

West Midlands Regional Assembly

**Understanding the
2006 Based Household Projections**

April 2009

2006 based Household Projections for the West Midlands Region.

Executive Summary

Attached is a technical note prepared by the West Midlands Regional Assembly to help understand the 2006 based Sub-national Household Projections published in March 2009.

The main points that arise from this paper are:

- The 2006 household projections (and the underlying 2006 population projections) do not take into account the impact of the recent downturn in the economy.
- Net International migration has fallen significantly in the West Midlands Region in the last two years.
- The West Midlands Region continues to lose population through migration to other English Regions.
- The increasing rate of household formation is driven by population increase and particularly international migration.
- The variant household projections show a wide range of possible outcomes particularly in relation to net migration with the lower range of the migratory assumptions being more in line with the 2004 based household projections.

Introduction

This briefing paper provides a broad analysis of the 2006 Sub-national Household Projections for the West Midlands Region for the period 2006 to 2026.

This paper also provides a comparison with the previous household projection, changes in methodology and explores recent demographic changes that have yet to be included in the projections which could impact on the future population and household numbers.

2006 Based Household Projections

The 2006 based Sub-national household projections indicate an additional 431,000 households in the West Midlands Region between 2006 and 2026, which equates to a 19.3% increase over the period.

The most significant change is in the number of single person households which are projected to increase by 309,000 households between 2006 and 2026, an increase of 45%. In contrast married couple households are projected to fall by 58,000 during the same period. See Table 1 below.

Table 1. Changes in Household numbers by Household Type in West Midlands Region 2006 - 2026

Household Type	2006	2016	2026	Change		
				Total 2006-2026	Percentage 2006- 2026	Annual Average 2006-2026
Married couple households	1,021,000	977,000	963,000	-58,000	-5.7%	-2,900
Cohabiting couple households	215,000	291,000	338,000	123,000	57.2%	6,150
Lone parent households	181,000	202,000	216,000	35,000	19.3%	1,750
Other multi-person households	138,000	150,000	160,000	22,000	15.9%	1,100
One person households	682,000	833,000	991,000	309,000	45.3%	15,450
All households	2,237,000	2,454,000	2,668,000	431,000	19.3%	21,550

Source: Office for National Statistics, 2006 based Sub-national Household Projections, March 2009

The 2006 projections also show a significant shift in the age structure of households, with substantial growth in the number of households with a household reference person aged 55 and over. In particular the number of households with a household reference person aged over 85 is projected to nearly double during the period 2006 to 2026. Although there is growth in all age groups, the increase in the number of households with younger household reference persons is not as great as the older age groups. See Table 2 for details of changes in household numbers by age group.

Although the projected growth in households across the West Midlands Region is 19.3% between 2006 and 2026, there are significant variations across the Region. The more rural areas of the Region are projected to experience the highest percentage increase in households compared with the urban areas. The highest projected proportional household growth in the Region is in Oswestry with 41.2% , other Districts with high percentage household growth include South Shropshire (33.3%), Warwick (32.8%) and Stratford-on-Avon (28%). In contrast the more urban Districts of Dudley, Wolverhampton, Stoke-on-Trent and Walsall are all projected to see household growth of between 11% and 12%. Details of projected household growth by local authority in the West Midlands Region can be found in Appendix A.

Table 2. Changes in Household numbers by age of Household Reference Person in West Midlands Region 2006 - 2026

Age of Household Reference Person	2006	2026	Change		
			Total 2006-2026	Percentage 2006- 2026	Annual Average 2006-2026
Under 25	95,000	97,000	2,000	2.1%	100
25 - 34	310,000	371,000	61,000	19.7%	3,050
35 - 44	457,000	494,000	37,000	8.1%	1,850
45 - 54	391,000	397,000	6,000	1.5%	300
55 - 64	384,000	462,000	78,000	20.3%	3,900
65 - 74	299,000	374,000	75,000	25.1%	3,750
75 – 84	226,000	323,000	97,000	42.9%	4,850
85 & over	76,000	149,000	73,000	96.1%	3,650
Total	2,237,000	2,668,000	431,000	19.3%	21,550

Source: Office for National Statistics, 2006 based Sub-national Household Projections, March 2009

Comparison with the 2004 Based Household Projections

The 2004 based Household projections indicated a total increase in household numbers of 371,000 between 2006 and 2026, this is 61,000 fewer than the 2006 based household projections. The difference between the two sets of projections at 2026 is due to a smaller reduction in married couple households in the 2006-based projections compared with 2004-based, with increases observed in one person and cohabiting couple households.

See Table 3 below for a comparison on the 2004 and 2006 based projections at 2026 by household type.

Table 3. Comparison of 2004 and 2006 based Household Projections for the West Midlands Region – number of households by household type at 2026.

Household Type	2004-based	2006-based	Difference
Married couple households	937,000	963,000	25,000
Cohabiting couple households	325,000	338,000	14,000
Lone parent households	213,000	216,000	2,000
Other multi-person households	158,000	160,000	2,000
One person households	974,000	991,000	17,000
All households	2,607,000	2,668,000	61,000

Source: Office for National Statistics, 2006 based Sub-national Household Projections, March 2009

The higher level of household growth in the 2006-based projections is driven by a higher projected population, compared with the 2004-based projections, reflecting assumptions of a higher long term average number of children (fertility), a longer life expectancy (mortality) and higher net migration. Therefore, it is worth exploring further the factors that influence the population projections that underpin the household projections.

2006 Based Household Projection Methodology

The methodology used to generate the 2006 household projections is broadly the same as all previous household projections since 1996. The principal differences between the 2004 and the 2006 methodologies relate to the Household Representative Rates, the 2006 based projections incorporated more recent data taken from the Labour Force Survey 2004 to 2007 in relation to the under 45 age groups.

Considering there is little difference in methodological approaches between the Household Projections the principal difference will relate to the assumptions and data from the respective population projections which underpin the household projections.

2006 Population Projections

The 2006 based population projections indicate an increase in the population of 607,400 people between 2006 and 2026 (see Appendix B for details). This projected population growth is significantly higher than the 2004 based population projections which indicated a growth of 336,700 people over the same period, a difference of 270,900 people.

The principal driver of the projected population increase in the West Midlands Region is natural change and international migration, with internal migration having a neutral effect (see Table 4 below).

Increased population as a result of natural change can be attributed to an increased fertility rate and an increase in life expectancy, ie. a reduced mortality rate.

Table 4. 2006 Sub-national Population Projections, Components of Change 2006-2026 for the West Midlands Region

	2006-11	2011-16	2016-2021	2021-26	Change 2006-2026	% Change 2006-2026
Natural Change	97,700	115,000	111,000	93,500	417,200	68.7%
Internal Migration	-10,800	-2,500	3,000	7,000	-3,300	-0.5%
International Migration	52,700	47,000	47,000	47,000	193,700	31.9%
Total	139,900	159,500	161,000	147,000	607,400	100%

Source: Office for National Statistics, Table 6 Natural Change and Migration summaries, 2006 Population Projections

Changes between the approach in the 2004 and 2006 based population projections and the use of updated datasets result in a projected additional 270,900 people in the West Midlands Region, an increase from 336,700 people in the 2004 projections to 607,400 in the 2006 projections.

The 2006 based population projection indicate a significant increase in population through natural change compared with the 2004 projections between 2006 and 2026. It also shows less of a loss as a result of internal migration and an increase in the population through international migration. See Table 5 below for details.

Table 5. Components of Change 2006-2026 from 2004 and 2006 Population Projections for the West Midlands Region

	2004	2006	Difference
Natural Change	224,500	417,200	192,700
Internal Migration	-63,000	-3,300	59,700
International Migration	175,200	193,700	18,500
Total	336,700	607,400	270,900

Source: Office for National Statistics, Table 18 2004 Sub-national Population Projections; Table 6 Natural Change and Migration summaries, 2006 Population Projections

The Changing Pattern in Internal migration

The 2006 Sub-national population projections uses GP registers at postcode level to calculate migration. It only includes movements within England with movements to and from Wales, Scotland and Northern Ireland treated as International Migration within the model.

The 2006 Sub-national population projections indicate that during the 20 year period between 2006 and 2026 the West Midlands Region will only experience a loss of 3,300 people (net) as a result of internal migration. This is somewhat contrary to the regional experience where consistently over the last 20 years the West Midlands Region has lost population to other regions in England. Table 6 below shows that over the recent past on average the West Midlands Region has lost nearly 4,100 people (net) per annum to other regions in England. If this trend were to continue then over the next 20 year period it would equate to a loss of around 80,000 people compared with just 3,300 as indicated in the 2006 based projections. This difference equates to a potential difference of around 35,000 households (based on average household size of 2.25 persons).

Table 6: Migration Flows between West Midlands Region and other English Regions 1998-2007.

	In Flow	Out Flow	Net Change
1998-99	80,380	85,960	-5,580
1999-00	82,930	89,180	-6,250
2000-01	81,780	87,160	-5,380
2001-02	86,340	87,890	-1,550
2002-03	86,250	88,010	-1,760
2003-04	84,900	88,330	-3,430
2004-05	83,150	84,560	-1,410
2005-06	80,130	86,550	-6,420
2006-07	82,140	87,130	-4,990
Annual Average Flows	83,111	87,197	-4,086

Source: Office for National Statistics, NHSCR Patient Registrar, Table 3, 1998-2007

The Changing Pattern in International Migration

The international migration streams used in the 2006 sub-national population projections include:

- International Migration to and from the rest of the UK
- International migration to and from the rest of the World
- Asylum seekers
- Visitor switchers
- Irish flows

The 2006 Sub-national population projections indicate the population of the West Midlands region will increase by 193,700 people directly as a result of International Migration which equates to 9,700 people per annum (net).

The latest international migration data produced by the Population Estimates Unit at the Office for National Statistics shows a decline in the number of international migrant (net) in the West Midlands Region.

Table 3 shows details of the past trends in international migration between 2001 and 2007 from the components of population change supplied by Office for National Statistics Population Unit. The 2006 based population projections use an average for international migration based on the six years leading up to the base year of 2006. The last two years of data indicate a significant decline in the population growth in the West Midlands Region as a result of International Migration compared with the previous four years. The conditions that resulted in high level of population growth through international migration during the period 2001 to 2005 have subsequently diminished ie asylum seekers and the expansion of the European Union (EU) to include the eight eastern European accession countries (A8). The number of asylum seekers has fallen dramatically in recent years with figure for 2005-6 being just 13% of the level experienced in the Region in 2001-2. The figures for the International Passenger Survey (IPS) saw a dramatic peak in 2004-5 which coincided with the expansion of the EU and since then the IPS has fallen back significantly. See Table 7 for details.

Table 7. Net International Migration 2001-2007 for the West Midlands Region

Total Net Change	2001-2	2002-3	2003-4	2004-5	2005-6	2006-7	Total Net Change 2001-2007	Average Net Change 2001-2007
International Passenger Survey	4,755	7,551	7,320	13,533	7,370	4,517	45,046	7,508
Eire	-858	-832	-808	-1,032	-1,190	-1,188	-5,908	-985
Asylum Seekers	6,276	6,075	2,619	1,714	821	1,037	18,542	3,090
Visitor Switchers	879	1,518	1,768	2,125	1,712	1,945	9,947	1,658
Total	11,052	14,312	10,899	16,340	8,713	6,311	67,627	11,271

Source: ONS, Population Estimates Unit, Components of Change 2001-2007

The high levels of net international migration experienced in the 2001 to 2005 will have directly influenced the 2006 population projections. Perhaps in reality these high levels of net international migration are not reflective of the current situation. The 2006 population projections show the population of the West Midlands Region increasing by 9,700 people per annum between 2006 and 2026 through international migration.

However, taking the lower rates of international migration, post 2005, as in table 7 above, would result in population growth of just 7,500 per annum, this figure would reduce further when considering the level of international migration to and from the rest of UK. On average, the West Midlands Region loses 1,600 people (net) per annum to the rest of the UK, outside of England (see Table 8 for details). This would drive the annual population increase down to just 6,000 per annum through international migration rather than 9,700 indicated in the 2006 population projections. This lower figure translates into a population growth of 120,000 people compared with the 193,700 in the 2006 based

projections (Table 5), a difference of 73,700 people which equates approximately to 32,500 households between 2006 and 2026.

Table 8. Migration Flows between West Midlands Region and Rest of UK* 1998-2007.

	In Flow	Out Flow	Net Change
1998-99	12,133	13,060	-927
1999-00	12,280	13,863	-1,583
2000-01	11,798	12,832	-1,034
2001-02	11,552	12,972	-1,420
2002-03	11,335	13,262	-1,927
2003-04	11,267	13,404	-2,137
2004-05	11,084	12,688	-1,604
2005-06	11,241	12,269	-1,028
2006-07	10,770	13,662	-2,892
Annual Average Flows	11,496	13,112	-1,617

Source: Office for National Statistics, NHSCR Patient Registrar, Table 2a, 1998-2007

* Wales, Scotland, Northern Ireland and Isle of Man

Other further evidence in the slowing down in the population growth through international migration comes from the Workers Registration Scheme. The number of people registering for work in the West Midlands Region from the A8 eastern European countries has more than halved in less than two years. In the final quarter of 2008 there were only 2,395 registrations compared with 5,300 for the same quarter in 2006.

Variant Projections

At a national level the Office for National Statistics has produced a set of variant population projections showing the effect of assumptions about fertility, life expectancy and net migration on the future levels of the population. The Department for Communities and Local Government (DCLG) have produced a set of household projections by applying the 2006 based variant population projections to the household representative rates in the principal household projections. Table 9 below provides details of the variant household projections.

Potentially the variance from the principal household projection for England could be significant, with the extremities of the variant projection showing an annual average increase in household numbers fluctuating between 206,000 and 299,000 households per annum. Using the lower set of variants for fertility, mortality and net migration assumptions this equates to 46,000 household per annum lower (-18.3%) than the principal projection and using the higher set of variants could result in an additional 47,000 households (18.7%) per annum more than the principal projection.

Changes in fertility assumptions used in the model show a variance of +2,000 household per annum at the higher level to -3,000 household per annum at the lower level compared with the principal assumption. Mortality assumptions used show a variance of +12,000 household per annum at the higher level to -12,000 household per annum at the lower level compared with the principal assumption. The largest variation is in the net migration assumptions with a variance of +33,000 household per annum at the higher level to -31,000 household per annum at the lower level compared with the principal assumption.

Table 9. Variant Household projections based in variant 2006 based population projections for England.

	Assumption in Population	Average Annual Increase in Households 2006-2031	Variance from Principal Projection per annum	Percentage Variance from Principal Projection
Fertility	2.05 children per woman	254,000	2,000	0.8%
	1.85 children per woman	252,000	0	0%
	1.65 children per woman	249,000	-3,000	-1.2%
Mortality	Males 84.9 years Females 87.6 years	264,000	12,000	4.8%
	Males 83.0 years Females 86.4 years	252,000	0	0%
	Males 81.0 years Females 85.1 years	240,000	-12,000	-4.8%
Net Migration (per annum)	231,500	285,000	33,000	13.1%
	171,500	252,000	0	0%
	111,500	221,000	-31,000	-12.3%

Source: Department for Communities and Local Government / Office for National Statistics, 2006 based Household Projections - Table 416, March 2009

The 2006 based household projections for the West Midlands Region indicate household growth of 431,000 households between 2006 and 2026 (see Appendix A). This equates to an annual average growth of 21,550 households per annum during that 20 year period. Assuming that the West Midlands Region has the same demographic profile as the England average and the variant projections assumptions are applied consistently, then potentially the range of household growth in the West Midlands Region could be as low as 17,600 households per annum (352,000 households over 20 years) or as high as 25,600 households per annum (512,000 households over 20 years) between 2006 and 2026. Appendix C contains further details.

Given the current economic down turn and the decline in the number of international economic migrants it could be argued that the projected population increase through net migration will not be as high as previously indicated in the principal population projection. Therefore, the projected number of households will not be as high as in the principal household projection. It could, therefore, be suggested that given the economic down turn, the projected household growth may not be as high as indicated in the 2006 sub-national household projections for the West Midlands Region and there could potentially be upwards of 53,000 fewer households in the Region by 2026 compared with the figure from the 2006 Sub-national household projections of 431,000 households.

Appendix A

2006 Sub-national Household Projections for West Midlands Region, 2006 - 2026

	2006	2011	2016	2021	2026	Change 2006-2026	Percentage Change 2006-2026
WEST MIDLANDS	2,237,000	2,340,000	2,454,000	2,566,000	2,668,000	431,000	19.3%
County of Herefordshire UA	78,000	82,000	86,000	91,000	94,000	16,000	20.5%
Stoke-on-Trent UA	105,000	108,000	111,000	114,000	117,000	12,000	11.4%
Telford and Wrekin UA	67,000	71,000	75,000	79,000	82,000	15,000	22.4%
Shropshire	123,000	130,000	138,000	145,000	152,000	29,000	23.6%
Bridgnorth	22,000	22,000	23,000	24,000	25,000	3,000	13.6%
North Shropshire	25,000	26,000	28,000	30,000	31,000	6,000	24.0%
Oswestry	17,000	19,000	20,000	22,000	24,000	7,000	41.2%
Shrewsbury and Atcham	41,000	43,000	45,000	46,000	48,000	7,000	17.1%
South Shropshire	18,000	20,000	21,000	23,000	24,000	6,000	33.3%
Staffordshire	344,000	360,000	378,000	395,000	409,000	65,000	18.9%
Cannock Chase	39,000	41,000	44,000	46,000	48,000	9,000	23.1%
East Staffordshire	45,000	48,000	51,000	54,000	57,000	12,000	26.7%
Lichfield	40,000	42,000	45,000	47,000	49,000	9,000	22.5%
Newcastle-under-Lyme	52,000	55,000	57,000	59,000	61,000	9,000	17.3%
South Staffordshire	43,000	45,000	46,000	48,000	49,000	6,000	14.0%
Stafford	52,000	55,000	58,000	61,000	63,000	11,000	21.2%
Staffordshire Moorlands	40,000	42,000	43,000	45,000	46,000	6,000	15.0%
Tamworth	31,000	32,000	34,000	36,000	37,000	6,000	19.4%
Warwickshire	222,000	236,000	251,000	266,000	280,000	58,000	26.1%
North Warwickshire	26,000	27,000	28,000	30,000	31,000	5,000	19.2%
Nuneaton and Bedworth	50,000	53,000	55,000	58,000	60,000	10,000	20.0%
Rugby	38,000	40,000	42,000	45,000	47,000	9,000	23.7%
Stratford-on-Avon	50,000	53,000	57,000	61,000	64,000	14,000	28.0%
Warwick	58,000	63,000	68,000	73,000	77,000	19,000	32.8%
West Midlands (former Met. County)	1,066,000	1,109,000	1,157,000	1,205,000	1,251,000	185,000	17.4%
Birmingham	407,000	428,000	450,000	472,000	494,000	87,000	21.4%
Coventry	127,000	133,000	139,000	145,000	151,000	24,000	18.9%
Dudley	127,000	130,000	134,000	137,000	141,000	14,000	11.0%
Sandwell	119,000	123,000	129,000	135,000	140,000	21,000	17.6%
Solihull	84,000	88,000	92,000	96,000	100,000	16,000	19.0%
Walsall	103,000	106,000	109,000	112,000	115,000	12,000	11.7%
Wolverhampton	99,000	101,000	104,000	107,000	110,000	11,000	11.1%
Worcestershire	233,000	245,000	258,000	271,000	282,000	49,000	21.0%
Bromsgrove	37,000	39,000	42,000	44,000	47,000	10,000	27.0%
Malvern Hills	31,000	33,000	35,000	37,000	38,000	7,000	22.6%
Redditch	33,000	35,000	36,000	38,000	40,000	7,000	21.2%
Worcester	40,000	42,000	43,000	45,000	47,000	7,000	17.5%
Wychavon	49,000	52,000	55,000	58,000	61,000	12,000	24.5%
Wyre Forest	42,000	44,000	46,000	48,000	50,000	8,000	19.0%

Source: Office for National Statistics, 2006 based Sub-national Household Projections, March 2009

Appendix B

2006 Sub-national Population Projections for West Midlands Region, 2006 - 2026

	2006	2011	2016	2021	2026	Change 2006-2026	Percentage Change 2006-2026
WEST MIDLANDS REGION	5,366,700	5,506,400	5,662,500	5,823,900	5,976,500	609,800	11.4%
County of Herefordshire UA	177,800	182,900	188,400	194,100	199,700	21,900	12.3%
Stoke-on-Trent UA	239,700	241,100	244,000	247,400	250,800	11,100	4.6%
Telford and Wrekin UA	161,900	166,800	171,700	176,400	180,700	18,800	11.6%
Shropshire	289,300	298,700	308,800	319,500	329,600	40,300	13.9%
Bridgnorth	51,800	52,500	53,400	54,400	55,300	3,500	6.8%
North Shropshire	59,500	62,500	65,400	68,300	70,900	11,400	19.2%
Oswestry	39,700	42,700	45,600	48,300	50,900	11,200	28.2%
Shrewsbury and Atcham	95,900	96,600	98,100	100,200	102,200	6,300	6.6%
South Shropshire	42,300	44,400	46,300	48,300	50,200	7,900	18.7%
Staffordshire	822,800	843,200	865,200	888,000	909,100	86,300	10.5%
Cannock Chase	94,300	97,300	100,400	103,400	105,900	11,600	12.3%
East Staffordshire	107,700	111,600	116,000	120,700	125,000	17,300	16.1%
Lichfield	96,700	100,500	104,300	108,200	111,600	14,900	15.4%
Newcastle-under-Lyme	123,800	126,400	128,900	131,400	134,100	10,300	8.3%
South Staffordshire	106,200	106,800	107,700	108,800	109,900	3,700	3.5%
Stafford	123,400	127,100	131,000	135,000	138,600	15,200	12.3%
Staffordshire Moorlands	95,300	96,700	98,300	100,200	101,900	6,600	6.9%
Tamworth	75,400	76,800	78,600	80,500	82,100	6,700	8.9%
Warwickshire	522,200	545,100	569,300	594,100	617,300	95,100	18.2%
North Warwickshire	62,300	63,500	65,000	66,700	68,300	6,000	9.6%
Nuneaton and Bedworth	120,700	123,500	127,000	130,800	134,200	13,500	11.2%
Rugby	90,200	93,800	97,900	102,200	106,300	16,100	17.8%
Stratford-on-Avon	116,100	122,100	128,300	134,700	140,600	24,500	21.1%
Warwick	132,900	142,100	151,100	159,800	167,800	34,900	26.3%
West Midlands Met Area	2,600,100	2,660,600	2,730,600	2,802,500	2,871,100	271,000	10.4%
Birmingham	1,006,500	1,041,000	1,078,200	1,114,300	1,148,100	141,600	14.1%
Coventry	306,600	314,600	323,800	333,600	343,700	37,100	12.1%
Dudley	305,300	307,700	311,200	315,300	319,000	13,700	4.5%
Sandwell	287,600	293,400	301,000	308,900	316,100	28,500	9.9%
Solihull	203,000	208,800	215,200	222,300	229,400	26,400	13.0%
Walsall	254,500	257,700	261,800	266,100	270,000	15,500	6.1%
Wolverhampton	236,600	237,300	239,400	242,100	244,800	8,200	3.5%
Worcestershire	552,900	568,000	584,400	601,900	618,400	65,500	11.8%
Bromsgrove	91,600	95,600	99,600	103,900	107,900	16,300	17.8%
Malvern Hills	73,900	75,700	77,700	80,100	82,600	8,700	11.8%
Redditch	79,500	81,100	83,200	85,400	87,300	7,800	9.8%
Worcester	93,400	94,800	96,600	98,400	100,200	6,800	7.3%
Wychavon	116,300	120,600	124,900	129,200	133,300	17,000	14.6%
Wyre Forest	98,200	100,200	102,400	104,800	107,000	8,800	9.0%

Source: Office for National Statistics, 2006 Sub-national Population Projections

Extrapolated Estimates of Variant Household change for West Midlands Region based on percentage average change inferred in the Variant Household Projections for England.

	Assumption in Population for England	Percentage Variance from Principal Household Projection for England	Variance from Principal Projection per annum for West Midlands Region*	Average Annual Increase in Households 2006-2026 for West Midlands Region
Fertility	2.05 children per woman	0.8%	172	21,722
	1.85 children per woman	0%	0	21,550
	1.65 children per woman	-1.2%	-259	21,291
Mortality	Males 84.9 years Females 87.6 years	4.8%	1,034	22,584
	Males 83.0 years Females 86.4 years	0%	0	21,550
	Males 81.0 years Females 85.1 years	-4.8%	-1,034	20,516
Net Migration (per annum)	231,500	13.1%	2,823	24,373
	171,500	0%	0	21,550
	111,500	-12.3%	-2,650	18,900

Source: Research Unit, Staffordshire County Council, March 2009 (using Department for Communities and Local Government / Office for National Statistics, 2006 based Household Projections - Table 416, March 2009)

* based on annual average household growth of 21,550 households per annum in West Midlands Region and applying percentage variance from principal household projection for England