

West Northamptonshire Study Area: Demography Note

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Background

This note examines recent ONS and CLG population and household projections for the three districts of Daventry, Northampton and South Northamptonshire. The analysis starts with the ONS/CLG 2008-based projections that have been incorporated in the 'How Many Homes?' website. The note also presents updated projections by PBA.

Since the publication of the initial results of the 2011 Census in July 2012 ONS has published population estimates for mid-2011 and revised the estimates for all years between 2002 and 2010. ONS has also published interim population projections based on the 2011 mid-year estimate. These projections only project ahead 10 years to 2021 and utilise the same demographic rates and assumptions as used by ONS in the 2010-based population projections – hence their 'interim' status.

In April 2013 CLG used the ONS interim 2011-based projections in its own interim 2011 household projections. These projections used household numbers by type based on the 2011 Census results but were not able to fully incorporate 2011 Census-results on housing formation. These projections also only go ahead as far as 2021.

The PBA projections are based on the 2011 mid-year estimates and incorporate average annual migration and other changes affecting each district over two periods: 2001-11 and 2006-11. The former are more robust as they are reliant on the mid-year estimates in the last two Census years; however the 2006-11 trends although utilising the revised estimates for 2006-10, are less robust but are more similar to the ONS projections that are based on the experience of the previous five years. The PBA projections utilise the same fertility and survival assumptions as the ONS 2010-based and 2011-based projections and the same household representative rates and assumptions relating to the communal establishment population as the CLG 2011 projections as far as 2021. After 2021 the representative rates from the CLG 2008 projections are used with an adjustment based on a comparison at 2021 with the rates from the CLG 2011 projection.

This note also includes a projection of economically active residents.

Summary of Results

The 2011 Census, and subsequent 2011 mid-year estimates, showed that:

- ONS had overestimated the populations of each of the districts at 2011
- The population in the three districts grew by 30 thousand since 2001.
- CLG had further overestimated the numbers of households at 2011 partly as a result of there being lower rates of household formation amongst younger adults leading to higher average household sizes than had been forecast.
- The number of households in the three districts grew by 14 thousand since 2001.

The PBA projections show that:

- Population growth – under both projections – will be lower than shown by ONS projections.
- Household growth will also be significantly lower than shown by CLG projections.
- During 2001-11 Daventry and South Northamptonshire had higher growth in the earlier years while Northampton's major growth came later in the decade.
- While the two projections (2001-11 and 2006-11 Trends) differ in the distribution of future change between the three districts they are similar in terms of total change between 2011 and 2031.
- By 2031 the population is projected to grow by 54-61 thousand and households to increase by 29-31 thousand in the Study Area. In contrast the ONS/CLG 2008 projections implied increases of 86 thousand persons and 49 thousand households.
- Under both PBA projections household growth will be concentrated in Northampton: 21-24 thousand.
- The economically active population of the area will increase between 2011 and 2031 by 12-19 thousand. In both projections growth will be dominated by Northampton with declines in the other two districts combined.

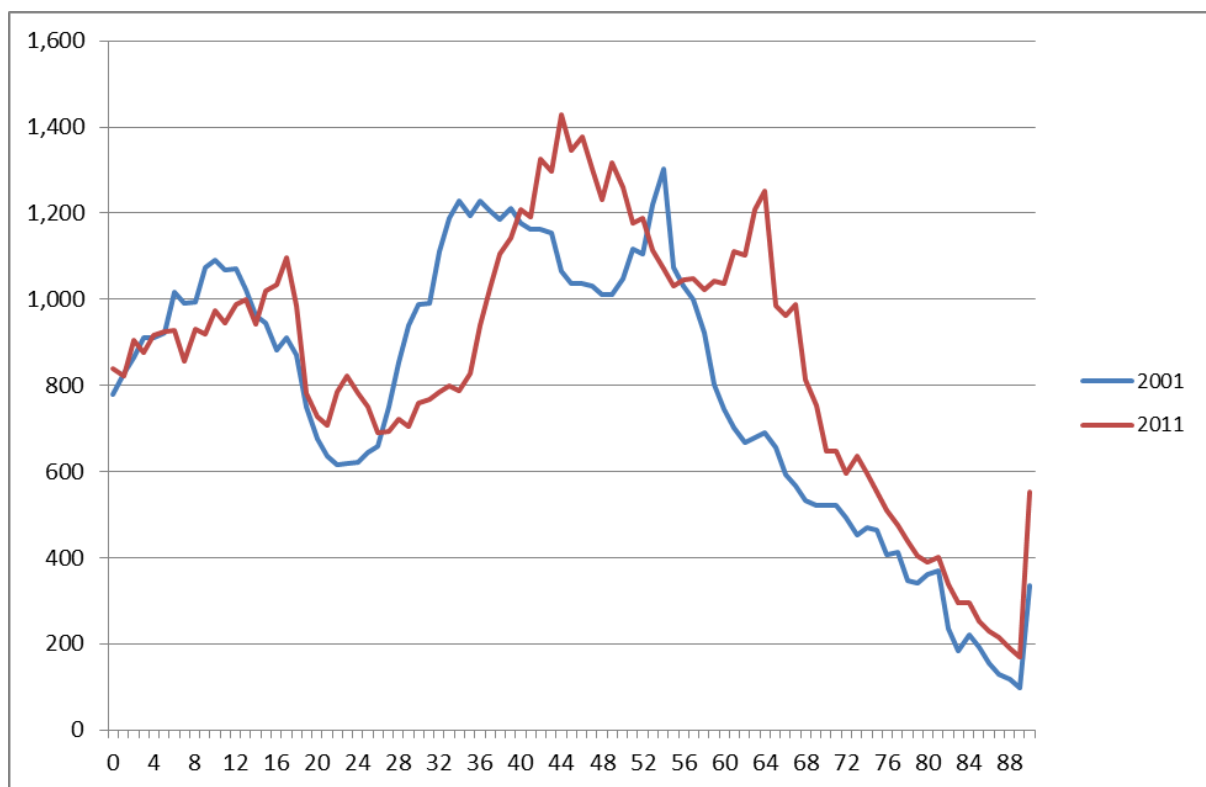
Demographic Changes 2001-11

Daventry

Since mid-2001 the population of Daventry has increased by 6,000 to reach 78,100 at mid-2011. This increase has been made up of 2,200 natural change (births to resident women less deaths of residents) and a net migration gain of 3,800 persons. The net migration figure includes 'other changes' including an 'unexplained' loss of 1,200¹. The 2011 mid-year estimates showed that the ONS 2008-based projection had overestimated the population by about 1,800. The pattern of migration estimated by ONS (Table 1) was of very significant gains between 2001 and 2003, mainly from the rest of the UK, followed by years of smaller net gains. In 2010-11 Daventry gained most migrants from Northampton (840), South Northamptonshire (320) and Rugby (230). Major destinations of persons leaving were Northampton (610), Rugby (260) and South Northamptonshire (200).

Figure 1 shows that Daventry has gained population mainly in the older worker and retirement ages through net migration in the worker ages and through the ageing of the population.

Figure 1: Daventry: Age Structure 2001 and 2011. ONS mid-year estimates.



¹ ONS says that the 'unexplained' losses (or gains in some other authorities) may be due to errors in either the 2001 or 2011 Censuses, giving rise to errors in the mid-year estimates of those years, or errors in either the UK or Overseas migration calculations.

Table 1: Daventry: Annual Migration from ONS mid-year estimate change analyses.

	UK			Overseas			Asylum	Total
	In	Out	Net	In	Out	Net	Net	Net
2001-02	5,240	4,164	1,076	257	190	67	-30	1,113
2002-03	5,124	4,033	1,091	292	262	30	1	1,122
2003-04	4,584	4,251	333	366	250	116	0	449
2004-05	4,347	4,109	238	522	287	235	0	473
2005-06	4,422	4,018	404	453	296	157	0	561
2006-07	4,389	4,268	121	490	302	188	0	309
2007-08	3,989	3,993	-4	355	339	16	0	12
2008-09	3,917	3,626	291	271	229	42	0	333
2009-10	4,109	4,032	77	229	263	-34	0	43
2010-11	3,985	3,714	271	283	221	62	0	333
Annual Averages								
2001-11	4,411	4,021	390	352	264	88	-3	475
2006-11	4,078	3,927	151	326	271	55	0	206

The CLG 2008 household projection showed a net increase of 4,300 households across the decade; however the CLG 2011 projections indicate that the increase in households was only 2,900.

Northampton

Since mid-2001 the population of Northampton has increased by 18,100 to reach 212,500 at mid-2011. This increase has been made up of 12,300 natural change and a net migration gain of 5,800 persons. The net migration figure includes 'other changes' including an 'unexplained' loss of 2,800. The 2011 mid-year estimates showed that the ONS 2008 projections had overestimated the population by about 5,200. The pattern of migration estimated by ONS (Table 2) was initially one of net losses but with significant gains since 2004, notably 2004-07, largely as a result of immigration from Overseas. These gains coincide with the opening up of the UK as a destination for migrants from the EU A8 accession countries mainly in Eastern Europe. There has been a tendency for annual net losses to the rest of the UK. In 2010-11 Northampton gained most migrants from South Northamptonshire (860), Daventry (610), Wellingborough (450), Milton Keynes (420) and East Northamptonshire and Kettering (both 230). Major destinations of those leaving were South Northamptonshire (890), Daventry (840), Wellingborough (570), Kettering (340), Milton Keynes (300) and East Northamptonshire (250).

Figure 2 shows that most of the increase in population over the decade has been caused by a rise in births and net immigration in the 20s. At higher ages changes have been due to the ageing of the population with major increases in the 40s and around retirement age.

Figure 2: Northampton: Age Structure 2001 and 2011. ONS mid-year estimates.

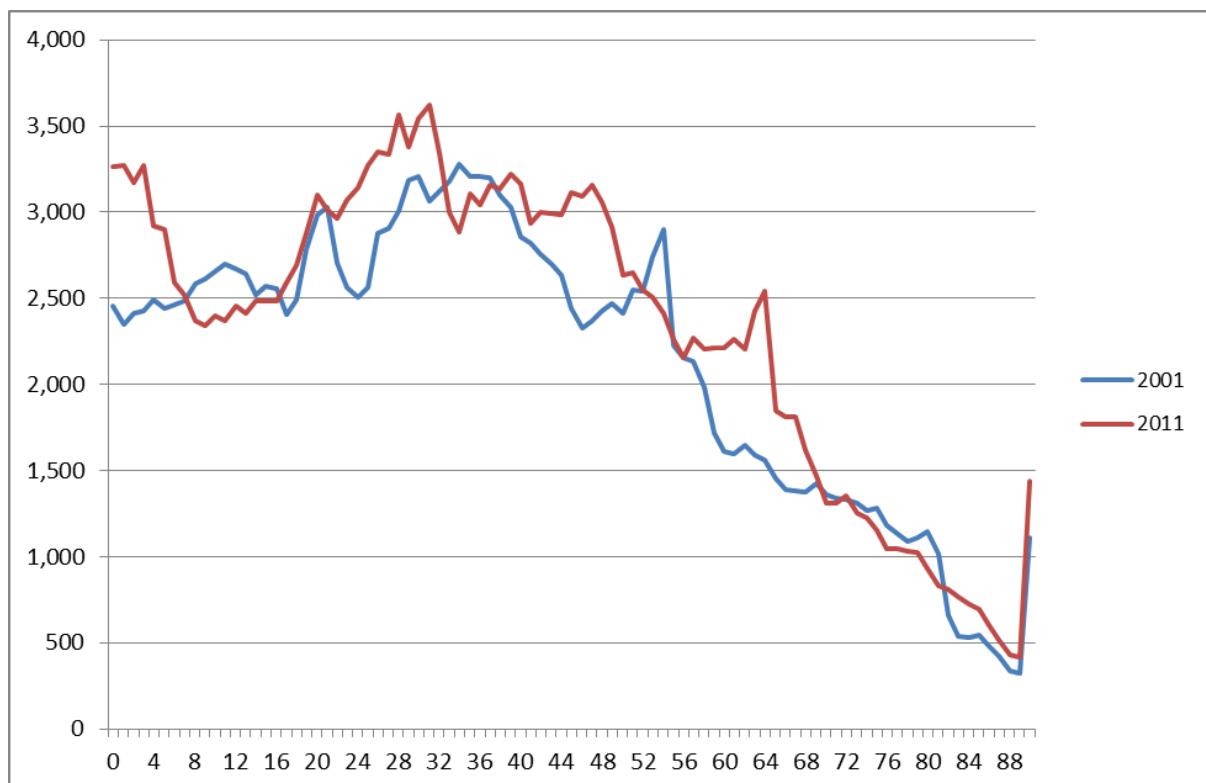


Table 2: Northampton: Annual Migration from ONS mid-year estimate change analyses.

	UK			Overseas			Asylum	Total
	In	Out	Net	In	Out	Net	Net	Net
2001-02	10,034	10,220	-186	1,095	1,170	-75	-60	-321
2002-03	9,954	10,101	-147	1,390	1,617	-227	286	-88
2003-04	9,532	10,705	-1,173	2,104	1,716	388	98	-687
2004-05	9,359	10,492	-1,133	3,881	1,423	2,458	53	1,378
2005-06	9,897	10,458	-561	4,746	1,714	3,032	25	2,496
2006-07	9,847	10,774	-927	3,934	1,398	2,536	33	1,642
2007-08	9,405	10,017	-612	3,290	1,456	1,834	25	1,247
2008-09	8,925	9,531	-606	2,833	1,263	1,570	26	990
2009-10	9,321	9,812	-491	2,693	1,415	1,278	20	807
2010-11	9,603	9,535	68	2,372	1,290	1,082	21	1,171
Annual Averages								
2001-11	9,588	10,165	-577	2,834	1,446	1,388	53	864
2006-11	9,420	9,934	-514	3,024	1,364	1,660	25	1,171

The CLG 2008 household projection showed a net increase of 13,900 households across the decade; however the CLG 2011 projections indicate that the increase in households was only 8,000.

South Northamptonshire

Since mid-2001 the population of South Northamptonshire has increased by 5,900 to reach 85,400 at mid-2011. This increase has been made up of 2,500 natural change and a net migration gain of 3,400 persons. The net migration figure includes 'other changes' including an 'unexplained' loss of 4,000. The 2011 mid-year estimates showed that the ONS 2008 projections had overestimated the population by about 6,000. The pattern of migration estimated by ONS (Table 3) was basically one of significant annual net gains between 2001 and 2006, mainly from the rest of the UK, with much smaller gains since. In 2010-11 South Northamptonshire gained most migrants from Northampton (890), Milton Keynes (550), Cherwell (440), Aylesbury Vale (230) and Daventry (200). Major destinations of those leaving were Northampton (860), Milton Keynes (420), Cherwell (380) and Daventry (320).

Figure 3 shows that most of the increase in population over the decade has been caused by net immigration in the 40s. At higher ages changes have been due to the ageing of the population with major increases around retirement age.

Figure 3: South Northamptonshire: Age Structure 2001 and 2011. ONS mid-year estimates.

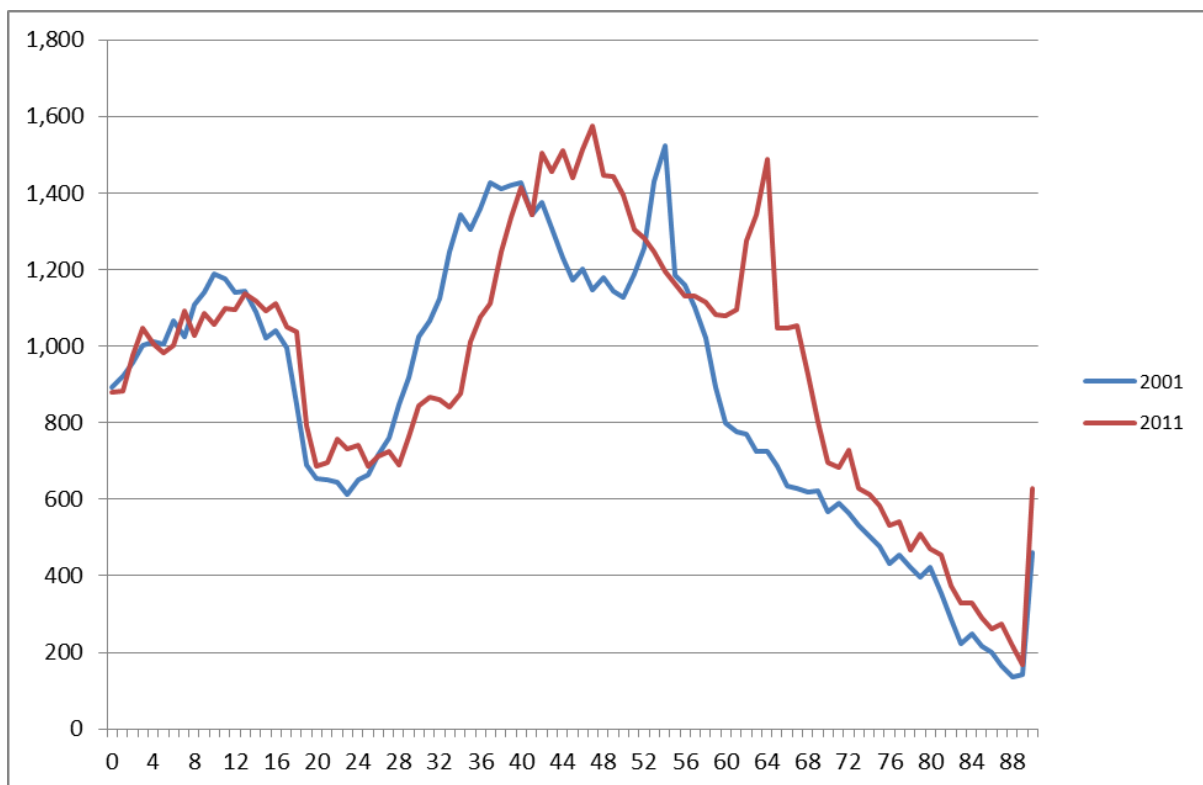


Table 3: South Northamptonshire: Annual Migration from ONS mid-year estimate change analyses.

	UK			Overseas			Asylum	Total
	In	Out	Net	In	Out	Net	Net	Net
2001-02	6,519	4,936	1,583	313	154	159	260	2,002
2002-03	6,056	5,074	982	335	271	64	0	1,046
2003-04	5,980	5,037	943	358	278	80	0	1,023
2004-05	6,095	4,604	1,491	399	246	153	0	1,644
2005-06	5,655	4,911	744	340	273	67	0	811
2006-07	5,645	5,195	450	308	280	28	0	478
2007-08	4,931	4,864	67	213	304	-91	0	-24
2008-09	4,573	4,519	54	226	234	-8	0	46
2009-10	4,914	4,708	206	197	273	-76	0	130
2010-11	4,740	4,729	11	241	244	-3	0	8
Annual Averages								
2001-11	5,511	4,858	653	293	256	37	26	716
2006-11	4,961	4,803	158	237	267	-30	0	128

The CLG 2008 household projection showed a net increase of 5,700 households across the decade; however the CLG 2011 projections indicate that the increase in households was only 3,000.

West Northamptonshire Study Area

Since mid-2001 the population of the West Northamptonshire Study Area has increased by 30,100 to reach 376,000 at mid-2011. This increase has been made up of 17,100 natural change and a net migration gain of 13,000 persons. The net migration figure includes 'other changes' including an 'unexplained' loss of 8,000. The 2011 mid-year estimates showed that the ONS 2008 projections had overestimated the population by about 13,000. The pattern of migration estimated by ONS (Table 4) was basically one of annual net gains with a boost between 2004 and 2007 caused by increased inflows from Overseas. Net flows with the rest of the UK were strongly positive in 2001-03 but were negative in 2006-10. In 2010-11 the Study Area gained 17,800 migrants from the rest of England and Wales, of these 1,360 came from the London boroughs. Other major origins were Wellingborough (780), Milton Keynes (760), Cherwell (570), Kettering (510), Rugby (380), East Northamptonshire (370), Birmingham (300) and Aylesbury Vale (250). In the same year the area lost 18,100 migrants to the rest of England and Wales, of these 1,640 went to London. Other major destinations were Milton Keynes (1,030), Cherwell (650), Wellingborough (620), Kettering (360), East Northamptonshire (330), Aylesbury Vale (320), Rugby (300) and Birmingham (270). Therefore Wellingborough and Kettering were the major net origins for the Study Area's population while London and Milton Keynes were the major net destinations for those who left.

Figure 4 shows that most of the increase in population over the decade has been caused by increased births and net immigration in the 40s. At higher ages changes have been due to the ageing of the population with major increases around retirement age.

Figure 4: West Northamptonshire: Age Structure 2001 and 2011. ONS mid-year estimates.

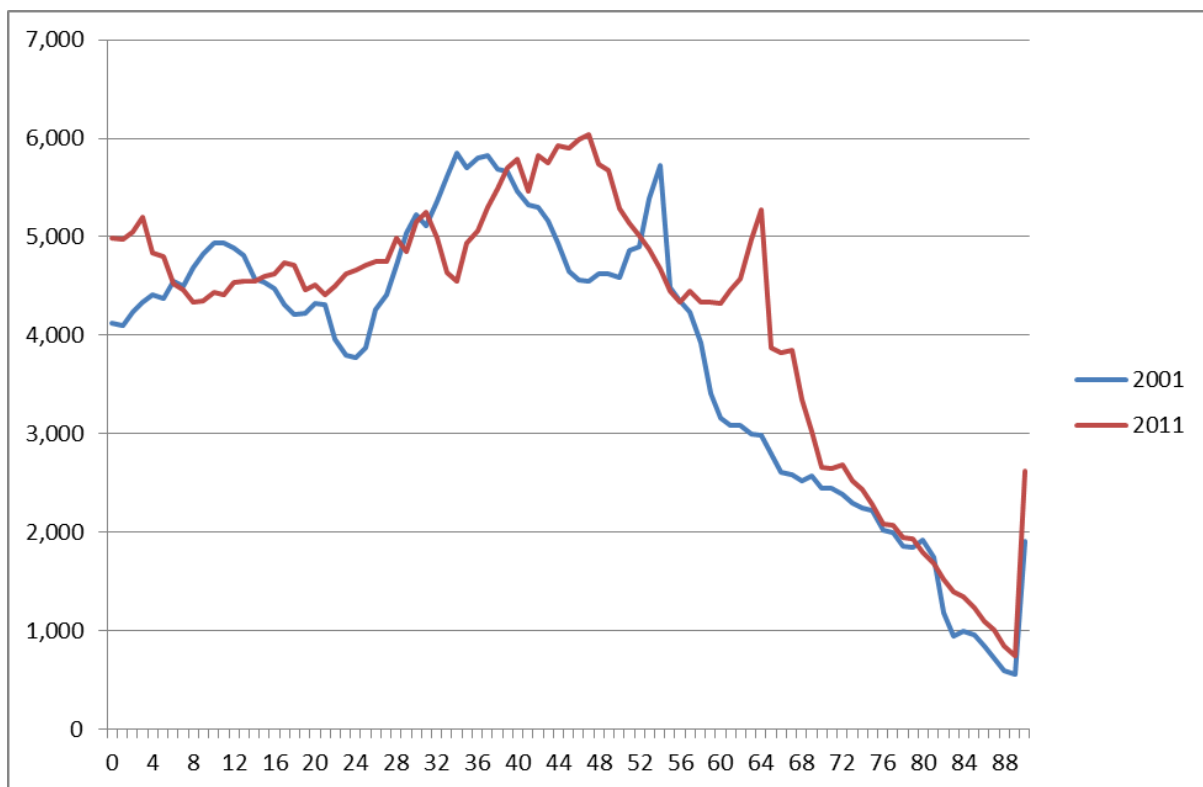


Table 4: West Northamptonshire Study Area: Annual Migration² from ONS mid-year estimate change analyses.

	UK		Overseas		Asylum	Total
	Net	In	Out	Net	Net	Net
2001-02	2,473	1,665	1,514	151	170	2,794
2002-03	1,926	2,017	2,150	-133	287	2,080
2003-04	103	2,828	2,244	584	98	785
2004-05	596	4,802	1,956	2,846	53	3,495
2005-06	587	5,539	2,283	3,256	25	3,868
2006-07	-356	4,732	1,980	2,752	33	2,429
2007-08	-549	3,858	2,099	1,759	25	1,235
2008-09	-261	3,330	1,726	1,604	26	1,369
2009-10	-208	3,119	1,951	1,168	20	980
2010-11	350	2,896	1,755	1,141	21	1,512
Annual Averages						
2001-11	466	3,479	1,966	1,513	76	2,055
2006-11	-205	3,587	1,902	1,685	25	1,505

The CLG 2008 household projection showed a net increase of 23,900 households across the decade; however the CLG 2011 projections indicate that the increase in households was only 14,000.

² As the data have been accumulated over the flows for the three districts it is not possible to give the gross in and out flows with the rest of the UK due to the cross-flows between the three districts. However, in 2010-11 the sizes of the flows with the rest of England and Wales were of the order of 18 thousand.

Net Migration by Age

Figure 5: Three Districts and the Study Area: Net Migration 2001-11 by ages 10-64 at 2011.

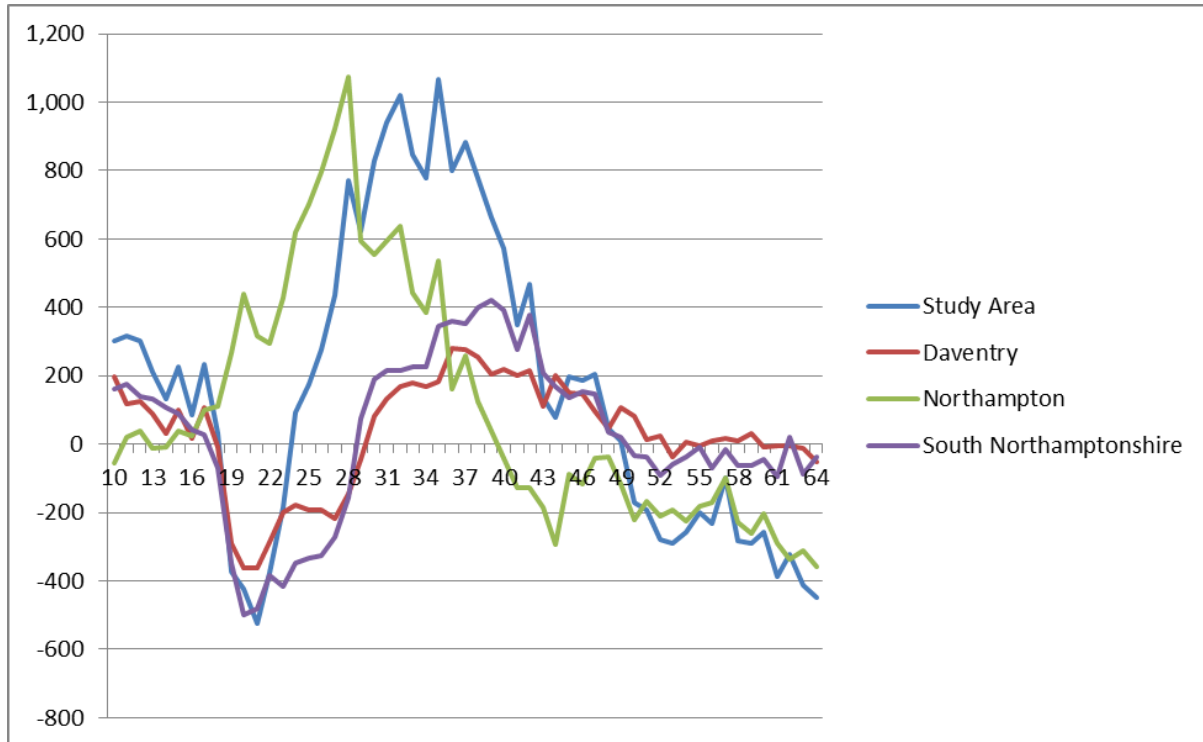


Figure 5 shows the different net migration patterns of the three districts and the study area as a whole over the decade 2001-11. The data are obtained by differencing the ONS 2001 and 2011 mid-year estimates with an allowance for 10 years difference in age, ie 20 year olds in 2011 less 10 year olds in 2001. The figures will therefore also contain the small impact of deaths in the resident population aged 0-54 at 2001 over the following decade. As all ages are at 2011 the average age of migration would be about 5 years younger than shown by the x-axis scale.

Northampton attracts persons in their late teens and from their twenties up to the late thirties, partly due to education establishments and also work opportunities. Northampton loses older workers and the pre-retirement ages.

Daventry and South Northamptonshire lose students and persons up to the late twenties but attract people in their thirties and forties together with their children.

The net impact on the study area is a gain of children, a net loss of students but gains at all ages from the mid-twenties to the late forties. There is also a net loss of older workers and the pre-retired.

These patterns will be reflected in the various projections presented below, particularly the two PBA Trends projections.

The Projections Defined

Five projections are used in this note. They are as follows:

ONS/CLG 2008

This is still the most complete set of national projections, as the 2011 Interim projections only go as far into the future as 2021. The migration is based on ONS estimates for 2003-08 and the ONS population projection was converted to households by CLG.

ONS 2010

This is the last ONS population projection produced before the availability of 2011 Census results. The migration is based on ONS 'indicative' revisions between 2005 and 2010. CLG has not (and has no plans to) converted this projection to households. Therefore only population results are shown.

ONS/CLG 2011 Interim

The ONS interim population projection uses the same assumptions and demographic rates (fertility, mortality and out-migration) as the ONS 2010 projection but is based on the post-Census 2011 mid-year population estimate. The projection horizon is 2021. The population has recently been converted to households in the CLG 2011 interim projections. These projections are only a partial update of the 2008 projections due to their use of out-of-date demographic rates, a particularly important factor for local authorities that the 2011 Census showed to have been poorly estimated up to 2010, and the short projection horizon

2001-11 Trends

This projection by PBA is based on the ONS 2011 mid-year estimates and uses fertility and mortality assumptions from the ONS 2010 projection. It uses average annual migration characteristics of the area by age and gender over the period 2001-11 using the revised series of ONS mid-year estimates for years 2002-10. This revised series takes account of the 2011 Census results. The conversion to households uses the household representative rates and other assumptions of the CLG interim 2011 projections, described above, to 2021. After 2021 the household representative rates from the CLG 2008 projection are used with gender/age/relationship adjustments based on the comparison of rates with the CLG 2011 projection at 2021.

2006-11 Trends

This projection by PBA is based on the ONS 2011 mid-year estimates and uses fertility and mortality assumptions from the ONS 2010 projection. It uses average annual migration characteristics of the area by age and gender over the period 2006-11 using the revised series of ONS mid-year estimates for years 2006-10. The conversion to households uses the household representative rates and other assumptions of the CLG interim 2011 projections, described above, to 2021. After 2021 the household representative rates from the CLG 2008 projection are used with gender/age/relationship adjustments based on the comparison of rates with the CLG 2011 projection at 2021.

Projection Results

Daventry

Table 6: Population and Household Projections for Daventry 2001-31, thousands except average household size.

	ONS/CLG	ONS	ONS/CLG	2001-11	2006-11
	2008	2010	2011	Trends	Trends
Population					
2001	72.0	72.0			
2006	77.1	77.0			
2011	79.9	79.1	78.1	78.1	78.1
2016	83.2	82.3	81.0	80.6	79.6
2021	86.9	85.9	84.2	83.2	80.7
2026	90.4	89.4		85.6	81.7
2031	93.6	92.6		87.7	82.3
Households					
2001	28.8				
2006	31.2				
2011	33.1		31.7	31.7	31.7
2016	35.5		33.5	33.3	32.9
2021	37.7		35.1	34.6	33.9
2026	39.8			36.0	34.9
2031	41.7			37.3	35.7
2001-11	4.3		2.9	2.9	2.9
2011-21	4.6		3.4	2.9	2.2
2021-31	4.0			2.7	1.8
2011-31	8.6			5.6	4.0
Average Household Size					
2001	2.448				
2006	2.415				
2011	2.359		2.398	2.398	2.398
2016	2.295		2.359	2.363	2.353
2021	2.249		2.336	2.338	2.314
2026	2.217			2.308	2.271
2031	2.187			2.277	2.228

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The population estimates for 2011 indicate that the revisions to migration that informed the ONS 2010 projection were only a modest improvement upon the original estimates. The 2011 mid-year estimates show that Daventry had been overestimated by 1,000 to 1,800.

The ONS 2010 projection was only a little less optimistic than the ONS 2008 projection. The ONS 2011 projection picked up the assumptions of the ONS 2010 projection and is a little lower still.

However the two PBA Trends projections are both significantly lower than any of the ONS projections, with the 2006-11 trends, based on years of lower population growth being the lowest of all. The 2001-11 Trends projection results in declining natural change averaging 130 per year and a net migration gain averaging 350 per year between 2011 and 2031, compared to the averages of 220 and 380 in 2001-11. Figure 6 shows that the population is projected to decrease in the forties and fifties and increase at higher ages. The most notable increases above age 75.

Figure 6: Daventry: Age Structure 2011 and 2031. PBA 2001-11 Trends projection.

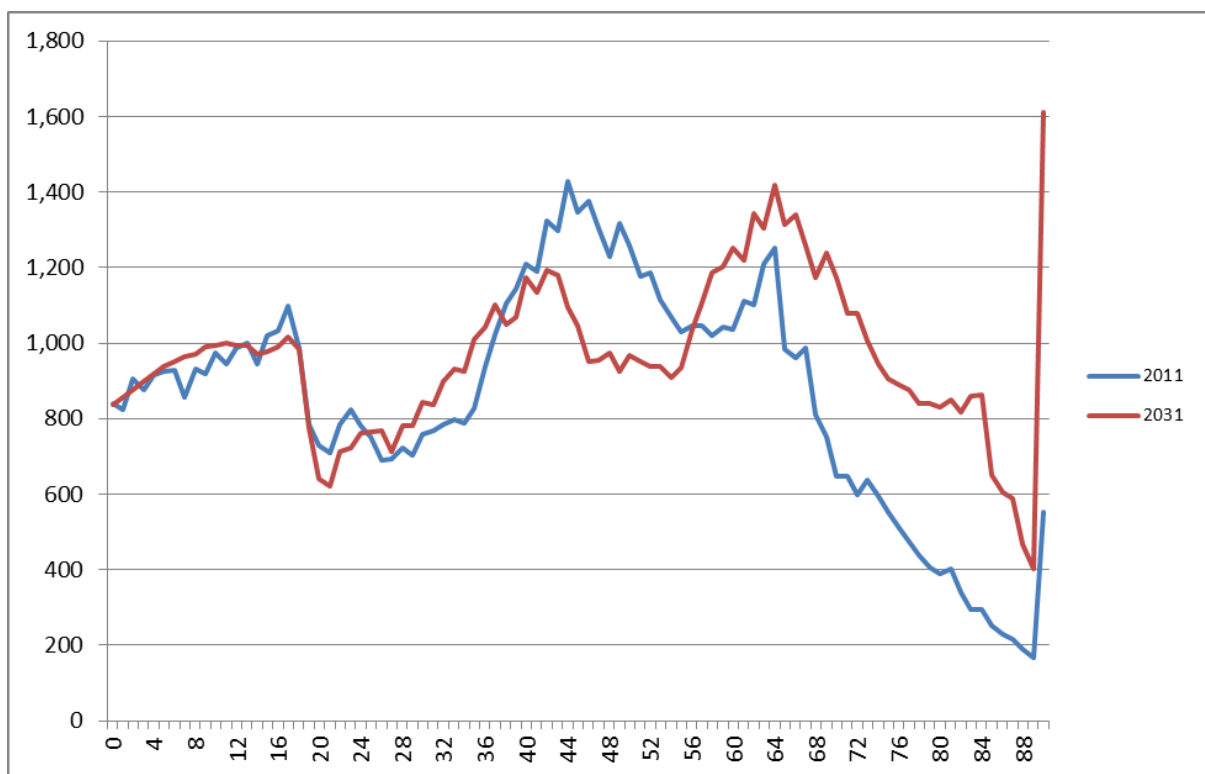
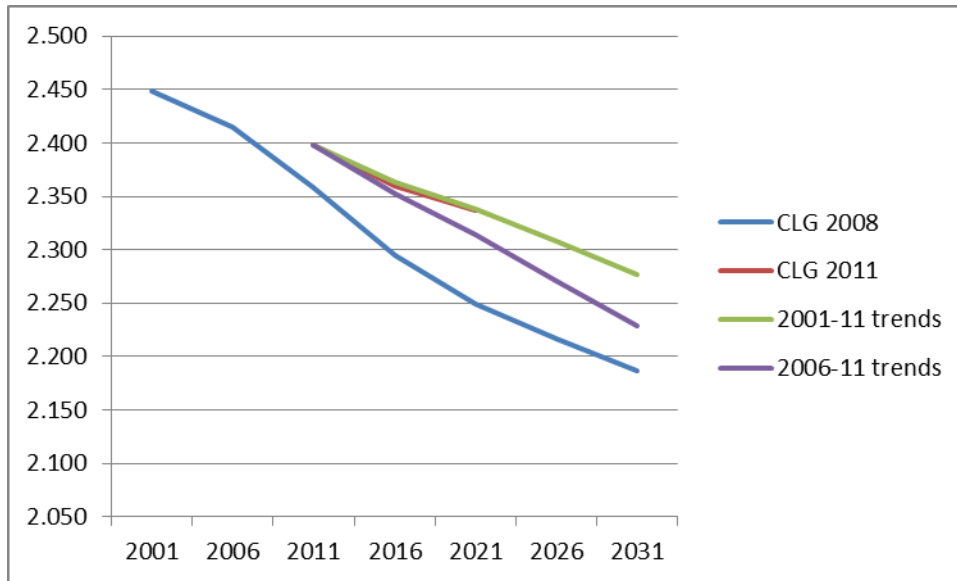


Figure 7: Daventry: Projected Average Household Size.



The main feature relating to households is the higher average household size (AHS) that results from the use of data from the 2011 Census, which showed only about half of the CLG 2008 projected decline in AHS since 2001. The projections based on 2011 differ due to different projections of age structure.

The 2011 Census results reduced the projected increase in households between 2001 and 2011 from 4,300 (ONS/CLG 2008) to 2,900. However, the two PBA Trends projections imply that housing demand will be 4,000 to 5,600 over the 2011-31 period, significantly less than the CLG 2008 projection: 8,600.

The reduced number of households and the higher average household size at 2011 are common features of Census results across England. Initial national Census results show this to be mainly caused by reduced household formation amongst young adults who are either remaining with parents or living in groups rather than as one person households. This phenomenon has been confirmed by Labour Force Survey results since the start of the financial crisis in 2007/08. CLG has used this information as the basis for its projection to 2021.

A key question is at what pace, if ever, household formation will return to the long term trend that has informed previous national household projections.

Northampton

Table 7: Population and Household Projections for Northampton 2001-31, thousands except average household size.

	ONS/CLG	ONS	ONS/CLG	2001-11	2006-11
	2008	2010	2011	Trends	Trends
Population					
2001	194.4	194.4			
2006	201.5	200.8			
2011	217.7	213.3	212.5	212.5	212.5
2016	232.1	231.9	228.8	224.3	226.2
2021	245.5	248.4	242.7	235.8	239.5
2026	258.0	263.1		246.8	252.5
2031	269.0	276.2		257.9	266.0
Households					
2001	80.9				
2006	86.0				
2011	94.7		88.9	88.9	88.9
2016	103.0		96.0	93.7	94.4
2021	110.7		102.7	98.7	100.0
2026	117.7			103.8	106.1
2031	124.3			109.7	113.0
2001-11	13.9		8.1	8.0	8.0
2011-21	16.0		13.8	9.7	11.1
2021-31	13.5			11.0	13.0
2011-31	29.5			20.8	24.1
Average Household Size					
2001	2.357				
2006	2.298				
2011	2.256		2.349	2.349	2.349
2016	2.213		2.344	2.355	2.357
2021	2.179		2.326	2.353	2.357
2026	2.152			2.336	2.340
2031	2.125			2.310	2.312

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The population estimates for 2011 indicate that the revisions to migration that informed the ONS 2010 projection significantly improved on the original estimates, but there was still an overestimate. The 2011 mid-year estimates show that Northampton had been overestimated by between 800 and 5,200 persons in both the ONS projections.

The 2001-11 Trends projection results in natural change of 1,790 and net migration of 480 per year between 2011 and 2031, compared to the averages of 1,230 and 580 in 2001-11. Figure 8 shows that the population is projected to increase at virtually all ages, most significantly school ages, workers in their 40s and the elderly. This reflects net inflows of younger workers as well as the ageing of the 2011 population aged over 50.

Figure 8: Northampton: Age Structure 2011 and 2031. PBA 2001-11 Trends projection.

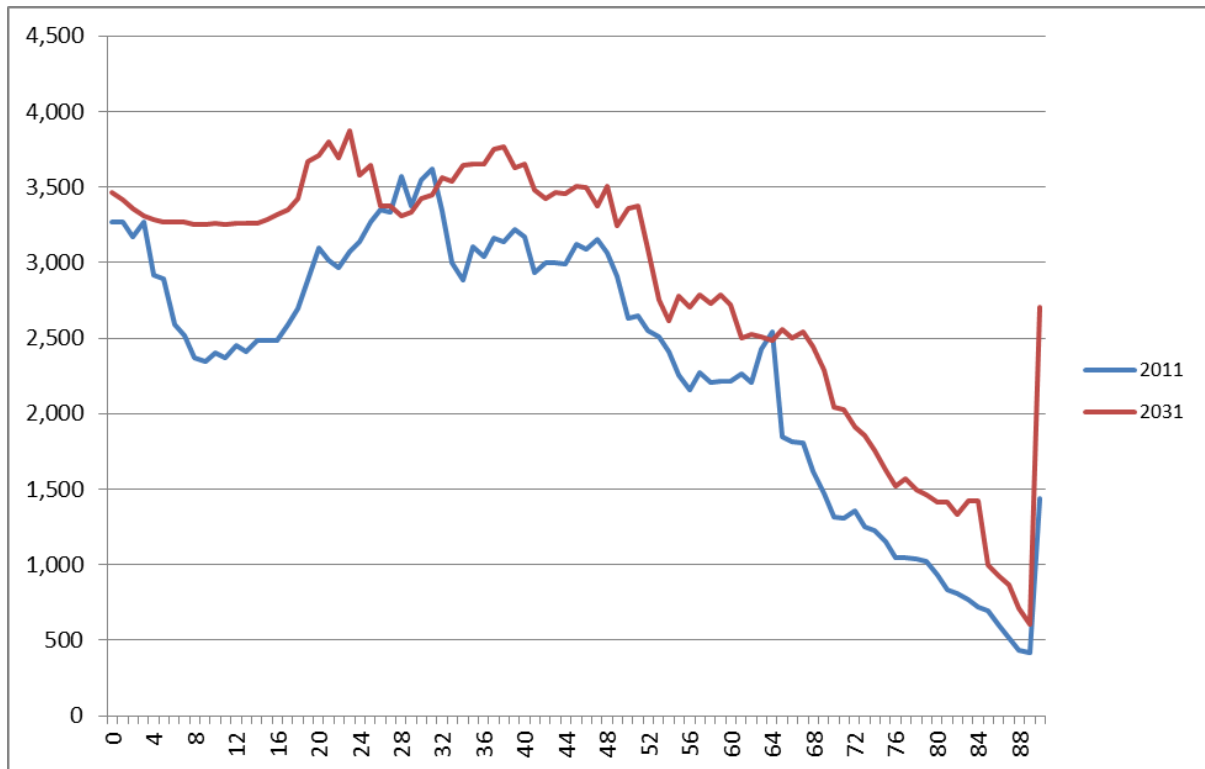
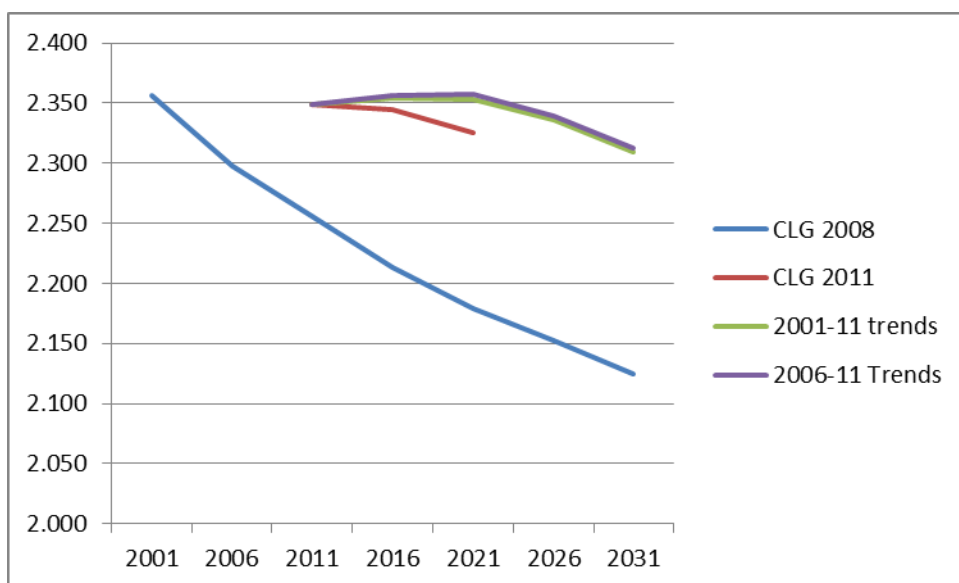


Figure 9: Northampton: Projected Average Household Size.



The 2011 Census results reduced the projected increase in households between 2001 and 2011 from 13,900 (ONS/CLG 2008) to 8,000. However, the PBA Trends projections imply that housing demand will be between 20,800 and 24,100 over the 2011-31 period. This is about two-thirds of the growth as implied by the CLG 2008 projection.

South Northamptonshire

Table 8: Population and Household Projections for South Northamptonshire 2001-31, thousands except average household size.

	ONS/CLG	ONS	ONS/CLG	2001-11	2006-11
	2008	2010	2011	Trends	Trends
Population					
2001	79.5	79.5			
2006	87.1	87.1			
2011	91.4	89.4	85.4	85.4	85.4
2016	96.8	93.3	89.8	87.2	84.8
2021	102.4	97.4	94.3	88.8	83.7
2026	107.6	101.4		90.3	82.6
2031	112.1	104.8		91.6	81.2
Households					
2001	31.8				
2006	35.1				
2011	37.5		34.8	34.8	34.8
2016	40.4		36.9	35.8	35.0
2021	43.4		39.0	36.8	35.2
2026	46.1			38.1	35.5
2031	48.6			39.2	35.7
2001-11	5.7		3.0	3.0	3.0
2011-21	5.9		4.2	2.0	0.4
2021-31	5.3			2.4	0.5
2011-31	11.1			4.4	0.9
Average Household Size					
2001	2.479				
2006	2.458				
2011	2.417		2.434	2.434	2.434
2016	2.376		2.412	2.414	2.398
2021	2.340		2.397	2.386	2.352
2026	2.308			2.345	2.293
2031	2.278			2.303	2.235

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The population estimates for 2011 indicate that the revisions to migration that informed the ONS 2010 projection improved on the original estimates but only by about 2 thousand out of a required amendment of 6 thousand.

The 2001-11 Trends projection results in a natural change averaging 340 and a net migration gain averaging 180 per year between 2011 and 2031, compared to the averages of 250 and 130 in 2001-11. Figure 10 shows that the population is projected to increase mainly at ages over 70 with losses in the forties and fifties. This largely reflects the aging of the population aged over 40 with relatively little net inflows of younger workers.

Figure 10: South Northamptonshire: Age Structure 2011 and 2031. PBA 2001-11 Trends projection.

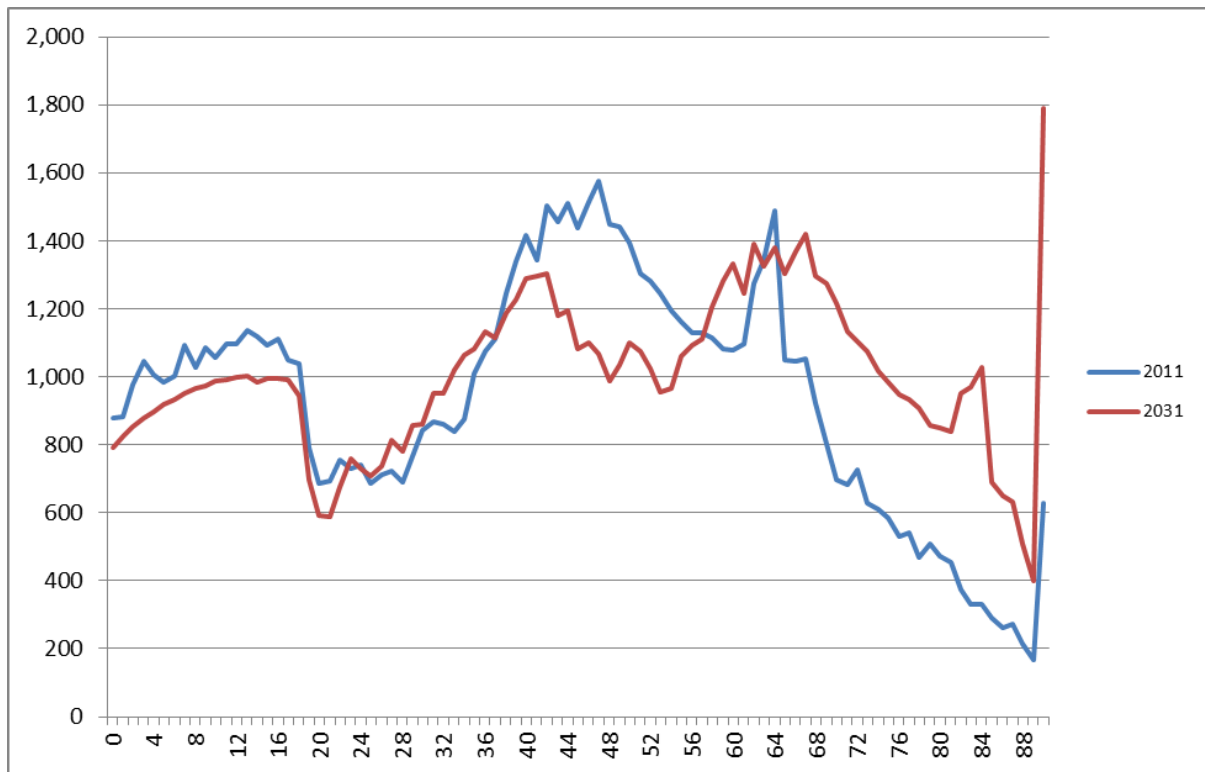
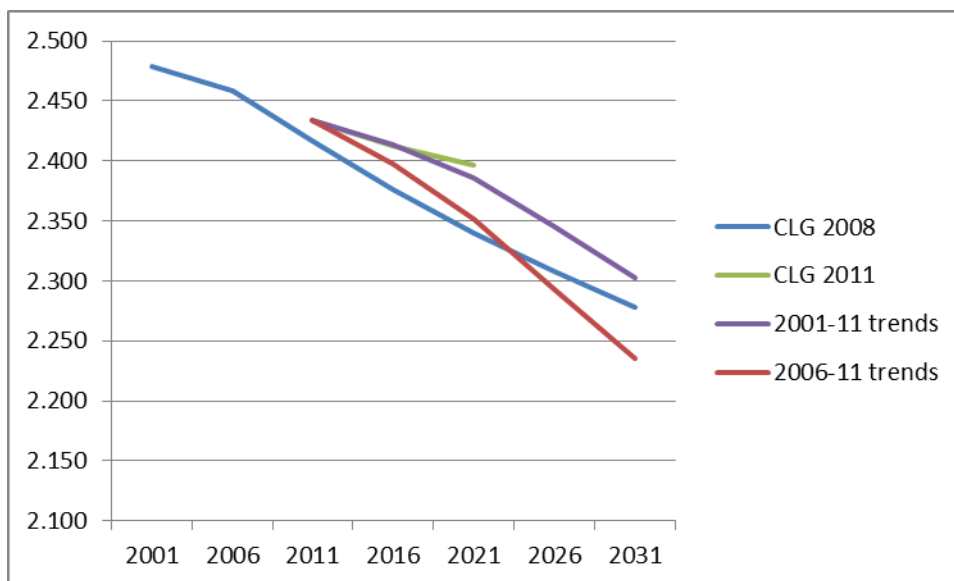


Figure 11: South Northamptonshire: Projected Average Household Size.



The projected change in average household size in South Northamptonshire is of a similar pattern to Daventry, although the PBA 2006-11 Trends projection, with a declining population, shows much reduced average household size by 2031.

The 2011 Census results reduced the projected increase in households between 2001 and 2011 from 5,700 (ONS/CLG 2008) to 3,000. However, the two PBA Trends projections imply that housing demand will be between 900 and 4,400 over the 2011-31 period. This level is well below the 11,100 implied by the CLG 2008 projection.

Being based on a period of relatively little population change the PBA 2006-11 Trends projection shows a declining population with little demand for additional homes.

West Northamptonshire Study Area

Table 9: Population and Household Projections for the West Northamptonshire Study Area 2001-31, thousands except average household size.

	ONS/CLG 2008	ONS 2010	ONS/CLG 2011	2001-11 Trends	2006-11 Trends
Population					
2001	345.9	345.9			
2006	365.6	364.9			
2011	389.0	381.8	376.0	376.0	376.0
2016	412.1	407.5	399.6	392.2	390.6
2021	434.8	431.7	421.3	407.8	404.0
2026	456.0	453.9		422.7	416.7
2031	474.7	473.6		437.3	429.5
Households					
2001	141.5				
2006	152.4				
2011	165.4		155.5	155.5	155.5
2016	178.9		166.4	162.8	162.4
2021	191.8		176.8	170.1	169.2
2026	203.7			178.0	176.5
2031	214.6			186.2	184.4
2001-11	23.9		14.0	14.0	14.0
2011-21	26.5		21.3	14.7	13.7
2021-31	22.8			16.1	15.2
2011-31	49.2			30.8	28.9
Average Household Size					
2001	2.403				
2006	2.359				
2011	2.313		2.378	2.378	2.378
2016	2.266		2.362	2.369	2.365
2021	2.229		2.343	2.357	2.347
2026	2.200			2.332	2.317
2031	2.172			2.302	2.281

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The two RTP Trends projections differ by only 8 thousand persons at 2031, but both are well below the ONS 2008 and 2010 projections. The interim ONS 2011 projection falls between the two earlier ONS projections and the two PBA projections. The 2001-11 Trends projection results in natural change averaging 2,000 and a net migration gain averaging 1,000 per year

between 2011 and 2031, compared to the averages of 1,700 and 1,300 in 2001-11. Figure 12 shows that the population is projected to increase at child ages, the late twenties, the forties and the sixties.

Figure 12: West Northamptonshire Study Area: Age Structure 2011 and 2031. PBA 2001-11 Trends projection.

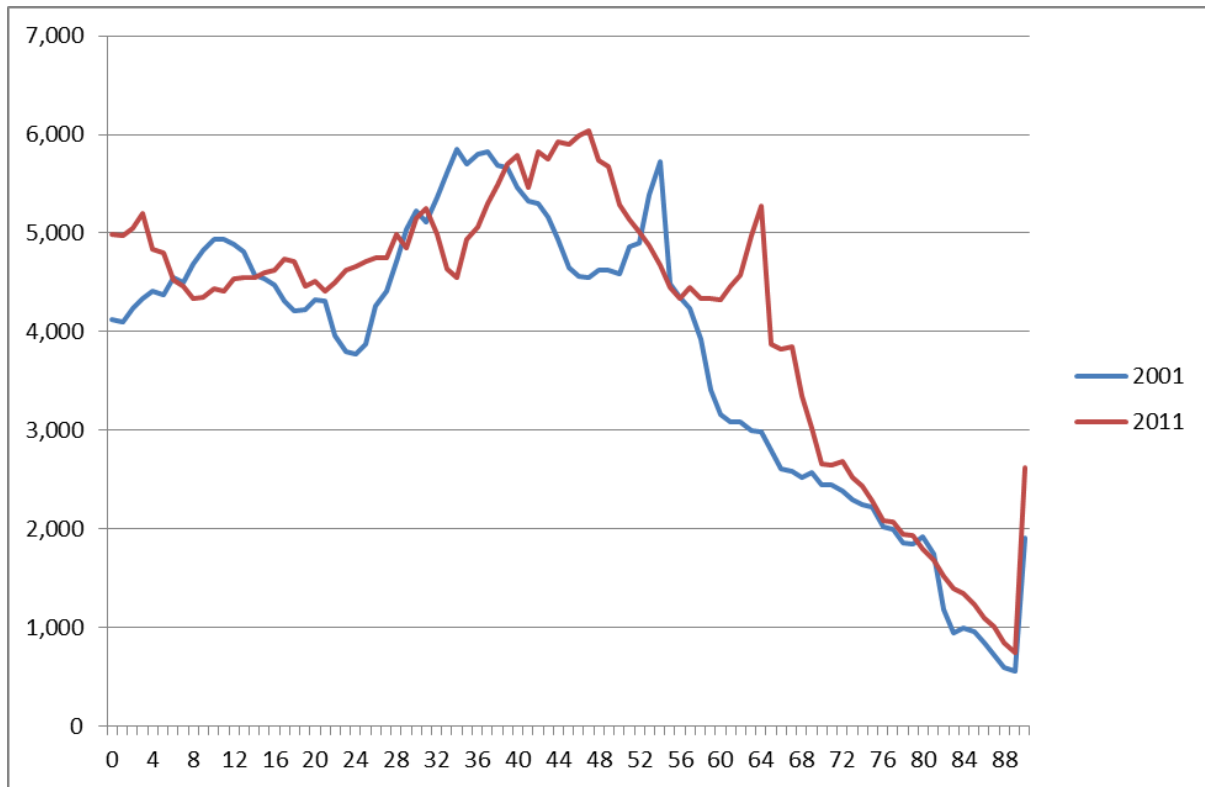
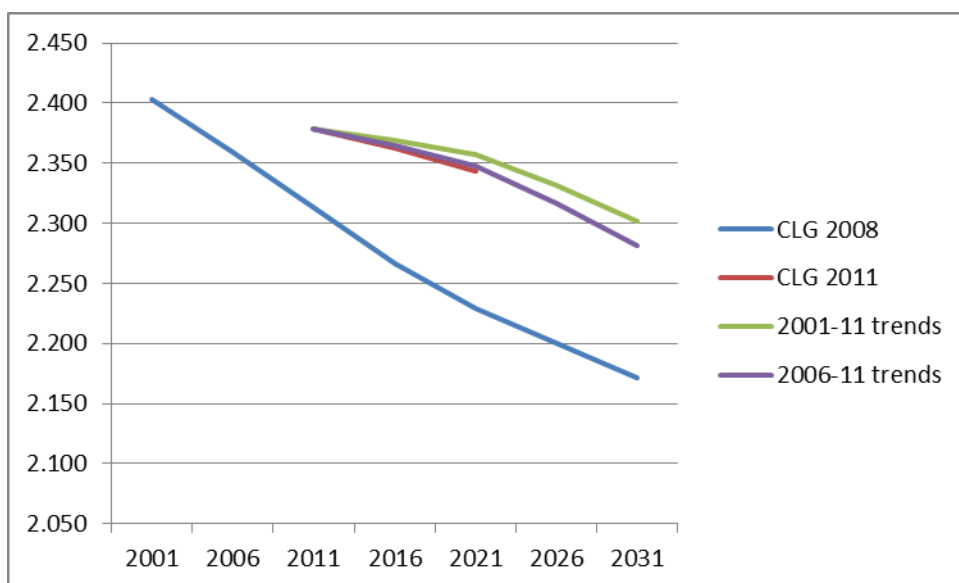


Figure 13: West Northamptonshire Study Area: Projected Average Household Size.



Average household size is now projected by both CLG and the PBA projections to be significantly higher than in the CLG 2008 projection, having fallen little between 2001 and 2011.

The two PBA Trends projections imply that housing demand will be between 28,900 and 30,800 over the 2011-31 period. This level is about 60 per cent of that implied by the CLG 2008 projection.

Labour Force Projections

The PBA 2001-11 Trends projection has been converted to the resident labour force using:

- 2001 Census: economic activity rates by age and gender (Table 28)
- ONS: *Projection of the UK labour force to 2020 (Labour Force Trends, January 2006)*
- Kent County Council *Technical Paper: Activity Rate Projections to 2036* (October 2011)
- 2011 Census: total economically active population by gender aged 16-74 (Tables KS602 and KS603)

The Kent paper extended the ONS projection of UK activity rates to 2036 to account for the further changes in the state retirement pension age planned by the Government.

The 2001 Census rates for each authority were projected in line with the ONS and KCC trends for the UK. The 2011 Census data were used to calculate male and female correction factors at 2011 based on the ratios between economically active and total residents aged 16-74 by gender.

Table 5: Resident Labour Force Projections (PBA 2001-11 Trends) for the Three Districts and the Study Area 2011-31. Thousands.

		2011	2016	2021	2026	2031	2011-31
Daventry	Males	22.2	22.3	22.2	22.0	21.7	-0.6
	Females	19.5	19.9	20.1	20.1	20.0	0.6
	Persons	41.7	42.2	42.4	42.1	41.7	0.0
Northampton	Males	61.0	63.1	64.9	67.3	70.3	9.2
	Females	54.6	57.3	59.8	62.7	65.9	11.4
	Persons	115.6	120.4	124.7	130.1	136.2	20.6
South Northamptonshire	Males	25.1	24.8	24.3	23.8	23.3	-1.8
	Females	22.4	22.8	23.0	23.0	22.7	0.3
	Persons	47.5	47.5	47.3	46.9	46.0	-1.5
W. Northants Study Area	Males	108.4	110.1	111.4	113.2	115.2	6.8
	Females	96.4	100.0	103.0	105.9	108.7	12.2
	Persons	204.8	210.1	214.3	219.1	223.9	19.1

Under the PBA 2001-11 Trends projection the resident labour forces of both Daventry and South Northamptonshire are not expected to over the projection period. All of the projected increase in the Study Area occurs in Northampton. In all authorities females will form a greater proportion of the labour force in the future. In sum an increase of about 30,800 households in the three districts is projected to give rise to an increase of 19,100 in the resident labour force. The reduction from 1.32 to 1.20 'workers' per household between 2011 and 2031 reflects the general ageing of the population across the districts.

Summary of PBA 2001-11 Trends Projection

The 2011 Census has thrown new light on the population and households of the three districts; it has corrected the estimated and projected population growth in each authority over the previous decade and shown that the numbers of households had not grown as fast as projected in each district.

The PBA 2001-11 Trends projection is presented here as it is believed to be more robust than the projection based on 2006-11 trends as it is less prone to incorporating any ONS errors in estimating populations between the censuses.

Table 6: Summary of PBA 2001-11 Trends projection, thousand except average household size (AHS)

	Daventry	Northampton	S Northants	3 Districts
2011 Population	78.1	212.5	85.4	376.0
Natural Change pa	0.1	1.8	0.1	2.1
Net Migration pa	0.4	0.5	0.2	1.0
2031 Population	87.7	257.9	91.6	437.3
2011-31 Population	9.6	45.4	6.2	61.2
2031 AHS	2.28	2.31	2.30	NA
2011-31 Households	5.6	20.8	4.4	30.8
2011-31 Labour Force	0.0	20.6	-1.5	19.1

Annex

Figure A1: Daventry Household Projections, thousands

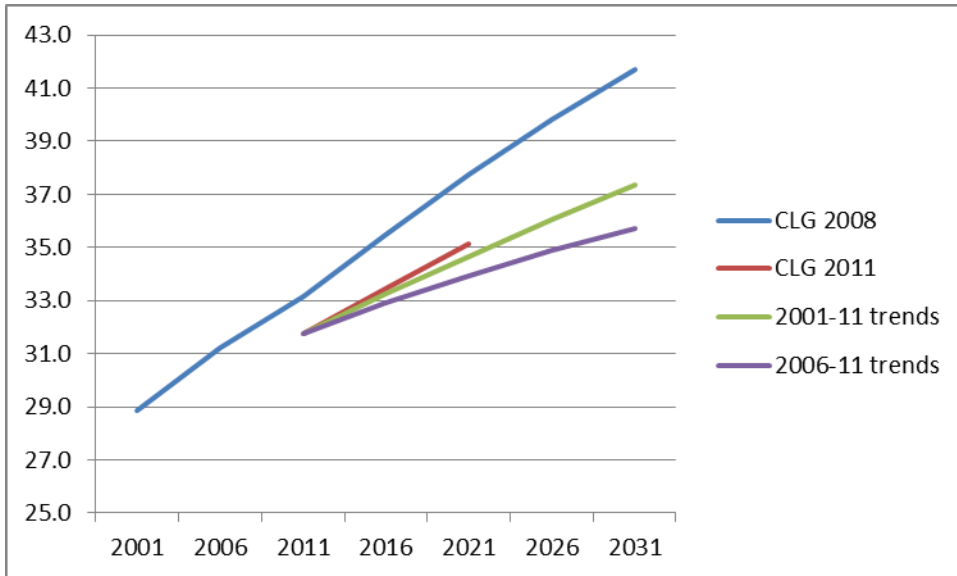


Figure A2: Northampton Household Projections, thousands

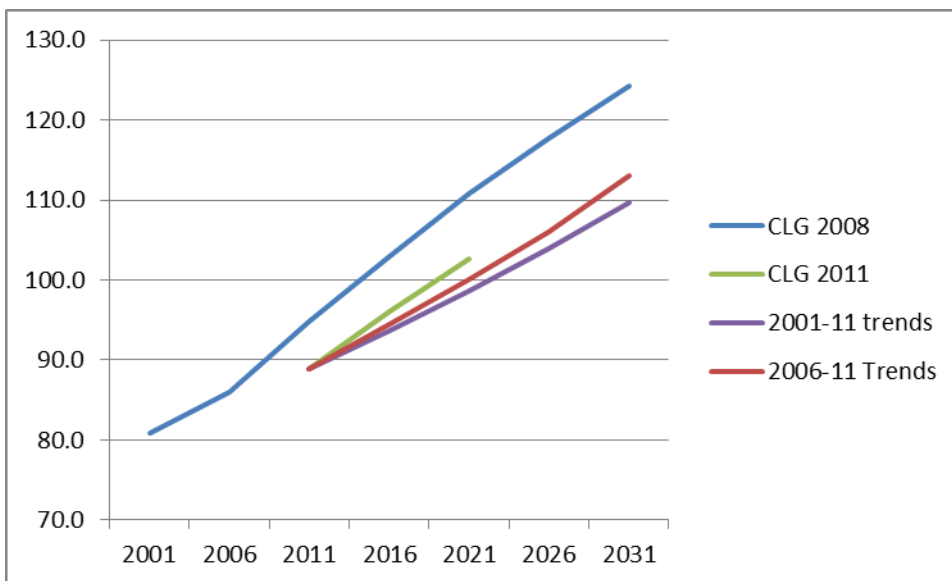


Figure A3: South Northamptonshire Household Projections, thousands

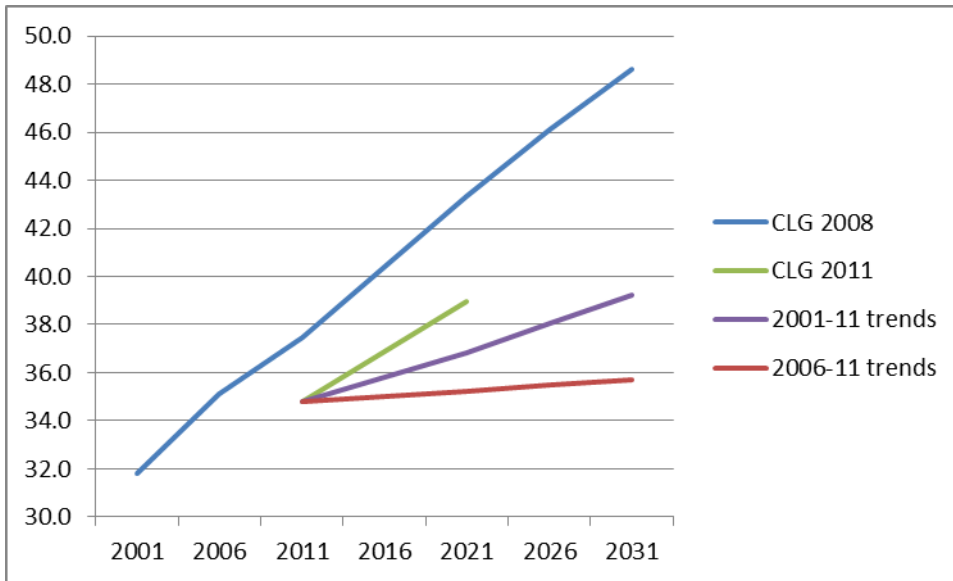
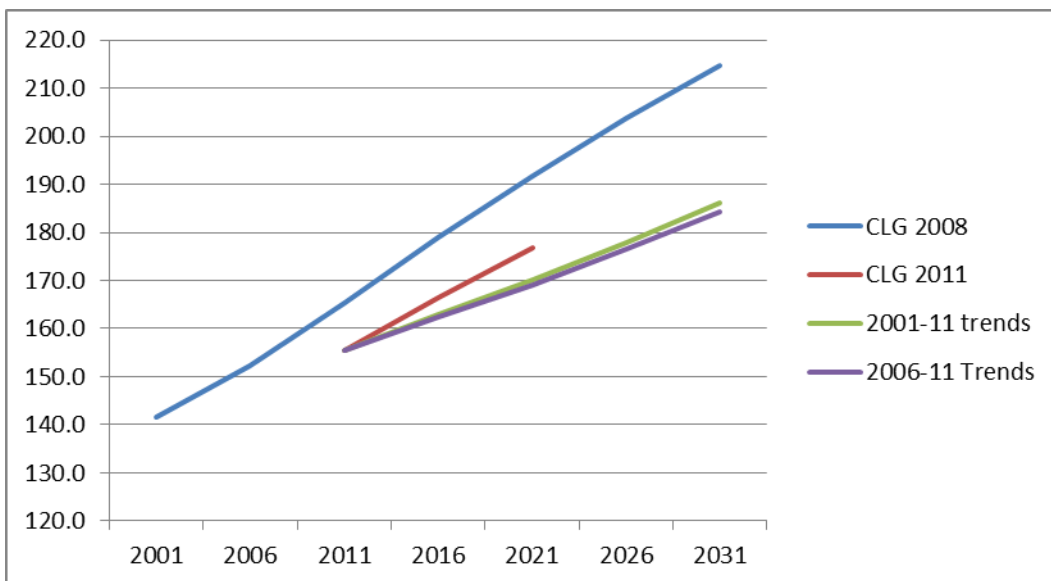


Figure A4: West Northamptonshire Study Area Household Projections, thousands



End Note

CLG published interim household projections to 2021 on 9th April 2013 based on the ONS 2011 interim population projections. These are a valuable source of household representative rates information updated using the 2011 Census and the Labour Force Survey but, due to the interim nature of the ONS population projections and the use of incomplete 2011 Census household characteristics data that did not distribute households by age and gender of the representatives, users should be wary of drawing conclusions at local authority level from the resulting numbers of households, particularly where the 2011 mid-year estimate showed significant variance with the 2010 mid-year estimate and the ONS projections for mid-2011.

ONS 2012-based population projections for local authorities are expected in early 2014. These will use updated fertility, mortality and migration data over the period 2007-12 as the base period for setting assumptions. The projections will in due course be converted to households by CLG using full analysis of the 2011 Census results. These projections will become the benchmark for future planning decisions.