in nature) later in life.

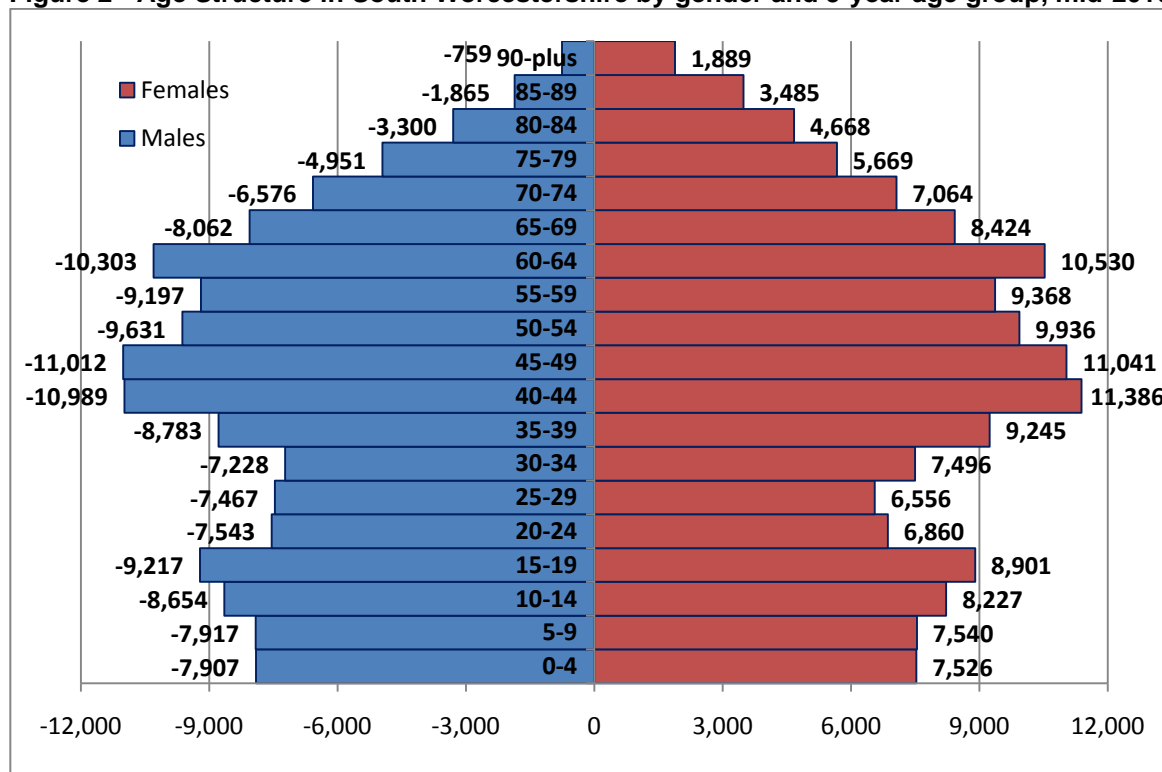
It is also noticeable that South Worcestershire follows the regional and national patterns of having a population "spike" at around the age of around 60. This is a product of the large increase in births just after World War II, known as the "baby boomers". There could be potential issues for the economy in South Worcestershire as more of these people

reach retirement age and are lost from the workforce. South Worcestershire also has a noticeably lower proportion of children aged 0-5 than the national average.

In terms of five-year age bands, 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 males, due to higher life expectancy and lower death rates in females in comparison to males. Around 50.8% of the South Worcestershire population is female, a similar proportion as the national average.

Figure 2 below emphasises the population bulge in South Worcestershire around the 40-64 age group, with particular high levels in the 40-49 and 60-64 age ranges, whilst the 20-34 age band is proportionally lower. This is most likely a combination of national birth patterns being replicated in South Worcestershire with high levels of births just after World War 2 compared to much lower levels around 2001, and migration patterns into the area, as younger adults tend to move away for higher education or job opportunities, whilst older adults move into South Worcestershire for the rural nature of the area.

Figure 2 - Age Structure in South Worcestershire by gender and 5-year age group, mid-2010

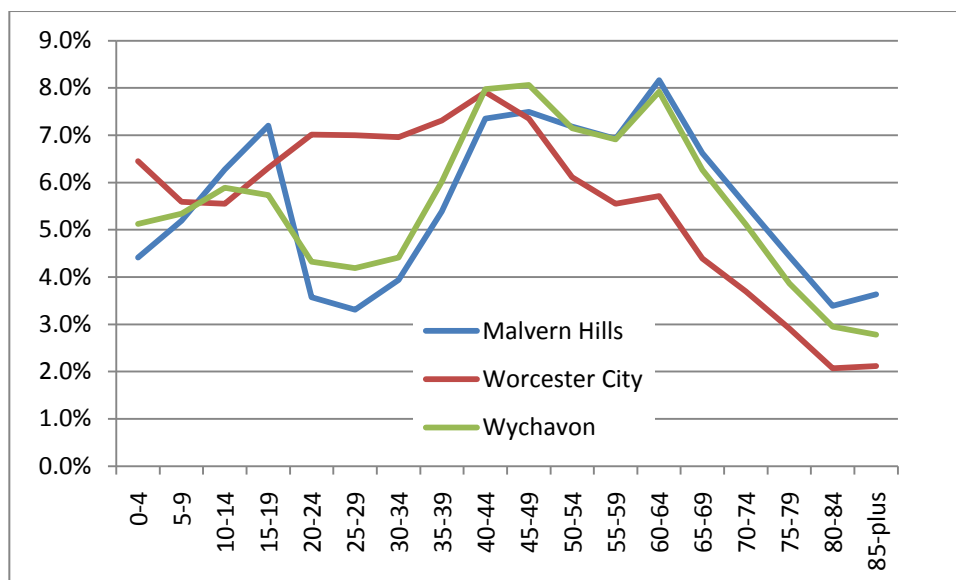


Source – ONS mid-year estimates, 2010

Figure 3 below further illustrates the age structure of the South Worcestershire districts in relation to each other. This highlights the decline between the 15-19 age band and the 20-24 age band in Malvern Hills and Wychavon, as families with children tend to move into these areas, but young adults aged 18-24 tend to move out of these rural areas in favour of urban areas for job opportunities or university towns. This decline is not present in the Worcester City age structure, location of the University of Worcester and key economic centre within the county. Worcester City has noticeably lower proportions of older people than in the other two South Worcestershire districts.

The other interesting element is in the 60-64 age group, where the population "spike" representing the "baby boomers" is prominent across the districts. The exception is Worcester City where the spike is much less prominent, due to pre-retirement groups tending to migrate out of that area.

Figure 3 – Population of South Worcestershire Districts by 5-year Age Groups, 2010



Source – ONS 2010 mid-year estimates

Table 1 – Population of Worcestershire Districts by Broad Age Groups, 2010 (thousands)

Area	0-15	%	16-64	%	65-plus	%
Malvern Hills	13.1	17.4%	44.5	59.0%	17.8	23.6%
Worcester City	17.8	18.7%	62.6	66.1%	14.4	15.2%
Wychavon	20.6	17.6%	71.9	61.5%	24.5	21.0%
South Worcs	51.4	17.9%	179.0	62.3%	56.7	19.7%
Worcestershire	100.8	18.1%	349.2	62.6%	107.4	19.3%
West Midlands	1,055.4	19.3%	3,462.4	63.5%	937.4	17.2%
England	9,766.3	18.7%	33,861.4	64.8%	8,606.3	16.5%

Source – ONS 2010 mid-year estimates

From the most recent estimates in mid-2010, almost 18% of people in South Worcestershire are aged 15 and under, whilst around 19.7% of people are aged 65-plus. This reinforces the fact that the age structure of South Worcestershire is older than both the West Midlands Region (in which over 17% are 65 and over) and England (in which 16.5% are 65-plus), and is slightly older than the Worcestershire average. Proportions of older people are noticeably lower in the urban districts of Worcester City 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.

Worcester City has the youngest age structure in South Worcestershire and the level of 0-15 year olds similar to the national average

Table 2 – Mid-2010 Population Estimates – Key Age Groups (thousands)

Area	18-24	%	75-plus	%	85-plus	%	All Persons
Malvern Hills	4.7	6.2%	8.6	11.5%	2.7	3.6%	75.4
Worcester City	9.3	9.8%	6.7	7.1%	2.0	2.1%	94.8
Wychavon	7.5	6.4%	11.2	9.6%	3.3	2.8%	117.0
South Worcs	21.5	7.5%	26.6	9.3%	8.0	2.8%	287.2
Worcestershire	41.4	7.4%	49.4	8.9%	14.7	2.6%	557.4
West Midlands	524.3	9.6%	439.6	8.1%	124.5	2.3%	5,455.2
England	4,977.8	9.5%	4,119.4	7.9%	1,197.8	2.3%	52,234.0

Source – ONS mid-year estimates, 2010

In South Worcestershire 21,500 people are estimated to be aged 18-24, representing 7.5% of the total population, similar to the proportion in the county. This is lower than the national and regional averages which are both around 9.5%. It is noticeable that Worcester City, the urban centre in Worcestershire and location of the University of Worcester, is the only district to have a higher proportion of 18-24 year olds than the national average. The rural district of Malvern Hills has the lowest percentage of 18-24 year olds, at less than 6%.

South Worcestershire has an estimated 49,400 residents aged 75-plus, and 8,000 persons aged 85 and over. This further illustrates the older age structure in South Worcestershire compared regional and national averages, and that South Worcestershire has a slightly higher proportion of older residents than the whole of the county.

Table 3 – Population Change over Time, 1991 - 2010 (thousands)

Area	1991	2001	2005	2010	Change 1991-10	Change 2001-10
Malvern Hills	70.0	72.2	73.6	75.4	7.7%	4.4%
Worcester City	83.3	93.4	93.1	94.8	13.8%	1.5%
Wychavon	101.9	113.1	115.2	117.0	14.8%	3.5%
South Worcs	255.2	278.7	281.9	287.2	12.5%	3.0%
Worcestershire	512.4	542.2	549.3	557.4	8.8%	2.8%
West Midlands	5,229.7	5,280.7	5,347.2	5,455.2	4.3%	3.3%
England	47,875.0	49,449.7	50,466.2	52,234.0	9.1%	5.6%

Source – ONS mid-year estimates, 1991-2010. All figures are for current boundaries

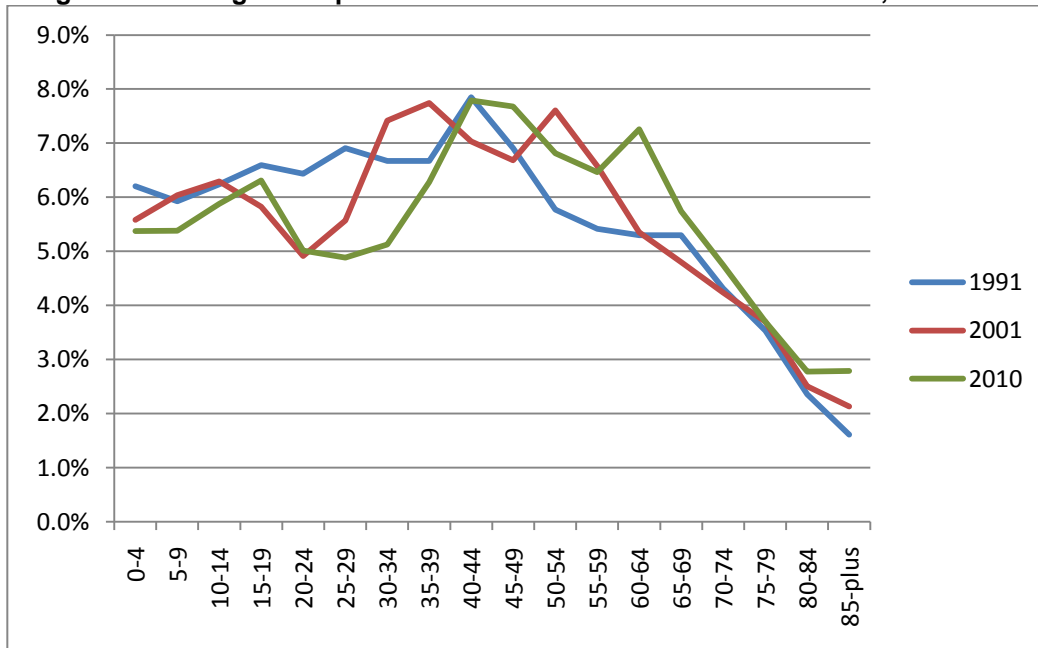
Since 1991 the population of South Worcestershire has increased by around 12.5%, higher than the county, national and regional averages. It is apparent that the relative growth in population in South Worcestershire has slowed notably in more recent years. The change since 2001 in South Worcestershire is 3.0%, slightly higher than the whole of the county but slightly lower than the regional average and noticeably lower than the national average of 5.6%.

At a district level, population increases since 1991 have been notably larger in Worcester City and Wychavon than in Malvern Hills. In contrast, the population in Malvern Hills has increased more in proportional terms since 2001 than the other two South Worcestershire districts.

As well as a growing population, South Worcestershire has an aging population. Figure 4 below compares the age structure in 1991 with the current estimate in 2010. It can be seen that in South Worcestershire the proportion of the population 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 2010 than it was in 1991. This is due to the higher levels of people leaving South Worcestershire to attend higher education, which is much more common now than it was in the past. This has contributed to the lower proportion of persons aged under 35 within South Worcestershire. The other, smaller element is the lower birth rate among women, which although now rising is still low having reached a minimum in around 2001. This pattern in birth rates is replicated nationally.

Figure 4 – Change in Population Structure in South Worcestershire, 1991-2010



Source – ONS mid-year estimate 2010 and 1991 & 2001 Censuses. All figures for current boundaries

It is also noticeable that the population "spike" representing the "baby boomers" born just after the 2nd World War is prominent in the 40-44 age group in 1991, compared to the 60-64 age group in 2010 as these people have "aged on" in the time frame. This population "bulge" has contributed to the higher levels of persons aged over 65 in South Worcestershire, 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.

Table 4 below gives details of the components of change in South Worcestershire and each of the districts. It can be seen that over the last 5 years South Worcestershire has had an average population increase of around 1,050 per annum. About 800 of this growth is due to migration into the South Worcestershire, accounting for almost 80% of the total increase. This compares to almost 60% of total population increase in the county due to migration, in England just less than half of the population increase due to migration, whilst in the West Midlands Region migration into the area accounts for around 15% of the total population growth.

Table 4 – Components of Population Change over Time, annual average, 2005-10

	Natural Change (change due to births & deaths)	Migration & Other Changes	Total Average Annual Change
Malvern Hills	-297	658	361
Worcester City	498	-171	327
Wychavon	36	328	364
South Worcs	237	815	1,052
Worcestershire	690	944	1,634
West Midlands	18,306	3,288	21,594
England	189,166	164,413	353,579

Source – ONS mid-year estimates, 2005-2010

It can be seen that the urban district of Worcester City have relatively high natural change levels. This is due to the younger age structure in that area, with a higher number 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 other areas.

Changes due to migration are also split along urban/rural lines, with the rural area of Malvern Hills gaining 650 persons per annum, and Wychavon gaining around half that number. By contrast the urban area of Worcester City experiences a net outflow of over 150 per annum.

It is noted that the first results from the 2011 census for population by age and sex are due to be released in July 2012, and that the 2011 mid-year estimates, along with revisions of the mid-year estimates for the years 2002-10 will follow in September 2012.

3. 2008-based Population Projections

ONS have produced sub-national population projections, which estimate the likely population growth in an area in the future, whilst the Communities and Local Government (CLG) department 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 is noted that the ONS use the previous 5 years data to compile their assumptions for future years in their projections.

It can be seen that by 2030 South Worcestershire is projected to have a population of over 310,000, representing an increase of over 23,000 on the 2010 figure an increase of over 8%. This similar to the county average, but is a lower proportional increase than projected in the West Midlands region as a whole (10.7%), and a notably smaller projected increase than the national average of over 14%.

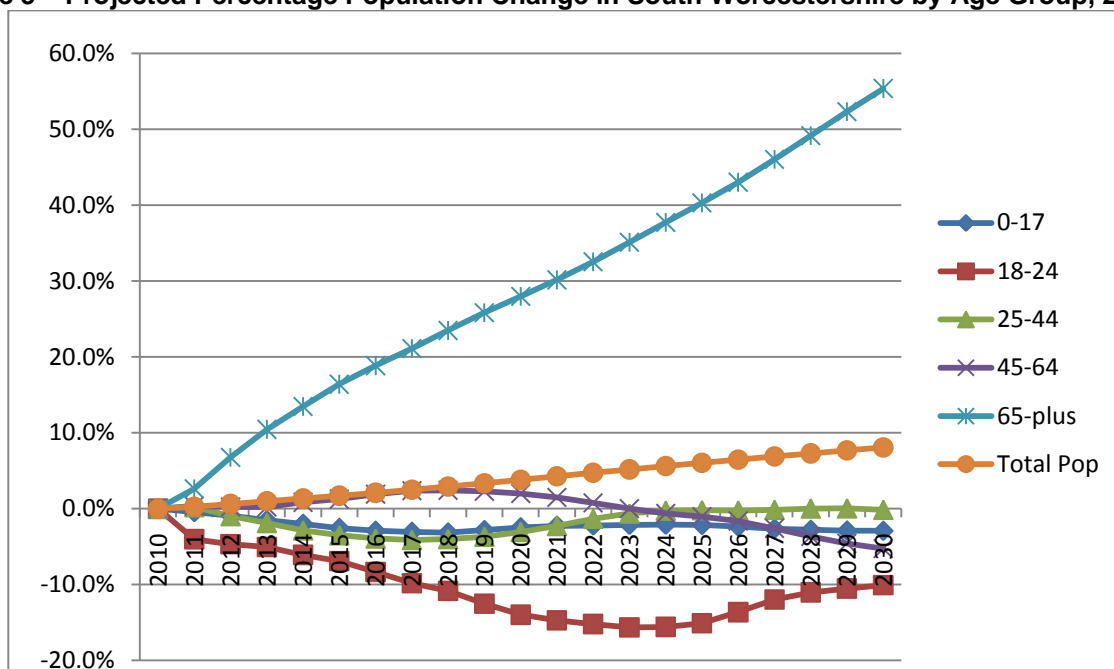
Table 5 – ONS 2008-based Population Projections, South Worcestershire Districts, 2010-30 (thousands)

Area	2010	2015	2020	2030	Change 2010-30	Percentage Change
Malvern Hills	75.4	76.5	78.4	82.5	7.1	9.5%
Worcester City	94.8	95.9	97.4	100.2	5.5	5.8%
Wychavon	117.0	119.7	122.3	127.6	10.6	9.0%
South Worcs	287.2	292.1	298.1	310.3	23.2	8.1%
Worcestershire	557.4	568.8	581.0	604.8	47.4	8.5%
West Midlands	5,455.2	5,599.7	5,750.7	6,038.8	583.6	10.7%
England	52,234.0	54,087.9	56,039.9	59,738.3	7,504.3	14.4%

Source – ONS 2008-based Population Projections & 2010 mid-year estimate

Within South Worcestershire, projected increases are relatively high in Wychavon, at almost 11,000, and in percentage terms in Malvern Hills, at almost 10%. In contrast, Worcester City has a relatively low projected increase of less than 6%.

Figure 5 – Projected Percentage Population Change in South Worcestershire by Age Group, 2010-30



Source – ONS 2008-based Population Projections & 2010 mid-year estimate

Figure 5 shows that the projected increase in population within South 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 31,000 in the 2010-30 period. This represents growth of 55% among that age group, and also represents 135% of the total projected population increase. In comparison, the 18-24 age group is projected to decrease by 10%, whilst each of the other age ranges are projected to experience smaller decreases.

Table 6 – ONS 2008-based Population Projections, Worcestershire Districts, 2010-30 (thousands)

Area	0-17	18-24	25-44	45-64	65-plus	Total Pop
Malvern Hills	-5.6%	-23.5%	0.3%	-5.3%	57.5%	9.5%
Worcester City	-1.2%	-3.4%	2.4%	-3.9%	43.8%	5.8%
Wychavon	-2.6%	-10.0%	-3.0%	-6.2%	60.7%	9.0%
South Worcs	-2.9%	-10.1%	-0.1%	-5.3%	55.4%	8.1%
Worcestershire	-0.8%	-10.6%	-0.2%	-5.1%	56.9%	8.5%
West Midlands	8.7%	-1.8%	6.2%	-0.8%	44.0%	10.7%
England	10.6%	0.4%	9.1%	5.2%	50.3%	14.4%

Source – ONS 2008-based Population Projections & 2010 mid-year estimate

It is notable that the projected decline in people in the working age groups are not replicated at a regional or national level – the projected decrease among 18-24 year olds in particular is prevalent in South Worcestershire and the county but is much smaller in the region and is a projected increase in the whole of England. The decline is also projected to be pronounced in the 45-64 age group, which again is not representative of the national figures.

3.1. Births and Deaths

Table 7 – Total Number of Births in the South Worcestershire Districts, 2005-10

Area	2005-06	2006-07	2007-08	2008-09	2009-10	Average 2005-10
Malvern Hills	620	610	630	620	590	614
Worcester City	1,280	1,300	1,290	1,340	1,330	1,308
Wychavon	1,210	1,130	1,140	1,140	1,110	1,146
South Worcs	3,110	3,040	3,060	3,100	3,030	3,068
Worcestershire	5,960	6,220	6,170	6,120	6,090	5,960

Source – ONS 2006-10 mid-year estimates, Components of Change

Over the past 5 years South Worcestershire has averaged almost 3,100 births per annum. Worcester City averages the most at a district level with over 1,300 births per annum due to the younger age structure within that district, whilst Malvern Hills which has a much older age structure averages just over 600 births per year

Table 8 – Total Number of Deaths in the South Worcestershire Districts, 2005-10

Area	2005-06	2006-07	2007-08	2008-09	2009-10	Average 2005-10
Malvern Hills	930	870	900	910	920	906
Worcester City	790	820	820	850	770	810
Wychavon	1,160	1,090	1,130	1,120	1,060	1,112
South Worcs	2,880	2,780	2,850	2,880	2,750	2,828
Worcestershire	5,430	5,370	5,450	5,530	5,330	5,422

Source – ONS 2006-10 mid-year estimates, Components of Change

South Worcestershire averages over 5,400 deaths per annum. At a district level Wychavon has the most deaths due to a relatively older age structure coupled with a high number of residents, whilst the younger age structure in Worcester City accounts for the low number of deaths in that district.

Table 9 – Natural Change in the South Worcestershire Districts, 2005-10

Area	2005-06	2006-07	2007-08	2008-09	2009-10	Average 2005-10
Malvern Hills	-310	-260	-270	-290	-330	-292
Worcester City	490	480	470	490	560	498
Wychavon	50	40	10	20	50	34
South Worcs	230	260	210	220	280	240
Worcestershire	530	850	720	590	760	538

Source – ONS 2006-10 mid-year estimates, Components of Change

South Worcestershire gains an average of almost 250 persons per annum due to Natural Change. This compares to an average of around 550 in the whole of the county. Worcester City has an average annual natural change of around 500 persons per annum, whilst Malvern Hills experiences almost 300 more deaths than births each year.

3.2. Internal Migration

Many migration patterns in this country are well-established; for example younger people tend to move to towns and cities for education, for employment reasons, or because house prices and the general cost of living in rural areas (i.e. possibly needing to run a car to access work or services) is unaffordable. Older persons and families with children tend to move to rural areas, which are perceived to be more attractive and desirable, perhaps for peaceful surroundings or for health reasons.

In gross terms, movements from urban to rural areas make up the bulk of all relocations, and hence rural areas tend to experience a net inflow of people (i.e. more people moving in than moving out), whereas urban areas experience a net outflow (more people moving out than moving in). The majority of movements tend to be over short distances, although levels of migration are also high to and from areas with large population bases.

Table 10 below outlines the total change due to internal migration.

Table 10 – Total Net Internal Migration into the South Worcestershire Districts, 2005-10

Area	2005-06	2006-07	2007-08	2008-09	2009-10	Average 2005-10
Malvern Hills	510	497	393	250	790	488
Worcester City	-324	-350	-308	-140	-360	-296
Wychavon	444	459	-156	170	240	230
South Worcs	630	610	-80	280	670	422
Worcestershire	1,222	1,170	273	220	380	652

Source – ONS 2006-10 mid-year estimates, Components of Change

It can be seen that over the 2005-10 period South Worcestershire has an annual net internal in-migration of over 400 per annum – this compares to the county average of around 650 persons. It is also apparent that the level of net inflow has decreased markedly in the last 3 years, with an annual in-migration of around 600 people in 2005-07 falling to much lower levels in subsequent years, with a net outflow from the South Worcestershire area in 2007-08. This downturn in migration figures is replicated in the county averages, although in South Worcestershire the numbers have returned to the previous level of over 600 in the final year of 2009-10, which is not observed in the county figures.

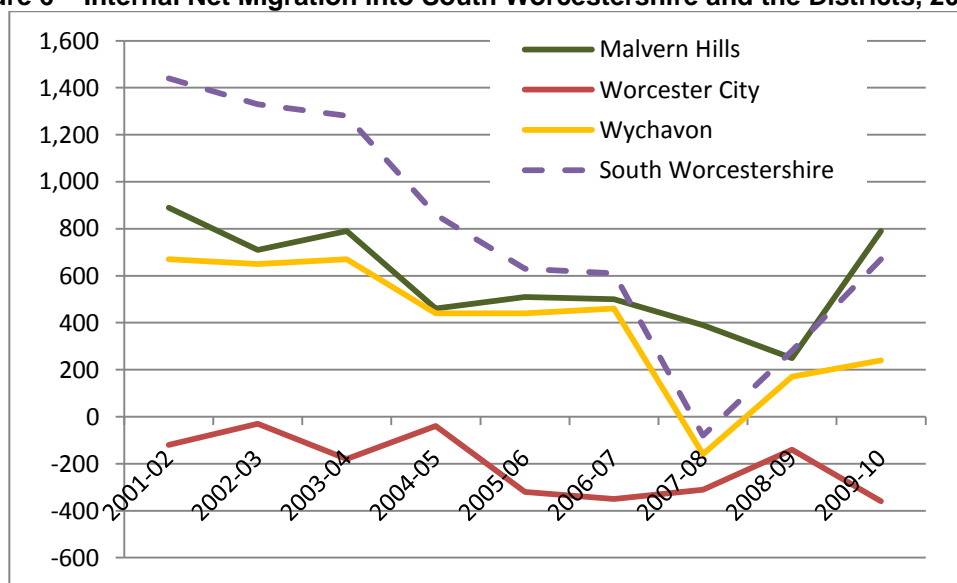
The reasons for this decrease are varied and not necessarily obvious. It is possible that the beginning of the economic downturn may have played a part in the lower in-migration into Worcestershire, with the level and geographic distribution of house-building also possibly contributing. However, the pattern of decreasing internal migration into Worcestershire has been occurring for many years, with an internal in-migration of around 2,500 per annum in the first two years after the 2001 census.

At a district level, the rural districts of Malvern Hills and Wychavon tend to have fairly substantial inflows due to internal migration. Malvern Hills experiences an average net in-migration of almost 500 persons per annum, as people move into this rural district for improved quality of life. There is evidence that this level of migration decreased somewhat between 2005 and 2009, with a 510 inflow in 2005-06 decreasing to 250 in 2008-09, but the level has risen again to stand at almost 800 in the most recent year of 2009-10.

The internal net inflow into Wychavon averages almost 250 persons per annum, but fluctuations are more prominent in this rural district. The level of in-migration was substantial at around 450 per annum in 2005-07, but fell to a net **loss** of around 150 by 2007-08. The figure has increased again slightly and is an inflow of almost 250 in the most recent year of 2009-10, but this still represents a decline of in-migration compared to earlier years.

The urban district of Worcester City tends to lose out in net terms to other areas in the UK, with around 300 persons per annum in net terms departing Worcester City. The net losses have fluctuated throughout the 5-year period.

Figure 6 – Internal Net Migration into South Worcestershire and the Districts, 2001-10



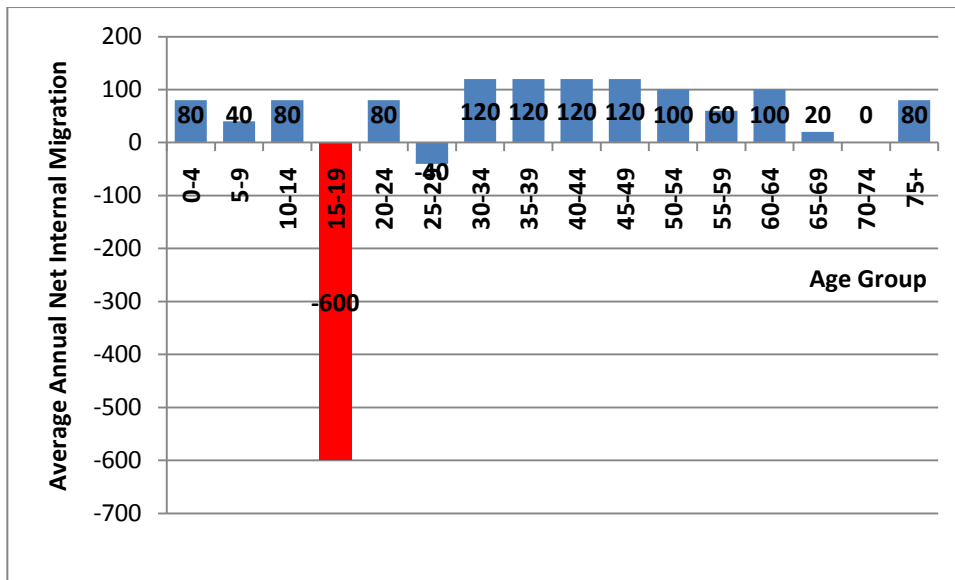
Source – ONS mid-year estimates Components of Change, 2002-10

Figure 6 above further illustrated the substantial decline in the net inflow due to internal moves into the South Worcestershire area since the early years of the decade – a 1,400 net inflow in 2001-02 has decreased throughout the timeframe to become a net loss of almost 100 by 2007-08, although the figures have increased again in the final two years. It is evident that South Worcestershire as a whole has experienced decreasing levels of internal in-migration over time, and that at a district level some areas within the county have been affected by this decline to a greater extent than others. The decline in Wychavon is the most prevalent.

Figure 7 below illustrates the net movements between South Worcestershire and the rest of the UK, split by 5-year age group. In the period 2005-10 South Worcestershire gained a net annual average of over 400 people in movements between the county and the rest of the UK.

It can be seen that South Worcestershire makes net gains across almost all of the age groups with the notable exception of those aged 15-19, which record an average net loss of around 600 persons per annum. It is people in these age groups who are more likely to move for access to higher education or for employment reasons, and many will be leaving the county in favour of more urban areas or university towns. There is also a relatively high in-migration among the 20-24 age range. This will include an element of graduated students returning home to Worcestershire after completing their studies, although many of these people prefer to stay in the area that they studied in, or to move to other urban areas for greater job opportunities.

Figure 7 – Average Annual Internal Net Internal Migration into South Worcestershire by 5-year age group, 2005-10

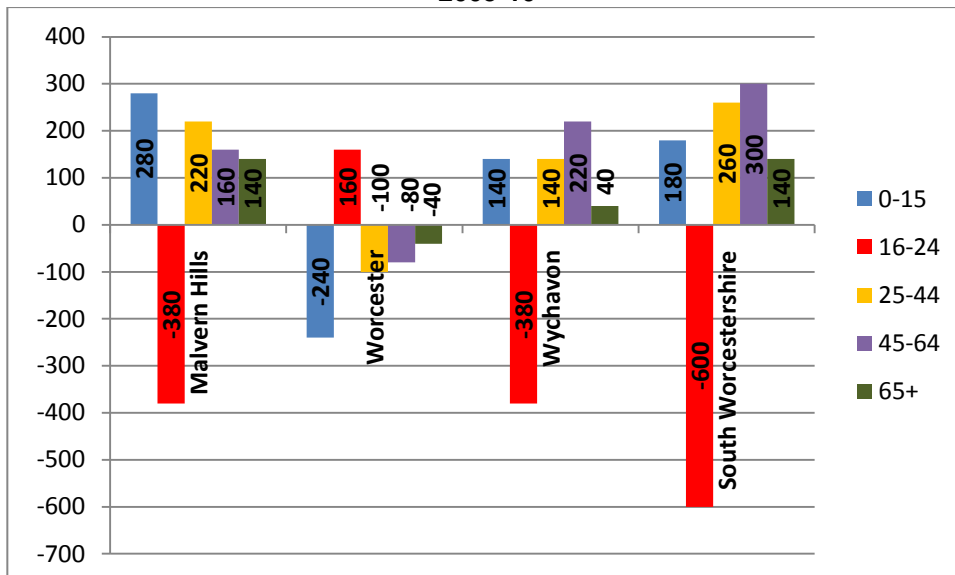


Source – National Health Service Central Register (NHSCR) figures, 2005-10

South Worcestershire tends to experience a net gain in almost all other age groups, with groups of people such as families with young children, the pre-retirement groups and the retired age groups all contributing to this net inflow. The inflow of families can be distinguished by the reasonably high levels of in-migration among both children and the 30-44 age range. A high inflow of persons aged 75-plus is also prominent as people move into the area after retirement, and also evident is a noticeable inflow among people aged 60-64, perhaps due to people moving after taking early retirement or people choosing to relocate just before retiring or when their children have grown up and left home.

Figure 8 below shows the age breakdown of net internal migration split by district. It is noticeable that all districts with the exception of Worcester City are experiencing net losses in the 16-24 age group. Worcester City, as the main employment centre in the county, and the location of the University of Worcester, attracts this young adult group, and helps to limit the impact of the large-scale net outward migration of young adults out of the county. Malvern Hills and Wychavon have particularly noticeable net outflows in the 16-24 age range, of almost 400 persons per annum.

Figure 8 – Average Annual Internal Net Migration into South Worcestershire Districts by Broad Age Group, 2005-10



Source – National Health Service Central Register (NHSCR) figures, 2005-10

The migration of families with young children into the districts of Malvern Hills and Wychavon is also illustrated here, defined by significant net gains for those districts in both the 0-15 and 25-44 age groups, with net outflows of children (and therefore families) noticeable in Worcester City. This follows the established pattern of families moving away from urban centres and larger towns in favour of more rural surroundings.

Net inflows of persons aged 65 and over are also apparent into the rural districts, most noticeably Malvern Hills, whilst Malvern Hills and Wychavon also experience net gains in the 45-64 age band. This age range includes people of pre-retirement age and those who have retired early, and view retirement as an opportunity to move to a different, typically more rural, area.

3.3. International Migration

The demographic structure of South Worcestershire is also influenced by migration from overseas, although total gross and net flows are much lower than is the case for internal migration. Migration from overseas, and in particular the arrival and employment of migrant workers is a contentious issue, and one that receives much media attention as the extra demand on local services in particular is scrutinised.

Total movements due to international migration are also available from ONS. These figures only include those people who have moved into the area from overseas and stay in the UK for at least 12 months¹, and are reproduced in Table 11 below:-

Table 11 – Total Net International Migration into the South Worcestershire Districts, 2005-10

Area	2005-06	2006-07	2007-08	2008-09	2009-10	Average 2005-10
Malvern Hills	256	274	338	180	-20	206
Worcester City	-241	148	366	480	-150	122
Wychavon	141	134	133	-60	-20	64
South Worcs	156	556	837	600	-190	392
Worcestershire	-153	370	882	490	-340	250

Source – ONS 2005-10 mid-year estimates, Components of Change

The figures for net international migration into the county fluctuate fairly rapidly. According to the ONS estimates, South Worcestershire was recording an annual net gain of around 150 in 2005-06, which increased to almost 850 in 2007-08. This increase is potentially down to many reasons, although a key factor is undoubtedly EU Accession of the A8 Countries² in May 2004. The inflow has fallen from the peak in 2007-08, and is actually recorded as a net loss of almost 200 persons in the most recent year of 2009-10 – this is probably linked to the economic downturn in the UK, and possibly to less people moving into the UK from overseas for job opportunities, as well as migrant workers already in the UK returning home as economic conditions in the UK have deteriorated. This pattern is also reflected in the Worcestershire figures.

The South Worcestershire districts of Malvern Hills, Worcester City and Wychavon have tended to have a higher number of people from overseas migrating into the area in net terms than the whole of the county. Malvern Hills has an average inflow of over 200 persons per annum due to international migration, which is the highest average of all the districts. The increase in migration from abroad has been particularly striking in Worcester City – this is probably due to the fact that this is the urban centre in the county and people from overseas are more likely to settle in that district. It is also noticeable that Worcester City had the largest net outflow due to international migration in 2009-10, which again may be related to less people from overseas looking for work in the UK as well as workers from overseas already in the UK returning to their country of origin

In Wychavon, the relatively high level of in-migration from abroad is most likely linked to the relatively high levels of migrant workers that are present in that rural district, with many migrant workers and their families settling in the area. People from overseas are attracted to Wychavon for opportunities in areas such as farming and food production.

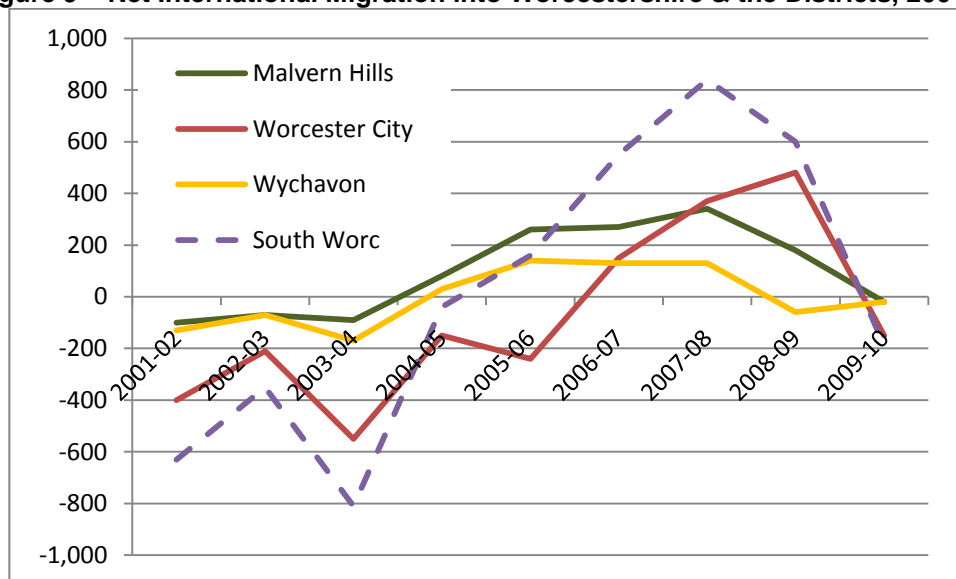
Figure 9 below further illustrates the increase over the past few years in the level of in-migration due to overseas migration. The fluctuations in net migration from abroad is evident in Worcester City and to a lesser extent Malvern Hills. The change in Worcester City is mainly due to an increase in the gross numbers of people coming in from overseas, and is due to the changing economic and political landscape coupled with the job and housing opportunities that exist there. There may also be an increasing element of overseas students moving to Worcester City for access

¹ Please note that there is very little data at Local Authority level available for short-term migration, consisting of people moving for between 1 and 12 months. This may apply to many migrant workers that apply for a National Insurance number to work in Worcestershire.

²The A8 counties are the Czech Republic, Estonia, Latvia, Lithuania, Slovenia, Slovakia, Poland and Hungary. EU Accession in May 2004 meant that people from these countries could legally work anywhere in the EU. It is also of interest to note that two further countries, Romania and Bulgaria, were granted accession in January 2007

to Worcester University. Applicants to Worcester University have increased by 100% since September 2005 when the establishment was granted university status, many of whom are from overseas.

Figure 9 – Net International Migration into Worcestershire & the Districts, 2001-10



Source – ONS 2001-10 mid-year estimates, Components of Change

3.4. Total Migration

Total net migration into the county and each of the districts is shown in Table 12 below. It can be seen that, in terms of total migration, South Worcestershire experiences an average net gain of over 800 persons per annum. It is also noticeable that the decreases in both internal and international migration in net terms in 2009-10 have resulted in a substantial net decrease in the figures for the total migration into South Worcestershire. The 2009-10 figure has a net inflow into South Worcestershire of less than 500, compared to an in-migration of more than 1,100 in 2006-07. This is most likely due to the economic downturn, and is replicated in the figures for the whole of the county. It is also notable that over the past 5 years net inflow into South Worcestershire is around 90% of the total Worcestershire figure.

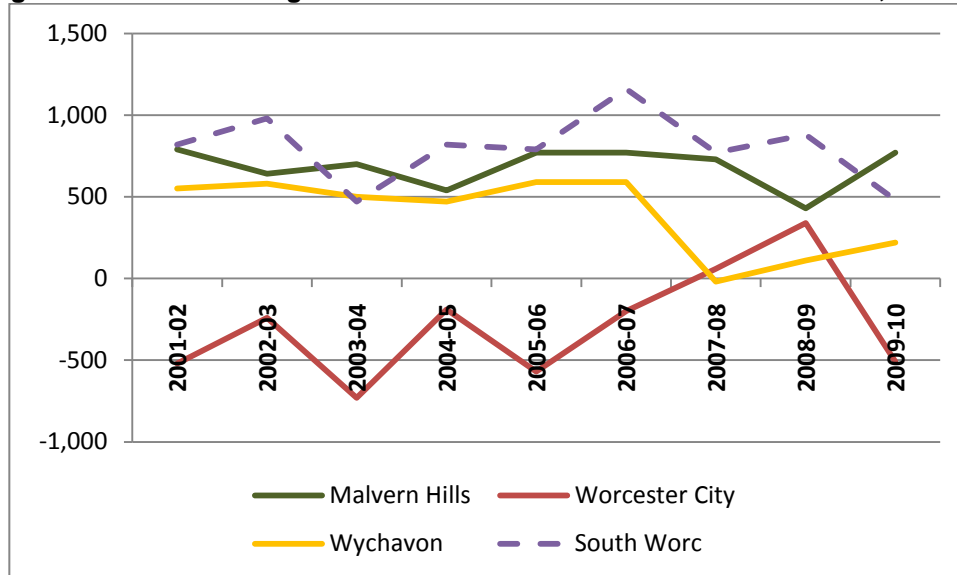
Table 12 – Total Net Migration into the Worcestershire Districts, 2005-10

Area	2005-06	2006-07	2007-08	2008-09	2009-10	Average 2005-10
Malvern Hills	766	771	731	430	770	694
Worcester City	-565	-202	58	340	-510	-176
Wychavon	585	593	-23	110	220	298
South Worcs	790	1,160	770	880	480	816
Worcestershire	1,069	1,540	1,155	710	40	904

Source – ONS 2005-09 mid-year estimates, Components of Change

Figure 10 below further illustrates the total migration level into South Worcestershire. In Malvern Hills the total net migration figures over time are fairly stable and constant at around 800 persons per annum with the exception of a trough at 2008-09. Wychavon shows a definite downward trend, with the significant decline in the internal migration figure in these districts having a definite impact on the total migration figures, with a markedly lower in-migration since 2007-08.

Figure 10 – Total Net Migration into the South Worcestershire Districts, 2005-10

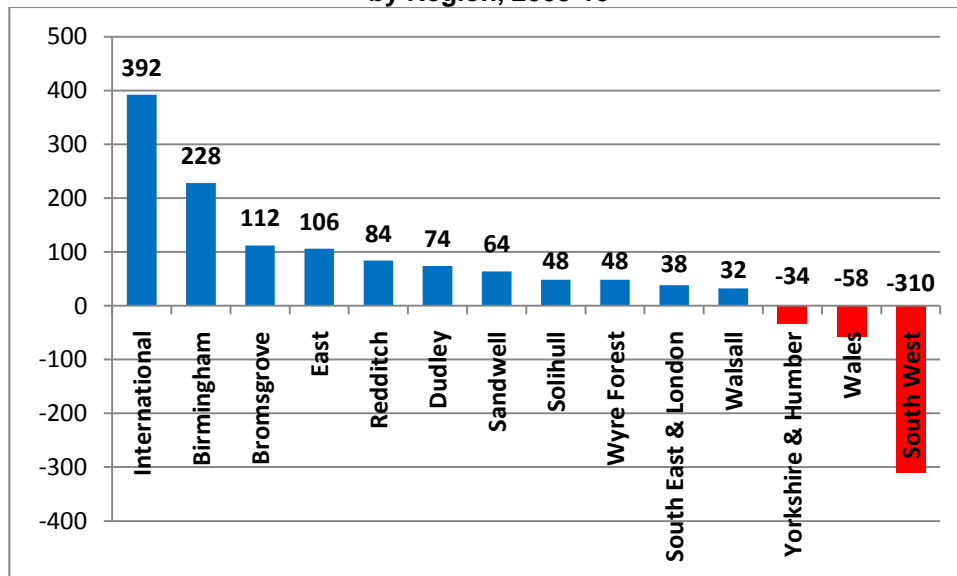


Source – ONS mid-year estimates Components of Change, 2005-10

The total migration into the urban district of Worcester City has increased significantly in the first 4 years of the period, and then fell back to 2005-06 levels in 2009-10. This instability is almost exclusively due to fluctuations in international migration in the case of Worcester City. This illustrates the effect that migration from overseas has had on that urban district.

Net movements in and out of South Worcestershire are now considered. As has already been stated, South Worcestershire experiences an average net gain of around 800 persons per annum, with around 400 per annum coming from internal moves, and 400 from international moves.

Figure 11 – Net Intra-Regional and Inter-Regional Migration into South Worcestershire by Local Authority or by Region, 2005-10



Source – ONS PRDS figures, 2005-10. Only major net flows larger than ± 30 are shown

This illustrates the average annual net change experienced by South Worcestershire to each Local Authority in the West Midlands, to each region in England, to Wales and to abroad. Net migration flows of less than ± 30 per annum are omitted, so only the significant net flows in and out of South Worcestershire are shown.

The general pattern is for net in-migration into Worcestershire from the neighbouring parts of the West Midlands conurbation, from the north Worcestershire districts and from the East, with net migration flows out of South Worcestershire into surrounding rural areas, particularly the South West region. This is a fairly well-established

pattern, of people moving out of urban areas in favour of nearby surrounding more rural areas, and then those areas in turn experiencing a smaller net out-migration to other rural areas further away from the urban areas.

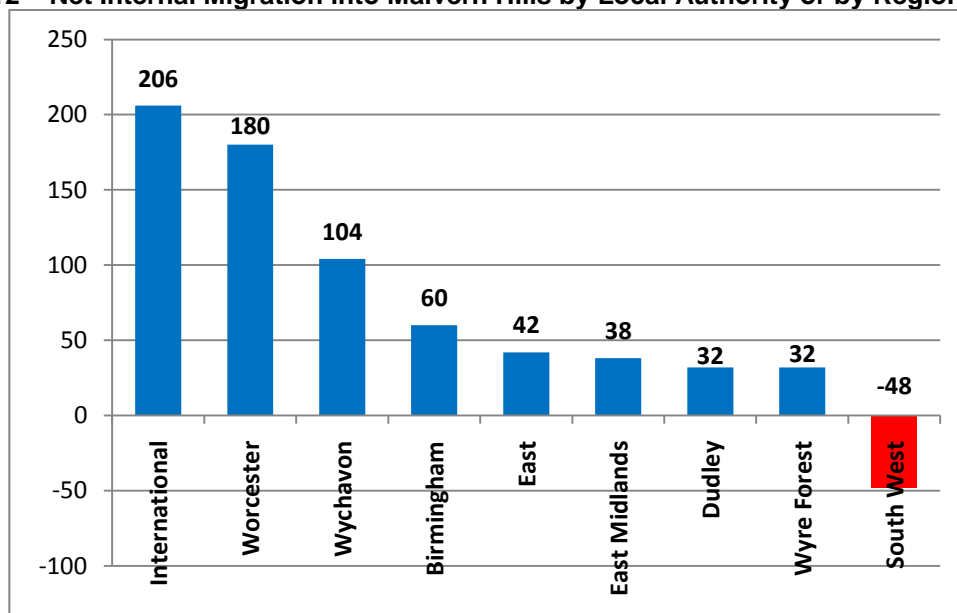
As can be seen the largest net in-migration is from international migration, with almost 400 persons per annum in net terms coming into South Worcestershire from abroad.

There is a significant inflow into South Worcestershire from Birmingham, with over 200 persons per annum in net terms coming into South Worcestershire. Each of the other Local Authorities within the Metropolitan Area with the exception of Coventry and Wolverhampton also contribute to the net inflow experienced by South Worcestershire. Of these areas, there is a net inflow of over 70 persons per annum Dudley, around 60 from Sandwell, and almost 50 from Solihull. The net inflow into South Worcestershire from the Metropolitan Area as a whole is around 450 persons per annum.

South Worcestershire also receives a relatively substantial level of in-migration from the East region, contributing an annual average of just over 100 persons. This would seem to be linked to movement of families, as well as the retired and pre-retired groups coming into the county.

The "ripple effect" can then be seen with people in net terms in turn moving out of South Worcestershire and into rural surrounding areas further away from the conurbation, most notably the South West region, with a net outflow over 300 persons per annum, and to a lesser extent Wales, an outflow of around 60 persons per annum.

Figure 12 – Net Internal Migration into Malvern Hills by Local Authority or by Region, 2005-10



Source – ONS PRDS figures, 2005-10. Only major net flows larger than ±30 are shown

Figure 12 above illustrates the pattern of net migration moves into Malvern Hills. It can be seen that no single migration stream particularly dominates the net inflow experienced by Malvern Hills, with people moving in from overseas, from the other South Worcestershire districts, and from the conurbation. There is then a smaller out-migration moving west and south further away from the Metropolitan Area and into the South West region.

The net inflow into Malvern Hills is almost 500 persons per annum in internal moves, with much of the movement among families and the older age groups. Malvern Hills also has a substantial outflow of around 400 persons per annum in the 16-24 age group due to out-migration of students and young adults.

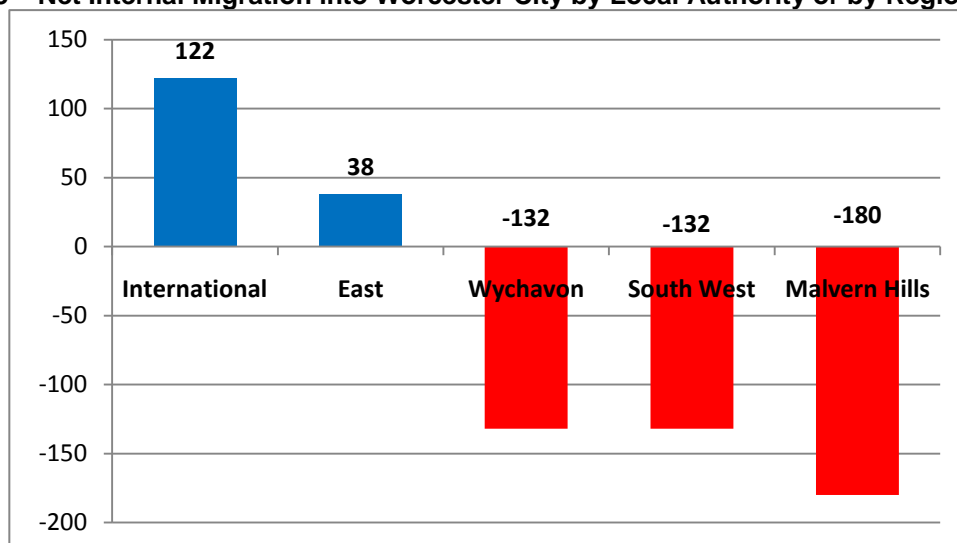
Malvern Hills has a net inflow of around 350 persons per annum from the rest of Worcestershire, almost three quarters of the total internal migration into the district. Most of this is from the neighbouring districts of Worcester City (180 persons each year on average), and Wychavon (over 100 persons per annum), with Wyre Forest also making a lower contribution of around 30 persons per annum. This is linked to families and persons in the retired and pre-retired age groups moving into Malvern Hills. The substantial net movement from Wychavon into Malvern Hills is likely to be a product of the "ripple effect", with people preferring to move further away from the urban areas.

The Metropolitan Area also adds an average of almost 150 persons each year to the in-migration into Malvern Hills, with Birmingham contributing the most of around 60 per annum, and Dudley contributing around 30 persons per year. The largest inflows due to inter-regional moves are from the East and the East Midlands, with each flow averaging around 40 persons each year.

The only significant major outflow from Malvern Hills is in favour of the South West region, an out-migration of around 50 persons per annum.

Figure 13 below show the overall pattern of net moves in and out of Worcester City. As an urban centre Worcester City loses out in net terms to the surrounding rural areas, most notably the neighbouring Worcestershire districts of Wychavon and Malvern Hills, as well as the South West Region.

Figure 13 – Net Internal Migration into Worcester City by Local Authority or by Region, 2005-10



Source – ONS PRDS figures, 2005-10. Only major net flows larger than ± 30 are shown

Worcester City experiences a net outflow of almost 300 persons per annum in internal moves, and with the exception of Redditch is the only district in the county to suffer an annual net loss. Worcester City as the main urban centre in Worcestershire is the only district in the county to achieve a net gain in the 16-24 student and young adult population, but this is cancelled out by an outflow of families (typified by the loss in the 0-15 age group) and retired persons moving out in favour of more rural surroundings.

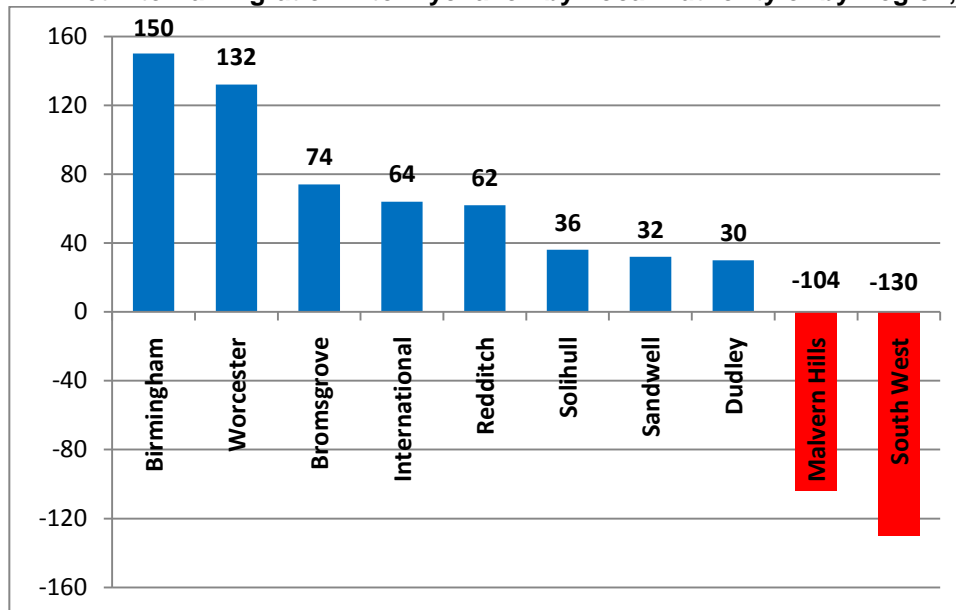
There are three main streams that make up the net outflow from Worcester City. These are to the two neighbouring Worcestershire districts of Wychavon and Malvern Hills, and also to the South West region. Each of these areas is rural in nature and perceived as more desirable areas of residence for families and retired persons.

The largest outflow from Worcester City is to Malvern Hills, with around 180 persons per annum in net terms moving in favour of that rural district. There is a similar movement of people into neighbouring Wychavon to the east, with an annual average of around 130 persons making this move. A similar number of people make up the inter-regional net outflow to the South West each year.

Inter-regional movements also form the only noticeable net migration stream into Worcester City, with around 40 persons per annum moving in from the East. There is also a noticeable inflow from the Metropolitan Area into Worcester City. No particular district dominates this inflow but in total the Metropolitan Area contributes around 60 persons per annum moving into Worcester City.

The rural district of Wychavon experiences an average net inflow of over 200 persons per annum in internal moves. Like most of Worcestershire, Wychavon loses out in net terms in the student and young adult (16-24) age group, with almost 400 persons in this age range leaving Wychavon. The net inflow is made up primarily of families and especially the pre-retirement age groups, with noticeable net in-migration of over 200 persons each year among the 45-64 age range. The net change experienced by Wychavon with each Local Authority in the West Midlands, as well as the other regions in England and Wales, is shown in Figure 14 below.

Figure 14 – Net Internal Migration into Wychavon by Local Authority or by Region, 2005-10



Source – ONS PRDS figures, 2005-10. Only major net flows larger than ± 30 are shown

Figure 14 illustrates the overall pattern of net migration into and out of Wychavon. The substantial in-migration from the more urban areas to the north is again evident, including the Metropolitan Area, most notably Birmingham, as well as the northern Worcestershire districts of Redditch and Bromsgrove. Wychavon also receives considerable levels of in-migration from the urban centre of Worcester City. Prominent out-migration from Wychavon is then in favour of rural areas to the south and west further away from the conurbation, most notably Malvern Hills and the South West region.

The largest individual net inflow into Wychavon is from Birmingham. In net terms, Wychavon gains an average of 150 persons per annum from Birmingham, with the other Metropolitan Areas of Sandwell, Dudley and Solihull also each contributing between 30 and 40 persons each year to the net gain that Wychavon experiences. This is as expected and follows the usual migration pattern of people moving out of urban areas in favour of more rural surroundings. In total over 250 persons per annum in net terms move out of the Metropolitan Area in favour of Wychavon.

The other major migration streams into Wychavon are from other districts within Worcestershire. Wychavon shares a border with each of the other districts in Worcestershire and the interaction between Wychavon and the rest of the county is prominent. In net terms, Wychavon gains over 130 persons per annum from Worcester City, over 70 persons per annum from Bromsgrove, and over 60 persons per annum from Redditch. Again, this would seem to be linked to families and the pre-retirement age groups moving into rural areas and away from urban areas.

There are also several noticeable net migration streams out of Wychavon, which seem to be largely due to the "ripple effect" of people moving out of rural areas that are close to urban centres in favour of even more remote rural areas. The largest net outflows are to Malvern Hills and the South West, with around 100 persons and 130 persons per annum respectively in net terms leaving Wychavon on favour of these neighbouring rural areas.

4. Components of Change

Table 13 below shows the components of change assumptions that have been used in the ONS 2008-based population projections. It should be noted that the assumptions are based on data taken from the previous 5 years, so the assumptions are based on 2003-08.

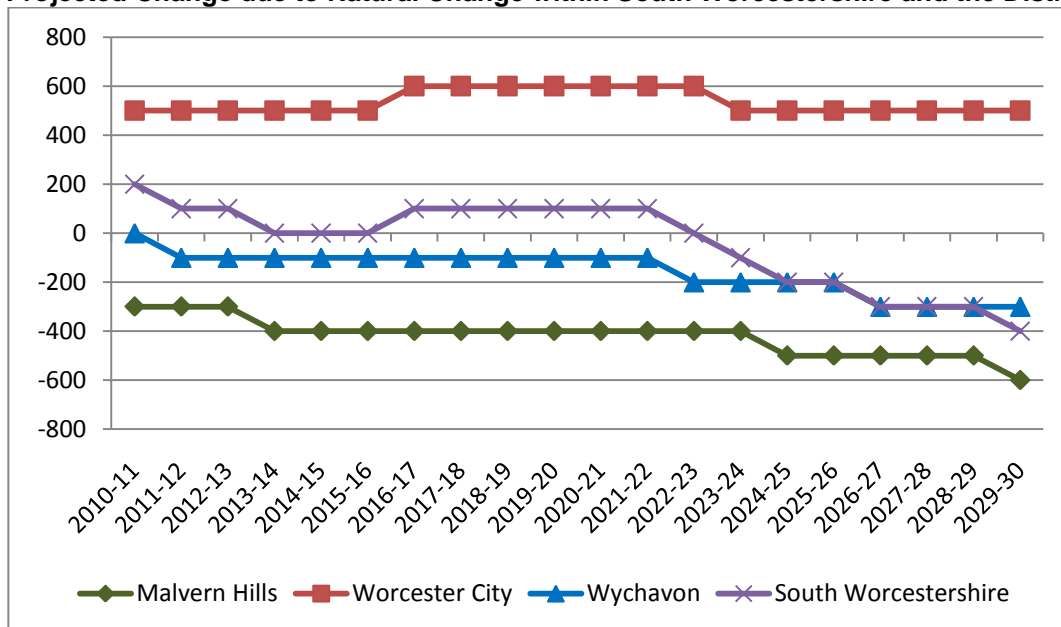
It can be seen that in the assumptions internal migration has by far the greatest effect on South Worcestershire. Internal migration accounts for a population increase of almost 26,000 persons over the 20-year period. In contrast, migration between South Worcestershire and areas abroad results in net loss of 2,000 persons over the twenty year period, with natural change (population change due to births and deaths) also resulting in a small net loss for South Worcestershire.

Table 13 – Components of Change³ Assumptions for South Worcestershire Districts, 2010-30

Area	Natural Change	Internal Migration	Cross-border Migration	International Migration	Total Migration	Total Population Change
Malvern Hills	-8,400	13,200	4,000	0	16,000	7,100
Worcester City	10,700	-1,900	-3,700	0	-5,300	5,500
Wychavon	-3,100	14,600	0	-2,000	13,500	10,600
South Worcs	-800	25,900	300	-2,000	24,200	23,200
Worcestershire	600	55,900	-3,700	-6,000	45,800	47,400

Source – ONS 2008-based Population Projections. Values may not sum due to rounding errors

Figure 15 – Projected Change due to Natural Change within South Worcestershire and the Districts, 2010-30



Source – ONS 2008-based population projections assumptions

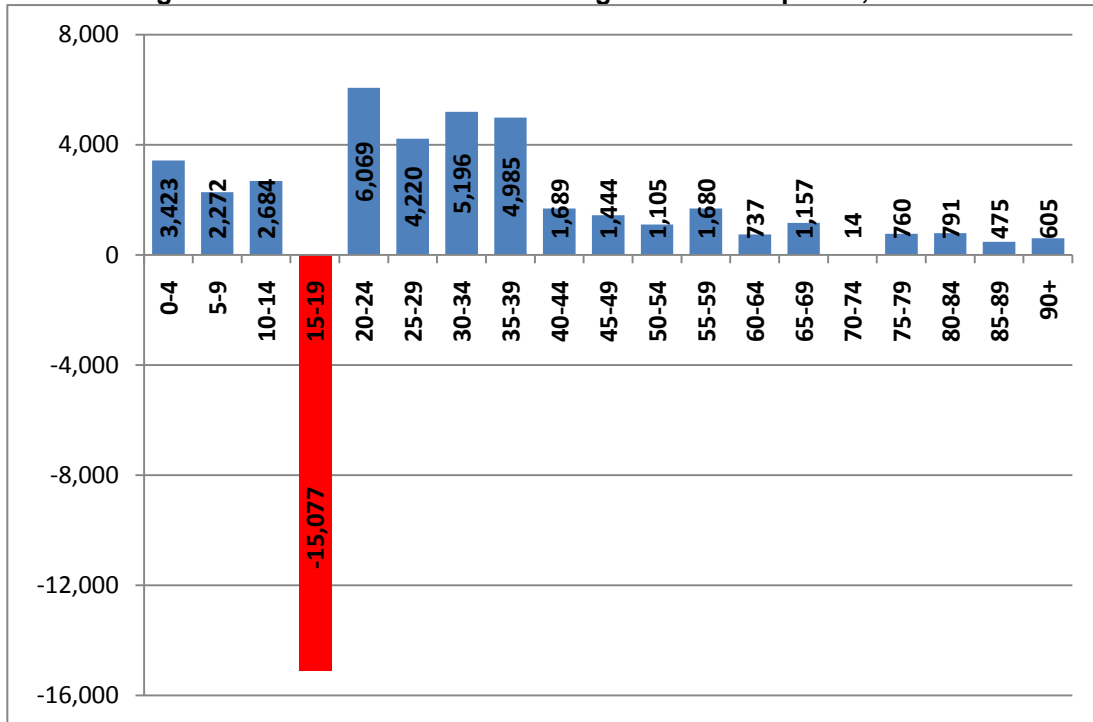
It can be seen that the Natural Change component within South Worcestershire is projected to decrease in the future. As has already been stated the effect of Natural Change across the whole of the 2010-30 time period is a net loss of 800 persons in South Worcestershire. The current situation in the most recent 2009-10 estimate is more births than deaths in the area, giving a natural change for 2009-10 of around 280. This is reflected in the first few years of the projected South Worcestershire figures, but the figures for Natural Change show a projected decline for South Worcestershire from +280 in 2010-11 and positive Natural Change up until 2022-23, then a decline to stand at -400 by 2029-30.

It is noted that the Natural Change in Worcester City is projected to stay fairly constant at +500, whilst Natural Change in both Malvern Hills and Wychavon is projected to decline in future years. This is related to a higher number of deaths in those areas rather than fewer births, and is the consequence of an ageing population especially in those rural districts.

The total migration assumptions split by age group for the 2010-30 time period for South Worcestershire is shown in Figure 15 below. As would be expected from the current trend of migration in the area (see Figure x) there is in-migration across all of the age groups with the exception of the 15-19 age range, which experiences an out-migration of over 15,000 persons over the 20 years. The notable in-migration of children along with people aged 30-39 typify the projected movement into the area of families and people with children. The in-migration of people aged 20-29 will include people returning to the area after completing their studies at university as well as an in-migration of migrant workers, whilst there is relatively high number of people projected to come into South Worcestershire across the older age ranges for retirement and pre-retirement purposes.

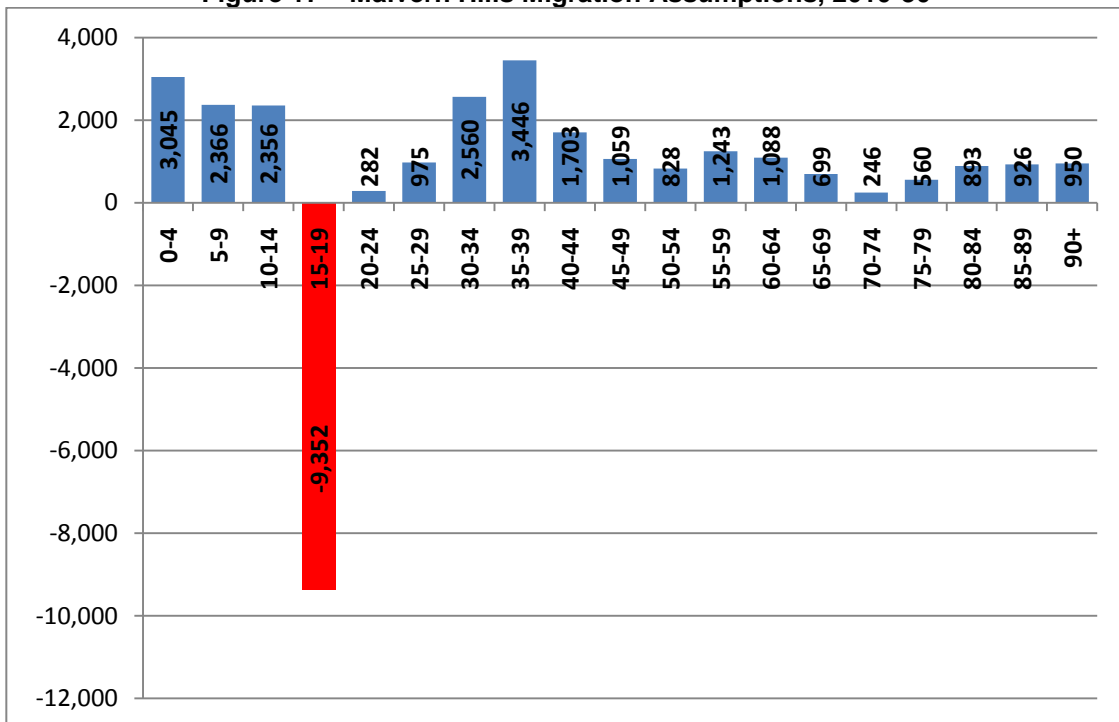
³ Internal migration refers to moves within England. Cross border migration refers to moves between England and Scotland, Wales and Northern Ireland. International migration includes moves between England and the Republic of Ireland, moves between England and the rest of the World, as well as migrant switchers, visitor switchers and asylum seekers.

Figure 16 – South Worcestershire Migration Assumptions, 2010-30



Source – ONS 2008-based population projections assumptions

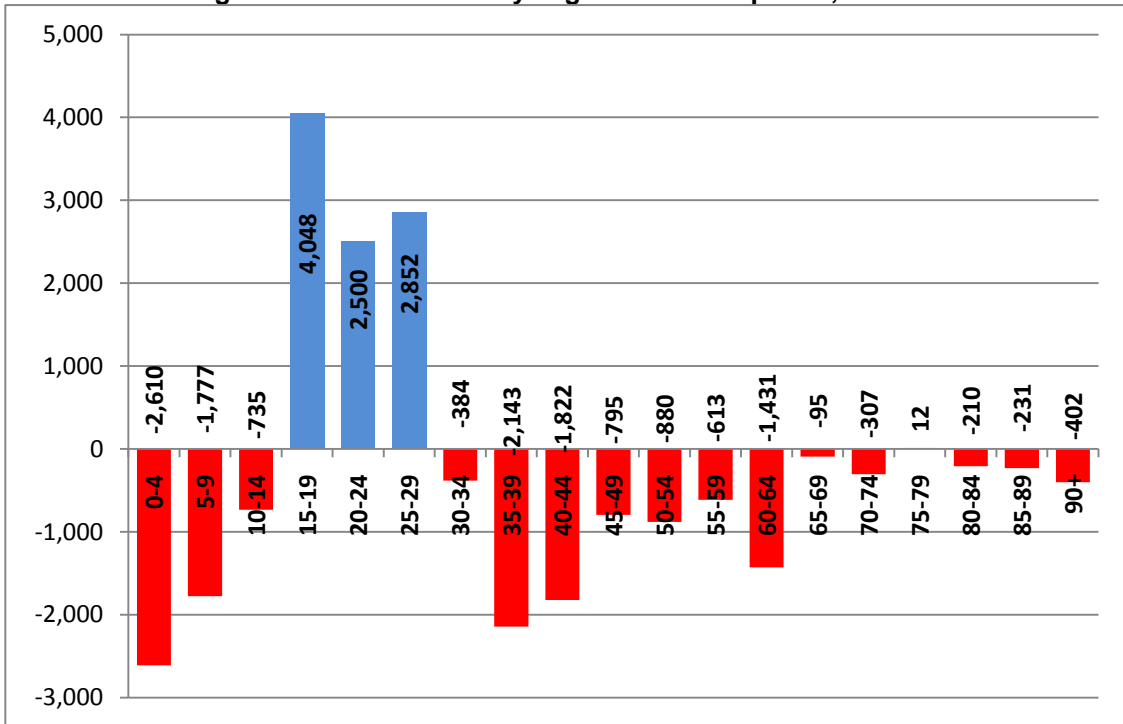
Figure 17 – Malvern Hills Migration Assumptions, 2010-30



Source – ONS 2008-based population projections assumptions

The projected migration profile for Malvern Hills is very similar to that of the whole of South Worcestershire, with high levels of out-migration among students and young adults (over 9,000 in the 15-19 age range) and in-migration among families with children and older people. The in-migration among the pre-retirement and retirement age groups (55-plus) is slightly larger in Malvern Hills than in South Worcestershire, reflecting the fact that this district is a popular destination for older people.

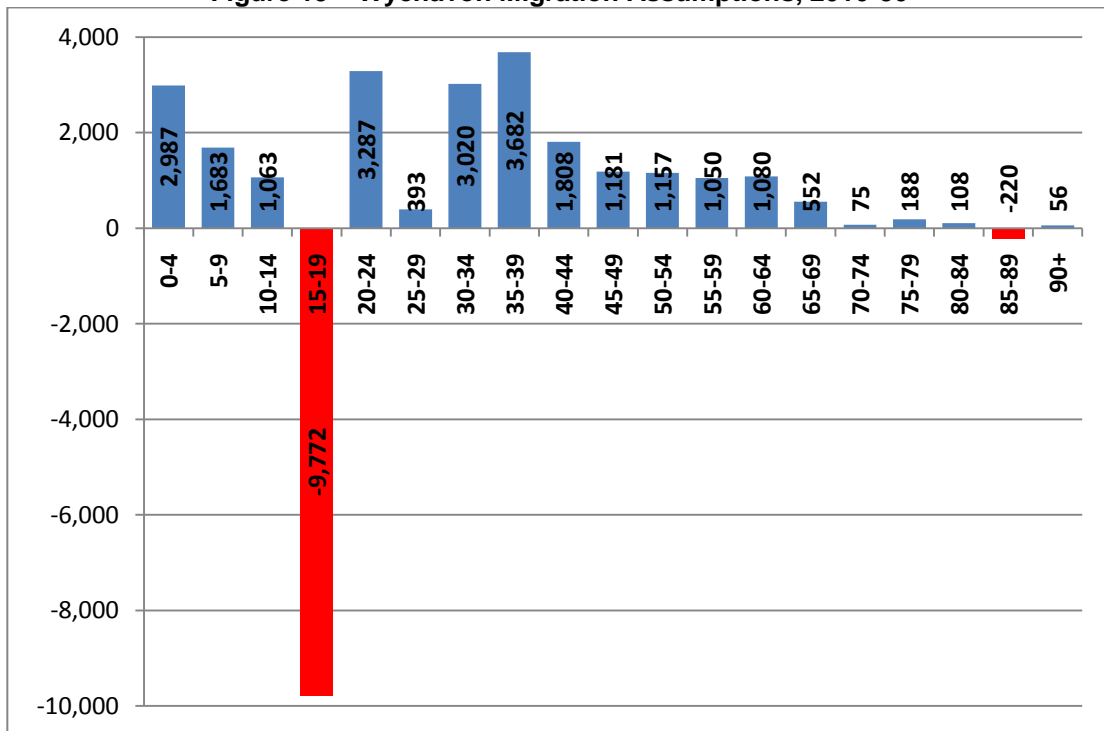
Figure 18 – Worcester City Migration Assumptions, 2010-30



Source – ONS 2008-based population projections assumptions

The migration profile projected for Worcester City over the 20-year period is slightly different, with in-migration among young adults, most notably the 15-19 age group, reflecting the position of the University of Worcester and the fact that Worcester City is the principle settlement within the county and has many job opportunities. The other age groups are projected to migrate away from Worcester City, especially families with young children (particularly 0-9's and 35-44 year olds) and also those aged 60-64, migrating away from urban in favour of rural areas.

Figure 19 – Wychavon Migration Assumptions, 2010-30

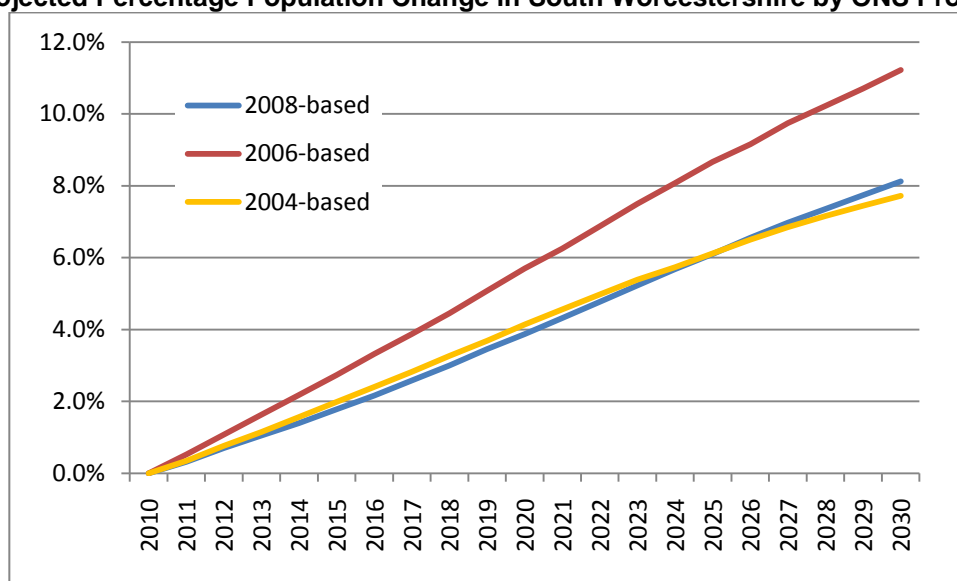


Source – ONS 2008-based population projections assumptions

The projected Wychavon migration profile for the 20-year time period is shown in Figure 18 above. Like Malvern Hills, Wychavon has a large out-migration of 15-19 year olds, of almost 10,000 people, and an in-migration of families with

children, with gains in the 0-14 and 30-39 age ranges. The notable gains among people aged 20-24 will include students who moved away for studies returning to the area. Unlike Malvern Hills however, Wychavon does not have the same high levels of projected in-migration of people in older age groups moving into the area.

Figure 20 – Projected Percentage Population Change in South Worcestershire by ONS Projection, 2010-30



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

Figure 19 shows the difference between the different ONS population projections produced since 2004. It is evident that the projections produced in 2006 project the greatest population increase in South Worcestershire, with a projected increase of around 11%, or around 32,500 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. The 2008-based and 2006-based projections have similar levels of projected growth, at around 8%, representing an increase of around 23,000 persons. It should be noted that differences made in apportioning international migration and counting student migration were included in the assumptions for the 2008-based projections.

5. 2008-Based 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 level of house building, and are reproduced in Table 14 below.

Table 14 – Household Projections for Worcestershire and the Districts, 2008-30 (thousands)

Area	2010	2015	2020	2030	Change 2010-30	Percentage Change
Malvern Hills	32.2	33.7	35.2	38.3	6.1	18.8%
Worcester City	40.7	42.1	43.6	46.1	5.4	13.3%
Wychavon	50.3	52.3	54.5	58.7	8.4	16.8%
South Worcs	123.2	128.1	133.3	143.1	19.9	16.1%
Worcestershire	238.0	247.5	257.6	275.9	38.0	16.0%
West Midlands	2,273.2	2,367.4	2,466.6	2,652.1	378.9	16.7%
England	22,152.0	23,359.0	24,601.0	26,912.0	4,760.0	21.5%

Source – CLG 2008-based Household Projections

On current trends, projected increase in the number of households in South Worcestershire is around 20,000 over the period 2010 to 2030. This represents a projected growth of just over 16%, around the same as for the whole of the county, but slightly lower than the average for the whole of the West Midlands Region and considerably lower than the national figure of 21.5%.

The projected household growth within the South Worcestershire districts ranges from almost 19% in Malvern Hills, to just over 13% in Worcester City, although the projected highest increase in terms of household numbers is in Wychavon, at 8,400. The levels of projected increases in households and population in the districts are broadly in line, with lower projected increases in households in those districts with a lower projected population increase.

Table 15 – Projected Percentage Household Change in South Worcestershire by Household Type, 2010-30

Household Type	2010	2030	2010-30 Change	Percentage Change
One Person	37,900	52,200	14,400	37.9%
One family and no others: Couple, no dependent children	41,300	50,200	8,900	21.6%
One family and no others: Couple, one or more dependent children	22,300	21,000	-1,300	-6.0%
One family and no others: Lone parent	5,800	7,600	1,800	30.9%
A couple and one or more other adults, no dependent children	6,800	4,100	-2,700	-39.4%
A couple and one or more other adults, one or more dependent children	3,000	2,200	-900	-29.2%
A lone parent and one or more other adults	1,000	1,200	100	11.5%
Other households	5,000	4,600	-400	-8.1%
All Households	123,200	143,100	19,900	16.1%

Source – CLG 2008-based Household Projections

Table 15 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 over 14,000 during the 2010-30 period, increasing the number of One-person households in South Worcestershire by almost 40%, and representing almost three quarters 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 rise by about 4,000 between 2010 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 almost 9,000 (over 20%).

The number of Lone Parent households is also projected to increase, by almost 2,000 when those households with other adults also present are taken into account.

It is apparent that the number of One-person households makes the greatest contribution to the increase in households in South Worcestershire.

Table 16 – Projected Change of One-Person Households in South Worcestershire by Age of Household Representative, 2006-26

	2010 Households	2030 Households	2008-30 Change	Percentage Change
15-24	1,000	1,000	0	2%
25-44	8,100	10,500	2,400	29%
45-64	10,400	11,800	1,400	13%
65-74	6,200	7,600	1,400	22%
75-plus	12,200	21,500	9,300	76%
All Ages	37,900	52,200	14,400	38%

Source – CLG 2008-based Household Projections

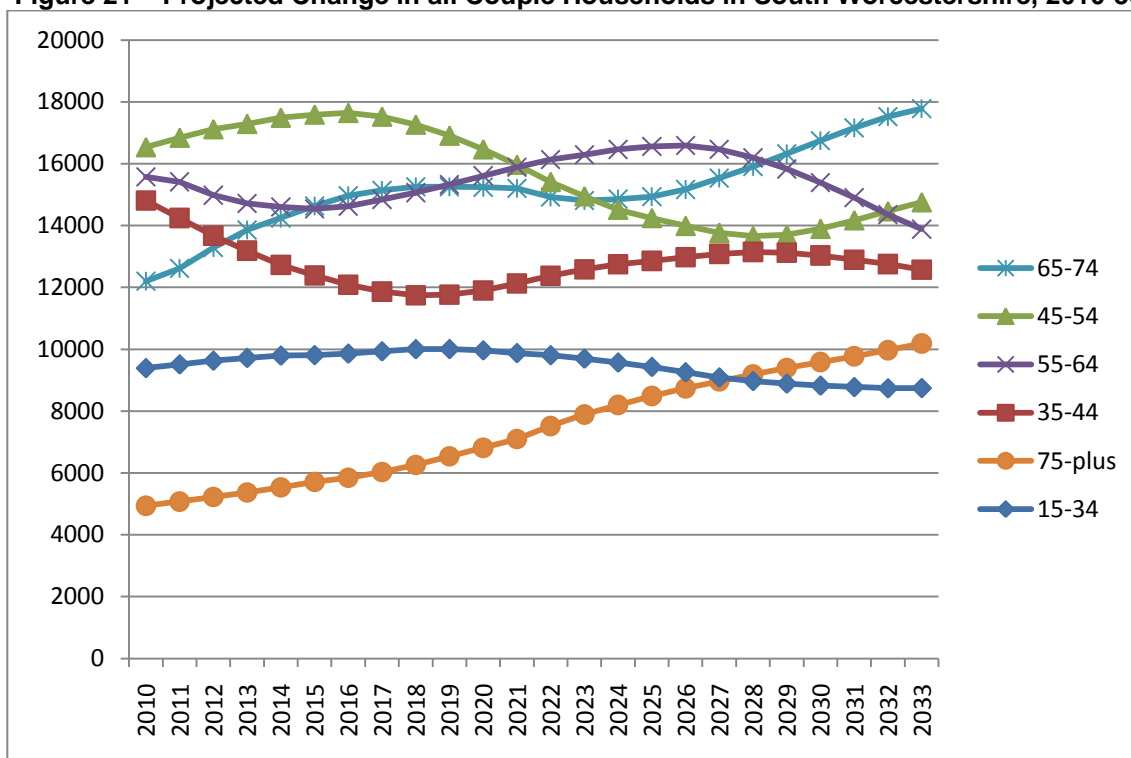
Table 16 shows the increase in One-person households split by age group. The biggest growth is in One-person households aged 65-plus, which is in line with the large projected increase in population in this age group. Projected increase in the number of One-person households in the 75-plus age group is particularly high, and is projected to rise by over 9,000 (three quarters) over the 2010-30 period, representing about two thirds 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 25-44 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 change in all Couple households (including those in which another adult resides) is shown in the figure below:-

Figure 21 – Projected Change in all Couple Households in South Worcestershire, 2010-30



Source – ONS Population Projections 2008-based

The rise in the number of couple households among older people is apparent, most notably 65-74 and 75-plus, as would be expected as the total population in these age groups is projected to increase rapidly. Over the entire 2010-30 period the other age groups are projected to decline, although the number of couple households among the 15-34 age group is projected to peak in around 2018, whilst the number of couple households in people aged 45-64 is projected to peak at around 2016.

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 the 2nd World War and ONS project that it will further decrease in the future.

Table 17 – Estimated & Projected Average Household Size for South Worcestershire, 1991-2030

Year	1991	2001	2008	2010	2015	2020	2030	Decrease 2010-30
Malvern Hills	2.43	2.31	2.28	2.25	2.19	2.14	2.07	-0.18
Worcester City	2.45	2.36	2.30	2.29	2.24	2.20	2.14	-0.15
Wychavon	2.49	2.38	2.32	2.30	2.25	2.21	2.14	-0.16
South Worcs	2.46	2.36	2.30	2.28	2.23	2.19	2.12	-0.16
Worcestershire	2.51	2.39	2.32	2.30	2.25	2.21	2.14	-0.16

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

Table 17 shows the decrease in average household size from 2.46 in South Worcestershire in 1991 to 2.36 in 2001. This decrease is projected to continue in future years, with the average household size projected to be 2.12 in South Worcestershire by 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.

Table 18 below brings together the 2008-based ONS population projections and related CLG household projections. It is noted that in South Worcestershire a projected population increase of just over 23,000 results in a projected household change of almost 20,000. The projected household change in percentage terms (over 16%) is also much higher than the projected population change of just over 8%. This is because of the projected decrease in average

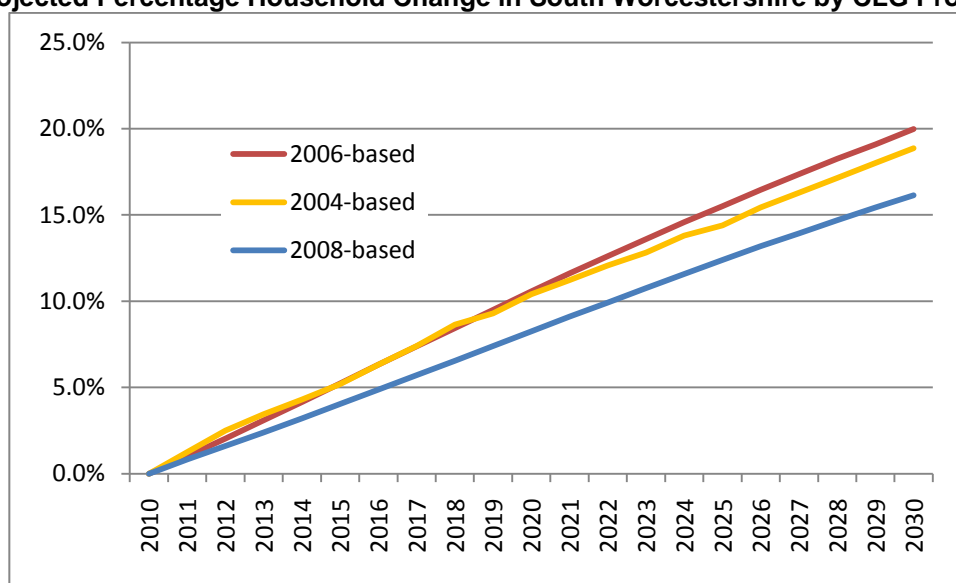
household size in future years, which applies to all households and not just the new households that have been formed.

Table 18 – 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			
	2010	2030	Change 2010-30	Perc. Change	2010	2030	Change 2010-30	Perc. Change
Malvern Hills	75.4	82.5	7.1	9.5%	32.2	38.3	6.1	18.8%
Worcester City	94.8	100.2	5.5	5.8%	40.7	46.1	5.4	13.3%
Wychavon	117.0	127.6	10.6	9.0%	50.3	58.7	8.4	16.8%
South Worcs	287.2	310.3	23.2	8.1%	123.2	143.1	19.9	16.1%
Worcestershire	557.4	604.8	47.4	8.5%	238.0	275.9	38.0	16.0%

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

Figure 22 – Projected Percentage Household Change in South Worcestershire by CLG Projection, 2010-30



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

Figure 22 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 20% (around 25,000 households) in the 2010-30 period. This compares to increases of 23,700 in the 2004-based figures, and 20,000 in the 2008-based projections.

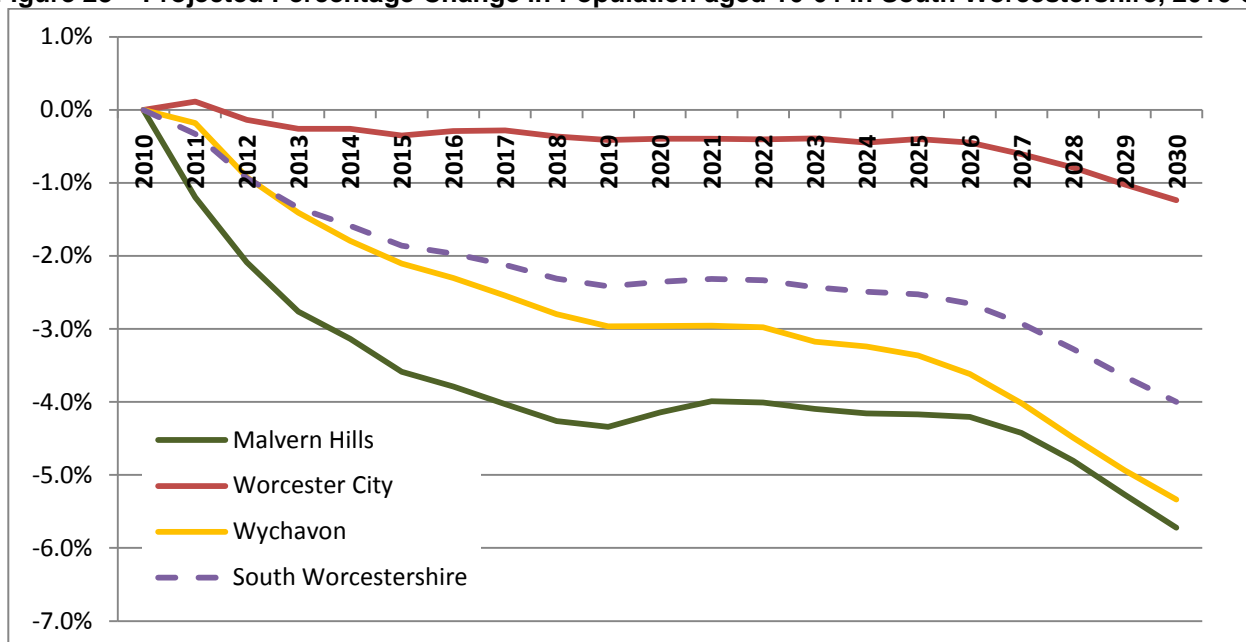
It is noted that the 2010 CLG household projections are due to be released at the end of March 2012.

6. Economic Activity

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 South Worcestershire. 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 50% and 44% respectively. Clearly such a big increase of older persons in the future will have an impact in Worcestershire on services provided to older people.

Figure 23 below shows the projected decline in the key 16-64 working age range within South Worcestershire using the ONS 2008-based projections. The projected fall in South Worcestershire among people aged 16-64 is around 4%, representing over 7,100 persons. The projected decrease is lower in Worcester City due to this district having greater job opportunities.

Figure 23 – Projected Percentage Change in Population aged 16-64 in South Worcestershire, 2010-30



Source – ONS 2008-based Population Projections & 2010 mid-year estimate

7. Jan 2012 Worcestershire Strategic Housing Market Assessment Scenarios

The Strategic Housing Market Assessment (SHMA) has developed a number of core scenarios. These scenarios include variations on four key driver-led projections, alongside a benchmark scenario driven from the 2008 based Sub-National Population Projections (SNPP) published by the ONS.

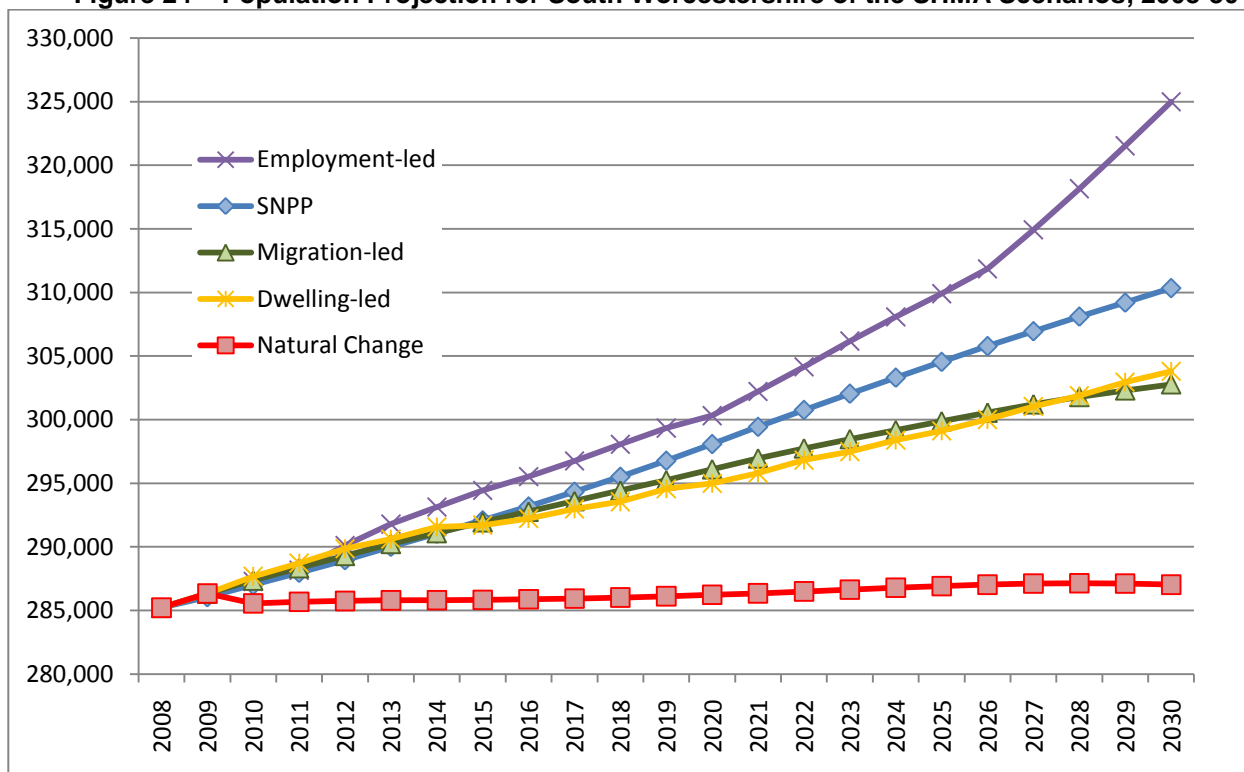
The five core scenarios are:-

- ONS 2008-based Sub-National Population Projections (SNPP) - Presented as a benchmark against which to compare other scenarios. The population element has not been altered in any way, although the derived household projections incorporate rescaled household headship rates, which are applied to all scenarios.
- Natural Change Scenario – This is a hypothetical trend-based scenario under the conditions of "no migration", so births and deaths are the only drivers of growth. Although purely hypothetical, this provides an important insight into the levels of population change which would occur from locally generated demographic pressures.
- Migration-led Scenario – This is a trend-based scenario developed using similar methodology to the SNPP, but draws on more recent data from ONS mid-year estimates on births, deaths and migration to derive an updated alternative projection. This projection therefore incorporates the reduction in internal migration since 2008 and changes in international migration which tend to fluctuate.
- Employment-led Scenario – This is a "policy-constrained" projection that takes the migration-led scenario as a base and constrains the population to the latest employment forecasts taken from the Labour Market Future Profiles produced by Advantage West Midlands. The forecasts show the impact of the recession from 2006 with a slow, steady recovery across Worcestershire. Economic activity rates, unemployment rates and commuting ratios for the authorities continue to reflect recent trends.
- Dwelling-led scenario – This is a "policy-constrained" scenario which also takes the migration-led scenario as a base but models the impact of a future house building trajectory based on average completion rates over the past 6 years.

8. SHMA Scenarios – Population Projections

Results and analysis of the population projections produced from the 5 scenarios are presented below. It can be seen that the lowest level of growth within South Worcestershire is projected to be the Natural Change scenario, of just over 1,800 persons over the 2008-30 time period. The dwelling-led and migration-led scenarios both have similar projected population increases of just over 6%, lower than the SNPP projected change of almost 9%. The employment-led scenario has a higher projected population than the SNPP population, of almost 40,000 persons, representing an increase of almost 14%.

Figure 24 – Population Projection for South Worcestershire of the SHMA Scenarios, 2008-30



Source – Edge Analytics 2011, GVA 2011

Table 19 – Components of Population Change in South Worcestershire for each SHMA scenario, 2010-30

	SHMA 1 - SNPP	SHMA 2 – Natural Change	SHMA 3 – Migration-led	SHMA 4 – Employment-led	SHMA 5 – Dwelling-led
Births	57,914	58,300	57,506	59,751	57,436
Deaths	58,720	56,834	58,612	59,487	58,558
Natural Change	-807	1,466	-1,106	264	-1,122
Internal Mig.	22,657	0	8,234	29,144	8,950
International Mig.	1,491	0	8,298	8,298	8,298
Total Mig	24,149	0	16,532	37,443	17,248
Total Pop Change	23,342	1,466	15,426	37,707	16,126

Source – Edge Analytics 2011, GVA 2011

Table 19 above shows the components of change for each of the SHMA scenarios. It is noted that the number of births and deaths vary for each of the scenarios. This is due to the age structure changing depending on the levels of migration for that scenario. The Natural Change projection for instance has the largest positive increase in population due to births and deaths than any of the other scenarios. This is because in this hypothetical scenario, the inflow of older persons (especially into Malvern Hills) and the outflow of young adults and students would no longer occur, resulting in fewer deaths due to a lower number of old people, and more births due to more people of child-bearing age staying in the area.

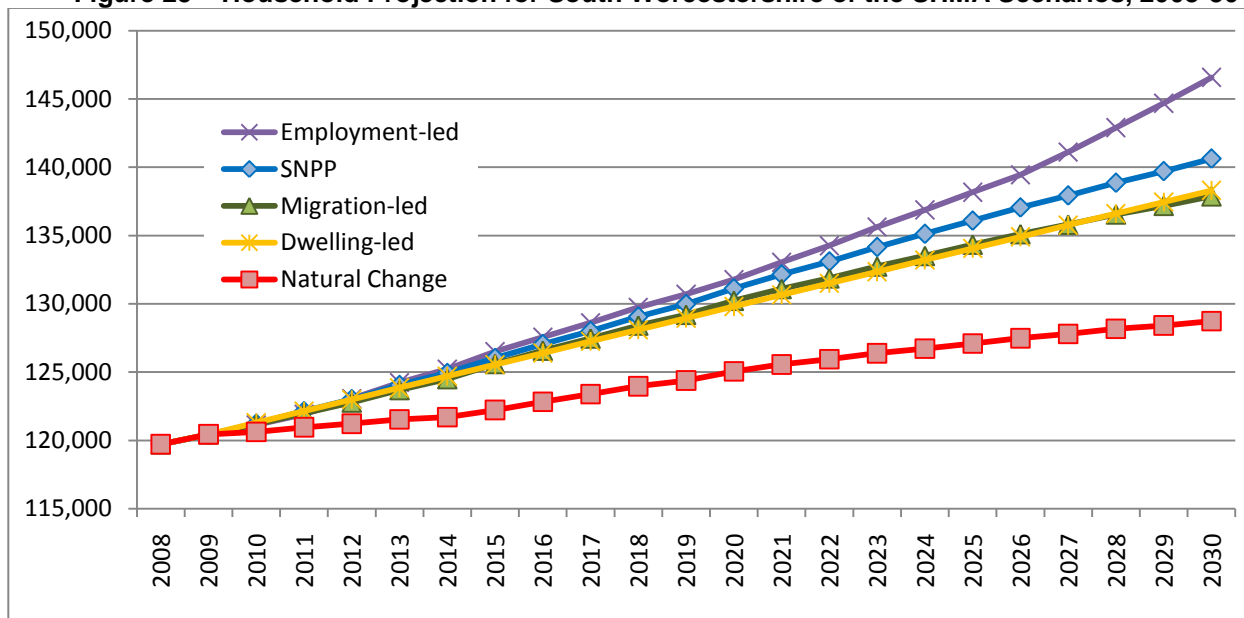
It is also noticeable that the migration-led scenario has a much more even split between internal and international migration than the SNPP projection, due to this scenario using recent migration trends which include a reduced internal migration into the area. The dwelling-led and employment led use the migration-led scenario as a base, and therefore have a similar level of international migration.

Full details of the population projection components, including births and deaths, internal and international migration and population change by broad age group are contained in the Appendix.

9. SHMA Scenarios – Households Projections

It is noted that in the SHMA scenarios the DCLG 2008 based household representative rates are not applied directly to the population projections. Instead, the DCLG headship rates were compared with council tax data. The population estimates were then divided by the known number of occupied properties to derive a set of updated household sizes, which were then used to recalibrate the household projections from the population projections.

Figure 25 – Household Projection for South Worcestershire of the SHMA Scenarios, 2008-30



Source – Edge Analytics 2011, GVA 2011

It is noted that the difference between the scenarios for projected numbers of households is much lower than was the case for projected population figures. The Natural Change projection again has the lowest increase in number of households since 2008, with a projected rise of over 9,000 households, representing a 7.5% increase. The migration-led and dwelling-led projections have a similar projected increase in the number of households in South Worcestershire at over 18,000 households (around 15%), and each slightly lower than the SNPP projection of almost 21,000 extra households. The employment-led scenario again has the highest projected growth of around 26,900 households, representing a rise of over 22%.

Table 20 – Component of Household Change in South Worcestershire for each SHMA scenario, 2010-30

	SHMA 1 - SNPP	SHMA 2 – Natural Change	SHMA 3 – Migration-led	SHMA 4 – Employment-led	SHMA 5 – Dwelling-led
Households for Natural Change	9,013	9,013	9,013	9,013	9,013
Households for Migration	11,892	0	9,137	17,846	9,573
Total Household Change	20,905	9,013	18,150	26,858	18,586

Source – Edge Analytics 2011, GVA 2011

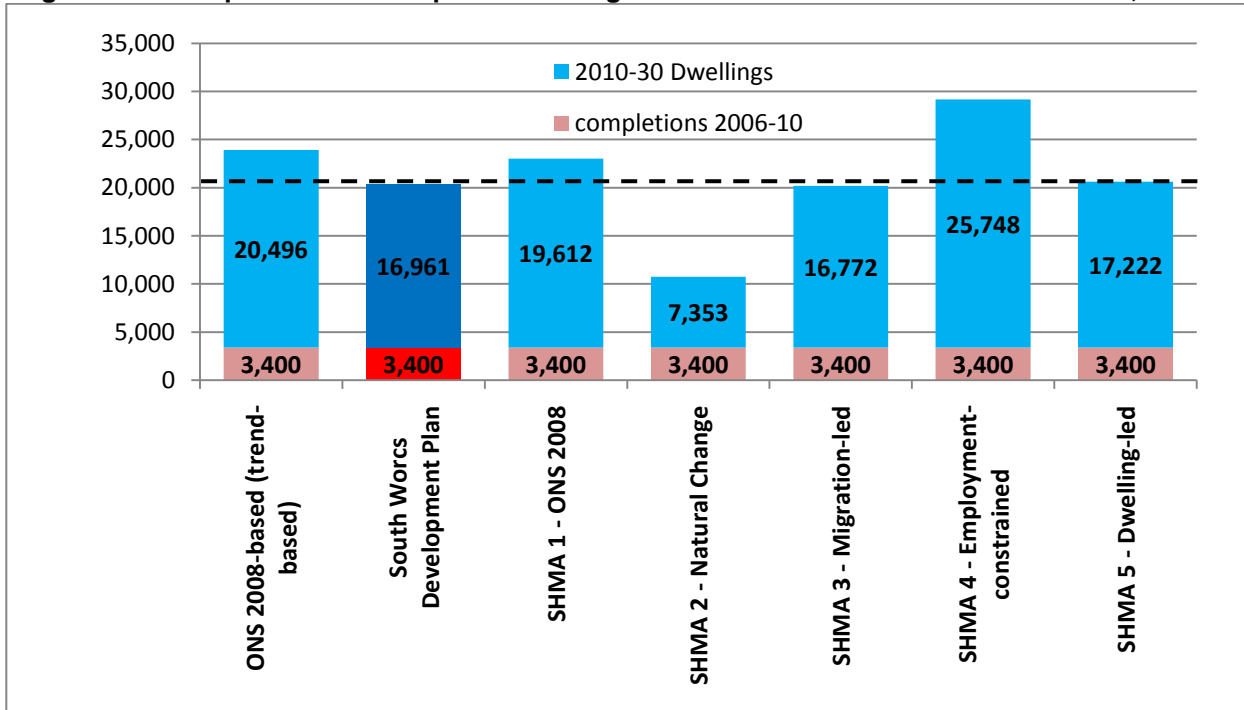
Table 20 above compares each of the SHMA scenarios to the hypothetical Natural Change scenario and shows the number of households that are effectively available for migration. Just over 9,000 households were generated from local need in the Natural Change scenario. Around 9,000 households are therefore generated from migration in the migration-led and dwelling-led scenarios, with almost 12,000 in the SNPP projection. The highest number of households generated from migration is in the employment-led scenario, at over 17,800 households.

It is noted that the Natural Change scenario generates 9,000 households but a population increase of just 1,500. This is due to the decreasing average household size that is projected into the future, continuing the past trend.

Full details of the household projection components, including projected change by types of household, are contained in the Appendix.

Figure 26 below brings together the number of dwellings that would be required for each of the 5 SHMA scenarios as well as the original ONS/CLG 2008-based projections, and the figures in the South Worcestershire Development Plan (SWDP). The total number of dwellings required for the 2006-30 period is represented, with the dwelling completions between 2006-10 and the required dwellings for the 2010-30 period shown.

Figure 26 – Completions and Required Dwellings for Scenarios in South Worcestershire, 2006-30



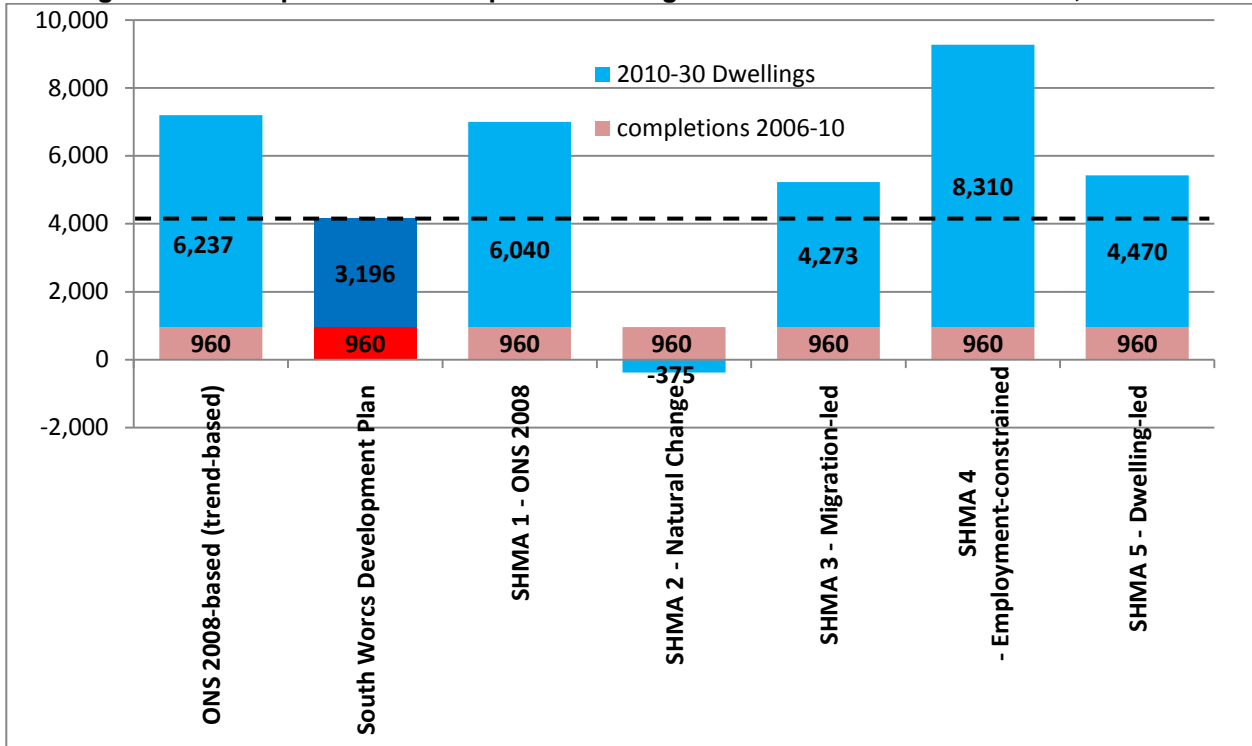
Source – CLG 2008-based Projections & Edge Analytics 2011, GVA 2011

Note there is a slight difference between the 2008-based ONS/CLG projection and the SHMA SNPP scenario 1 projection due to the different household representative rates that were used in the SHMA SNPP model, with the SHMA model requiring slightly less households to accommodate the population increases projected by ONS in the 2008-based projection.

The SWDP allocates almost 17,000 extra dwellings in the 2010-30 period in South Worcestershire. This is a similar level to the SHMA Dwelling-led and SHMA Migration-led projections, but less than either the official ONS/CLG 2008-based projection, or the SHMA ONS 2008-based projection. The SHMA Natural Change projection suggests that almost 7,400 new dwellings are required in South Worcestershire to cater for the locally generated population. The highest allocation of dwellings comes in the SHMA Employment-led projection, which would require over 25,700 extra dwellings in the 2010-30 period.

For completeness similar graphs for the three South Worcestershire districts are shown below:-

Figure 27 – Completions and Required Dwellings for Scenarios in Malvern Hills, 2006-30

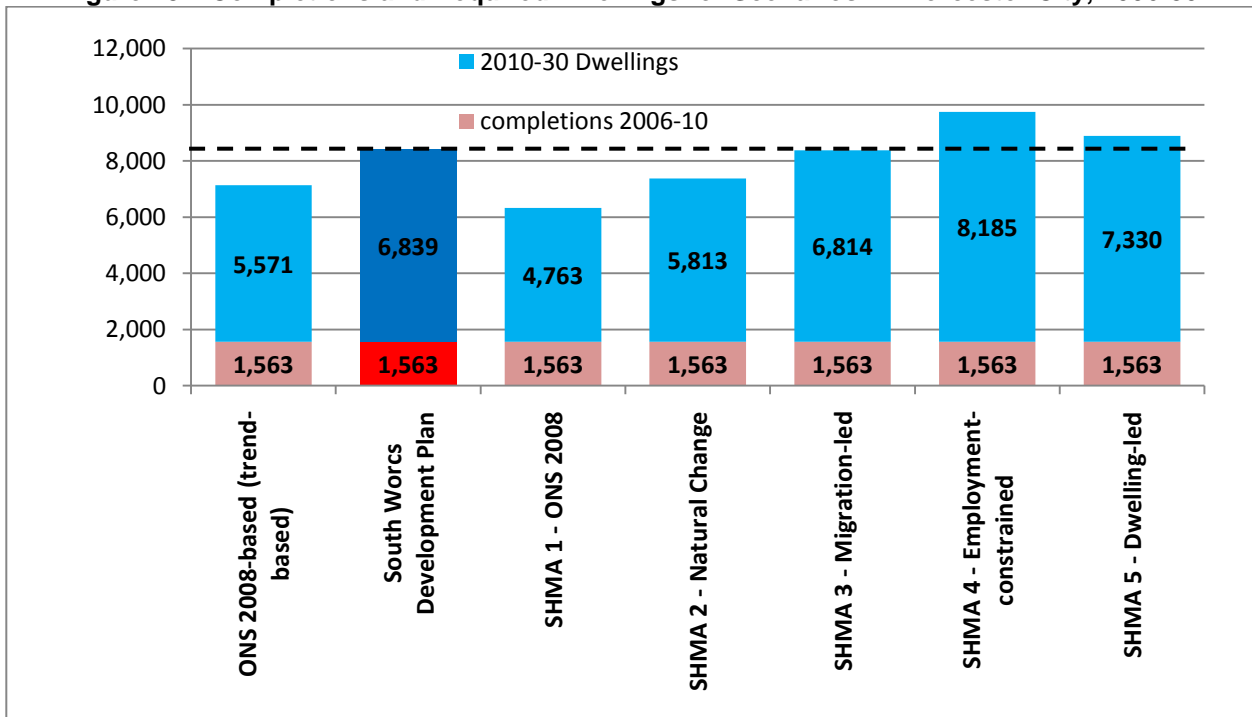


Source – CLG 2008-based Projections & Edge Analytics 2011, GVA 2011

In Malvern Hills the SWDP allocation of dwellings is lower than any of the other scenarios with the exception of the Natural Change one. Indeed, the number of dwellings required for the locally generated need within Malvern Hills is less than the 960 new dwellings that have already been completed in 2006-10. This is because Malvern Hills has an older population structure and would experience far fewer births than deaths and a subsequent decline in population in a hypothetical zero-migration scenario.

The SWDP allocates 3,200 dwellings in Malvern Hills, lower than the Migration-led (4,300 extra dwellings) and Dwelling-led (4,500 extra dwellings) scenarios. The SWDP allocation is significantly lower than the ONS/CLG 2008-based projection, and the Employment-led scenario which requires 8,300 extra dwellings in the 2010-30 time frame.

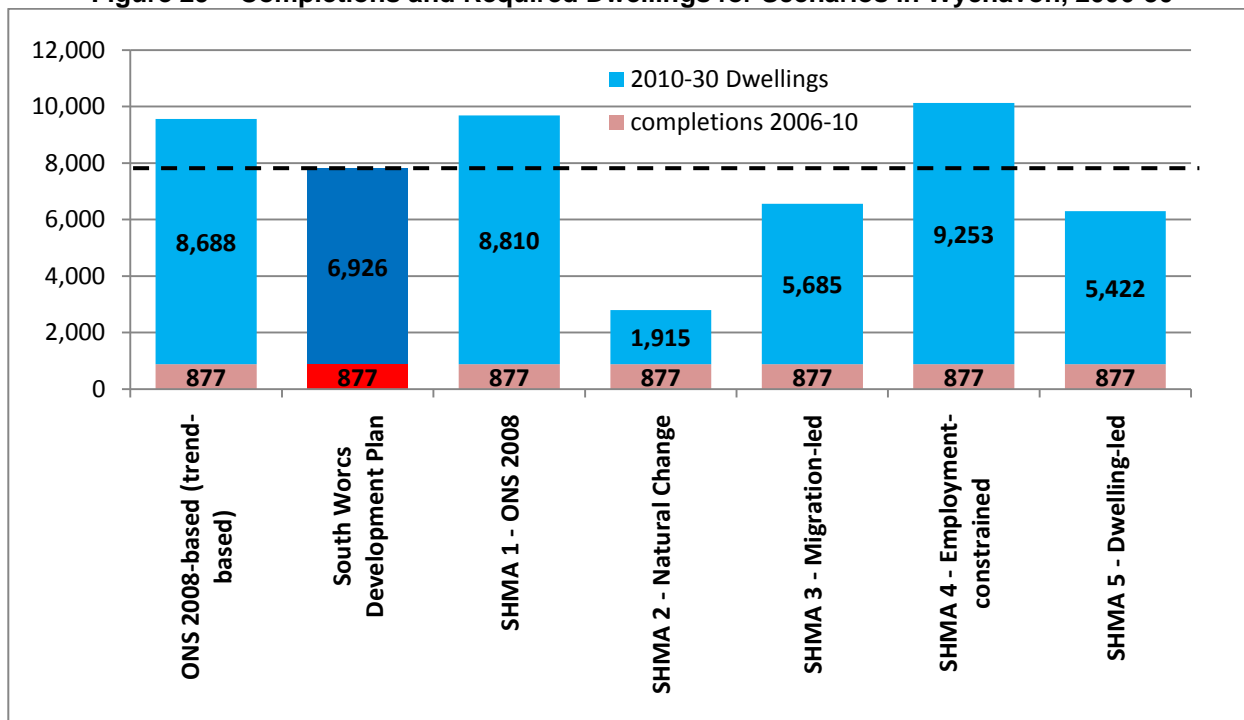
Figure 28 – Completions and Required Dwellings for Scenarios in Worcester City, 2006-30



Source – CLG 2008-based Projections & Edge Analytics 2011, GVA 2011

In Worcester City the SWDP allocates over 6,800 dwellings in the 2010-30 period. this is higher than the 2008-based ONS projections, and higher than the Natural Change projection which requires a high number of dwellings in Worcester City due to the young age structure and higher number of births than deaths. The SWDP has allocated a similar number of dwellings than is required for the Migration-led scenario, a slightly lower number of dwellings than the Dwelling-led scenario (7,300) and a lower number than in the employment-led scenario (8,200 dwellings).

Figure 29 – Completions and Required Dwellings for Scenarios in Wychavon, 2006-30



Source – CLG 2008-based Projections & Edge Analytics 2011, GVA 2011

In Wychavon the SWDP allocation of over 6,900 dwellings in the 2010-30 period is lower than the ONS 2008-based projections, which would require around 8,800 dwellings. Locally generated need is relatively low in Wychavon, with an extra 1,900 dwellings required over the twenty years.

The SWDP allocation is larger than the Dwelling-led and Employment-led scenarios, but lower than the Employment-led scenario which requires almost 9,300 extra dwellings.

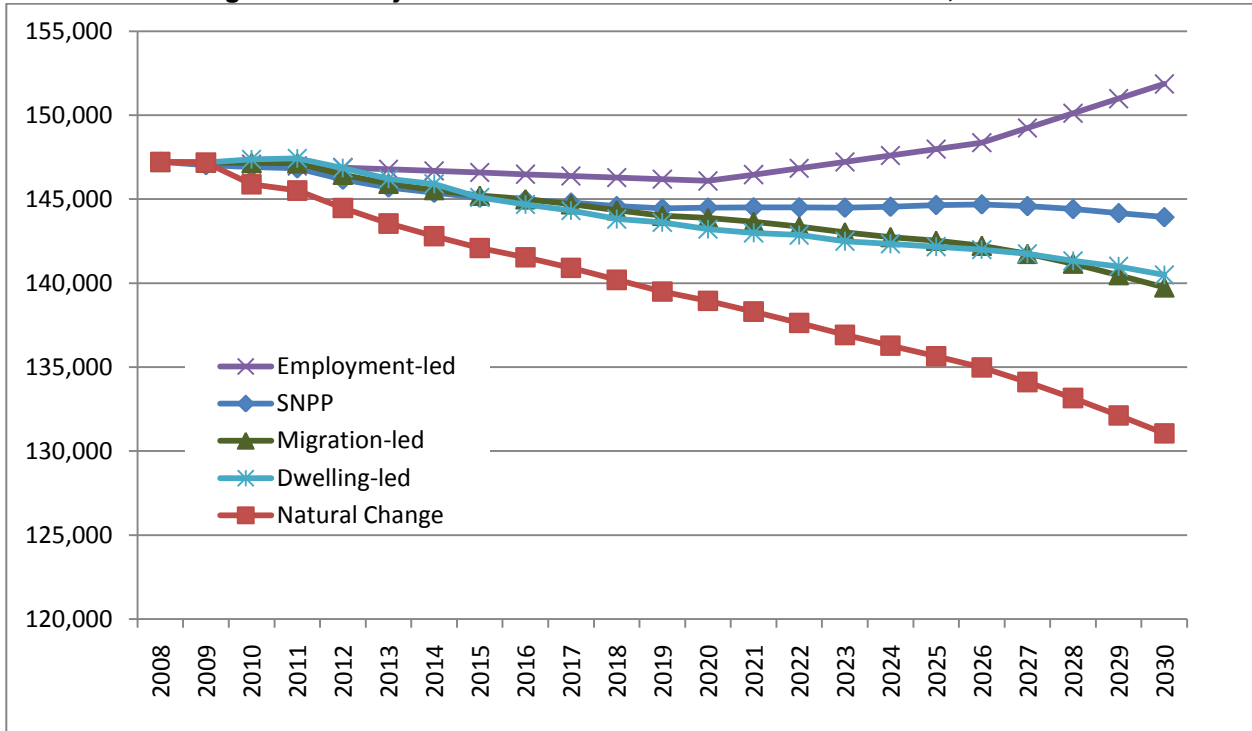
10. SHMA Scenarios – Economic Activity Projections

Figure 28 below shows the number of people projected in each of the scenarios to be in the labour force and therefore economically active.

All of the SHMA scenarios are projecting a loss in the number of people in the labour force with the exception of the Employment-led scenario. The Natural Change projection has the largest projected decline in economically active people of around 16,200 on 2008 levels, representing a decrease of 11%. The migration-led and dwelling led scenarios project decreases of 7,500 (-5.1%) and 6,700 (-4.6%) respectively.

The labour force in the SNPP scenario is projected to decrease by around 3,300 (just over 2%) on mid-2008 levels. The employment-led scenario has a projected increase of economically active people in South Worcestershire of over 4,600 persons compared to 2008, representing an increase of over 3%.

Figure 30 – Projected Labour Force in the SHMA Scenarios, 2008-30



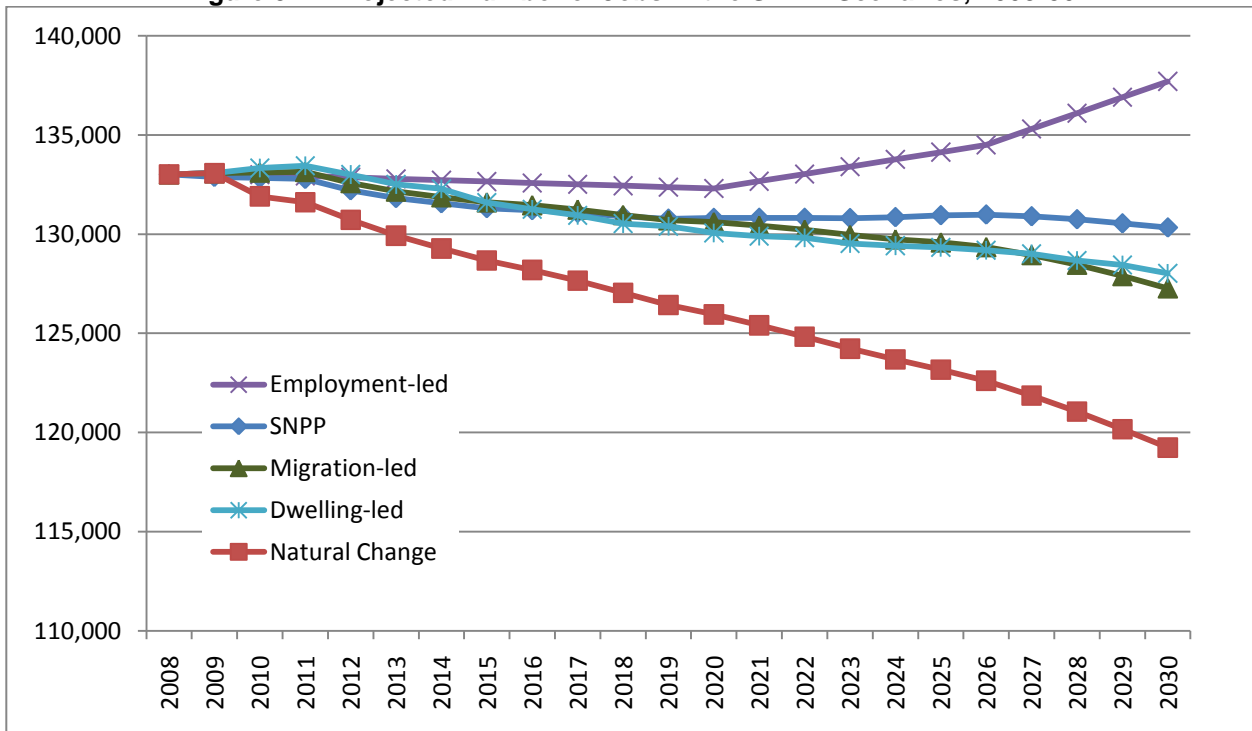
Source – Edge Analytics 2011, GVA 2011

11. Economic Growth

Figure 31 below shows the labour demand or the number of jobs projected for each of the SHMA scenarios.

As was the case for the labour force, each of the scenarios has a projected decline in jobs with the exception of the employment-led. The employment-led projects an increase of jobs from 133,000 in 2008 to 137,700 in 2030, representing a rise of 3.5%.

Figure 31 – Projected Number of Jobs in the SHMA Scenarios, 2008-30



Source – Edge Analytics 2011, GVA 2011

The pattern here is unsurprisingly very similar to the pattern seen in the labour force projections. The Natural Change scenario projects a decrease in jobs of around 13,800, representing a fall of over 10%, whilst the migration-led and dwelling-led scenarios project similar declines in labour demand of 5,700 and 5,000 respectively. The trend-based SNPP scenario projected a decrease in jobs of around 2,700 over the 2008-30 period, representing a 2% fall in labour demand.