Greater Essex

Demographic Forecasts

Phase 4

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Foreword

The planning system is changing. The era of regional planning, through Regional Spatial Strategies, is being replaced by a more local approach to decision making regarding local growth and future development. This change is placing new and challenging responsibilities on local planning authorities to consider future growth levels for their own areas.

Local planning authorities will retain responsibility for establishing spatial planning strategies for their area through preparation of Local Development Frameworks or Local Plans. This responsibility will now be discharged in the absence of any prescriptive guidance from a regional tier of government on matters such as policy directions and specific quantitative targets, for example concerning future housing provision. Responsibility for establishing the level of future housing provision in their area will in future rest solely with the individual local planning authorities. A key part of estimating this future provision will be an assessment of the likely future population of each authority's area and the implications for provision of housing, jobs, infrastructure, services and facilities.

Against this background of change the Essex Planning Officers Association (EPOA) has identified the need for early collaboration between authorities on the preparation and use of demographic information. EPOA views the availability of robust and consistent demographic information and forecasts across a wide area as a vital component in any local planning authority evidence base; this then facilitates more informed discussion regarding future development with local communities, neighbouring authorities, infrastructure and service providers, developers and others. In particular, demographic data will be a key component to inform and mobilise the 'duty to cooperate' which the Localism Act places on authorities, their neighbours and other organisations when engaged in policy development and Local Plan preparation.

Over recent years authorities have generally made use of demographic forecasts commissioned by the former East of England Regional Assembly (EERA) for preparing and monitoring the Regional Spatial Strategy. In the absence of EERA, EPOA considers that it is important for authorities to gain the best possible understanding of trends in population and household growth for the period 2011 to 2031. A key issue for consideration will be the effect that current and successive rounds of ONS/CLG population and household projections and other trends may have on current spatial planning policies, particularly those concerning the scale and distribution of future housing provision.

The project, as commissioned by EPOA, envisages an agreed programme of work to be conducted in four phases over a fixed term to summer 2012. A range of demographic forecasts representing a variety of scenarios is to be produced, together with other relevant demographic material. The scenarios will be defined by different parameters, to include migration-led, dwelling-led and economic-led approaches to demographic forecasts.

It is not the intention of this project to produce a recommended or preferred demographic forecast for any area. Rather, the approach is to encourage examination of the demography of each area from different perspectives. Hopefully this will allow appreciation of how the demography of an authority may be influenced by local circumstances and local policy choices. It will be for each local planning authority to determine its use of the forecasts and other outputs from this project to inform its future spatial policy development.

EPOA represents the twelve Local Planning Authorities in Essex, as well as the two unitary authorities of Southend-on-Sea and Thurrock and the County Council of Essex. The Association has also extended a welcome to East Hertfordshire District Council and Welwyn-Hatfield Borough Council as full contributing members of the project. The project also includes preparation of demographic forecast scenarios for additional local planning authorities which are not contributing to the project. This broader approach has been taken in order to provide EPOA members with equivalent demographic data for all their neighbouring authorities or sub-regional partners. This feature of the project is intended to facilitate the 'duty to cooperate' for all EPOA member authorities.

I trust that you find this initiative by the Association to be informative and of assistance at this time of change and uncertainty.

Steve Rogers
Chairman, Essex Planning Officers Association
March 2012

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1. Introduction

Context

1.1 Local authorities in Essex and adjoining areas have historically made use of demographic forecasts commissioned by the former East of England Regional Assembly (EERA). These forecasts informed the preparation and monitoring of the Regional Spatial Strategy (RSS). With the revocation of the RSS and the abolition of the planning functions of the East of England Local Government Association (the successor body to EERA), demographic forecasts and analysis will no longer be available from this source. Local authorities are now charged with the production of a new evidence base to support the preparation of Local Plans and to contribute to other planning activities within the Greater Essex area.

1.2 The Essex Planning Officers Association (EPOA) represents the 12 Local Planning Authorities in Essex, as well as the two unitary authorities of Southend-on-Sea and Thurrock and the County Council of Essex. Heads of planning departments from the authorities meet several times a year to discuss planning issues affecting the whole of Essex and to produce planning guidance documents to support local developments. To replace the demographic services provided by the former EERA, the EPOA has commissioned Edge Analytics to prepare a range of population, household and labour force forecasts to ensure consistency and robustness of evidence across the range of technical studies to be undertaken by EPOA and its member authorities.

1.3 In addition, the two authorities of East Hertfordshire DC and Welwyn-Hatfield BC are contributing to, and participating in, the project on an equal basis to the EPOA member authorities. The inclusion of forecasts for other, non-contributing authorities is for the purpose of enabling the contributing authorities to have an appreciation of neighbouring authorities for the purposes of facilitating the 'duty to cooperate' as now included in the Localism Act 2011.

1.4 Edge Analytics will deliver the required analysis using the POPGROUP suite of demographic forecasting models. These models are used extensively by local authorities across the UK, providing a desktop utility for the evaluation of alternative growth scenarios to support local planning. Under licence to the Local Government Association (LGA), Edge Analytics provides product development and technical support to the product suite and its user base.

EPOA geography

1.5 EPOA has specified its geographical area of interest, which encompasses a total of 24 local authority districts and unitary authorities plus a number of 'macro' areas, created as aggregates of these (Figure 1). Analysis, forecasting and reporting is to be undertaken for each of these defined geographical areas.

Districts & Unitary Authorities

ID	ONS old Area Code	ONS new Area Code	Area	Short label
1	22UB	E07000066	Basildon	BAS
2	22UC	E07000067	Braintree	BTE
3	22UD	E07000068	Brentwood	BRW
4	22UE	E07000069	Castle Point	CPT
5	22UF	E07000070	Chelmsford	CHL
6	22UG	E07000071	Colchester	COL
7	22UH	E07000072	Epping Forest	EPF
8	22UJ	E07000073	Harlow	HLW
9	22UK	E07000074	Maldon	MAL
10	22UL	E07000075	Rochford	ROC
11	22UN	E07000076	Tendring	TEN
12	22UQ	E07000077	Uttlesford	UTT
13	00KF	E06000033	Southend-on-Sea	SOS
14	00KG	E06000034	Thurrock	THU
15	12UB	E07000008	Cambridge	CamCity
16	12UG	E07000012	South Cambridgeshire	SCambs
17	26UB	E07000095	Broxbourne	Brox
18	26UD	E07000097	East Hertfordshire	EHerts
19	26UL	E07000104	Welwyn Hatfield	WelHat
20	42UB	E07000200	Babergh	Babergh
21	42UD	E07000202	Ipswich	Ipswich
22	42UE	E07000203	Mid Suffolk	MidSuff
23	42UG	E07000205	Suffolk Coastal	SufCoast
24	42UF	E07000204	St. Edmundsbury	StEdmun

Macro Areas

ID	Definition	Area	Short label
25	1-12	Essex CC	EssexCC
26	1-14	Greater Essex	GtrEssex
27	1, 4, 10, 13, 14	Essex Thames Gateway	EsxTham
28	3, 5, 9	Heart of Essex	HrtEssex
29	2, 6, 9, 11	Essex Haven Gateway	EssexHG
30	20-23	Suffolk Haven Gateway	SufflkHG
31	2, 6, 9, 11, 20-23	Haven Gateway	HG
32	7, 8, 12	West Essex	Wessex
33	17, 18	Hertfordshire (East)	EastHert
34	7, 8, 12, 17, 18	Stansted/M11 Corridor	StansM11
35	7, 8, 18	Harlow Joint Working Area	Harlow

Figure 1: EPOA study area definition

EPOA project development phases

1.6 EPOA's demographic requirements are to be delivered through a programme of work, completed in December 2012. With four Phases of work in total, this report constitutes a summary of Phase 4 development. The content of the four Phases is as follows:

1.7 Phase 1: Demographic model configuration & validation (September/October 2011)

The first phase of work used POPGROUP technology to replicate the 2008-based sub-national population projections (SNPP) from the Office for National Statistics (ONS) plus the accompanying household projections from Communities and Local Government (CLG). This initial validation of the POPGROUP technology demonstrated consistency and equivalence of output to the SNPP and to ONS mid-year estimates and Council Tax data on dwelling stock change since 2001. This phase was a key aspect of the project, providing the EPOA authorities with confidence that public discussion of the forecast scenarios could focus on the policy implications of the scenarios rather than technical demographic issues.

1.8 Phase 2: Scenario analysis & report (October 2011 – January 2012)

Following the configuration and validation work in phase 1, a suite of scenarios was produced to enable an evaluation of alternative growth trajectories. These scenarios included: an SNPP 2008-base benchmark; an alternative migration-led trend scenario and a zero-net migration scenarios; dwelling-led scenarios; plus a jobs-led forecast using the East of England Forecasting Model (Autumn 2010)

Scenarios were developed for each of the 24 local authority areas, using a 2033 horizon for each forecast. Results for individual areas were aggregated to produce output for the 11 macro areas. These scenarios provided an updated evidence base to both support the preparation of Local Plans and to contribute to other planning activities within each local area.

1.9 Phase 3: Demographic model update, scenario analysis & report (May-June 2012)

Phase 3 delivered an updated suite of forecast scenarios following review of the availability and continuing relevance of demographic and other data sources used to produce the material presented in previous phases. As a result of this review the forecast scenarios produced in Phase 3 incorporated two important new releases of demographic intelligence:

A. indicative 2010 ONS mid-year population estimates
B. 2010-based ONS sub-national population projections

1.10 Phase 4: Demographic model update, scenario analysis & report (July 2012)

This final phase of the EPOA project reviews the latest demographic evidence, published since completion of the phase 3 report. This includes the initial dissemination of population statistics from the 2011 Census, 2011 mid-year estimates that have resulted from these new census data, plus the 'interim' 2011-based sub-national population projection published by ONS following the release of the new estimates.

The phase 4 analysis examines the population adjustments that have resulted from the latest 2011 evidence, when compared to the mid-year estimates that have been rolled-forward since the 2001 Census. In addition, it scrutinises the methodology and outcomes of the 2011-based projections, which have been assigned an 'interim' status in recognition of the fact that they have not incorporated any revised historic data, which is not due for publication until Spring 2013.

An update of the scenario forecasts presented in Phase 3 has not been undertaken within Phase 4 of the project. Results published from the 2011 Census suggest that the recent trends previously indicated by the ONS mid-year population estimates, and which informed the ONS sub-national population projections, should be revised. ONS is currently reviewing the sequence of mid-year estimates from 2001 and the outcome of that review is expected to be published by the end of March 2013. Publication of the results of the review should provide sufficient new evidence to justify an update of the scenario forecasts produced in Phase 3 of this project. However, production of those forecasts would now lie beyond this current project.

Previous phases of the EPOA study have acknowledged the importance of Greater London as a major contributor to demographic change within the EPOA study area, specifically as a source of migrant inflows from the London Boroughs. The phase 4 analysis includes an illustration of the migration links that exist between Greater London and the EPOA local authorities and provides a summary of the alternative growth forecasts produced by the Greater London Authority (GLA), a dwelling-constrained alternative which contrasts to the trend projections published by ONS.

Structure of the Phase 4 report

1.11 Section 2 provides a short summary of how the demographic evidence has developed since 2006 and the expectation for new evidence during 2013.

Section 3 focuses on population data published from the 2011 Census, specifically the latest 2011-based mid-year population estimates and how they have altered the demographic picture suggested by the mid-year totals estimated since 2001.

The 2011-based mid-year estimates have been used as the basis for the latest ONS sub-national population projections; albeit 'interim' projections with a shorter, ten-year projection horizon. Section 4 examines how these new projections compare with the 2010-based alternatives, examined in phase 3 of the EPOA analysis.

Section 5 presents this new evidence for each of the 24 local authority area covered by the EPOA study area, presenting an illustration of important changes to the age-structure of local populations plus the impact of the 2011-based interim projection relative to the suite of scenarios presented in the phase 3 report.

There is an important demographic relationship between the EPOA study area and the Greater London Boroughs, particularly those in North East London. Section 6 explores this relationship using migration statistics and the GLA's latest 2011-based forecasts of likely population growth.

Section 7 concludes with a short commentary on the outcomes of the four phases of demographic analysis encompassed by this EPOA study, with recommendations for how local authorities might continue the review process during 2013 as new evidence becomes available.

2. Updating the demographic intelligence

2.1 Since 2001, the local authorities of England and Wales have relied on successive, annual updates of 2001 Census data to produce mid-year population estimates, from which national and sub-national population and household projections have been derived. With the release of the latest, 2011 Census population data, a new statistical base for demographic analysis and forecasting has become available, concluding a decade of unprecedented change in both the drivers of population growth and the methodologies employed to estimate them (Figure 2)

Year	Regional Spatial Strategy	Mid-year population estimates	National Population Projections	Sub-national Population Projections	Sub-national Household Projections	Methodological Revisions
	RSS	*MYE*	*NPP*	*SNPP*	*HP*	
	East of England Regional Assembly (EERA)	Office for National Statistics (ONS)	ONS	ONS	Department for Communities and Local Government (CLG)	
2006		MYE-2005				
2007		MYE-2006	NPP 2006-base		HP 2004-base	
2008		MYE-2007		SNPP 2006-base	HP 2004-base (revised)	
2009		MYE-2008	NPP 2008-base		HP 2006-base	
2010		MYE-2009		SNPP 2008-base	HP 2008-base	Household Model MYE 2002-2008
2011		MYE-2010	NPP 2010-base			MYE 2006-2010
2012		Census-2011 MYE-2011		SNPP 2010-base SNPP 2011-base		
2013		MYE 2012	NPP 2012-base		HP 2011-base	MYE 2002-2010

Figure 2: Changing demographic evidence

2.2 For EPOA members, engaged in the development of local plans to replace the RSS, it is imperative that the evidence used to support the planning process is the most recent and the most robust available. In the two years prior to the release of the 2011 Census this has been a challenging proposition due to the implementation of a number of methodological developments that have significantly altered the population and household estimates and projections for local authority areas.

2.3 In 2010, Communities and Local Government (CLG) implemented a new methodology for projecting household numbers in its 2008-based projections. A 17-fold classification of households was introduced, together with updated household formation (headship) rates using a combination of 2001 Census and Labour Force Survey statistics. These methodological changes, in conjunction with parallel changes to population estimation methodologies, made comparison with previous 2004 and 2006-based household projections difficult.

2.4 In 2010, ONS released a set of 'revised' mid-year estimates for 2001-2009 and a revised 2008-based population projection, which took account of a number of methodological 'improvements'; specifically, the improved handling of onward student moves and the integration of administrative data sources to better estimate the local impact of international migration.

2.5 A more fundamental change to the estimation of international migration was undertaken in 2011, resulting in the release of a further set of 'indicative' mid-year estimates for 2006-2010. These 'indicative' mid-year estimates provided the basis for the development of ONS' 2010-based sub-national population projections.

2.6 Revisions to (mid-year) estimates of population are extremely important in the development of alternative population growth scenarios; specifically the accuracy of the 'components of change' (births, deaths, internal migration and international migration) as these feed directly into the development of sub-national population projections (and therefore the household projections).

Historical trends for a prior five-year period provide the key to the 'trend' based sub-national population projections (i.e. evidence from 2006-2010 will drive the 2010-based projections). Recognition of the relative importance of the components of change within the mid-year estimates is necessary in order to interpret what is driving the 25-year trend projection of the SNPP and in the development of alternative, trend-based scenarios.

2.7 In July 2012, ONS released the first results of the 2011 Census, providing a critical and definitive update on the demographic decade; a basis for the recalibration of previous mid-year estimates and for the development of new local area forecasts.

The Census response rate averaged 94% across England and Wales, with a range of 92%-97% in the EPOA study area (Figure 3).

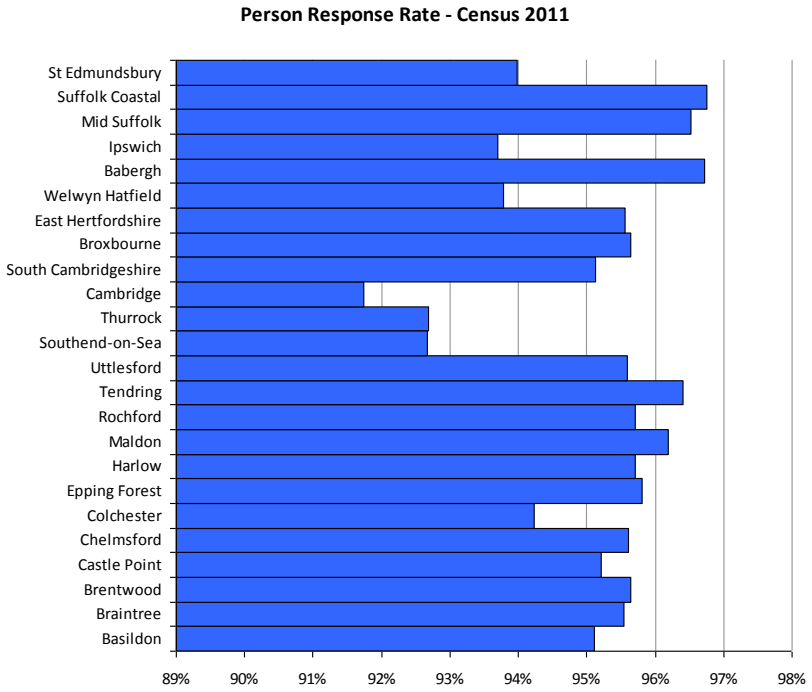


Figure 3: The 2011 Census response rates for EPOA study area

Quality assurance on the Census population statistics has been extensive, ensuring that this has been the most robust Census ever conducted.

ONS (2012) Quality Assurance of 2012 Census Population Estimates.
http://www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-data/2011-first-release/first-release--quality-assurance-and-methodology-papers/index.html

2.8 The 2011 Census population estimates have been used as the basis for the latest, 2011 mid-year population estimates. To enable a direct comparison with previous mid-year statistics for each local authority area, a 'rolled-forward' 2011 estimate has been calculated based upon the previous 2010 mid-year estimate.

The latest 2011 mid-year estimate and the rolled-forward equivalent provide the basis for the analysis presented in section 3 and in more detail in the local authority profiles illustrated in section 5.

2.9 Following publication of the 2011 mid-year population estimates, ONS has published its 'interim' 2011-based sub-national population projections for local authorities in England. These projections update the 2010-based projections published in March 2012 and project the population for 10 years to 2021. These projections have been produced to meet CLG's need for updated evidence to support the latest allocation of central government resources to local areas.

Importantly, these 2011-based projections assume a continuation of the estimated trends in

fertility, mortality and migration as used in the 2010-based projections (and are constrained to the assumptions made for the 2010-based national population projections). The trends from the 2010-based projections have been used because a revised historic data series is not yet available to update national and local assumptions.

The impact of the latest 2011-based projections upon the EPOA local authorities is summarised in section 4 and contrasted with previous trend and policy scenarios in section 5.

2.10 In Spring 2013, ONS intends to release a recalibrated time-series of mid-year population statistics for the 2002-2010 period. This will take account of the new 2011 Census benchmark and will recalculate the components of change (births, deaths, internal and international migration) which have driven local population growth between the two census dates. This new data series will provide a more robust basis for the development of updated assumptions for the 2012-based sub-national projections (due in 2014).

2.11 The timing of release of new household projections that use updated evidence from the 2011 Census remains unclear. In early 2013, updated household projections will be published for each local authority area, but it is understood that these will not incorporate revisions to the underlying household headship rates.

3. Population estimates for 2011

3.1 The latest 2011 mid-year population estimates have been derived from the 2011 Census population. To enable a direct comparison with previous mid-year statistics for each local authority, ONS has calculated a 'rolled-forward' 2011 estimate. The rolled-forward data are special 2011 estimates based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration between mid-2010 and Census Day.

3.2 Figure 4 provides a comparison between the rolled-forward estimates (identified as 'old' in the table) and the official 2011 mid-year population estimates for local authorities within the EPOA study area (identified as 'new' in the table). Differences for all macro areas are also displayed.

3.3 The percentage difference between the old and new estimates is just 1.2% for 'all areas'; which means that the 2011 mid-year population estimates are 35k higher than the rolled-forward estimates.

3.4 There are a number of local authorities where the differences are very significant. Cambridge, with the 2011 mid-year population estimate +14.0% higher than the rolled-forward estimate, shows the largest difference. Second highest difference between the two sets of estimates is observed in Southend-on-Sea (+7.0%). Tendring also shows a major difference but unlike in the areas mentioned above, the 2011 mid-year population estimates are considerably lower than the rolled-forward estimate by approximately 6.8%.

3.5 Other areas with the 2011 mid-year population estimates significantly higher than the rolled-forward estimates are St Edmundsbury (+6.5%) and Ipswich (+5.7%). In Welwyn Hatfield there is a large negative difference of -6.2% which means the official mid-year estimate are considerably lower than the rolled-forward estimate.

3.6 The main reason for such large differences between the two sets of population estimates are likely to be residual errors from the 2001 Census as well as the cumulative 'error' in migration estimation since 2001.

3.7 Section 5 examines the age profile adjustments in the 2011 mid-year population estimates compared with the age profiles in the rolled-forward estimates for each local authority within the EPOA study area.

Area	Population *Old* Rolled-forward estimate	Population *New* Mid-year Estimate 2011	Difference	% Difference
Basildon	171,644	174,971	3,327	1.9%
Braintree	145,464	147,514	2,050	1.4%
Brentwood	72,875	73,841	966	1.3%
Castle Point	89,311	87,964	-1,347	-1.5%
Chelmsford	166,618	168,491	1,873	1.1%
Colchester	176,586	173,614	-2,972	-1.7%
Epping Forest	125,863	124,880	-983	-0.8%
Harlow	81,119	82,177	1,058	1.3%
Maldon	62,599	61,720	-879	-1.4%
Rochford	82,920	83,333	413	0.5%
Tendring	148,195	138,062	-10,133	-6.8%
Uttlesford	78,667	80,032	1,365	1.7%
Southend-on-Sea	162,819	174,274	11,455	7.0%
Thurrock	157,688	158,268	580	0.4%
Cambridge	107,617	122,725	15,108	14.0%
South Cambridgeshire	148,487	149,842	1,355	0.9%
Broxbourne	91,230	93,702	2,472	2.7%
East Hertfordshire	138,712	138,155	-557	-0.4%
Welwyn Hatfield	118,095	110,727	-7,368	-6.2%
Babergh	86,109	87,901	1,792	2.1%
Ipswich	126,495	133,729	7,234	5.7%
Mid Suffolk	95,573	97,076	1,503	1.6%
Suffolk Coastal	124,584	124,590	6	0.0%
St. Edmundsbury	104,685	111,443	6,758	6.5%
Total	2,863,955	2,899,031	35,076	1.2%

Macro Area	Population *Old* Rolled-forward estimate	Population *New* Mid-year Estimate 2011	Difference	% Difference
Essex CC	1,401,861	1,396,599	-5,262	-0.4%
Greater Essex	1,722,368	1,729,141	6,773	0.4%
Essex Thames Gateway	664,382	678,810	14,428	2.2%
Heart of Essex	302,092	304,052	1,960	0.6%
Essex Haven Gateway	532,844	520,910	-11,934	-2.2%
Suffolk Haven Gateway	432,761	443,296	10,535	2.4%
Haven Gateway	965,605	964,206	-1,399	-0.1%
West Essex	285,649	287,089	1,440	0.5%
Eastern Hertfordshire	229,942	231,857	1,915	0.8%
Stansted/M11 Corridor	515,591	518,946	3,355	0.7%
Harlow Joint Working Area	345,694	345,212	-482	-0.1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census. The actual Census day populations for each local authority areas are presented in Appendix 2.

Figure 4: Rolled-forward population estimate vs new Mid-year estimate 2011

4. Population projections – 2010-based and 2011-based

4.1 This section provides a comparison of 2010-based and 2011-based sub-national population projections. Following publication of the 2011 mid-year population estimates, ONS has published its 'interim' 2011-based sub-national population projections for local authorities in England. These projections update the 2010-based projections published in March 2012 and project the population for 10 years to 2021.

4.2 The 2011-based projections use 2011 mid-year population estimates from the 2011 Census as a base population. They assume a continuation of the estimated trends in fertility, mortality and migration as used in the 2010-based projections (and are constrained to the assumptions made for the 2010-based national population projections). The trends from the 2010-based projections have been used because a revised historic data series is not yet available to update national and local assumptions.

4.3 Figure 5 illustrates differences (absolute and percentage) in projected 2021 populations between 2010-based and 2011-based sub-national population projections for each local authority within the EPOA study area, and for each macro area.

4.4 For the study area as a whole the difference in 2021 population between the two projections is small. 2011-based SNPP suggests 2021 population to be just 1.1% (35.7k) higher than 2010-based projections. This corresponds approximately to the difference between the rolled-forward Census-day population estimate and the 2011 mid-year population estimate illustrated in Figure 4.

4.5 The areas with the largest differences in their population estimates in 2011 also have the largest differences in projected populations in 2021. Again, Cambridge is the area showing the largest difference, with its 2021 population in the 2011-based SNPP being 18.4% higher than in the 2010-based projections. Southend-on-Sea also shows a large positive difference of +4.0% between the two projections in 2021. Conversely, Tendring's 2021 population is significantly lower in the 2011-based SNPP than in the 2010-based projections, by 4.4%.

4.6 Other areas with 2021 projected populations considerably higher in the 2011-based SNPP are St Edmundsbury (+3.6%) and Ipswich (+3.1%). In Welwyn Hatfield the latest projections suggest a 2021 population that is lower than the 2010-based SNPP by approximately 2.2%.

Area	Projected 2021 population 2010-based SNPP	Projected 2021 population 2011-based SNPP	Difference	% Difference
Basildon	185,318	187,879	2,562	1.4%
Braintree	161,319	162,805	1,486	0.9%
Brentwood	80,227	80,979	752	0.9%
Castle Point	94,494	94,288	-206	-0.2%
Chelmsford	179,369	180,563	1,194	0.7%
Colchester	203,681	200,324	-3,357	-1.6%
Epping Forest	138,989	139,274	285	0.2%
Harlow	88,831	89,720	889	1.0%
Maldon	67,544	66,971	-573	-0.8%
Rochford	90,046	90,840	795	0.9%
Tendring	163,979	156,797	-7,183	-4.4%
Uttlesford	90,739	91,569	830	0.9%
Southend-on-Sea	179,211	186,399	7,187	4.0%
Thurrock	179,892	180,844	951	0.5%
Cambridge	102,061	120,882	18,820	18.4%
South Cambridgeshire	169,643	171,941	2,298	1.4%
Broxbourne	100,461	102,184	1,723	1.7%
East Hertfordshire	152,768	152,255	-513	-0.3%
Welwyn Hatfield	136,512	133,480	-3,032	-2.2%
Babergh	89,805	91,251	1,446	1.6%
Ipswich	138,646	142,893	4,247	3.1%
Mid Suffolk	105,765	106,957	1,192	1.1%
Suffolk Coastal	137,223	137,095	-127	-0.1%
St. Edmundsbury	112,786	116,851	4,065	3.6%
Total	3,149,309	3,185,041	35,732	1.1%

Macro Area	Projected 2021 population 2010-based SNPP	Projected 2021 population 2011-based SNPP	Difference	% Difference
Essex CC	1,544,535	1,542,010	-2,525	-0.2%
Greater Essex	1,903,639	1,909,252	5,614	0.3%
Essex Thames Gateway	728,960	740,250	11,289	1.5%
Heart of Essex	327,139	328,513	1,373	0.4%
Essex Haven Gateway	596,524	586,897	-9,627	-1.6%
Suffolk Haven Gateway	471,440	478,197	6,757	1.4%
Haven Gateway	1,067,963	1,065,094	-2,870	-0.3%
West Essex	318,559	320,564	2,005	0.6%
Eastern Hertfordshire	253,229	254,439	1,210	0.5%
Stansted/M11 Corridor	571,787	575,002	3,215	0.6%
Harlow Joint Working Area	380,588	381,250	662	0.2%

Source: ONS

Figure 5: 2010-based vs 2011-based projections

4.7 Whilst the assumptions on fertility, mortality and migration have remained consistent between the 2010-based and 2011-based projections, it is possible that the different age-profile of the respective base-year populations may have an impact upon the pattern of

growth. The 2010-base has been taken from the mid-year estimate; the 2011-base is derived from the census year statistics. This is examined through the 'components of change' associated with each projection - natural change, internal migration and international migration (Figures 6-8). The three charts indicate the 'average' annual impact of each component during the period to 2021. Note that a negative figure means that the annual impact in the 2011-based projections is lower than in the 2010-based. A positive figure means the annual impact is higher in the 2011-based projections than in 2010-based. The variations that exist between projections are largely associated with those local authorities which have seen the most substantial change in their population estimate in the 2011 Census.

4.8 The natural change component of the projections (the difference between births and deaths) exhibits relatively small differences, with the exception of Cambridge. The annual impact of natural change for Cambridge in the 2011-based projections is +600 higher than in 2010-based SNPP (Figure 6).

4.9 Variation in the internal migration component is more substantial, reflecting the impact of the 2010-based rates to a different population age profile in the 2011-based projections. The difference is most significant for Welwyn Hatfield with a +700 increase in the annual net internal migration impact of the projection. Other significant differences occur in South Cambridgeshire, Tendring, Epping Forest and Colchester; approximately +300 in each case, reflecting a higher impact of net internal migration in the 2011-based projections. St Edmundsbury, Southend-on-Sea and Ipswich also suggest similar differences but with a 200-300 reduction in the impact of net internal migration in the 2011-based projection relative to the 2010-based alternative. (Figure 7).

4.10 For net international migration, the 2011-based projection suggests a lower annual impact than the 2010-based in almost all local authorities, with the most notable difference in Cambridge (approximately -600 per year) (Figure 8).

4.11 In Spring 2013, ONS is scheduled to release a recalibrated time-series of mid-year population estimates for the 2001-2010 period. This will use the new 2011 Census as a benchmark to recalculate the components of change (births, deaths, internal and international migration) which have driven local population growth between the two census dates. The revised data series will provide a more robust basis for the development of

alternative assumptions for 2011-based and 2012-based sub-national projections.

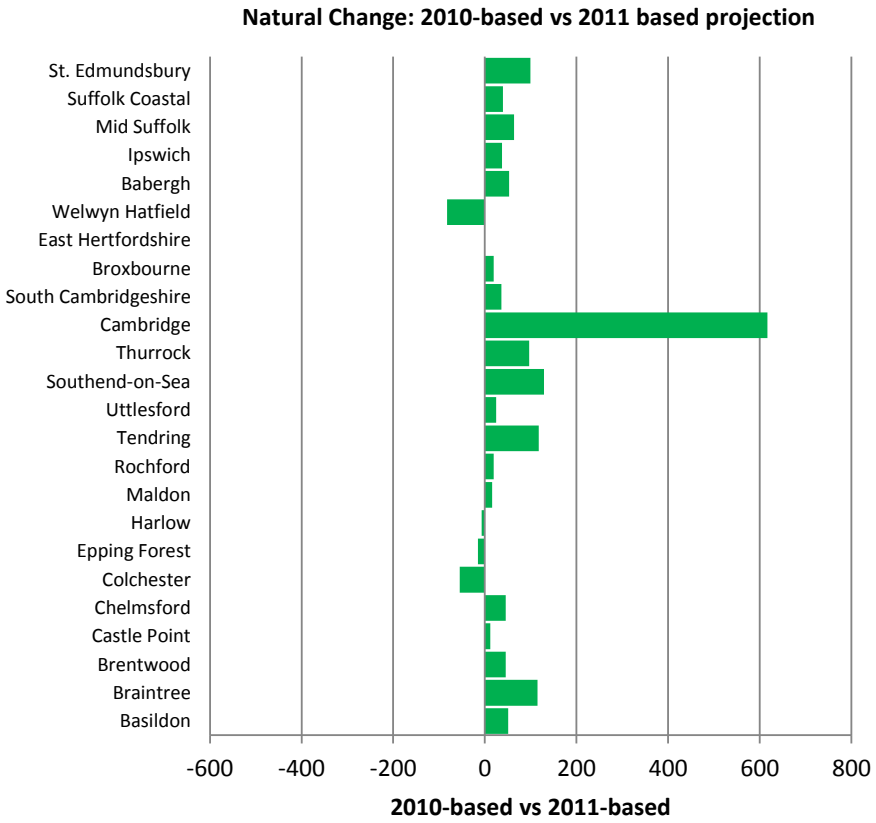


Figure 6: Annual Natural Change impact, 2010-based vs 2011-based SNPP

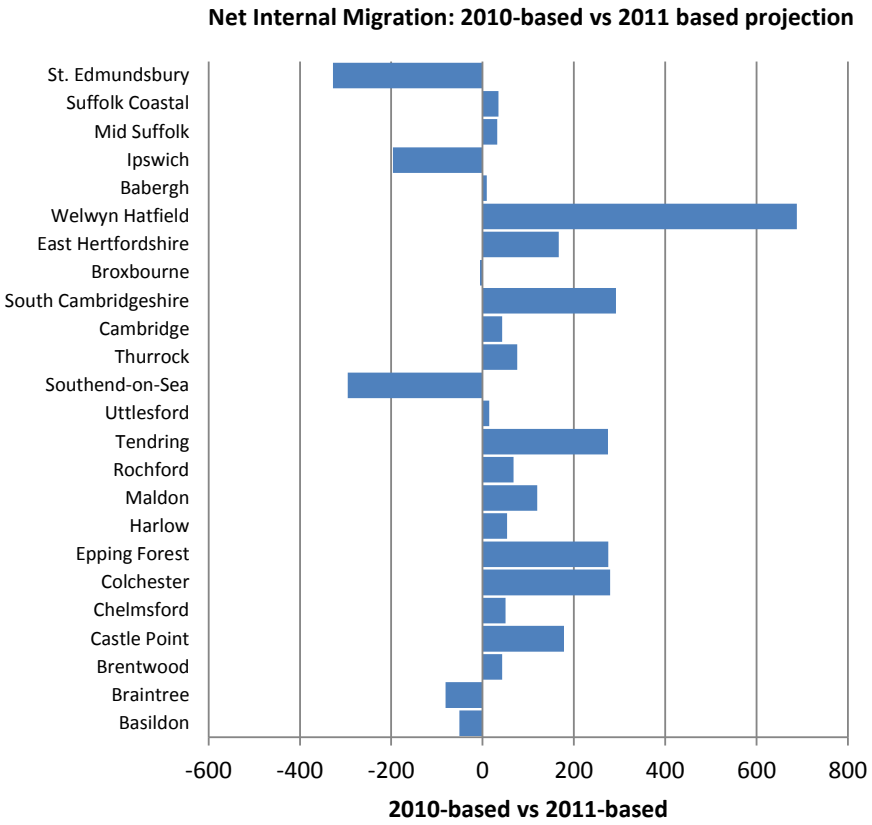


Figure 7: Annual Net Internal Migration impact, 2010-based vs 2011-based SNPP

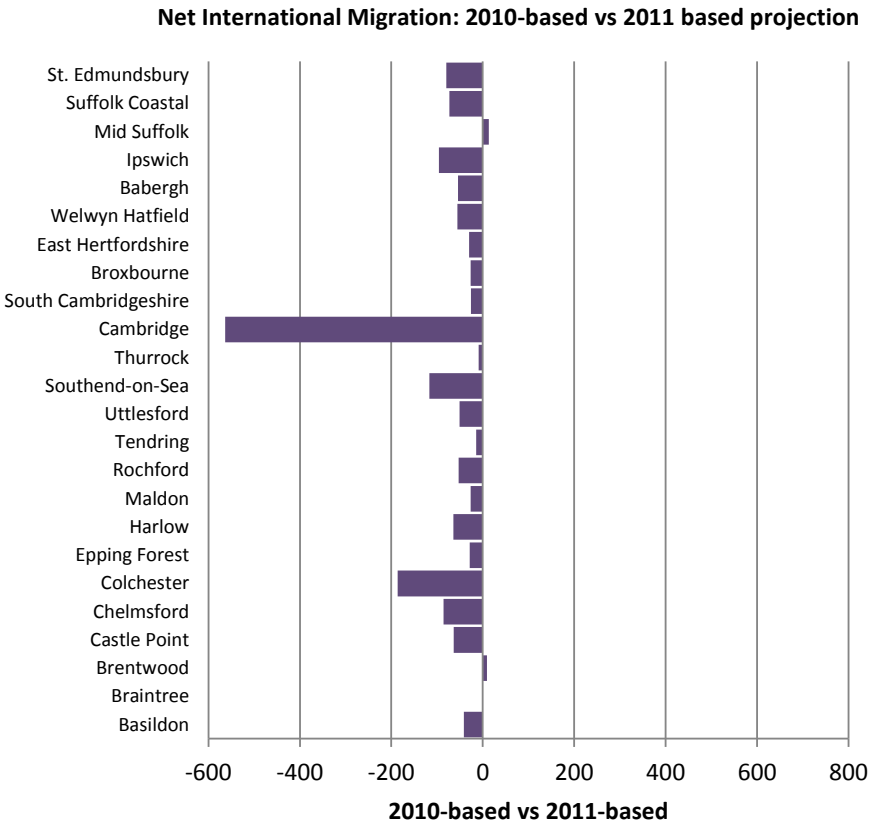


Figure 8: Annual Net International Migration impact, 2010-based vs 2011-based SNPP

5. Area Profiles

5.1 This section provides a profile for each of the Greater Essex local authorities, summarising the 'impact' of the latest demographic evidence. A short commentary accompanies two summary profiles for each local authority.

5.2 *Population estimates compared*

The first summary provides an indication of the adjustments to the population age profile that have resulted from the latest 2011 Census information. A direct comparison is made between the 'rolled-forward' population estimate for 2011 and the latest 2011 mid-year estimate that has been derived from Census statistics.

5.3 *Population growth scenarios compared*

The second summary benchmarks the ONS 2011-based projection with previous scenarios prepared in the phase 3 analysis. The aim of this analysis to indicate where the 2011-based scenario has resulted in significant variations over and above those associated with the different base-year populations. The commentary makes reference to the 'components-of-change' charts presented in Figures 6-8.

5.4 Equivalent summary profiles for each macro area are provided in the Appendix to this report.

Basildon

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward estimate for Basildon indicates an increase of +1.9%, a little above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Basildon since 2001 would suggest.

b) An examination of the differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 15-19 (8%), 10-14 (4%) and 50-54 (4%). The 0-4 and 5-9 age groups are lower in the 2011 mid-year estimate, by -3% and -1% respectively (Figure 9).

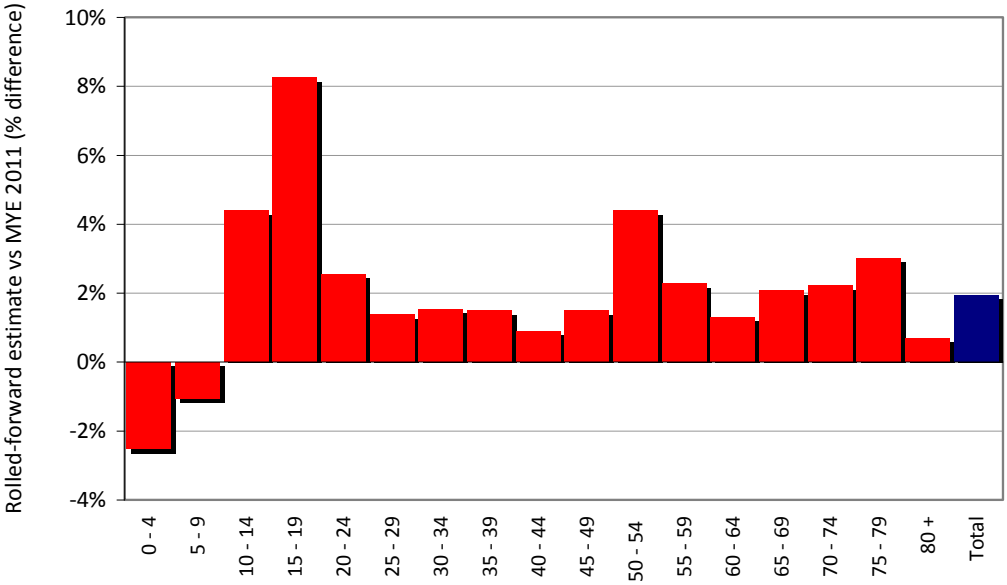
Population growth scenarios compared

c) The 2011-based SNPP for Basildon results in a similar growth trend to the 2010-based version, with the 2021 population 1.4% higher in the 2011-based alternative, reflecting the higher base population (see Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (see Figures 6-8).

e) The 2011-based SNPP and 2010-based SNPP both suggest higher population growth relative to the alternative scenarios, including 'AMR Dwelling Trajectory - R', 'Approved RSS - R' and 'Economic – R' (Figure 10).

Basildon



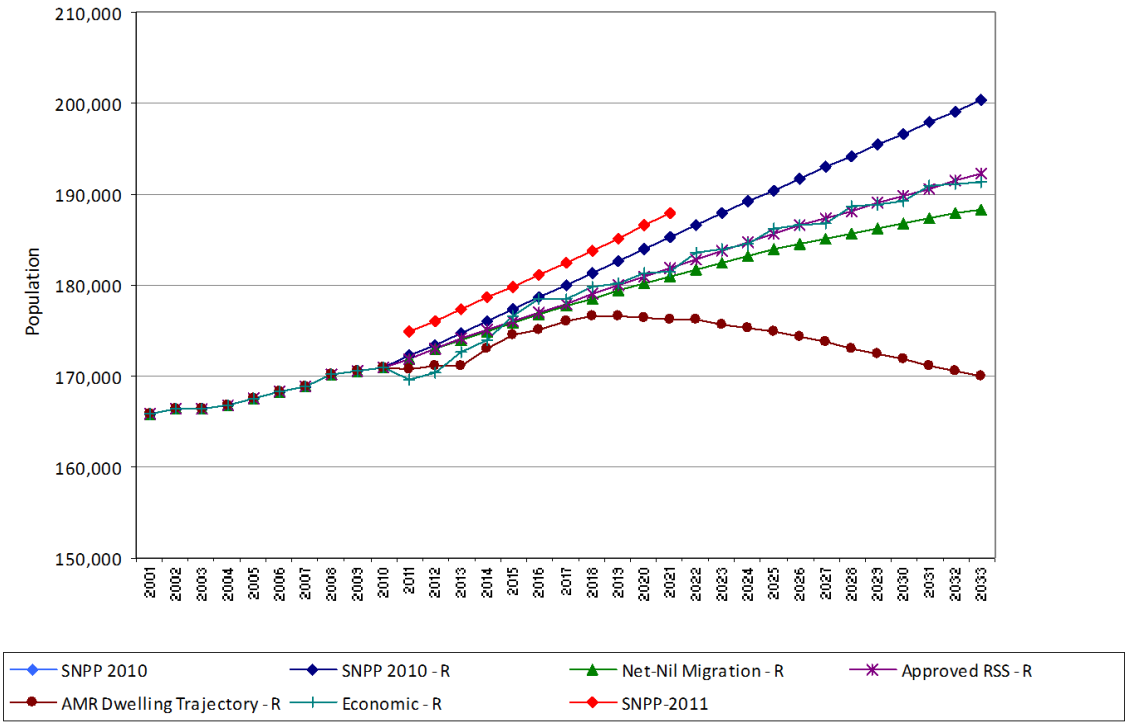
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	11,727	11,432	-3%
5 - 9	10,865	10,750	-1%
10 - 14	10,387	10,844	4%
15 - 19	10,267	11,114	8%
20 - 24	9,915	10,168	3%
25 - 29	10,818	10,968	1%
30 - 34	11,339	11,514	2%
35 - 39	11,691	11,866	1%
40 - 44	13,093	13,211	1%
45 - 49	12,883	13,075	1%
50 - 54	11,156	11,646	4%
55 - 59	9,593	9,811	2%
60 - 64	10,244	10,378	1%
65 - 69	7,976	8,142	2%
70 - 74	6,382	6,523	2%
75 - 79	5,563	5,731	3%
80 +	7,744	7,798	1%
Total	171,644	174,971	2%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 9: Basildon - rolled-forward population estimate vs new` Mid-year estimate 2011

Basildon

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	29,296	17.1%	17,898	24.3%	418	797	162
SNPP 2010 - R	29,296	17.1%	17,604	24.3%	418	783	162
Approved RSS - R	21,268	12.4%	14,157	19.5%	119	630	-5
Economic - R	20,232	11.8%	13,711	18.9%	75	610	-30
Net-Nil Migration - R	17,364	10.2%	12,691	17.5%	0	565	-108
AMR Dwelling Trajectory - R	-1,087	-0.6%	4,977	6.9%	-726	221	-471

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 10: Basildon – comparison of 2011-based SNPP with previous scenarios

Braintree

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Braintree suggests an increase of +1.4%, just above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Braintree since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 25-29 (8%), 20-24 (7%), 15-19 (5%) and 30-34 (5%). The 40-44 age group are considerably lower in the 2011 mid-year estimate, by -3% (Figure 11).

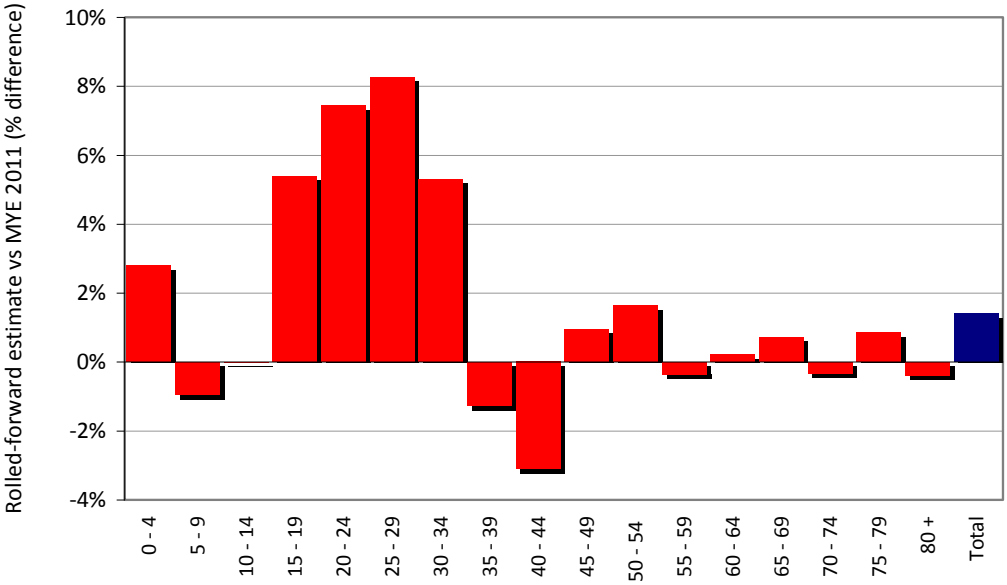
Population growth scenarios compared

c) The 2011-based SNPP for Braintree is very similar to the 2010-based version, with the 2021 population 0.9% higher in the 2011-based alternative, reflecting the higher base population (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP suggest higher population growth relative to 'AMR Dwelling Trajectory – R' and 'Approved RSS – R' scenarios. 'Economic – R' scenario shows a similar trajectory of growth to trend alternatives (Figure 12).

Braintree



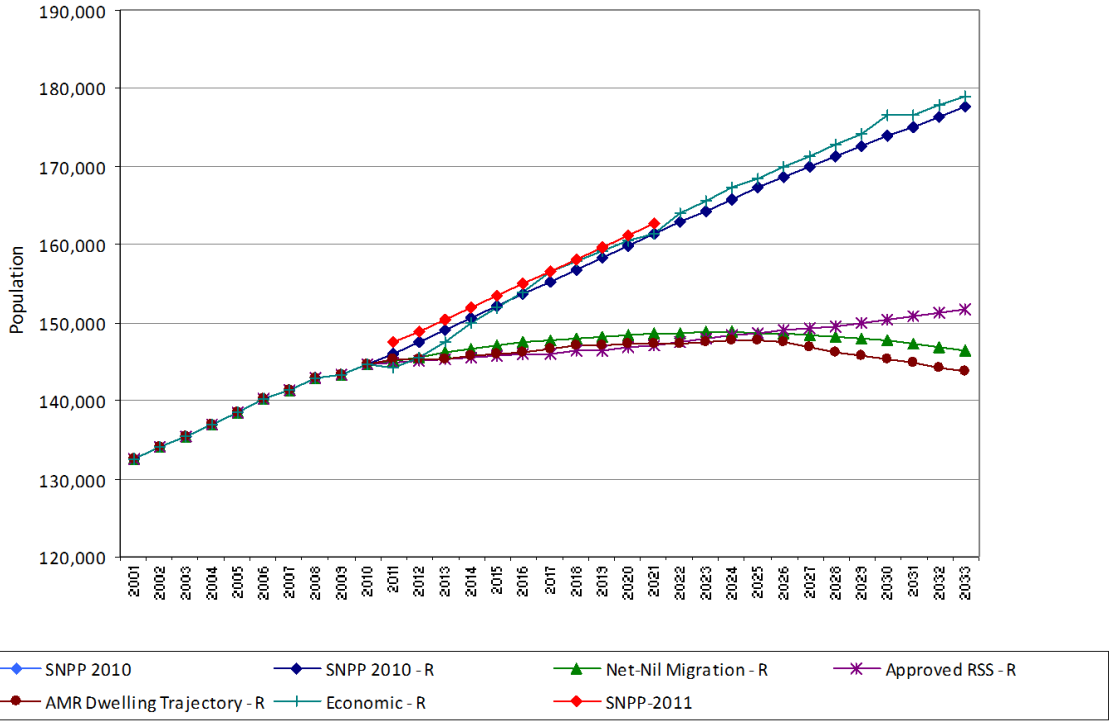
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	9,272	9,532	3%
5 - 9	8,794	8,710	-1%
10 - 14	8,913	8,912	0%
15 - 19	8,346	8,797	5%
20 - 24	7,389	7,938	7%
25 - 29	7,711	8,348	8%
30 - 34	8,301	8,742	5%
35 - 39	10,053	9,926	-1%
40 - 44	12,042	11,668	-3%
45 - 49	11,337	11,445	1%
50 - 54	9,594	9,750	2%
55 - 59	9,091	9,058	0%
60 - 64	9,915	9,936	0%
65 - 69	7,636	7,691	1%
70 - 74	5,614	5,595	0%
75 - 79	4,355	4,392	1%
80 +	7,102	7,074	0%
Total	145,464	147,514	1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 11: Braintree - rolled-forward population estimate vs new Mid-year estimate 2011

Braintree

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	34,451	23.8%	18,480	30.8%	1,138	824	291
SNPP 2010	32,997	22.8%	18,456	30.2%	1,096	823	274
SNPP 2010 - R	32,997	22.8%	18,100	30.2%	1,096	807	274
Approved RSS - R	7,049	4.9%	7,615	12.7%	134	340	-168
Net-Nil Migration - R	1,819	1.3%	6,338	10.6%	0	283	-284
AMR Dwelling Trajectory - R	-784	-0.5%	4,370	7.3%	-187	195	-305

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 12: Braintree – comparison of 2011-based SNPP with previous scenarios

Brentwood

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Brentwood suggests a difference of +1.3%, just above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Brentwood since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 15-19 (8%), 65-69 (5%) and 50-54 (4%). The 25-29, 5-9 and 0-4 age groups are all lower in the 2011 mid-year estimate, by -4%, -3% and -2% respectively (Figure 13).

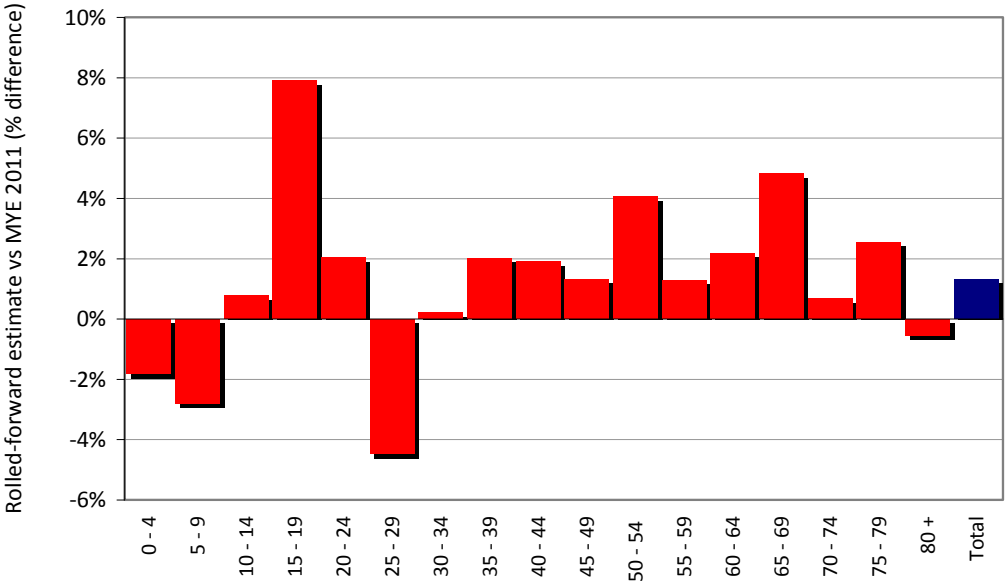
Population growth scenarios compared

c) The 2011-based SNPP for Brentwood is very similar to the 2010-based version, with the 2021 population just 0.9% higher in the 2011-based alternative, reflecting the higher base population (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP and 2010-based SNPP both suggest higher population growth relative to the alternative scenarios, including 'AMR Dwelling Trajectory – R', 'Approved RSS – R' and 'Economic – R' (Figure 14).

Brentwood



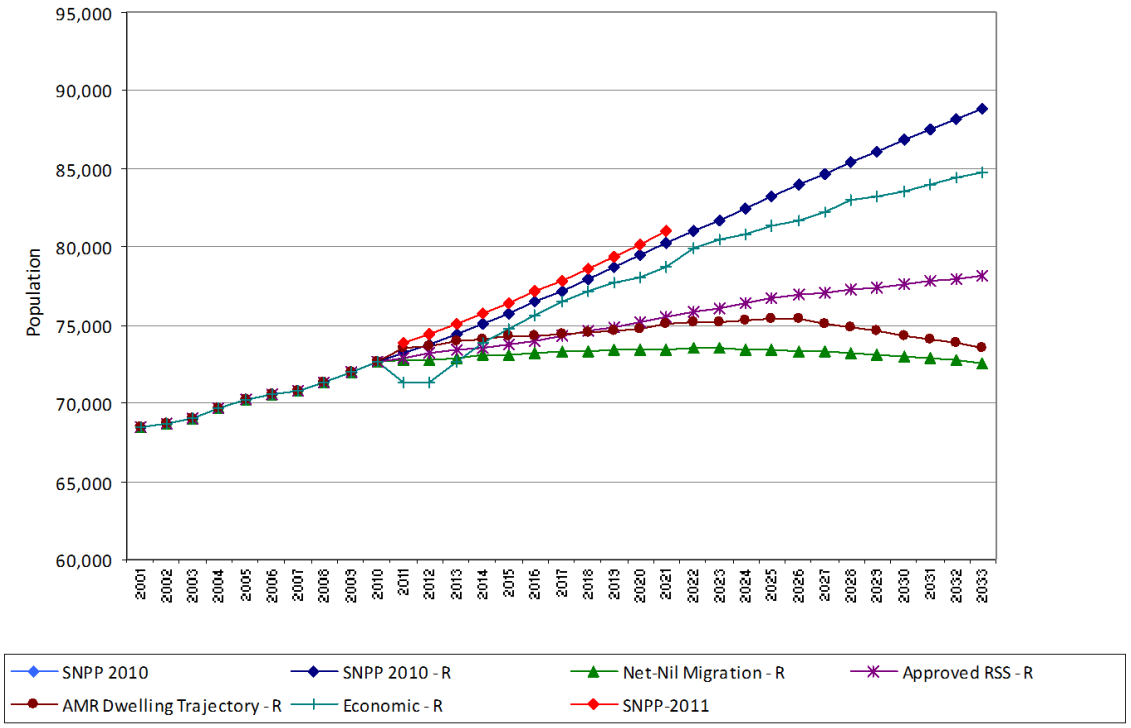
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	4,002	3,929	-2%
5 - 9	4,186	4,069	-3%
10 - 14	4,496	4,531	1%
15 - 19	4,280	4,618	8%
20 - 24	3,568	3,640	2%
25 - 29	4,054	3,873	-4%
30 - 34	4,221	4,231	0%
35 - 39	4,621	4,714	2%
40 - 44	5,452	5,556	2%
45 - 49	6,091	6,172	1%
50 - 54	5,017	5,221	4%
55 - 59	4,318	4,374	1%
60 - 64	4,652	4,754	2%
65 - 69	3,632	3,807	5%
70 - 74	3,093	3,114	1%
75 - 79	2,744	2,814	3%
80 +	4,448	4,424	-1%
Total	72,875	73,841	1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 13: Brentwood - rolled-forward population estimate vs new Mid-year estimate 2011

Brentwood

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

	Change 2010 - 2033				Average per year		
Scenario	**Population Change**	**Population Change %**	**Households Change**	**Households Change %**	**Net Migration**	**Dwellings**	**Jobs**
SNPP 2010	16,242	22.4%	8,006	26.2%	577	360	189
SNPP 2010 - R	16,242	22.4%	8,065	26.2%	577	362	189
Economic - R	12,124	16.7%	6,330	20.5%	417	284	96
Approved RSS - R	5,484	7.6%	3,843	12.5%	178	173	-36
AMR Dwelling Trajectory - R	925	1.3%	2,050	6.7%	-4	92	-132
Net-Nil Migration - R	-60	-0.1%	1,699	5.5%	0	76	-175

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 14: Brentwood – comparison of 2011-based SNPP with previous scenarios

Castle Point

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Castle Point suggests a difference of -1.5%, compared with a small positive difference (1.2%) for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly lower than the mid-year population estimates calculated for Castle Point since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are lower than the rolled-forward estimate for most age groups; lowest in 25-29 (-11%), 5-9 (-7%), 20-24 (-5%) and 0-4 (-5%). The 35-39, 40-44 and 30-34 age groups are higher in the 2011 mid-year estimate, by 9%, 4% and 4% respectively (Figure 15).

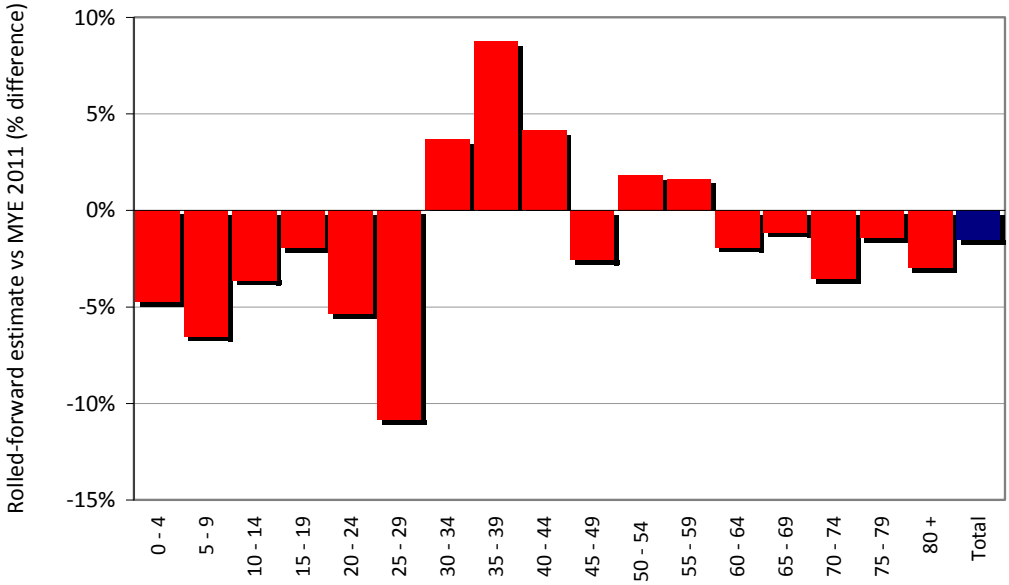
Population growth scenarios compared

c) The 2011-based SNPP for Castle Point is very similar to the 2010-based version, with the 2021 population -0.2% lower in the 2011-based alternative, reflecting the lower base population (Figure 5).

d) Two of the components of change: natural change and international migration are also very similar in both scenarios (Figures 6 & 8). However, there is a significant change in internal migration as a result of the shifts in the base-year age profile (Figures 7).

e) Although the 2011-based SNPP has a lower base year population compared with the five alternative scenarios, it suggests a relatively rapid population growth over the ten-year period and by 2021 has the third highest population; higher than 'Approved RSS – R' and 'AMR Dwelling Trajectory – R' scenarios but lower than 'Economic – R' scenario (Figure 16).

Castle Point



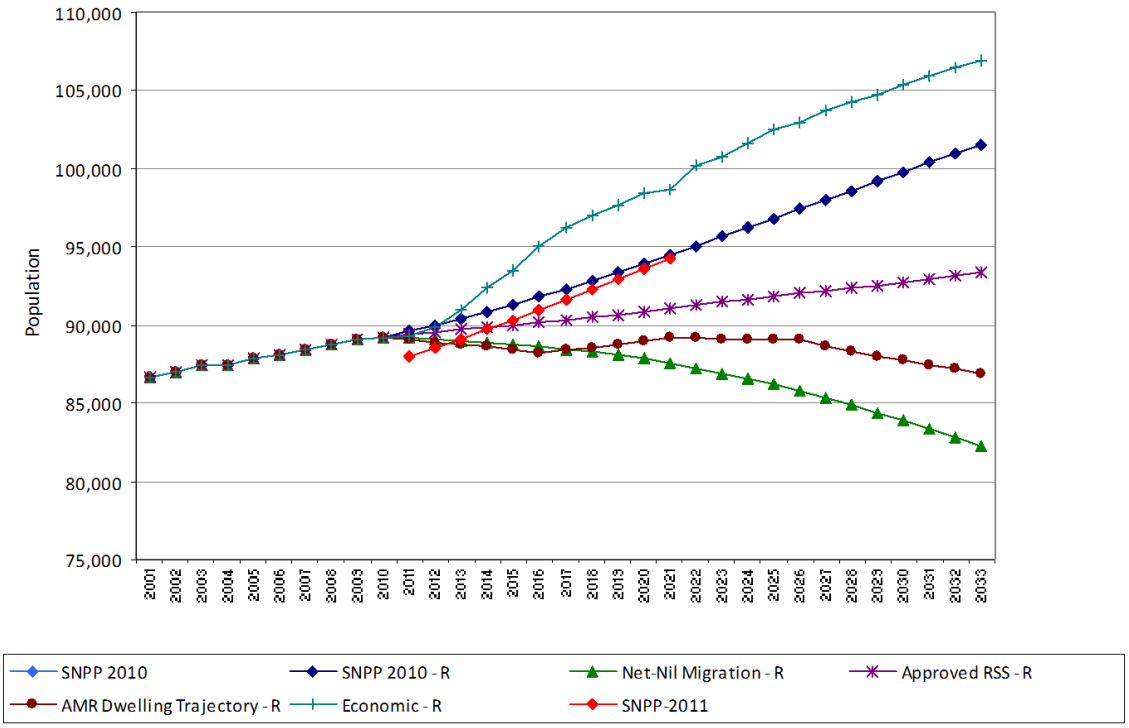
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	4,387	4,179	-5%
5 - 9	4,639	4,336	-7%
10 - 14	5,342	5,149	-4%
15 - 19	5,615	5,506	-2%
20 - 24	5,045	4,775	-5%
25 - 29	4,655	4,149	-11%
30 - 34	3,954	4,099	4%
35 - 39	4,633	5,038	9%
40 - 44	6,063	6,314	4%
45 - 49	6,693	6,520	-3%
50 - 54	5,888	5,995	2%
55 - 59	5,512	5,602	2%
60 - 64	7,183	7,045	-2%
65 - 69	6,027	5,959	-1%
70 - 74	4,814	4,643	-4%
75 - 79	3,755	3,701	-1%
80 +	5,106	4,954	-3%
Total	89,311	87,964	-2%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 15: Castle Point - rolled-forward population estimate vs new Mid-year estimate 2011

Castle Point

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	17,719	19.9%	9,644	26.4%	930	425	96
SNPP 2010	12,364	13.9%	7,928	21.2%	730	350	26
SNPP 2010 - R	12,364	13.9%	7,726	21.2%	730	341	26
Approved RSS - R	4,209	4.7%	4,536	12.4%	403	200	-82
AMR Dwelling Trajectory - R	-2,314	-2.6%	2,051	5.6%	138	90	-169
Net-Nil Migration - R	-6,970	-7.8%	693	1.9%	0	31	-249

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 16: Castle Point – comparison of 2011-based SNPP with previous scenarios

Chelmsford

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Chelmsford suggests a difference of +1.1%, just below the study area average (Figure 4). Therefore, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Chelmsford since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 20-24 (5%), 15-19 (4%) and 75-79 (4%). The largest negative difference is observed in 25-29 and 5-9 age groups, by -1% and -1% respectively (Figure 17).

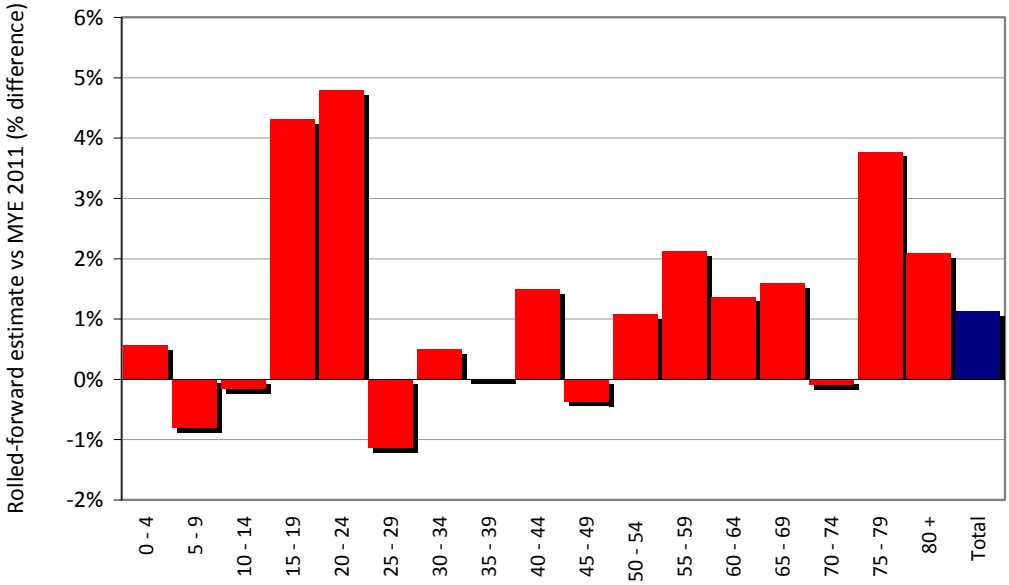
Population growth scenarios compared

c) The 2011-based SNPP for Chelmsford is very similar to the 2010-based version, with the 2021 population just 0.7% higher in the 2011-based alternative, reflecting the higher base population (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP follows a similar trajectory of population growth as the 2010-based SNPP but in 2021 the expected population is lower than 'Economic – R', 'Approved RSS- R' and 'AMR Dwelling Trajectory – R' alternatives (Figure 18).

Chelmsford



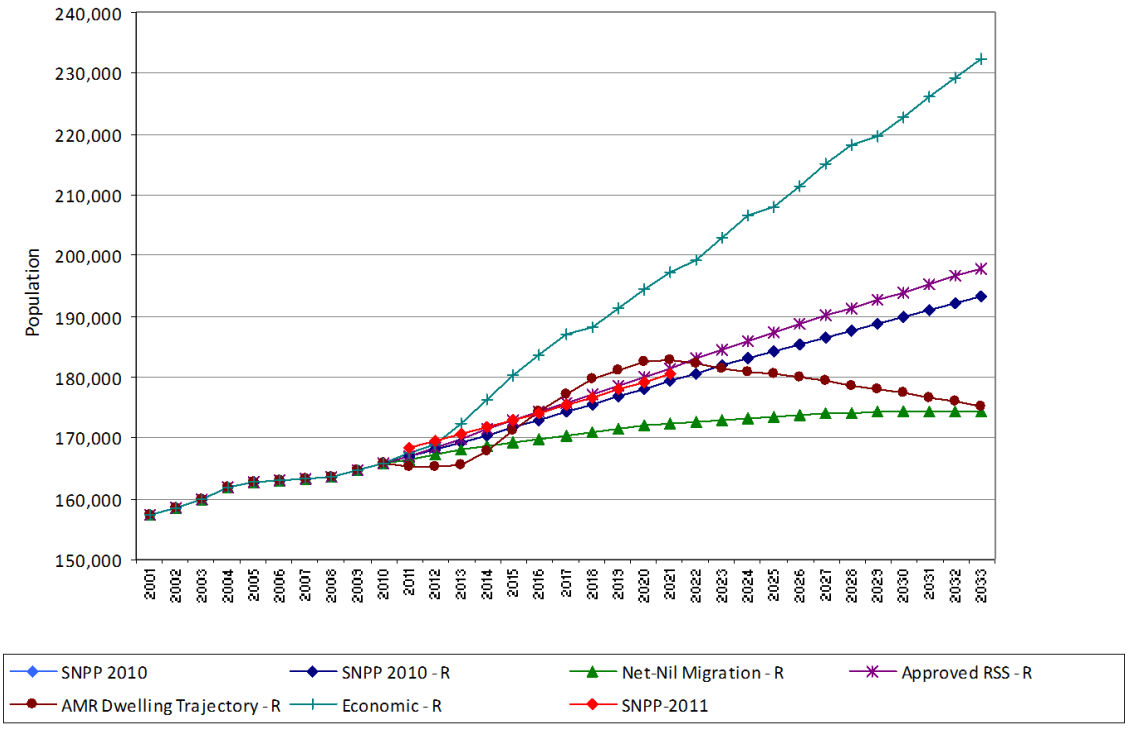
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	9,913	9,969	1%
5 - 9	9,668	9,590	-1%
10 - 14	9,720	9,705	0%
15 - 19	9,852	10,277	4%
20 - 24	9,420	9,871	5%
25 - 29	10,731	10,609	-1%
30 - 34	10,515	10,567	0%
35 - 39	11,662	11,662	0%
40 - 44	12,668	12,857	1%
45 - 49	12,926	12,879	0%
50 - 54	11,093	11,212	1%
55 - 59	9,882	10,091	2%
60 - 64	10,678	10,824	1%
65 - 69	8,376	8,509	2%
70 - 74	6,431	6,425	0%
75 - 79	5,285	5,484	4%
80 +	7,797	7,960	2%
Total	166,618	168,491	1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 17: Chelmsford - rolled-forward population estimate vs new Mid-year estimate 2011

Chelmsford

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	66,414	40.1%	31,867	45.7%	2,011	1,414	1,796
Approved RSS - R	32,087	19.4%	18,708	26.8%	798	830	857
SNPP 2010 - R	27,363	16.5%	17,087	24.5%	635	758	730
SNPP 2010	27,363	16.5%	17,241	24.5%	635	765	730
AMR Dwelling Trajectory - R	9,499	5.7%	9,631	13.8%	-93	427	197
Net-Nil Migration - R	8,525	5.1%	9,844	14.1%	0	437	165

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 18: Chelmsford – comparison of 2011-based SNPP with previous scenarios

Colchester

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Colchester suggests a negative difference of -1.7%, compared with a small positive difference (1.2%) for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly lower than the mid-year population estimates calculated for Colchester since 2001 would suggest.

b) An examination of age structure reveals that the largest differences between 2011 mid-year population estimate and the rolled-forward mid-year estimate are in 25-29 (-15%) and 20-24 (-7%). The largest positive difference is in the 45-49 age group (3%) (Figure 19).

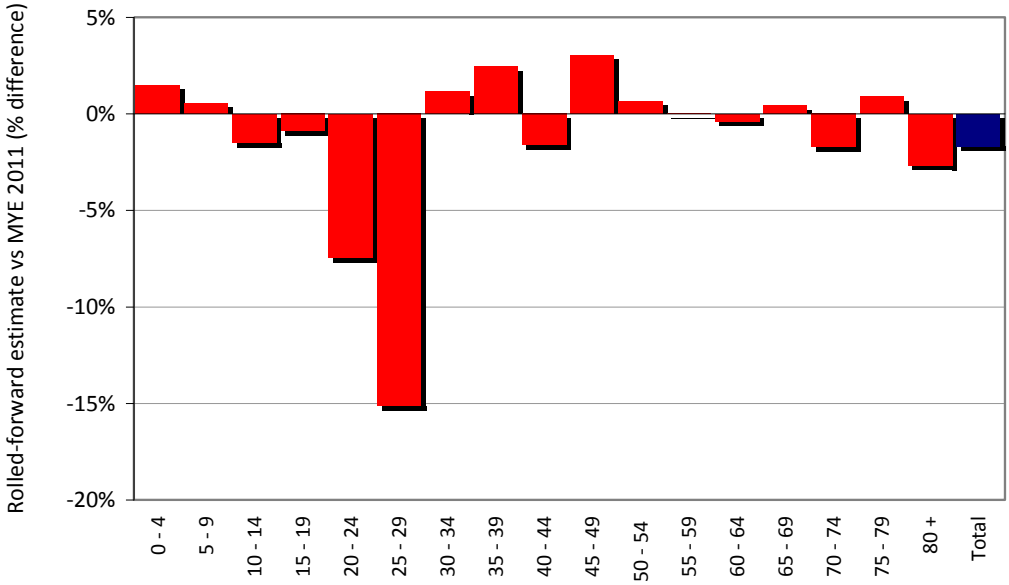
Population growth scenarios compared

c) The 2011-based SNPP for Colchester is similar to the 2010-based version, with the 2021 population 1.6% lower in the 2011-based alternative, reflecting the lower base population (Figure 5).

d) There is a lot of variation between the components of change (natural change, internal migration and international migration) in both scenarios. Whilst there is no major change in natural change (Figure 6), there are significant differences in internal migration (higher in 2011-based SNPP; Figure 7) and international migration (lower in 2011-based SNPP; Figure 8).

e) Although the 2011-based SNPP has a lower base year population compared with the five alternative scenarios, it suggests a relatively rapid population growth over the ten-year period and by 2021 has the third highest population; higher than 'Approved RSS – R' and 'AMR Dwelling Trajectory – R' scenarios but lower than 'Economic – R' scenario (Figure 20).

Colchester



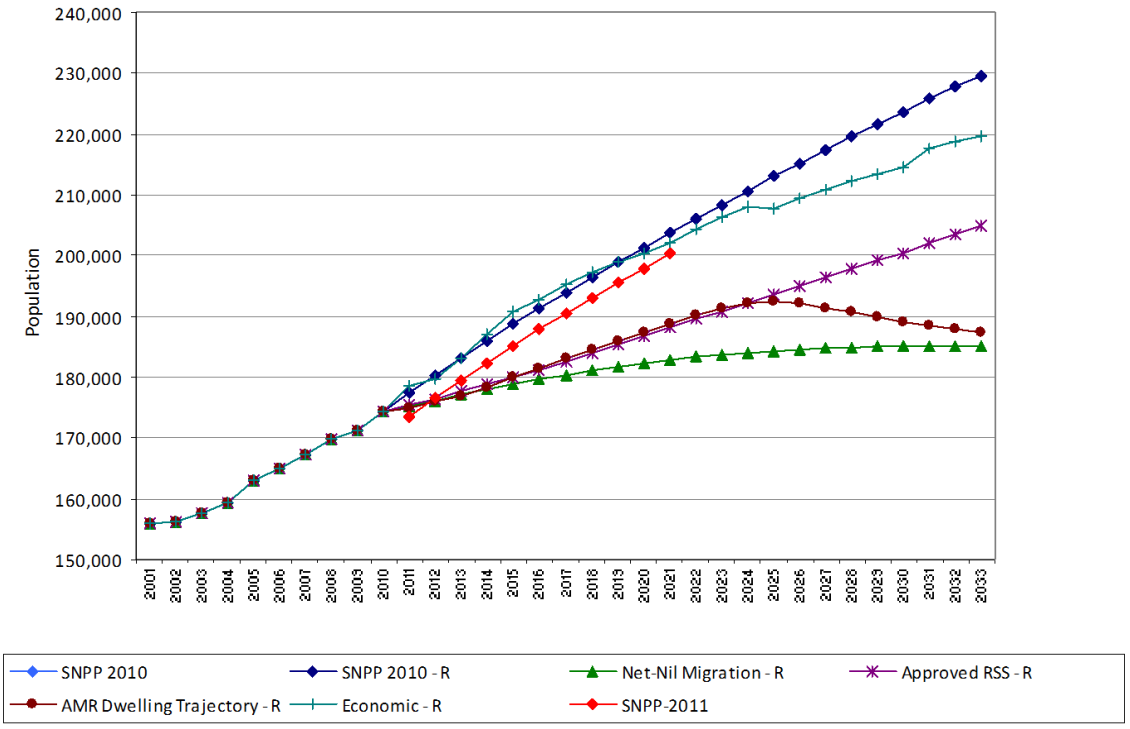
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	10,564	10,720	1%
5 - 9	9,416	9,467	1%
10 - 14	9,816	9,671	-1%
15 - 19	11,458	11,357	-1%
20 - 24	15,331	14,188	-7%
25 - 29	14,147	12,004	-15%
30 - 34	11,272	11,403	1%
35 - 39	11,362	11,639	2%
40 - 44	12,804	12,597	-2%
45 - 49	11,970	12,335	3%
50 - 54	10,440	10,508	1%
55 - 59	9,420	9,419	0%
60 - 64	10,763	10,721	0%
65 - 69	8,350	8,385	0%
70 - 74	6,393	6,283	-2%
75 - 79	5,182	5,228	1%
80 +	7,900	7,689	-3%
Total	176,586	173,614	-2%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 19: Colchester - rolled-forward population estimate vs new Mid-year estimate 2011

Colchester

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	55,265	31.7%	27,758	38.4%	1,450	1,238	1,186
SNPP 2010 - R	55,265	31.7%	27,902	38.4%	1,450	1,244	1,186
Economic - R	45,300	26.0%	24,775	34.1%	1,075	1,105	965
Approved RSS - R	30,501	17.5%	18,905	26.0%	603	843	619
AMR Dwelling Trajectory - R	12,997	7.5%	12,093	16.6%	-110	539	183
Net-Nil Migration - R	10,778	6.2%	11,529	15.9%	0	514	20

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 20: Colchester – comparison of 2011-based SNPP with previous scenarios

Epping Forest

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Epping Forest suggests a negative difference of -0.8%, compared with a small positive difference (1.2%) for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly lower than the mid-year population estimates calculated for Epping Forest since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are lower than the rolled-forward estimate for most age groups; lowest in 25-29 (-7%). The largest positive differences are noted in 15-19 and 75-79 age groups, by 6% and 6% respectively (Figure 21).

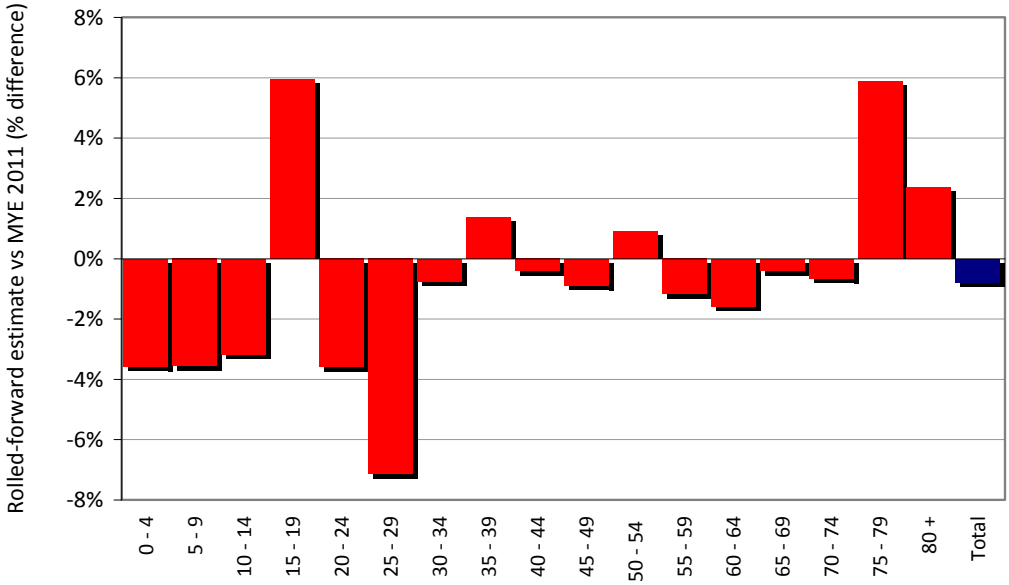
Population growth scenarios compared

c) The 2011-based SNPP for Epping Forest is very similar to the 2010-based version, with the 2021 population only 0.2% higher in the 2011-based alternative (Figure 5).

d) There is little variation between two of the components of change: natural change and international migration, in both scenarios (Figure 6 & 8). There is, however, a noticeable difference in internal migration suggesting it is higher in the 2011-based SNPP (Figure 7).

e) The 2011-based SNPP suggests very similar population growth to SNPP-2010 scenario; higher relative to three of the alternative scenarios (including 'Approved RSS – R' and 'AMR Dwelling Trajectory – R'); lower only than 'Economic - R' scenario (Figure 22).

Epping Forest



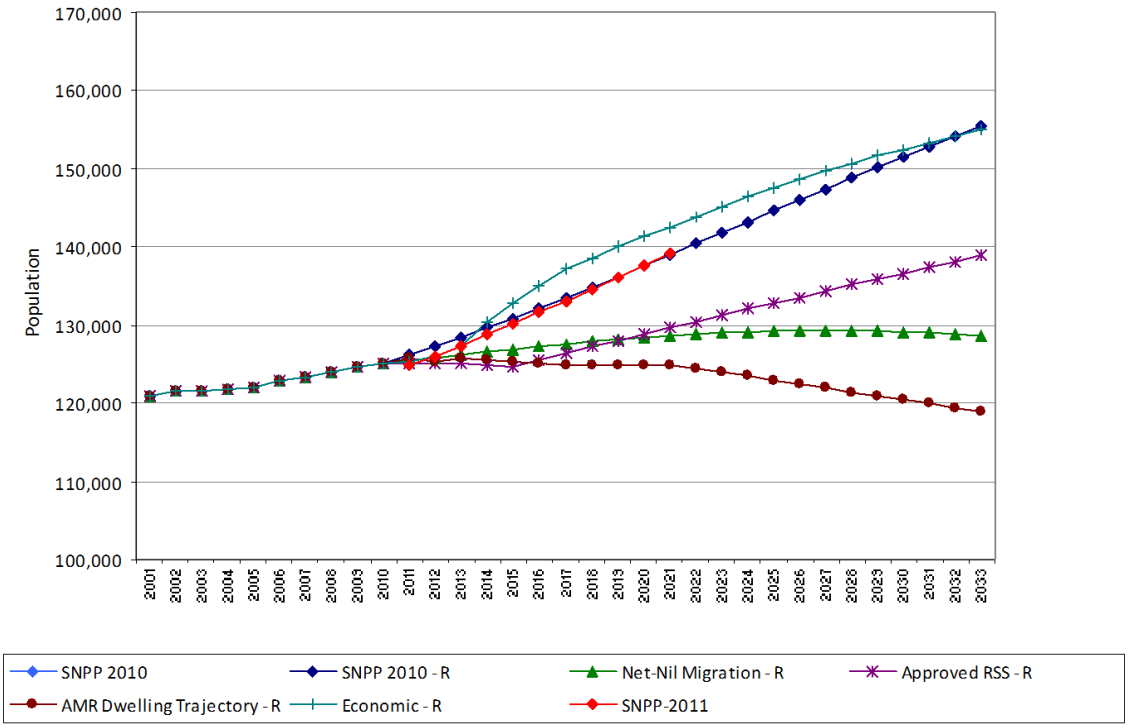
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	7,698	7,422	-4%
5 - 9	7,097	6,844	-4%
10 - 14	7,412	7,177	-3%
15 - 19	7,025	7,443	6%
20 - 24	6,968	6,718	-4%
25 - 29	7,132	6,622	-7%
30 - 34	7,523	7,466	-1%
35 - 39	8,176	8,289	1%
40 - 44	9,703	9,662	0%
45 - 49	10,038	9,948	-1%
50 - 54	8,601	8,680	1%
55 - 59	7,676	7,586	-1%
60 - 64	8,341	8,209	-2%
65 - 69	6,628	6,602	0%
70 - 74	5,021	4,988	-1%
75 - 79	4,082	4,322	6%
80 +	6,742	6,902	2%
Total	125,863	124,880	-1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 21: Epping Forest - rolled-forward population estimate vs new Mid-year estimate 2011

Epping Forest

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	30,247	24.2%	16,755	31.4%	943	746	544
SNPP 2010 - R	30,247	24.2%	16,568	31.5%	943	738	544
Economic - R	29,834	23.8%	16,179	30.7%	887	721	522
Approved RSS - R	13,821	11.0%	9,897	18.8%	353	441	185
Net-Nil Migration - R	3,551	2.8%	6,593	12.5%	0	294	-25
AMR Dwelling Trajectory - R	-6,192	-4.9%	1,879	3.6%	-409	84	-250

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 22: Epping Forest – comparison of 2011-based SNPP with previous scenarios

Harlow

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Harlow suggests a difference of +1.3%, just above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Harlow since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 15-19 (7%) and 50-54 (6%). The largest negative difference is noted in 25-29 age group, by -3% (Figure 23).

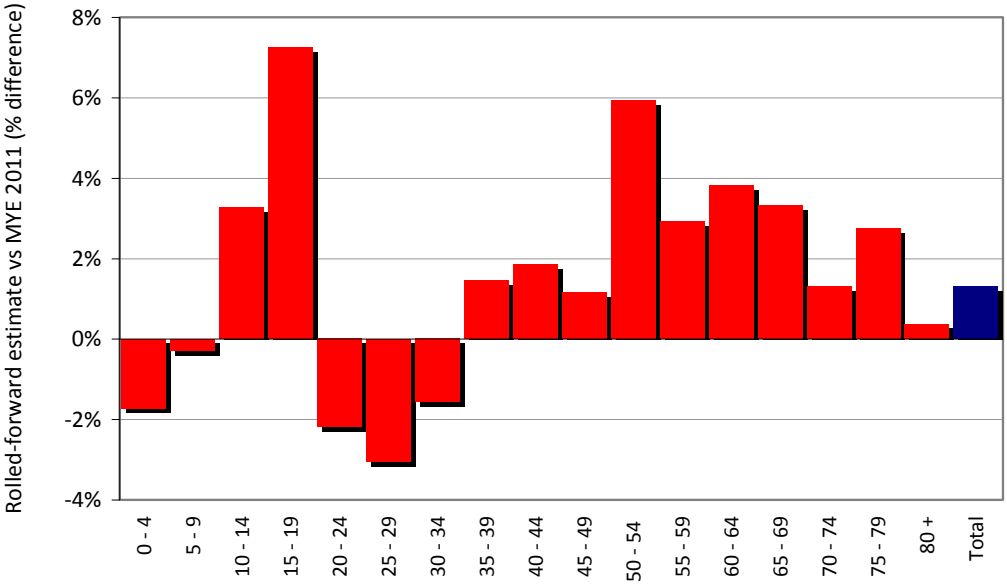
Population growth scenarios compared

c) The 2011-based SNPP for Harlow is very similar to the 2010-based version, with the 2021 population only 1.0% higher in the 2011-based alternative (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP suggests second highest level of population growth relative to the five alternative scenarios (including 'Economic – R' and 'AMR Dwelling Trajectory – R'); lower only than 'Approved RSS - R' scenario (Figure 24).

Harlow



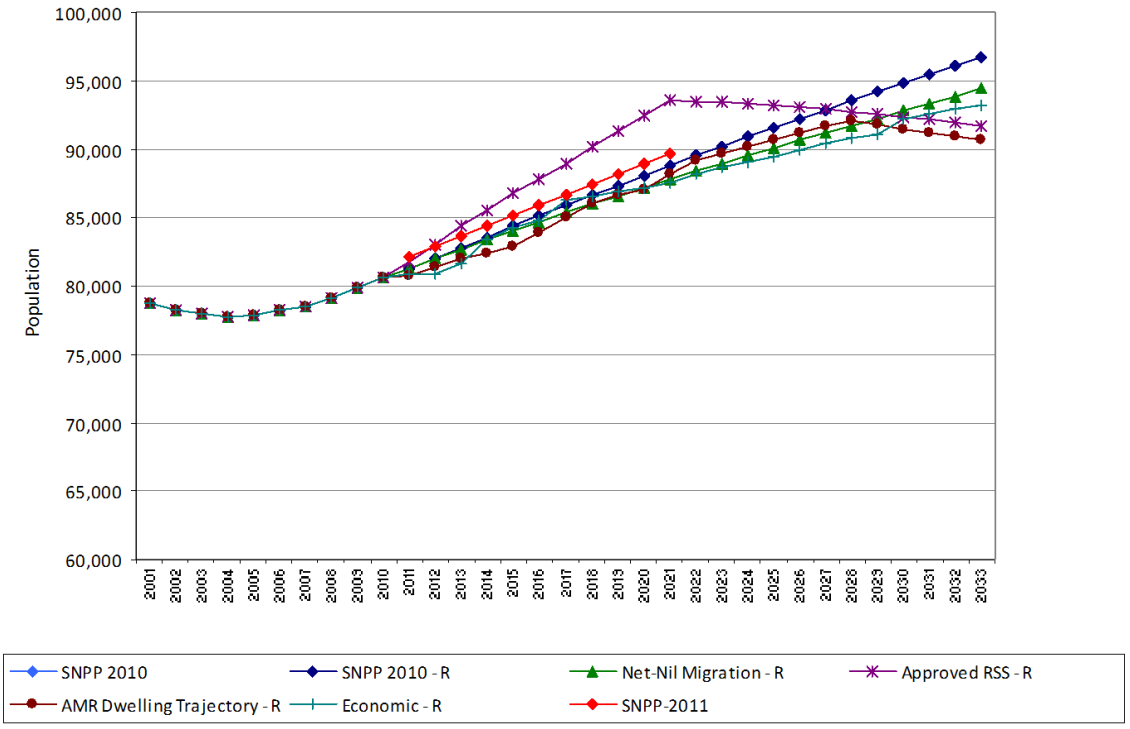
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	6,198	6,091	-2%
5 - 9	4,972	4,957	0%
10 - 14	4,746	4,901	3%
15 - 19	4,734	5,077	7%
20 - 24	4,985	4,876	-2%
25 - 29	6,158	5,970	-3%
30 - 34	6,082	5,987	-2%
35 - 39	5,584	5,666	1%
40 - 44	5,887	5,996	2%
45 - 49	5,947	6,016	1%
50 - 54	5,158	5,464	6%
55 - 59	4,552	4,685	3%
60 - 64	3,986	4,138	4%
65 - 69	3,108	3,211	3%
70 - 74	2,703	2,738	1%
75 - 79	2,572	2,643	3%
80 +	3,747	3,761	0%
Total	81,119	82,177	1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 23: Harlow - rolled-forward population estimate vs new Mid-year estimate 2011

Harlow

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

	Change 2010 - 2033				Average per year		
Scenario	**Population Change**	**Population Change %**	**Households Change**	**Households Change %**	**Net Migration**	**Dwellings**	**Jobs**
SNPP 2010	16,142	20.0%	8,504	24.3%	20	376	283
SNPP 2010 - R	16,142	20.0%	8,489	24.3%	20	375	283
Net-Nil Migration - R	13,787	17.1%	7,609	21.8%	0	337	200
Economic - R	12,593	15.6%	6,915	19.8%	-107	306	200
Approved RSS - R	11,086	13.7%	6,321	18.1%	-213	280	156
AMR Dwelling Trajectory - R	10,028	12.4%	5,856	16.8%	-220	259	130

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 24: Harlow – comparison of 2011-based SNPP with previous scenarios

Maldon

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Maldon suggests a negative difference of -1.4%, compared with a small positive difference (1.2%) for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly lower than the mid-year population estimates calculated for Maldon since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are lower than the rolled-forward estimate for most age groups; lowest in 5-9 (-8%), 0-4 (-7%), 25-29 (-6%), 10-14 (-6%) and 40-44 (-5%). The largest positive difference is in 30-34, by 6% (Figure 25).

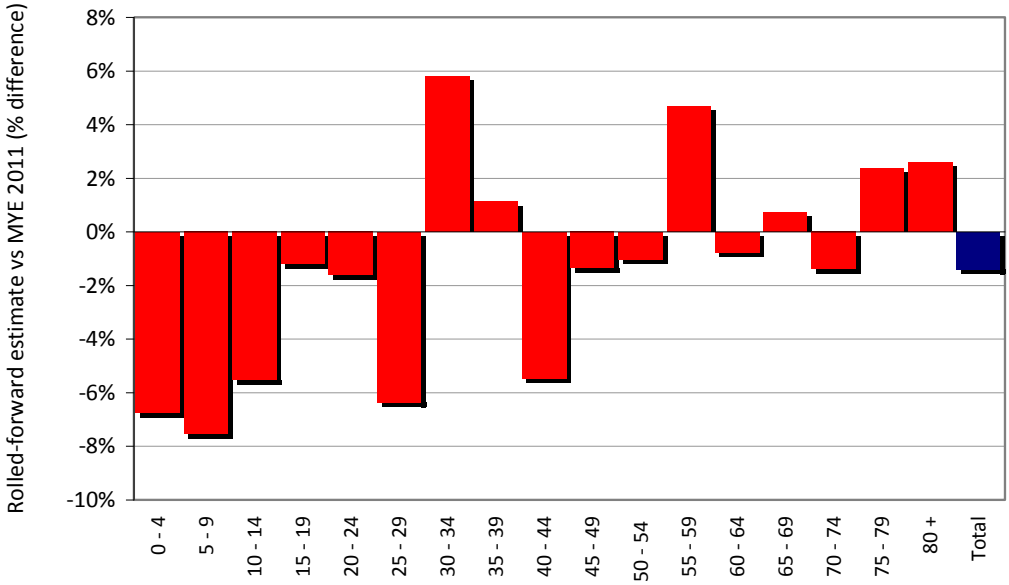
Population growth scenarios compared

c) The 2011-based SNPP for Maldon is very similar to the 2010-based version, with the 2021 population only 0.8% lower in the 2011-based alternative (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) Despite lower base-year population, the 2011-based SNPP suggests third highest level of population growth relative to the five alternative scenarios (including 'Approved RSS – R' and 'AMR Dwelling Trajectory – R'); lower only than 'Economic - R' and 'SNPP-2010' scenarios (Figure 26).

Maldon



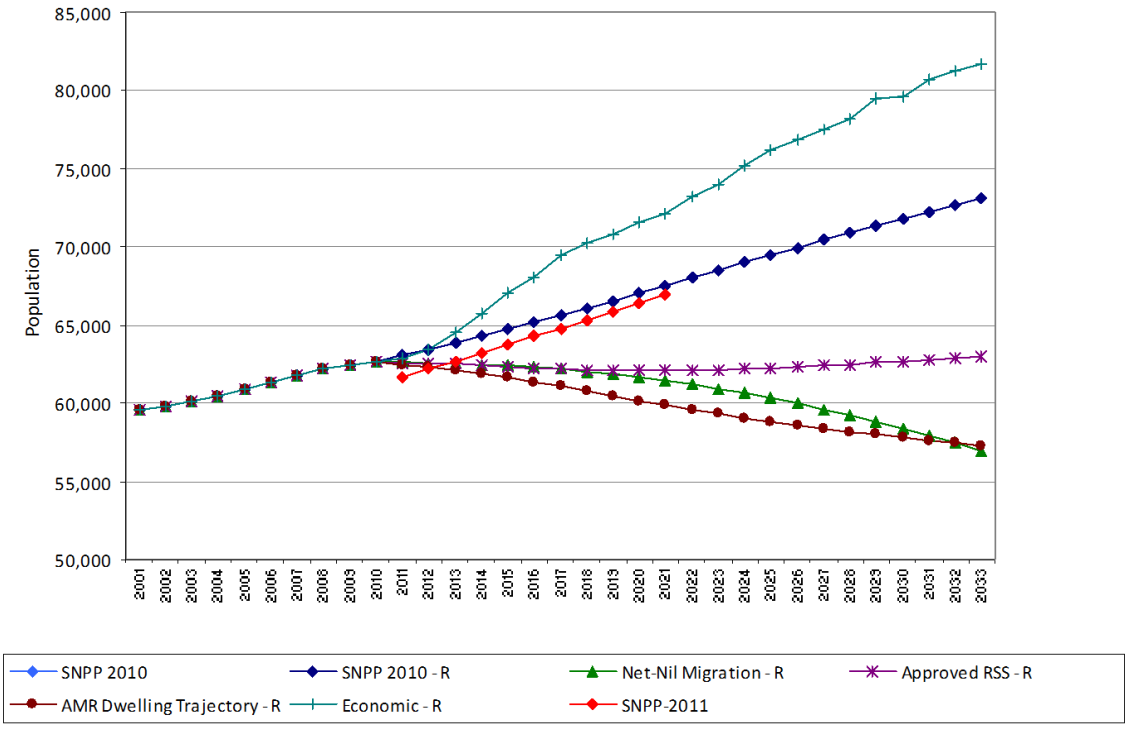
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	3,218	3,001	-7%
5 - 9	3,540	3,273	-8%
10 - 14	3,947	3,728	-6%
15 - 19	3,633	3,589	-1%
20 - 24	2,936	2,889	-2%
25 - 29	2,635	2,467	-6%
30 - 34	2,694	2,850	6%
35 - 39	3,617	3,658	1%
40 - 44	5,069	4,792	-5%
45 - 49	4,962	4,896	-1%
50 - 54	4,655	4,607	-1%
55 - 59	4,173	4,368	5%
60 - 64	5,065	5,026	-1%
65 - 69	4,122	4,152	1%
70 - 74	3,001	2,959	-1%
75 - 79	2,266	2,320	2%
80 +	3,065	3,145	3%
Total	62,599	61,720	-1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 25: Maldon - rolled-forward population estimate vs new Mid-year estimate 2011

Maldon

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

	Change 2010 - 2033				Average per year		
Scenario	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	19,089	30.5%	9,661	37.6%	935	437	187
SNPP 2010	10,444	16.7%	6,717	25.3%	602	304	54
SNPP 2010 - R	10,444	16.7%	6,495	25.2%	602	294	54
Approved RSS - R	332	0.5%	2,547	9.9%	200	115	-105
AMR Dwelling Trajectory - R	-5,376	-8.6%	336	1.3%	-31	15	-194
Net-Nil Migration - R	-5,707	-9.1%	722	2.8%	0	33	-218

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 26: Maldon – comparison of 2011-based SNPP with previous scenarios

Rochford

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Rochford suggests a very small difference of +0.5%, compared with a difference of +1.2% for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Rochford since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 35-39 (6%). The largest negative difference is in 25-29, by 6% (Figure 27).

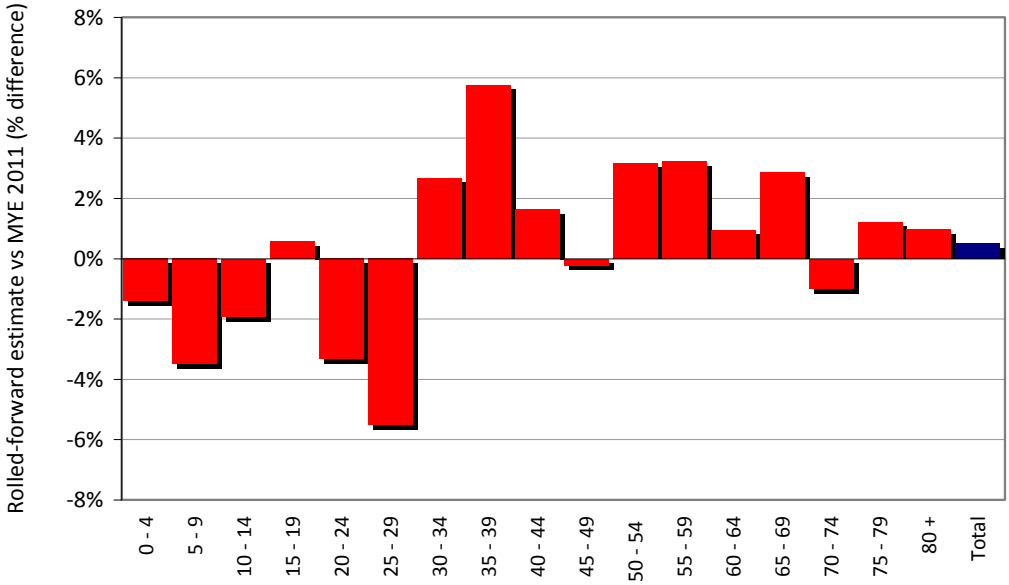
Population growth scenarios compared

c) The 2011-based SNPP for Rochford is very similar to the 2010-based version, with the 2021 population only 0.9% higher in the 2011-based alternative (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP suggests one of the highest levels of population growth relative to the alternative scenarios (higher than 'Approved RSS – R' and 'AMR Dwelling Trajectory – R'); following very similar trajectory of growth as 'Economic - R' and 'SNPP-2010' scenarios (Figure 28).

Rochford



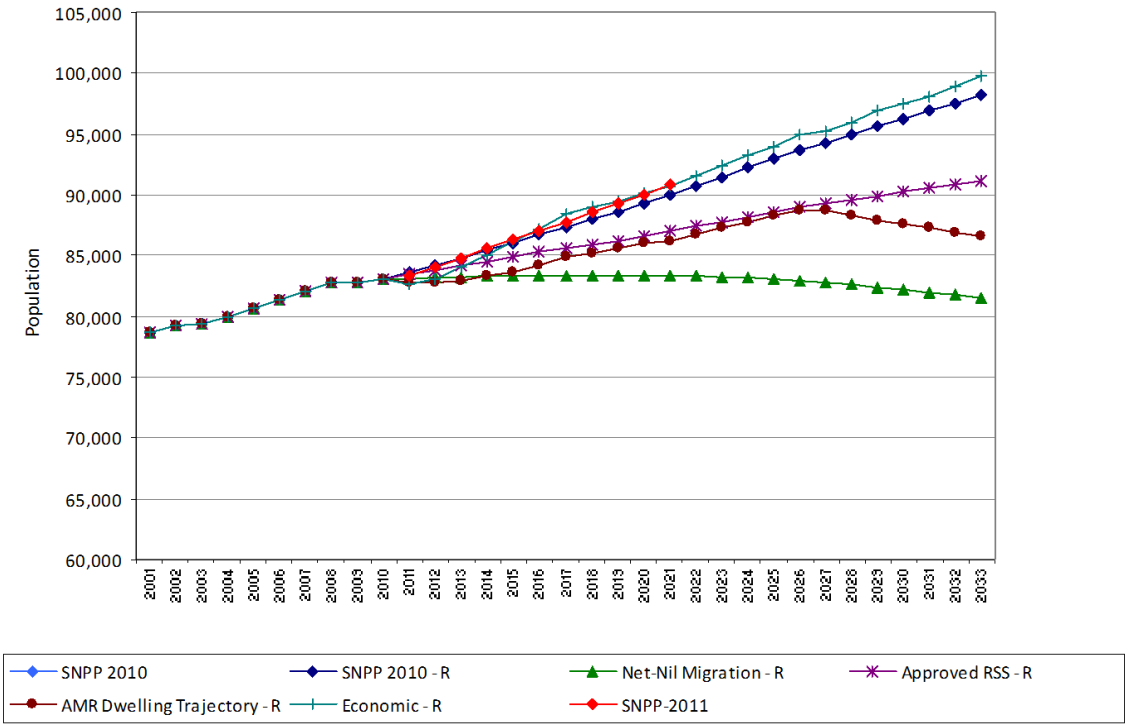
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	4,388	4,326	-1%
5 - 9	4,549	4,390	-4%
10 - 14	5,224	5,124	-2%
15 - 19	5,177	5,207	1%
20 - 24	4,260	4,118	-3%
25 - 29	3,956	3,738	-6%
30 - 34	4,023	4,130	3%
35 - 39	4,943	5,228	6%
40 - 44	6,452	6,558	2%
45 - 49	6,545	6,530	0%
50 - 54	5,601	5,779	3%
55 - 59	5,121	5,285	3%
60 - 64	6,004	6,061	1%
65 - 69	4,860	4,999	3%
70 - 74	3,954	3,915	-1%
75 - 79	3,354	3,395	1%
80 +	4,506	4,550	1%
Total	82,920	83,333	0%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 27: Rochford - rolled-forward population estimate vs new Mid-year estimate 2011

Rochford

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	16,767	20.2%	8,781	26.1%	677	391	157
SNPP 2010	15,104	18.2%	8,564	24.8%	619	381	137
SNPP 2010 - R	15,104	18.2%	8,353	24.8%	619	372	137
Approved RSS - R	8,096	9.7%	5,618	16.7%	348	250	46
AMR Dwelling Trajectory - R	3,542	4.3%	3,935	11.7%	162	175	-16
Net-Nil Migration - R	-1,550	-1.9%	2,118	6.3%	0	94	-82

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 28: Rochford – comparison of 2011-based SNPP with previous scenarios

Tendring

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Tendring suggests a difference of -6.8%, compared with a small positive difference of +1.2% for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the mid-year population estimates, there may have been an over-count of total population in the 2001 Census in Tendring, although this is difficult to verify.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are noticeably lower than the rolled-forward estimate for all age groups; lowest in 25-29 (-12%), 70-74 (-11%) and 80+ (-10%) (Figure 29).

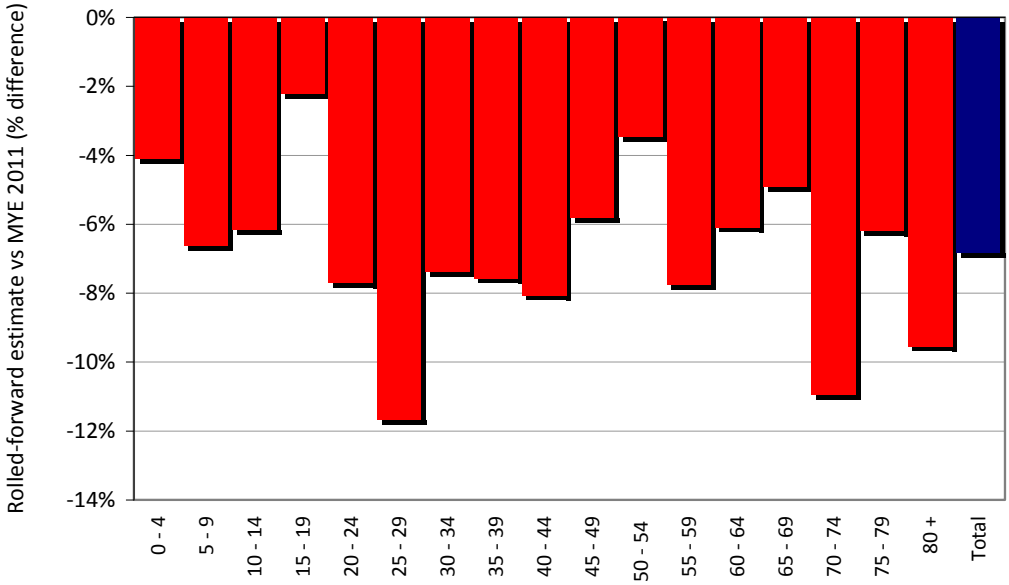
Population growth scenarios compared

c) The 2011-based SNPP for Tendring is also considerably different to the 2010-based version, with the 2021 population about 4.4% lower in the 2011-based alternative (Figure 5).

d) There is little variation between two of the components of change: natural change and international migration, in both scenarios (Figure 6 & 8). There is, however, a noticeable difference in internal migration suggesting it is higher in the 2011-based SNPP (Figure 7).

e) Despite the much lower base-year population, the 2011-based SNPP suggests one of the highest levels of population growth relative to the alternative scenarios (higher than 'Approved RSS – R' and 'AMR Dwelling Trajectory – R'); lower only than 'Economic - R' and 'SNPP-2010' scenarios (Figure 30).

Tendring



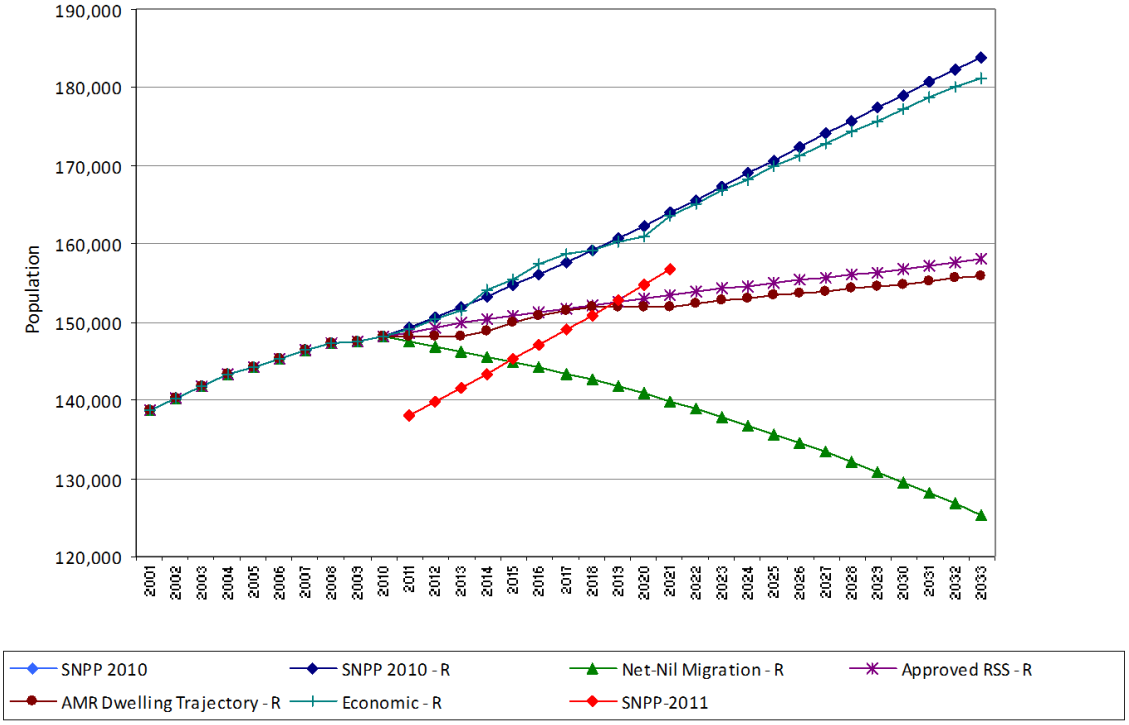
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	7,037	6,749	-4%
5 - 9	6,976	6,513	-7%
10 - 14	8,100	7,600	-6%
15 - 19	8,239	8,056	-2%
20 - 24	7,222	6,665	-8%
25 - 29	6,430	5,679	-12%
30 - 34	6,028	5,583	-7%
35 - 39	7,268	6,717	-8%
40 - 44	9,446	8,684	-8%
45 - 49	10,025	9,442	-6%
50 - 54	9,192	8,873	-3%
55 - 59	9,498	8,760	-8%
60 - 64	11,932	11,205	-6%
65 - 69	10,977	10,437	-5%
70 - 74	9,660	8,602	-11%
75 - 79	7,693	7,215	-6%
80 +	12,473	11,282	-10%
Total	148,195	138,062	-7%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 29: Tendring - rolled-forward population estimate vs new Mid-year estimate 2011

Tendring

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	35,826	24.2%	21,218	31.9%	2,233	972	317
SNPP 2010 - R	35,826	24.2%	20,370	31.9%	2,233	933	317
Economic - R	33,103	22.3%	19,038	29.8%	2,111	872	270
Approved RSS - R	9,960	6.7%	9,386	14.7%	1,158	430	-113
AMR Dwelling Trajectory - R	7,812	5.3%	8,475	13.3%	1,069	388	-148
Net-Nil Migration - R	-22,781	-15.4%	-474	-0.7%	0	-22	-785

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 30: Tendring – comparison of 2011-based SNPP with previous scenarios

Uttlesford

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Uttlesford suggests a small difference of +1.7%, compared with a small positive difference of +1.2% for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Uttlesford since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 20-24 (11%) and 30-34 (9%). The largest negative difference is in 0-4, by -4% (Figure 31).

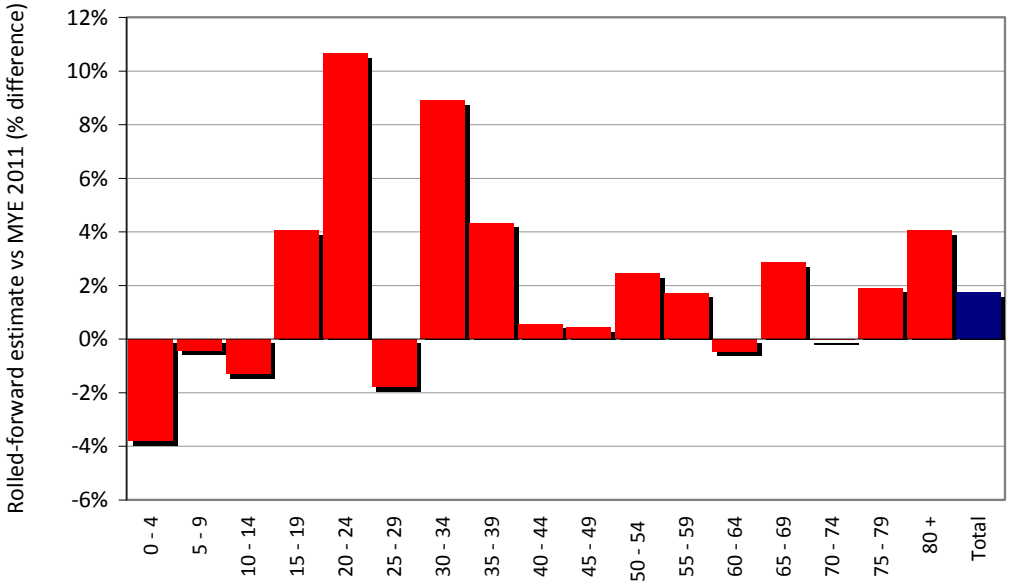
Population growth scenarios compared

c) The 2011-based SNPP for Uttlesford is very similar to the 2010-based version, with the 2021 population only 0.9% higher in the 2011-based alternative (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP and 2010-based SNPP both suggest higher population growth relative to the four alternative scenarios (including 'Economic – R', 'Approved RSS – R' and 'AMR Dwelling Trajectory – R') (Figure 32).

Uttlesford



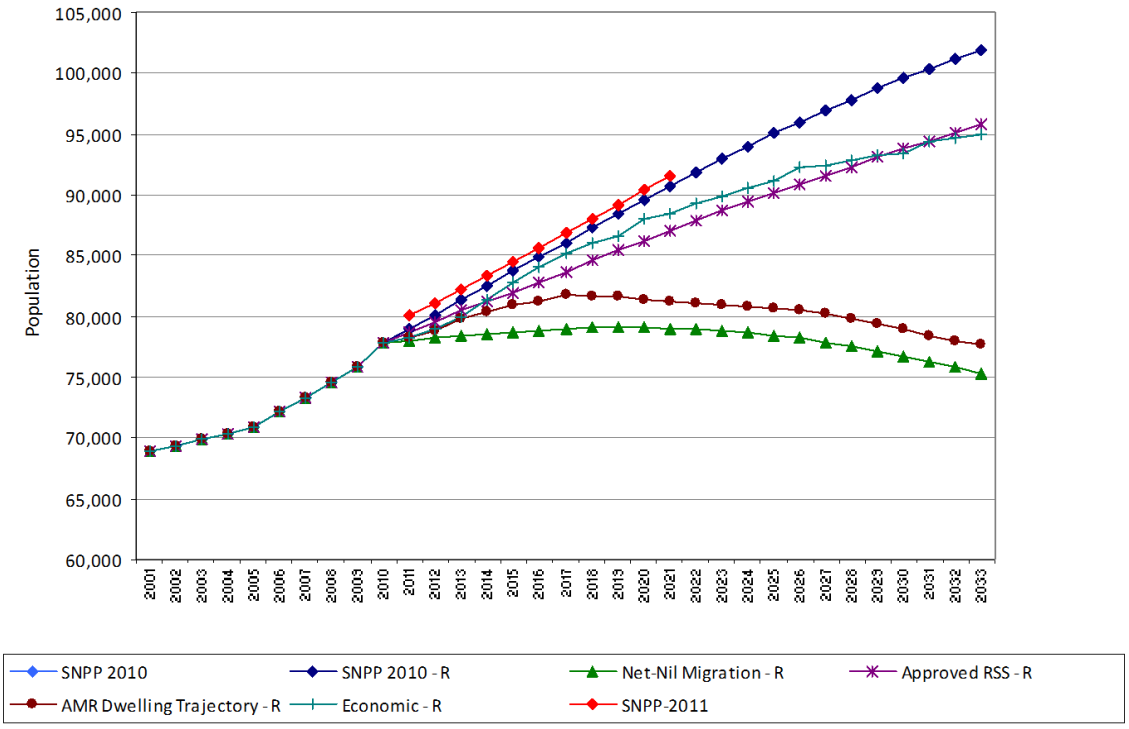
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	4,830	4,646	-4%
5 - 9	5,029	5,008	0%
10 - 14	5,379	5,309	-1%
15 - 19	4,929	5,129	4%
20 - 24	3,383	3,743	11%
25 - 29	3,700	3,634	-2%
30 - 34	3,921	4,270	9%
35 - 39	4,901	5,113	4%
40 - 44	6,372	6,407	1%
45 - 49	6,656	6,685	0%
50 - 54	5,901	6,046	2%
55 - 59	4,947	5,032	2%
60 - 64	5,321	5,296	0%
65 - 69	4,163	4,282	3%
70 - 74	3,063	3,062	0%
75 - 79	2,476	2,523	2%
80 +	3,697	3,847	4%
Total	78,667	80,032	2%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 31: Uttlesford - rolled-forward population estimate vs new Mid-year estimate 2011

Uttlesford

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	24,117	31.0%	11,676	37.5%	880	526	351
SNPP 2010 - R	24,117	31.0%	11,604	37.5%	880	523	351
Approved RSS - R	18,060	23.2%	9,544	30.8%	661	430	223
Economic - R	17,236	22.2%	9,214	29.7%	617	415	200
AMR Dwelling Trajectory - R	-85	-0.1%	2,957	9.5%	-29	133	-173
Net-Nil Migration - R	-2,513	-3.2%	3,159	10.2%	0	142	-253

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 32: Uttlesford – comparison of 2011-based SNPP with previous scenarios

Southend-on-Sea

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Southend-on-Sea suggests a difference of +7.0%, compared with a smaller positive difference of +1.2% for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the mid-year population estimates, there may have been an under-count of total population in the 2001 Census in Southend-on-Sea, although this is difficult to verify.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are noticeably higher than the rolled-forward estimate for all age groups; highest in 30-34 (18%), 35-39 (14%) and 40-44 (12%) (Figure 33).

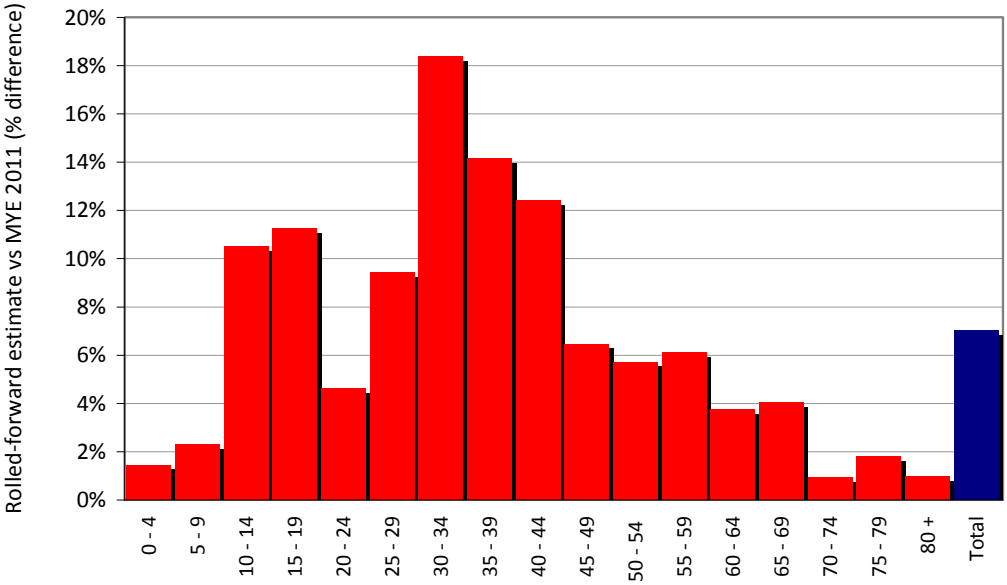
Population growth scenarios compared

c) The 2011-based SNPP for Southend-on-Sea is also considerably different to the 2010-based version, with the 2021 population about 4.0% higher in the 2011-based alternative (Figure 5).

d) There is little variation between two of the components of change: natural change and international migration, in both scenarios (Figure 6 & 8). There is, however, a substantial difference in internal migration suggesting it is significantly lower in the 2011-based SNPP (Figure 7).

e) With its substantially higher base-year population, the 2011-based SNPP suggests the highest population growth relative to the five alternative scenarios (including 'Economic – R', 'Approved RSS – R' and 'AMR Dwelling Trajectory – R') (Figure 34).

Southend-on-Sea



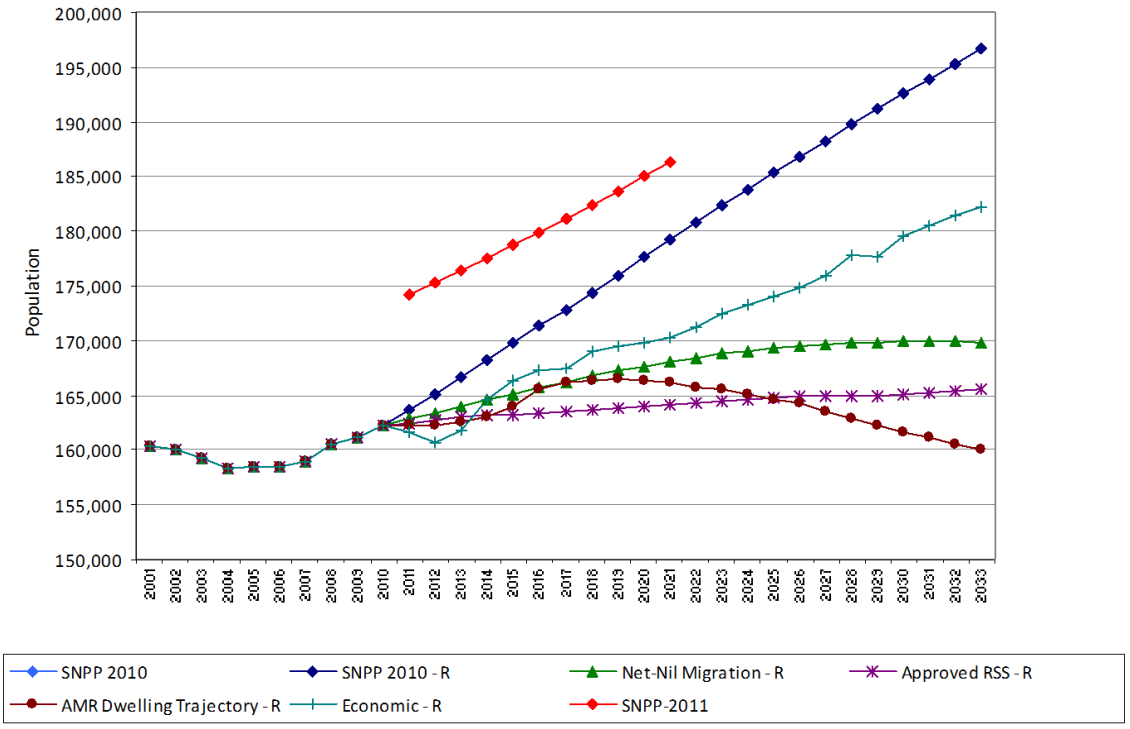
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	11,090	11,250	1%
5 - 9	9,390	9,606	2%
10 - 14	9,184	10,150	11%
15 - 19	9,298	10,344	11%
20 - 24	9,380	9,812	5%
25 - 29	10,318	11,290	9%
30 - 34	9,901	11,719	18%
35 - 39	10,663	12,171	14%
40 - 44	11,609	13,049	12%
45 - 49	12,065	12,843	6%
50 - 54	10,430	11,026	6%
55 - 59	9,067	9,620	6%
60 - 64	10,026	10,402	4%
65 - 69	8,348	8,684	4%
70 - 74	6,578	6,638	1%
75 - 79	5,690	5,793	2%
80 +	9,782	9,877	1%
Total	162,819	174,274	7%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 33: Southend-on-Sea - rolled-forward population estimate vs new Mid-year estimate 2011

Southend-on-Sea

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	34,400	21.2%	20,470	27.8%	865	926	422
SNPP 2010 - R	34,400	21.2%	20,843	27.7%	865	943	422
Economic - R	19,927	12.3%	14,215	18.9%	359	643	165
Net-Nil Migration - R	7,530	4.6%	10,622	14.1%	0	481	-73
Approved RSS - R	3,233	2.0%	6,813	9.1%	-249	308	-129
AMR Dwelling Trajectory - R	-2,316	-1.4%	4,325	5.7%	-484	196	-236

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 34: Southend-on-Sea – comparison of 2011-based SNPP with previous scenarios

Thurrock

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Thurrock suggests a very small difference of +0.4%, compared with a positive difference of +1.2% for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Thurrock since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most of young age groups: highest in 25-29 (6%) and 15-19 (6%), and lower in older age groups: lowest in 80+ (-7%) and 70-74 (-6%) (Figure 35).

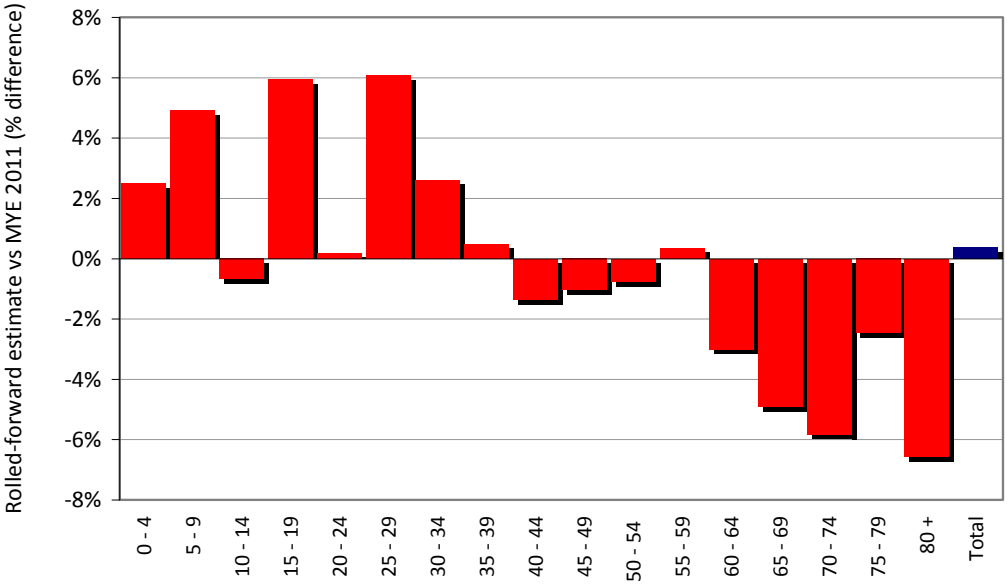
Population growth scenarios compared

c) The 2011-based SNPP for Thurrock is very similar to the 2010-based version, with the 2021 population only 0.5% higher in the 2011-based alternative (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP suggests medium level of population growth relative to the five alternative scenarios; very similar to the 'SNPP-2010' scenario. In 2021 it is lower than 'Economic – R' and 'AMR Dwelling Trajectory – R' but higher than 'Approved RSS – R' (Figure 36).

Thurrock



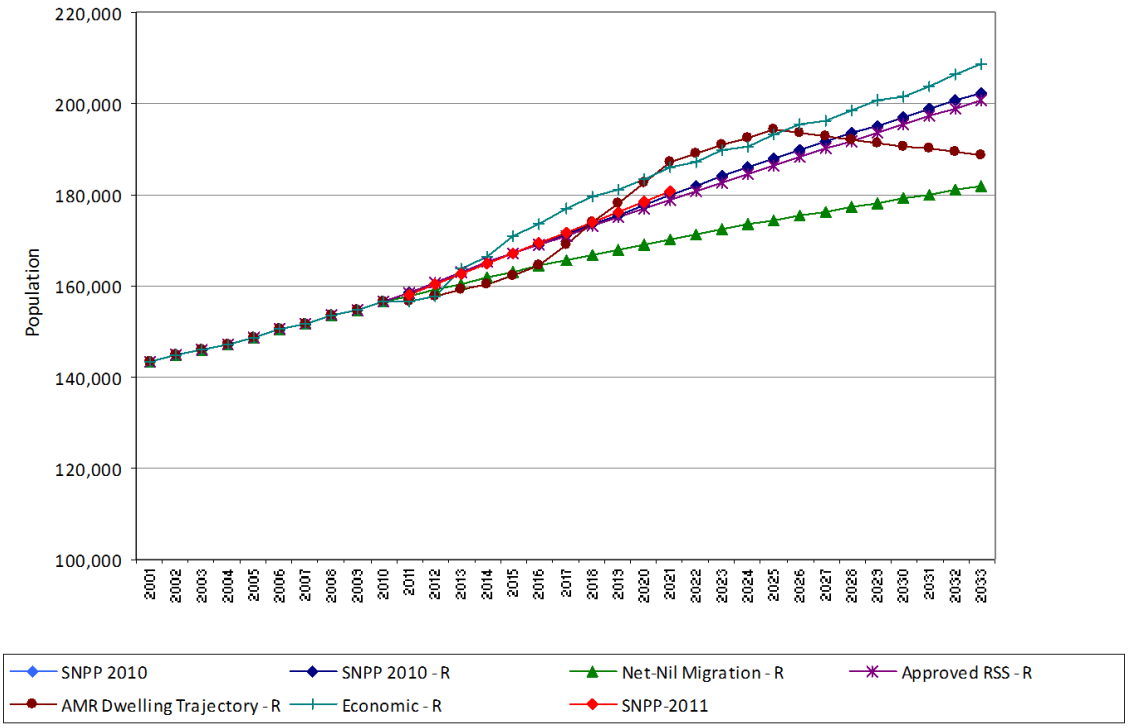
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	11,803	12,097	2%
5 - 9	9,792	10,273	5%
10 - 14	9,984	9,917	-1%
15 - 19	9,429	9,989	6%
20 - 24	9,706	9,724	0%
25 - 29	10,539	11,179	6%
30 - 34	11,562	11,863	3%
35 - 39	12,091	12,150	0%
40 - 44	12,758	12,584	-1%
45 - 49	11,766	11,644	-1%
50 - 54	9,565	9,492	-1%
55 - 59	8,414	8,444	0%
60 - 64	8,942	8,673	-3%
65 - 69	6,547	6,226	-5%
70 - 74	4,989	4,698	-6%
75 - 79	3,858	3,763	-2%
80 +	5,942	5,552	-7%
Total	157,688	158,268	0%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 35: Thurrock - rolled-forward population estimate vs new Mid-year estimate 2011

Thurrock

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	52,158	33.3%	24,560	39.1%	878	1,084	1,400
SNPP 2010	45,861	29.3%	23,287	35.6%	681	1,028	1,258
SNPP 2010 - R	45,861	29.3%	22,436	35.7%	681	990	1,258
Approved RSS - R	44,147	28.2%	21,522	34.2%	614	950	1,217
AMR Dwelling Trajectory - R	32,025	20.5%	17,019	27.1%	77	751	902
Net-Nil Migration - R	25,367	16.2%	14,156	22.5%	0	625	739

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 36: Thurrock – comparison of 2011-based SNPP with previous scenarios

Cambridge

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Cambridge suggests a difference of +14.0%; compared with a positive difference of +1.2% for the study area as a whole (Figure 4). This suggests that there may have been an under-count of total population in the 2001 Census in Cambridge. However, it is also likely, given the size of the difference, that there remain issues with the robustness of the mid-year estimate calculated for Cambridge from the latest ONS revisions.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 30-34 (50%), 25-29 (37%) and 35-39 (33%). The largest negative difference is in 70-74 (-10%) (Figure 37).

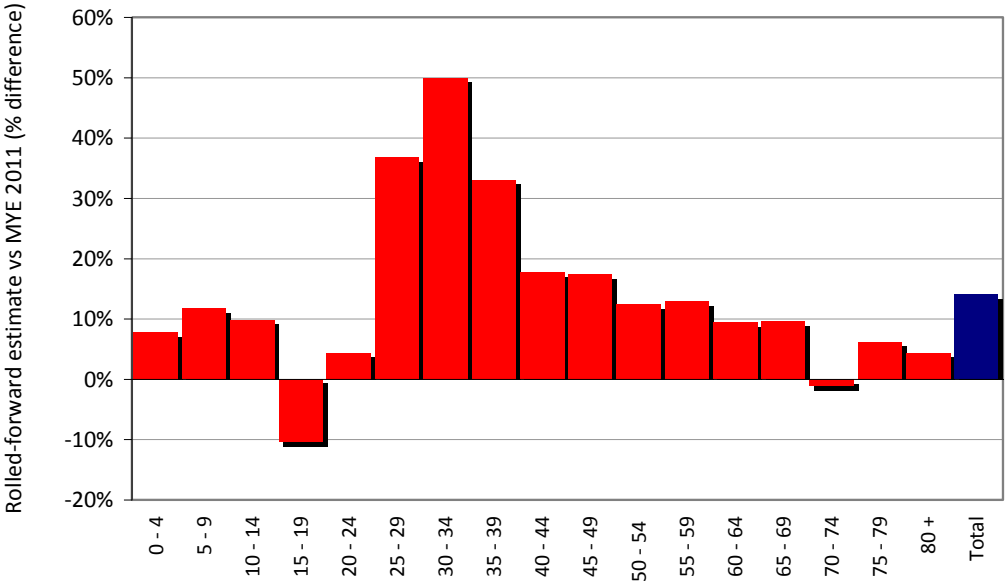
Population growth scenarios compared

c) The 2011-based SNPP for Cambridge is significantly different to the 2010-based version, with the 2021 population about 18.4% higher in the 2011-based alternative, reflecting the much higher base population (Figure 5).

d) There is little variation between the internal migration component of change in both scenarios (Figure 7). There are, however, very significant differences in natural change (2011-based SNPP much larger) and international migration (much smaller in 2011-based SNPP) (Figures 6 & 8).

e) Despite the much higher base-year population, the 2011-based SNPP suggests medium level of population growth relative to the five alternative scenarios in 2021 being lower than 'Approved RSS – R', 'AMR Dwelling Trajectory – R' and 'Economic – R' scenarios (Figure 38).

Cambridge



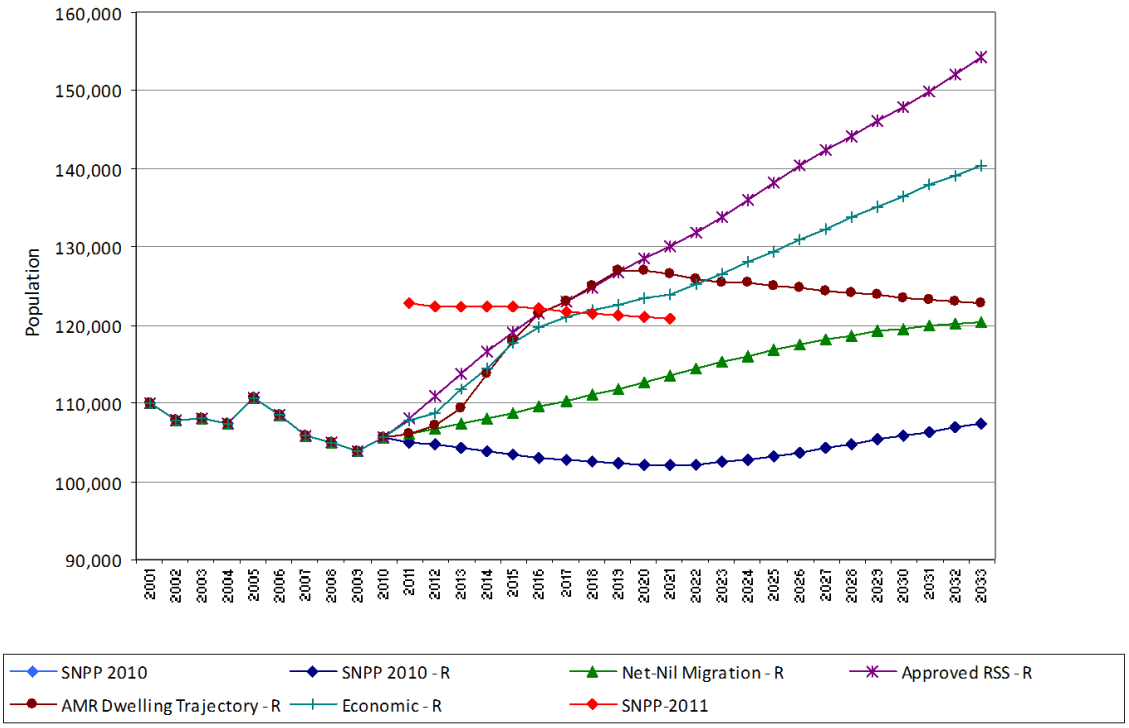
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	6,142	6,622	8%
5 - 9	4,547	5,081	12%
10 - 14	4,514	4,959	10%
15 - 19	10,511	9,416	-10%
20 - 24	17,261	18,018	4%
25 - 29	9,654	13,199	37%
30 - 34	7,516	11,273	50%
35 - 39	6,343	8,442	33%
40 - 44	6,516	7,670	18%
45 - 49	6,022	7,072	17%
50 - 54	5,309	5,970	12%
55 - 59	4,759	5,375	13%
60 - 64	4,535	4,962	9%
65 - 69	3,562	3,902	10%
70 - 74	3,036	3,002	-1%
75 - 79	2,567	2,726	6%
80 +	4,826	5,036	4%
Total	107,617	122,725	14%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 37: Cambridge - rolled-forward population estimate vs new Mid-year estimate 2011

Cambridge

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Approved RSS - R	48,777	46.2%	25,070	52.3%	1,117	1,110	1,552
Economic - R	34,914	33.1%	18,628	38.9%	657	825	1,091
AMR Dwelling Trajectory - R	17,321	16.4%	10,804	22.6%	-43	478	490
Net-Nil Migration - R	14,918	14.1%	12,058	25.2%	0	534	473
SNPP 2010	1,842	1.7%	2,627	6.7%	-346	116	4
SNPP 2010 - R	1,842	1.7%	2,701	5.6%	-346	120	4

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 38: Cambridge – comparison of 2011-based SNPP with previous scenarios

South Cambridgeshire

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for South Cambridgeshire suggests a small difference of +0.9%; just below the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for South Cambridgeshire since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 20-24 (9%) and 30-34 (6%). The largest negative difference is in 70-74 (-2%) (Figure 39).

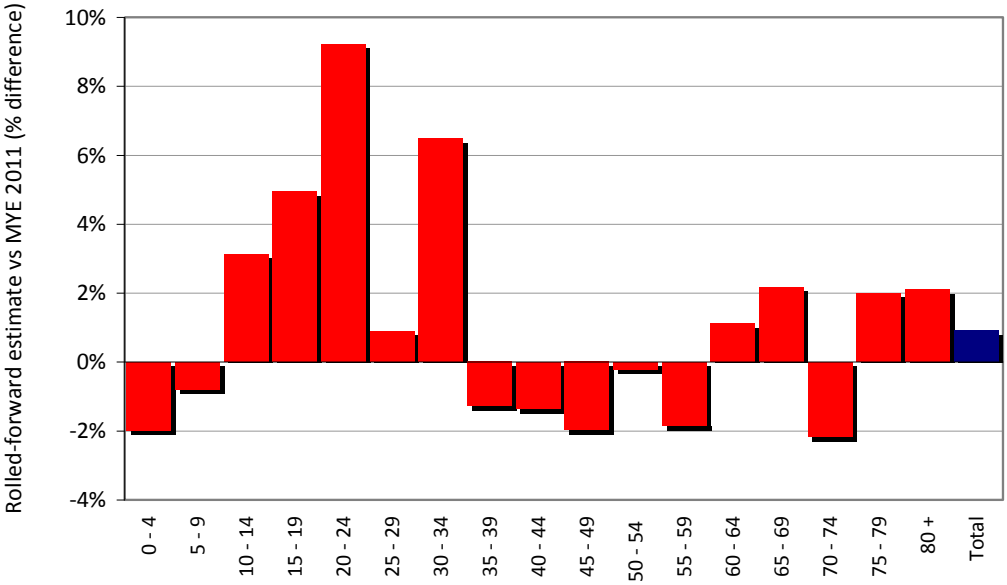
Population growth scenarios compared

c) The 2011-based SNPP for South Cambridgeshire is similar to the 2010-based version, with the 2021 population about 1.4% higher in the 2011-based alternative, reflecting the higher base population (Figure 5).

d) There is little variation between two of the components of change: natural change and international migration, in both scenarios (Figure 6 & 8). There is, however, a noticeable difference in internal migration suggesting it is higher in the 2011-based SNPP (Figure 7).

e) The 2011-based SNPP suggests medium level of population growth relative to the five alternative scenarios; very similar to the 'SNPP-2010' and 'AMR Dwelling Trajectory – R' scenarios; lower than 'Approved RSS – R' and 'Economic – R' scenarios (Figure 40).

South Cambridgeshire



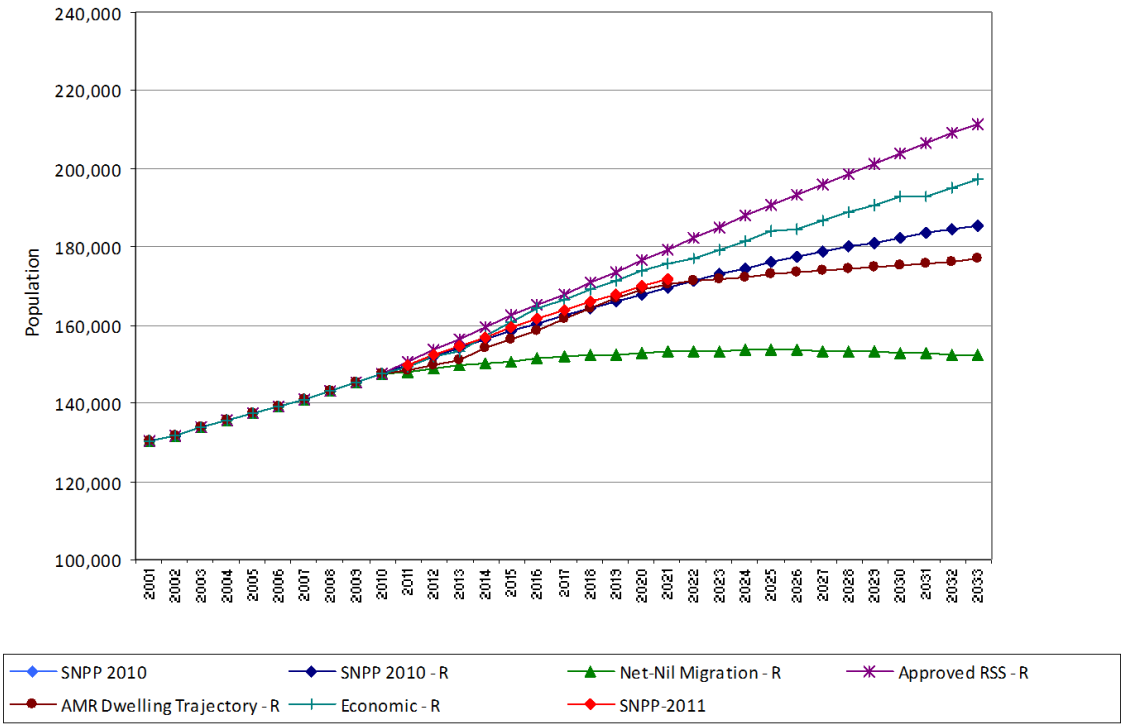
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	9,614	9,423	-2%
5 - 9	9,200	9,128	-1%
10 - 14	8,828	9,104	3%
15 - 19	8,516	8,937	5%
20 - 24	6,628	7,239	9%
25 - 29	8,072	8,145	1%
30 - 34	8,960	9,542	6%
35 - 39	10,893	10,754	-1%
40 - 44	11,992	11,829	-1%
45 - 49	12,055	11,817	-2%
50 - 54	10,263	10,241	0%
55 - 59	9,135	8,966	-2%
60 - 64	9,586	9,694	1%
65 - 69	7,584	7,749	2%
70 - 74	5,706	5,582	-2%
75 - 79	4,547	4,638	2%
80 +	6,909	7,054	2%
Total	148,487	149,842	1%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 39: South Cambridgeshire - rolled-forward population estimate vs new Mid-year estimate 2011

South Cambridgeshire

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Approved RSS - R	64,248	43.6%	29,795	50.2%	1,994	1,330	1,611
Economic - R	49,830	33.8%	24,523	41.3%	1,467	1,095	1,222
SNPP 2010 - R	38,275	26.0%	20,179	34.0%	1,063	901	914
SNPP 2010	38,275	26.0%	20,445	34.0%	1,063	913	914
AMR Dwelling Trajectory - R	29,498	20.0%	17,027	28.7%	725	760	671
Net-Nil Migration - R	4,923	3.3%	8,825	14.9%	0	394	5

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 40: South Cambridgeshire – comparison of 2011-based SNPP with previous scenarios

Broxbourne

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Broxbourne suggests a difference of +2.7%; above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Broxbourne since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 10-14 (8%). The largest negative difference is in 0-4 (-3%) and 55-59 (-3%) (Figure 41).

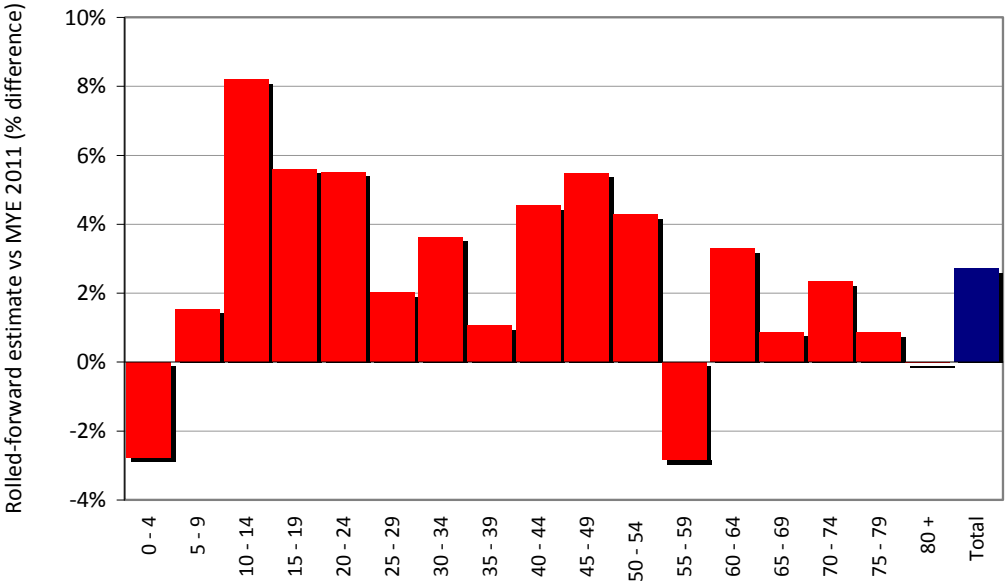
Population growth scenarios compared

c) The 2011-based SNPP for Broxbourne is similar to the 2010-based version, with the 2021 population about 1.7% higher in the 2011-based alternative, reflecting the higher base population (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP and 2010-based SNPP both suggest higher population growth relative to the four alternative scenarios (including 'Approved RSS – R', 'Economic – R' and 'AMR Dwelling Trajectory – R') (Figure 42).

Broxbourne



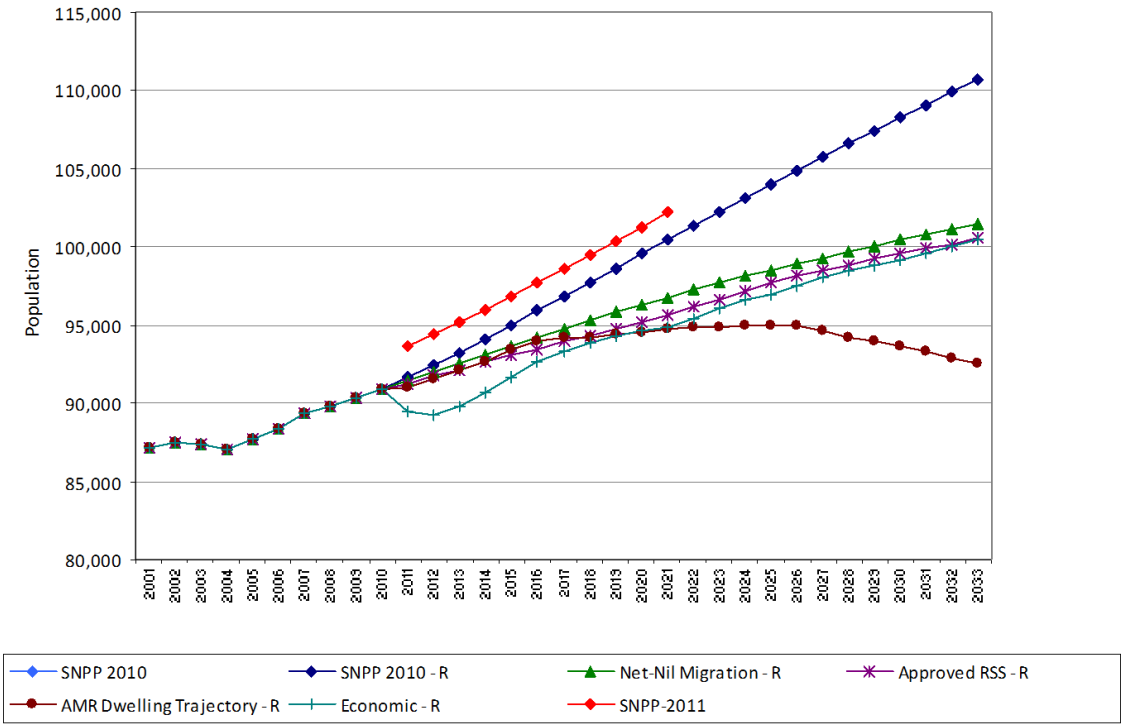
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	6,305	6,130	-3%
5 - 9	5,508	5,593	2%
10 - 14	5,432	5,877	8%
15 - 19	5,579	5,892	6%
20 - 24	5,298	5,590	6%
25 - 29	5,536	5,647	2%
30 - 34	5,930	6,145	4%
35 - 39	6,175	6,241	1%
40 - 44	7,042	7,362	5%
45 - 49	6,890	7,268	5%
50 - 54	5,922	6,175	4%
55 - 59	5,235	5,086	-3%
60 - 64	5,129	5,298	3%
65 - 69	4,371	4,409	1%
70 - 74	3,609	3,693	2%
75 - 79	3,135	3,162	1%
80 +	4,135	4,134	0%
Total	91,230	93,702	3%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 41: Broxbourne - rolled-forward population estimate vs new Mid-year estimate 2011

Broxbourne

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	19,900	21.9%	9,709	26.2%	323	434	374
SNPP 2010 - R	19,900	21.9%	9,888	26.1%	323	442	374
Net-Nil Migration - R	10,599	11.7%	6,483	17.1%	0	290	166
Approved RSS - R	9,688	10.7%	5,838	15.4%	-42	261	135
Economic - R	9,614	10.6%	5,803	15.3%	-37	259	130
AMR Dwelling Trajectory - R	1,699	1.9%	2,742	7.2%	-352	123	-56

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 42: Broxbourne – comparison of 2011-based SNPP with previous scenarios

East Hertfordshire

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for East Hertfordshire suggests a very small negative difference of -0.4%, compared with a positive difference of 1.2% for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly lower than the mid-year population estimates calculated for East Hertfordshire since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are lower than the rolled-forward estimate for most age groups; lowest in 35-39 (-5%). However, the largest is a positive difference of 11% in 20-24 (Figure 43).

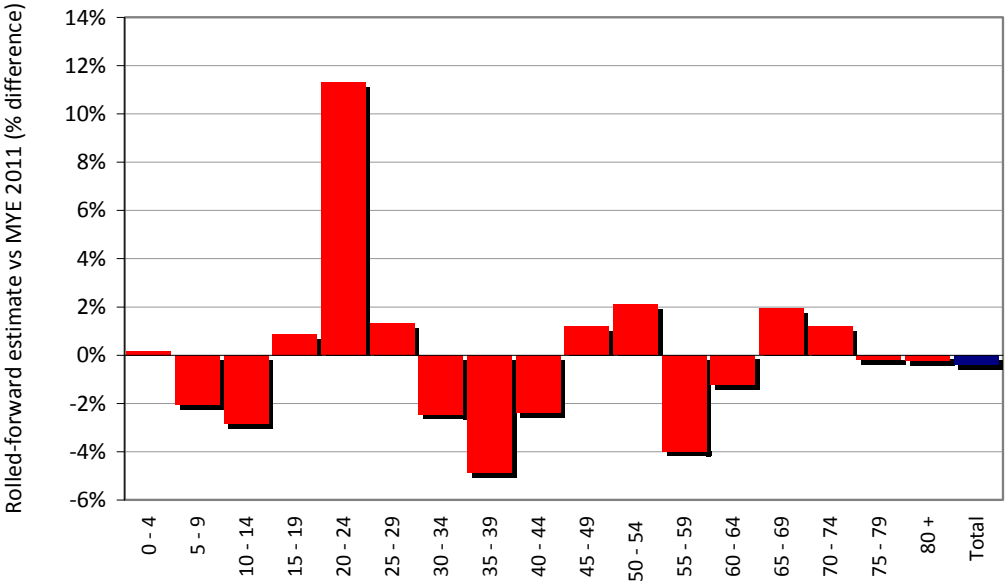
Population growth scenarios compared

c) The 2011-based SNPP for East Hertfordshire is very similar to the 2010-based version, with the 2021 population about 0.3% lower in the 2011-based alternative, reflecting the lower base population (Figure 5).

d) Two of the components of change: natural change and international migration are very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6 & 8). However, there is a significant positive difference in internal migration component between the 2011-based and the 2010-based SNPP (Figure 7).

e) The 2011-based SNPP shows a trajectory of growth very similar to 'SNPP-2010' and 'Economic – R' scenarios; by the end of its projection period (2021) being significantly lower only than 'Approved RSS – R' scenario but higher than 'AMR Dwelling Trajectory – R' scenario (Figure 44).

East Hertfordshire



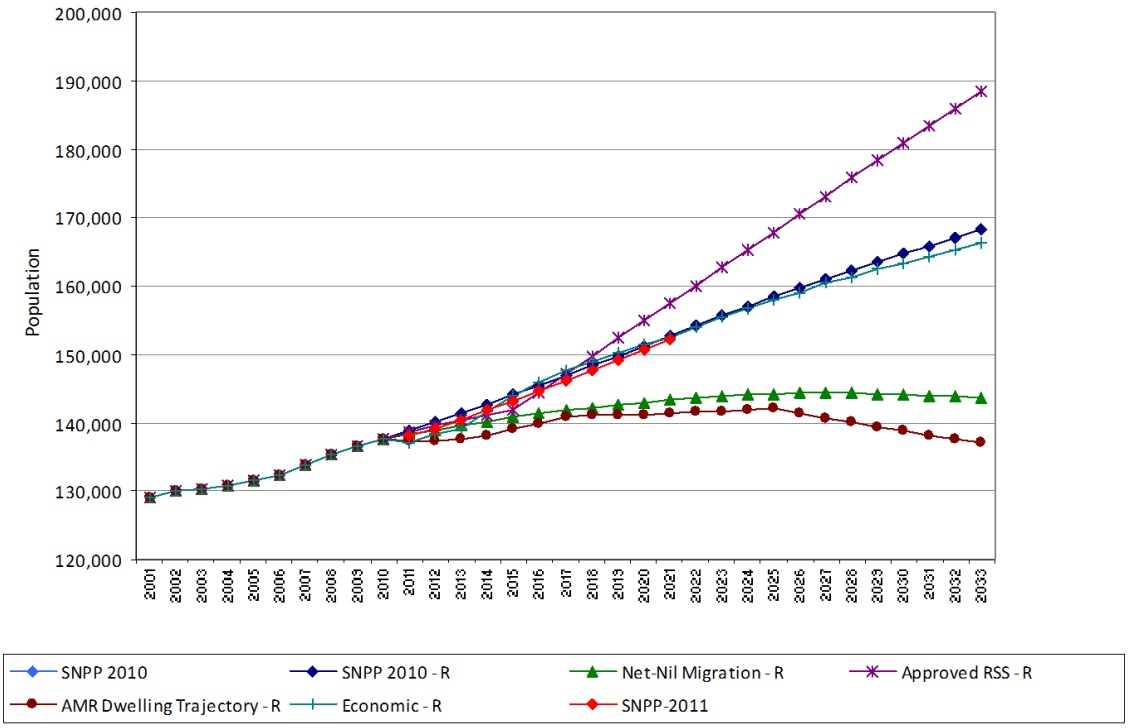
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	8,359	8,373	0%
5 - 9	8,449	8,275	-2%
10 - 14	9,254	8,991	-3%
15 - 19	8,788	8,865	1%
20 - 24	5,783	6,436	11%
25 - 29	7,237	7,332	1%
30 - 34	8,933	8,713	-2%
35 - 39	10,561	10,046	-5%
40 - 44	11,873	11,589	-2%
45 - 49	11,722	11,861	1%
50 - 54	9,648	9,851	2%
55 - 59	8,370	8,036	-4%
60 - 64	8,410	8,305	-1%
65 - 69	6,255	6,376	2%
70 - 74	4,873	4,930	1%
75 - 79	4,265	4,257	0%
80 +	5,933	5,919	0%
Total	138,712	138,155	0%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 43: East Hertfordshire - rolled-forward population estimate vs new Mid-year estimate 2011

East Hertfordshire

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Approved RSS - R	50,618	36.8%	25,822	45.6%	1,568	1,149	881
SNPP 2010 - R	30,472	22.1%	18,052	31.9%	820	803	462
SNPP 2010	30,472	22.1%	18,231	31.9%	820	811	462
Economic - R	28,455	20.7%	17,180	30.3%	741	765	417
Net-Nil Migration - R	5,835	4.2%	9,308	16.4%	0	414	-56
AMR Dwelling Trajectory - R	-703	-0.5%	5,793	10.2%	-321	258	-183

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 44: East Hertfordshire – comparison of 2011-based SNPP with previous scenarios

Welwyn Hatfield

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Welwyn Hatfield suggests a large negative difference of -6.2% compared with a small positive difference (1.2%) for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is considerably lower than the mid-year population estimates calculated for Welwyn Hatfield since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are lower than the rolled-forward estimate for all age groups but one; lowest in 25-29 (-18%), 20-24 (-15%) and 30-34 (-12%) (Figure 45).

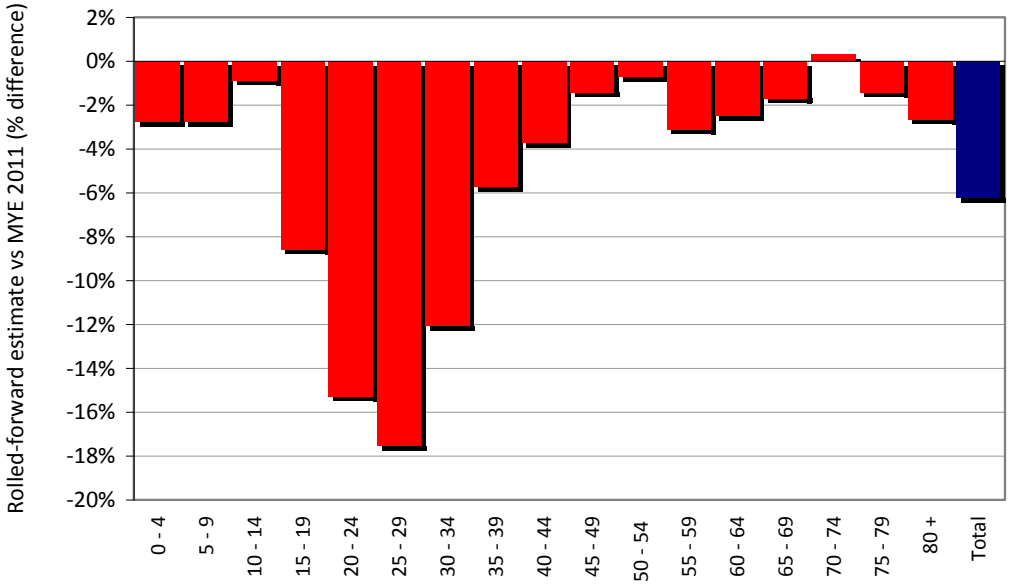
Population growth scenarios compared

c) The 2011-based SNPP for Welwyn Hatfield is relatively similar to the 2010-based version, with the 2021 population about 2.2% lower in the 2011-based alternative, reflecting the lower base population (Figure 5).

d) Two of the components of change: natural change and international migration are very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6 & 8). However, there is a very significant positive difference in internal migration component between the 2011-based and the 2010-based SNPP (Figure 7).

e) The 2011-based SNPP suggests lower population growth relative to the alternative scenarios at the beginning of the projection period but then increases rapidly and by 2021 is the second highest scenario of all; higher than 'Economic – R', 'Approved RSS – R' and 'AMR Dwelling Trajectory – R' scenarios (Figure 46).

Welwyn Hatfield



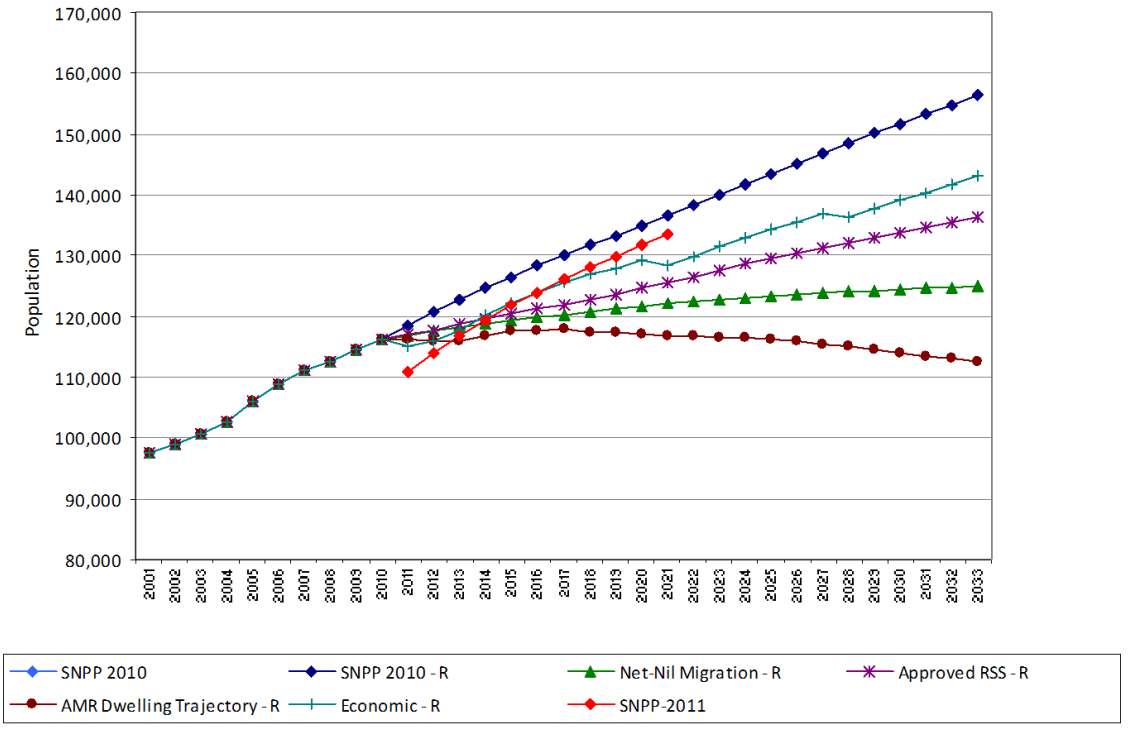
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	6,953	6,760	-3%
5 - 9	6,230	6,057	-3%
10 - 14	6,149	6,095	-1%
15 - 19	8,573	7,837	-9%
20 - 24	13,764	11,660	-15%
25 - 29	9,545	7,871	-18%
30 - 34	8,165	7,181	-12%
35 - 39	7,268	6,851	-6%
40 - 44	7,711	7,424	-4%
45 - 49	7,953	7,841	-1%
50 - 54	7,013	6,963	-1%
55 - 59	5,871	5,688	-3%
60 - 64	5,603	5,463	-2%
65 - 69	4,465	4,389	-2%
70 - 74	3,744	3,755	0%
75 - 79	3,586	3,535	-1%
80 +	5,503	5,357	-3%
Total	118,095	110,727	-6%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 45: Welwyn Hatfield - rolled-forward population estimate vs new Mid-year estimate 2011

Welwyn Hatfield

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	39,947	34.3%	18,984	40.9%	1,050	842	1,379
SNPP 2010 - R	39,947	34.3%	18,233	41.0%	1,050	809	1,379
Economic - R	26,620	22.9%	13,400	30.1%	580	594	943
Approved RSS - R	20,003	17.2%	11,054	24.8%	341	490	733
Net-Nil Migration - R	8,543	7.3%	6,498	14.6%	0	288	230
AMR Dwelling Trajectory - R	-3,727	-3.2%	2,713	6.1%	-552	120	-43

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 46: Welwyn Hatfield – comparison of 2011-based SNPP with previous scenarios

Babergh

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Babergh suggests a difference as large as +2.1%, just above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Babergh since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for majority of the age groups; highest in 20-24 (22%) (Figure 47).

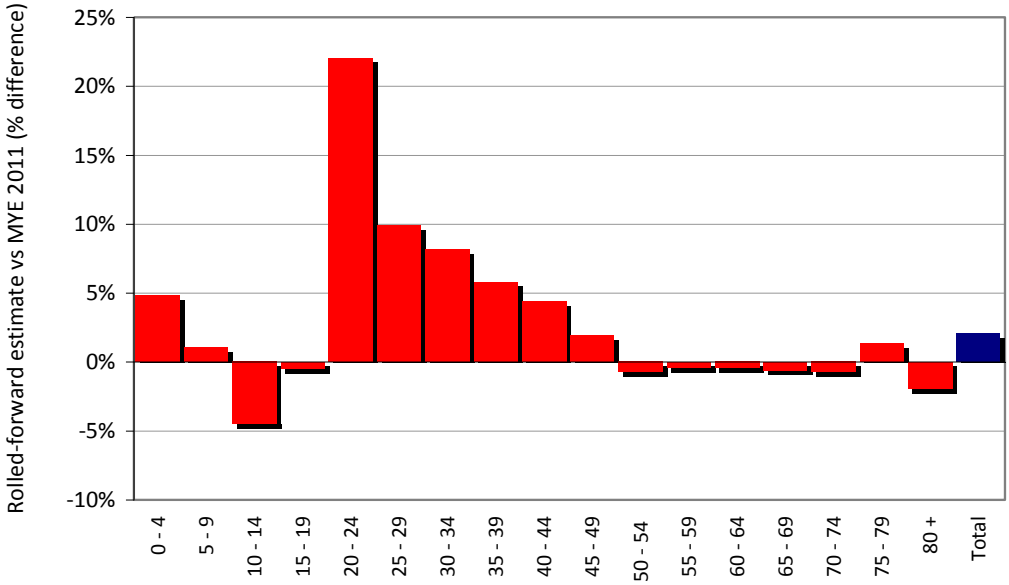
Population growth scenarios compared

c) The 2011-based SNPP for Babergh is similar to the 2010-based version, with the 2021 population about 1.6% higher in the 2011-based alternative, reflecting the higher base population (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP suggests higher population growth relative to the alternative scenarios (including 'Approved RSS – R' and 'AMR Dwelling Trajectory – R'), except for the 'Economic-R' scenario (Figure 48).

Babergh



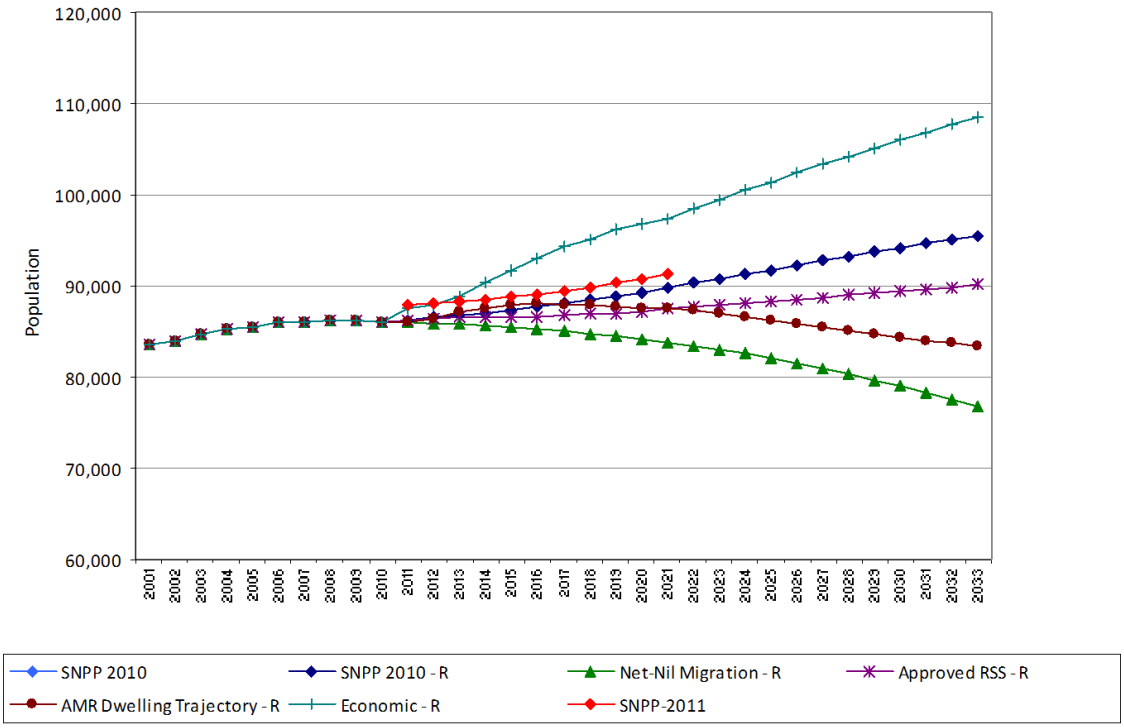
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	4,240	4,444	5%
5 - 9	4,836	4,887	1%
10 - 14	5,698	5,441	-5%
15 - 19	5,265	5,240	0%
20 - 24	3,215	3,924	22%
25 - 29	3,457	3,800	10%
30 - 34	3,785	4,094	8%
35 - 39	4,852	5,134	6%
40 - 44	6,187	6,459	4%
45 - 49	6,636	6,762	2%
50 - 54	6,003	5,959	-1%
55 - 59	5,839	5,815	0%
60 - 64	6,968	6,938	0%
65 - 69	5,901	5,866	-1%
70 - 74	4,350	4,319	-1%
75 - 79	3,487	3,533	1%
80 +	5,390	5,286	-2%
Total	86,109	87,901	2%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 47: Babergh - rolled-forward population estimate vs new Mid-year estimate 2011

Babergh

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	22,310	25.9%	12,804	34.4%	1,155	576	261
SNPP 2010	9,447	11.0%	7,628	20.6%	674	343	35
SNPP 2010 - R	9,447	11.0%	7,670	20.6%	674	345	35
Approved RSS - R	4,021	4.7%	5,507	14.8%	464	248	-63
AMR Dwelling Trajectory - R	-2,749	-3.2%	2,763	7.4%	185	124	-183
Net-Nil Migration - R	-9,371	-10.9%	1,172	3.1%	0	53	-318

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 48: Babergh – comparison of 2011-based SNPP with previous scenarios

Ipswich

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Ipswich suggests a substantial difference of +5.7% compared with a small positive difference (1.2%) for the study area as a whole (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is considerably higher than the mid-year population estimates calculated for Ipswich since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are significantly higher than the rolled-forward estimate for most age groups; highest in 20-24 (12%) and 15-19 (12%) (Figure 49).

Population growth scenarios compared

c) The 2011-based SNPP for Ipswich is considerably different to the 2010-based version, with the 2021 population about 3.1% higher in the 2011-based alternative (Figure 5).

d) The components of change: natural change and international migration are very similar in both scenarios but there is a substantial negative difference in internal migration in the 2011-based SNPP compared to the 2010-based alternative (Figures 6-8).

e) The 2011-based SNPP suggests higher population growth relative to all alternative scenarios (including 'Economic – R' and 'AMR Dwelling Trajectory – R'), except for the 'Approved RSS-R' scenario (Figure 50).

Ipswich

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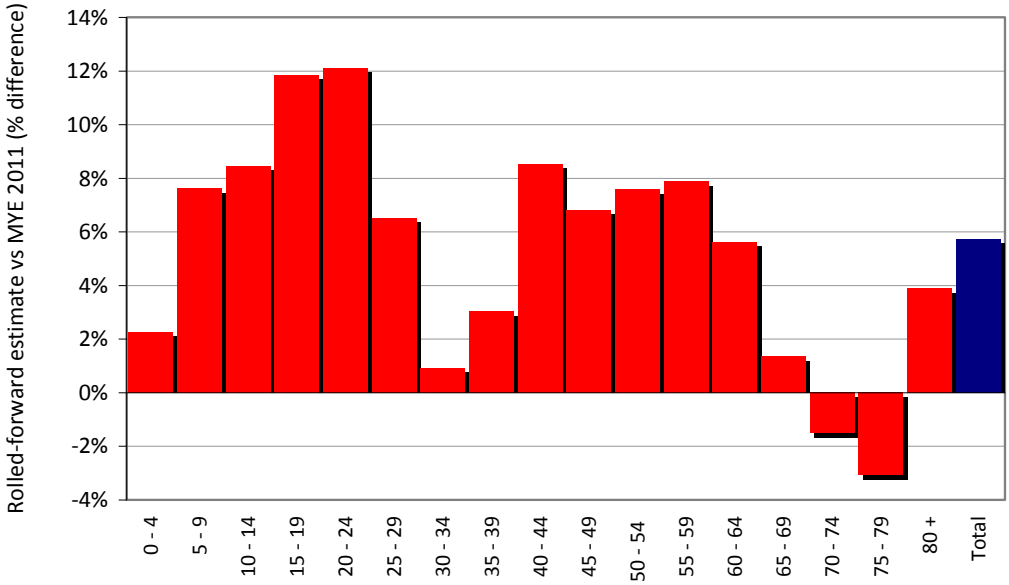


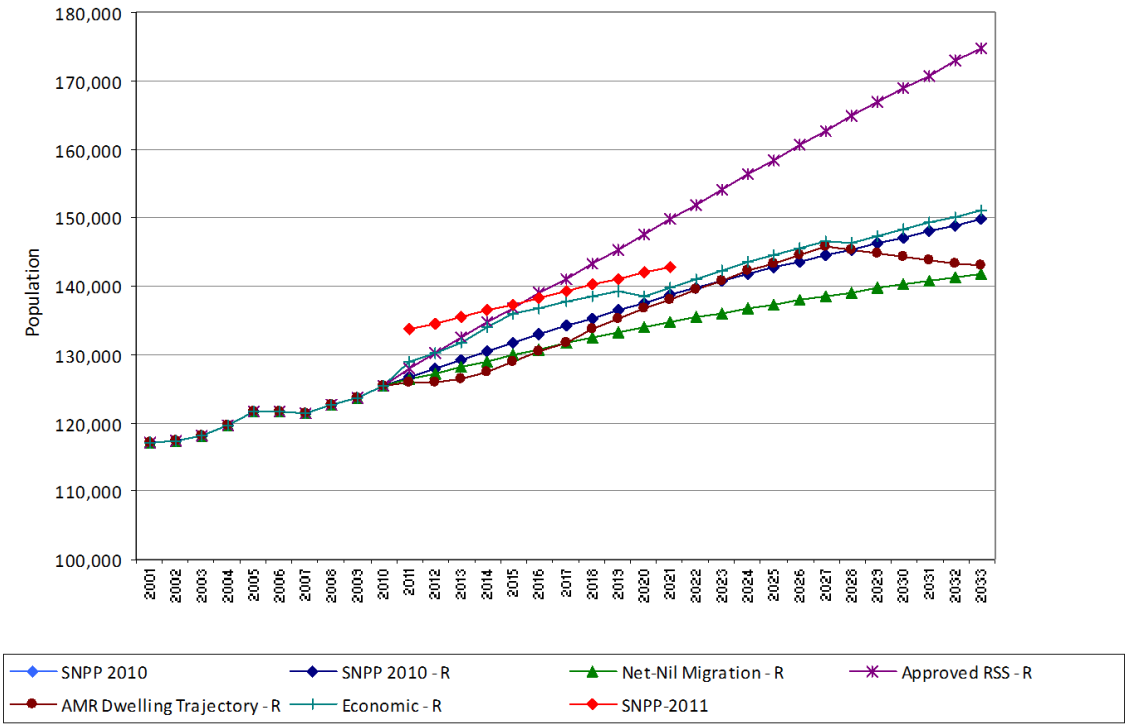
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	9,075	9,280	2%
5 - 9	7,160	7,706	8%
10 - 14	6,932	7,518	8%
15 - 19	7,698	8,611	12%
20 - 24	8,535	9,569	12%
25 - 29	10,215	10,880	7%
30 - 34	9,923	10,014	1%
35 - 39	8,829	9,096	3%
40 - 44	8,734	9,479	9%
45 - 49	8,428	9,002	7%
50 - 54	7,637	8,215	8%
55 - 59	6,724	7,253	8%
60 - 64	6,765	7,146	6%
65 - 69	5,294	5,365	1%
70 - 74	4,401	4,335	-2%
75 - 79	4,005	3,882	-3%
80 +	6,139	6,378	4%
Total	126,495	133,729	6%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 49: Ipswich - rolled-forward population estimate vs new Mid-year estimate 2011

Ipswich

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

	Change 2010 - 2033				Average per year		
Scenario	**Population Change**	**Population Change %**	**Households Change**	**Households Change %**	**Net Migration**	**Dwellings**	**Jobs**
Approved RSS - R	49,311	39.3%	25,302	44.8%	1,039	1,140	1,420
Economic - R	25,527	20.3%	15,256	27.0%	190	687	757
SNPP 2010 - R	24,247	19.3%	14,832	26.3%	163	668	718
SNPP 2010	24,247	19.3%	14,592	26.3%	163	657	718
AMR Dwelling Trajectory - R	17,401	13.9%	11,650	20.7%	-117	525	504
Net-Nil Migration - R	16,329	13.0%	12,046	21.4%	0	543	440

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 50: Ipswich – comparison of 2011-based SNPP with previous scenarios

Mid Suffolk

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Mid Suffolk suggests a marginal difference of +1.6%, just above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is slightly higher than the mid-year population estimates calculated for Mid Suffolk since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for most age groups; highest in 15-19 (8%), 20-24 (7%) and 0-4 (6%) (Figure 51).

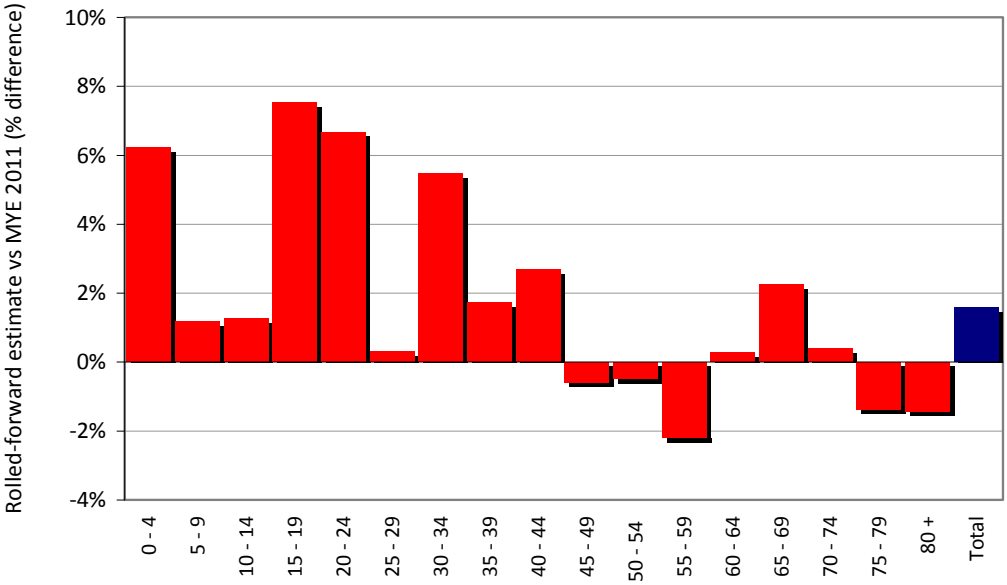
Population growth scenarios compared

c) The 2011-based SNPP for Mid Suffolk is very similar to the 2010-based version, with the 2021 population about 1.1% higher in the 2011-based alternative, reflecting the small difference in base population (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) The 2011-based SNPP suggests higher population growth relative to all alternative scenarios (including 'AMR Dwelling Trajectory – R' and 'Approved RSS – R'), except for the 'Economic-R' scenario (Figure 52).

Mid Suffolk



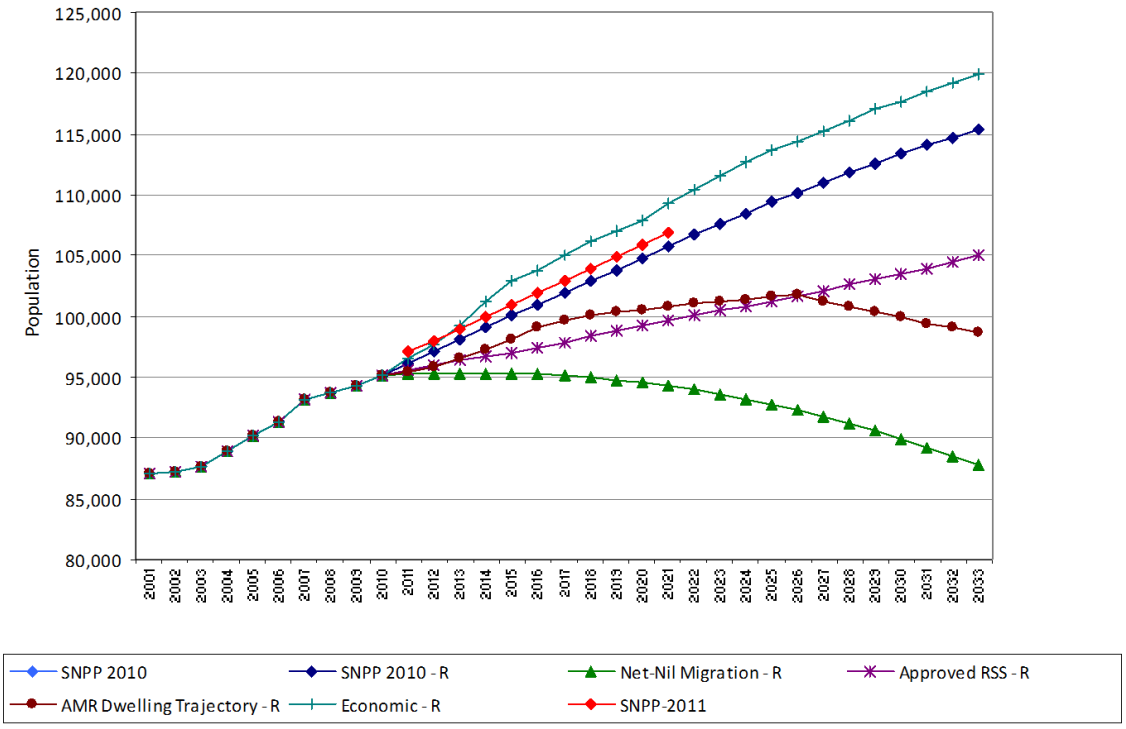
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	4,930	5,237	6%
5 - 9	5,333	5,395	1%
10 - 14	5,815	5,889	1%
15 - 19	5,327	5,728	8%
20 - 24	4,342	4,632	7%
25 - 29	4,580	4,594	0%
30 - 34	4,597	4,849	5%
35 - 39	5,473	5,568	2%
40 - 44	6,933	7,118	3%
45 - 49	7,563	7,518	-1%
50 - 54	6,965	6,931	0%
55 - 59	6,570	6,426	-2%
60 - 64	7,484	7,504	0%
65 - 69	6,054	6,190	2%
70 - 74	4,602	4,620	0%
75 - 79	3,716	3,665	-1%
80 +	5,288	5,212	-1%
Total	95,573	97,076	2%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 51: Mid Suffolk - rolled-forward population estimate vs new Mid-year estimate 2011

Mid Suffolk

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	24,772	26.0%	14,190	35.7%	1,150	641	222
SNPP 2010	20,211	21.2%	12,251	30.5%	983	553	148
SNPP 2010 - R	20,211	21.2%	12,145	30.5%	983	548	148
Approved RSS - R	9,836	10.3%	8,306	20.9%	595	375	-29
AMR Dwelling Trajectory - R	3,542	3.7%	5,799	14.6%	327	262	-141
Net-Nil Migration - R	-7,408	-7.8%	2,879	7.2%	0	130	-336

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 52: Mid Suffolk – comparison of 2011-based SNPP with previous scenarios

Suffolk Coastal

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for Suffolk Coastal suggests a marginal difference of +0.0%, slightly below the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the mid-year population estimation process has estimated growth in Suffolk Coastal since 2001 relatively accurate.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are slightly lower than the rolled-forward estimate for all age groups; highest in 20-24 (8%), 0-4 (7%) and 30-34 (5%) (Figure 53).

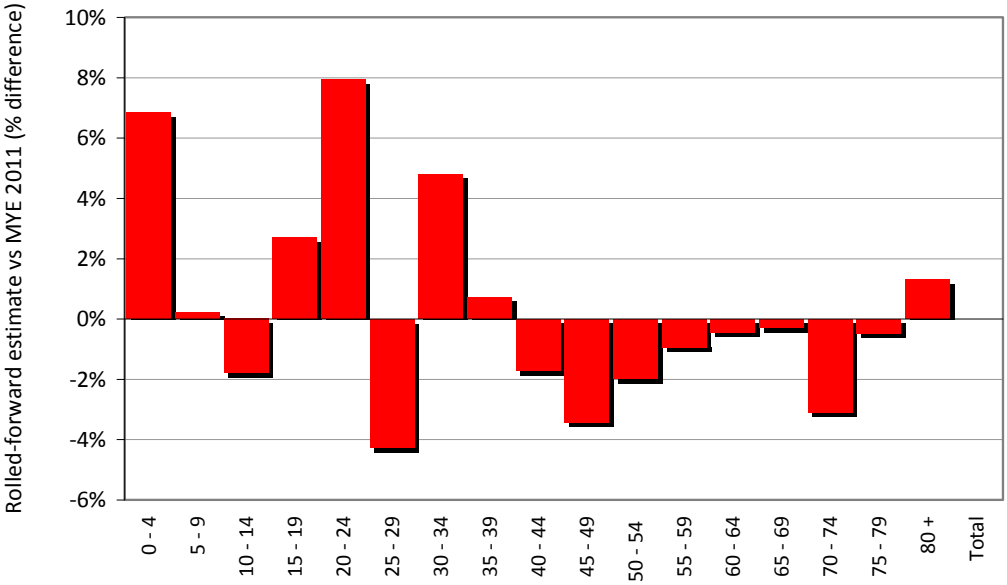
Population growth scenarios compared

c) The 2011-based SNPP for Suffolk Coastal is very similar to the 2010-based version, with the 2021 population about 0.1% lower in the 2011-based alternative, reflecting the small difference in base population (Figure 5).

d) The components of change (natural change, internal migration and international migration) are also very similar in both scenarios, with no major change as a result of the shifts in the base-year age profile (Figures 6-8).

e) Compared with the alternative scenarios run in Phase 3, the 2011-based SNPP shows a very similar trajectory of growth to 'SNPP-2010' scenario; higher than 'AMR Dwelling Trajectory – R' and 'Approved RSS – R' but lower than 'Economic – R' (Figure 54).

Suffolk Coastal



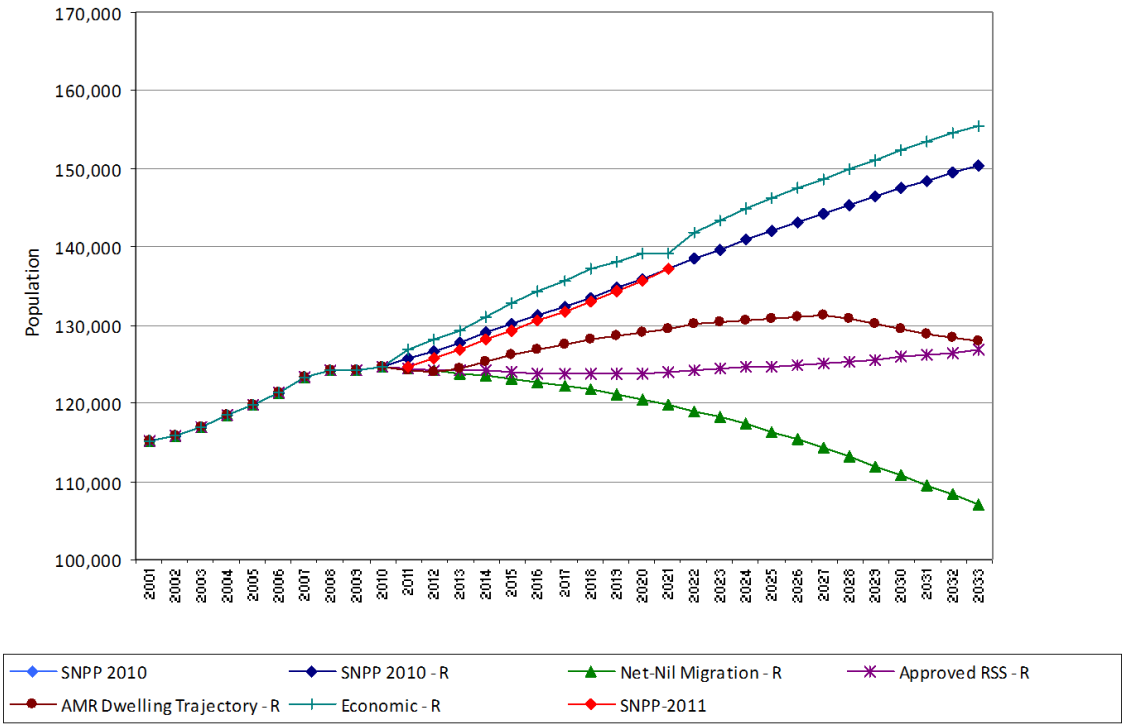
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	5,812	6,210	7%
5 - 9	6,489	6,504	0%
10 - 14	7,650	7,513	-2%
15 - 19	7,298	7,495	3%
20 - 24	4,976	5,370	8%
25 - 29	5,218	4,995	-4%
30 - 34	5,216	5,467	5%
35 - 39	6,708	6,756	1%
40 - 44	8,899	8,746	-2%
45 - 49	9,776	9,441	-3%
50 - 54	9,037	8,858	-2%
55 - 59	8,369	8,290	-1%
60 - 64	9,952	9,907	0%
65 - 69	8,284	8,260	0%
70 - 74	6,707	6,499	-3%
75 - 79	5,648	5,621	0%
80 +	8,546	8,658	1%
Total	124,584	124,590	0%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 53: Suffolk Coastal - rolled-forward population estimate vs new Mid-year estimate 2011

Suffolk Coastal

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	30,923	24.8%	18,538	34.4%	1,736	866	335
SNPP 2010	25,769	20.7%	16,824	30.6%	1,543	786	237
SNPP 2010 - R	25,769	20.7%	16,492	30.6%	1,543	770	237
AMR Dwelling Trajectory - R	3,441	2.8%	7,414	13.8%	654	346	-197
Approved RSS - R	2,284	1.8%	6,931	12.9%	634	324	-207
Net-Nil Migration - R	-17,637	-14.2%	2,215	4.1%	24	103	-670

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 54: Suffolk Coastal – comparison of 2011-based SNPP with previous scenarios

St Edmundsbury

Population estimates compared

a) Comparison of the latest 2011 mid-year population estimate to the rolled-forward mid-year estimate for St Edmundsbury suggests a difference as large as +6.5%, well above the study area average (Figure 4). This suggests that, notwithstanding any error in the 2001 population total, the latest 2011 statistic is considerably higher than the mid-year population estimates calculated for Basildon since 2001 would suggest.

b) An examination of differences in age structure reveals that the 2011 mid-year estimates are higher than the rolled-forward estimate for all age groups; highest in 20-24 (24%) and 25-29 (24%) (Figure 55).

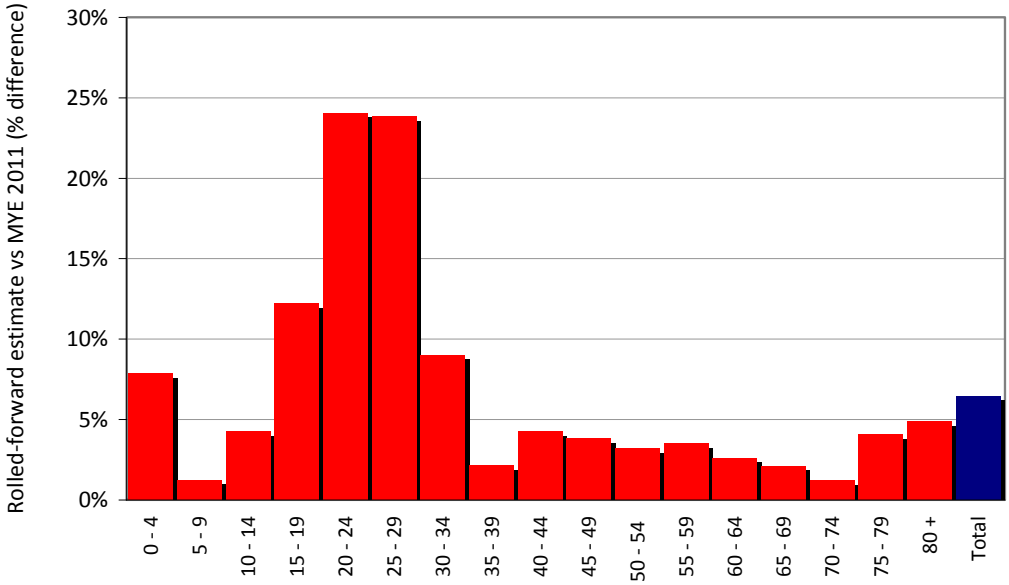
Population growth scenarios compared

c) The 2011-based SNPP for St Edmundsbury is quite different to the 2010-based version, with the 2021 population about 3.6% higher in the 2011-based alternative, reflecting the higher base population (Figure 5).

d) The components of change: natural change and international migration are very similar in both scenarios but there is a significant negative difference in internal migration in the 2011-based SNPP compared to the 2010-based alternative (Figures 6-8).

e) The 2011-based SNPP suggests considerably higher population growth relative to the alternative scenarios (including 'AMR Dwelling Trajectory – R' and 'Approved RSS – R'), except for the 'Economic-R' scenario that exceeds the 2011-based SNPP in 2016 (Figure 56).

St Edmundsbury



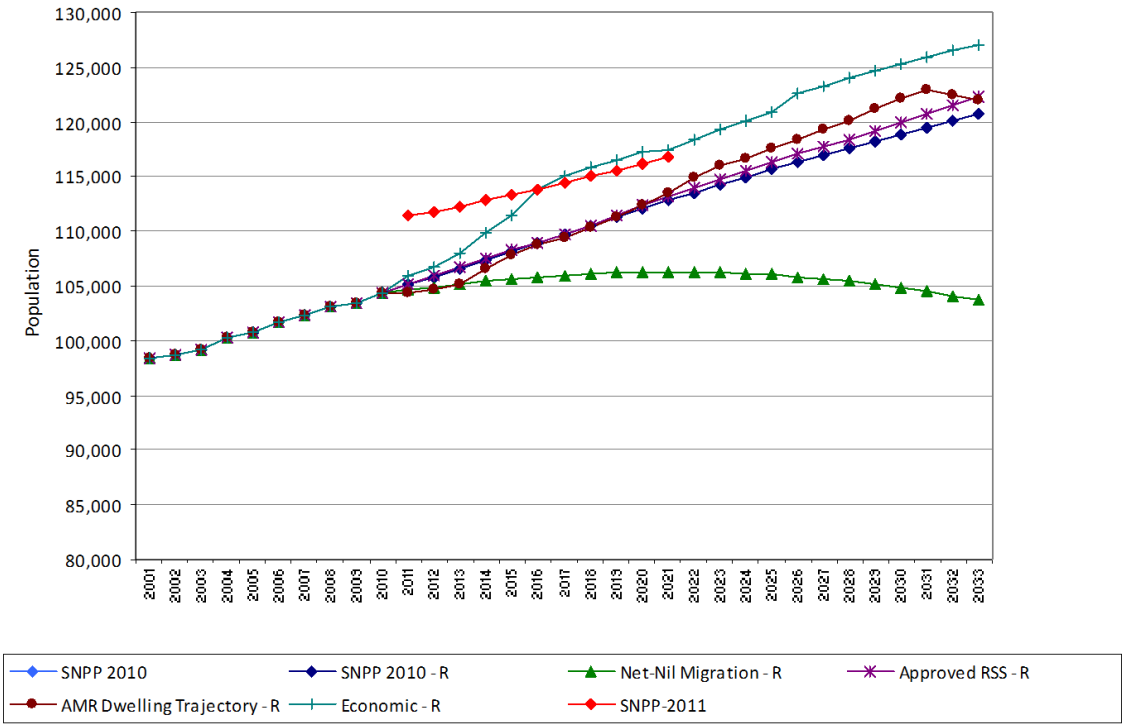
	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	6,204	6,693	8%
5 - 9	6,006	6,080	1%
10 - 14	6,009	6,264	4%
15 - 19	5,852	6,566	12%
20 - 24	5,225	6,481	24%
25 - 29	5,874	7,274	24%
30 - 34	6,070	6,616	9%
35 - 39	6,755	6,901	2%
40 - 44	7,897	8,231	4%
45 - 49	8,000	8,305	4%
50 - 54	6,710	6,924	3%
55 - 59	6,182	6,400	4%
60 - 64	7,311	7,502	3%
65 - 69	6,223	6,353	2%
70 - 74	4,964	5,023	1%
75 - 79	3,728	3,879	4%
80 +	5,675	5,951	5%
Total	104,685	111,443	6%

Source: ONS. The rolled-forward data are special Census Day estimates. They are based on the mid-2010 indicative population estimates, plus the net effect of births, deaths and migration in-between mid-2010 and Census Day. The mid-year 2011 statistics are the estimated resident population; based on the results of the 2011 Census.

Figure 55: St Edmundsbury - rolled-forward population estimate vs new Mid-year estimate 2011

St Edmundsbury

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	22,721	21.8%	13,875	31.0%	797	626	287
Approved RSS - R	17,974	17.2%	11,960	26.7%	645	540	170
AMR Dwelling Trajectory - R	17,706	17.0%	11,834	26.4%	621	534	155
SNPP 2010	16,344	15.7%	11,001	24.7%	579	497	134
SNPP 2010 - R	16,344	15.7%	11,078	24.7%	579	500	134
Net-Nil Migration - R	-626	-0.6%	5,204	11.6%	0	235	-306

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 56: St Edmundsbury – comparison of 2011-based SNPP with previous scenarios

6. London influence

London's demographic influence

6.1 This section provides EPOA members with additional intelligence on the importance of migration from Greater London, both from an historical perspective and in terms of its influence as a component of change in population forecasts.

6.2 Greater London plays a significant role in shaping the demographic dynamics of the Greater Essex local authorities (Figure 57). The collection of Boroughs to the north east of the city exerts a particular influence, providing a source of new migrants to drive population growth outside the Greater London boundary.

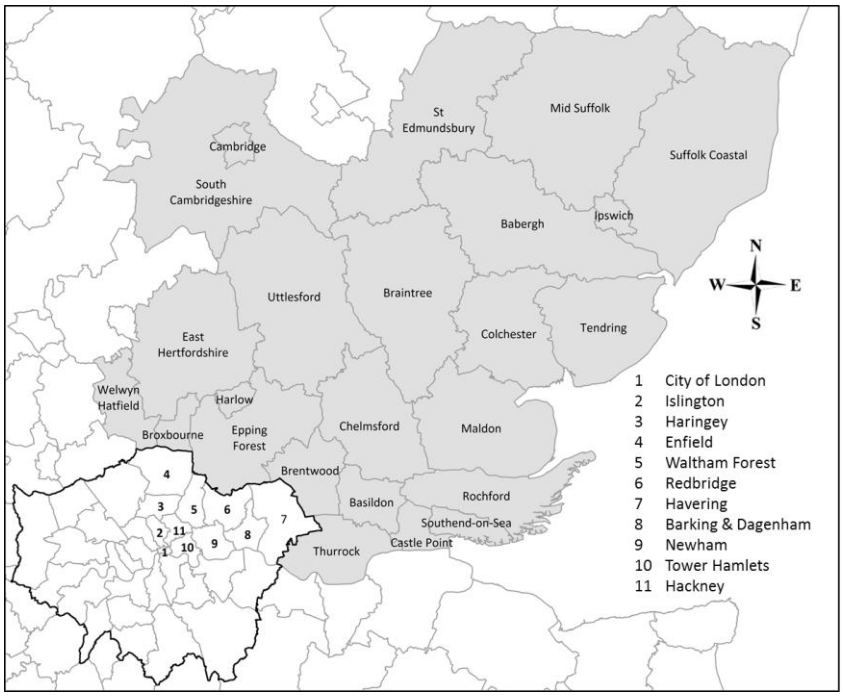


Figure 57: EPOA study area & NE London Boroughs definition

6.3 These historical migration flows are important to the forecasts of future population growth in the Greater Essex local authorities. The pattern and level of migration observed over a prior five-year period will typically provide the internal migration assumptions which drive the ONS trend projections for individual local authorities. Furthermore, higher population growth forecasts for London Boroughs will invariably mean a higher propensity for in-migration to those Greater Essex local authorities which have historically had significant

links through internal migration.

6.4 Whilst much of EPOA's demographic evidence is derived from ONS sources, the Greater London Authority (GLA) provides its own population forecasts; regularly updated and encapsulating both historical evidence and capacity constraints implied by proposed housing developments. The latest GLA forecasts can be compared and contrasted to the ONS 2010-based projections to indicate the potential level of sensitivity associated with migration flows from the north east London Boroughs into the Greater Essex local authorities.

Internal Migration – historical patterns

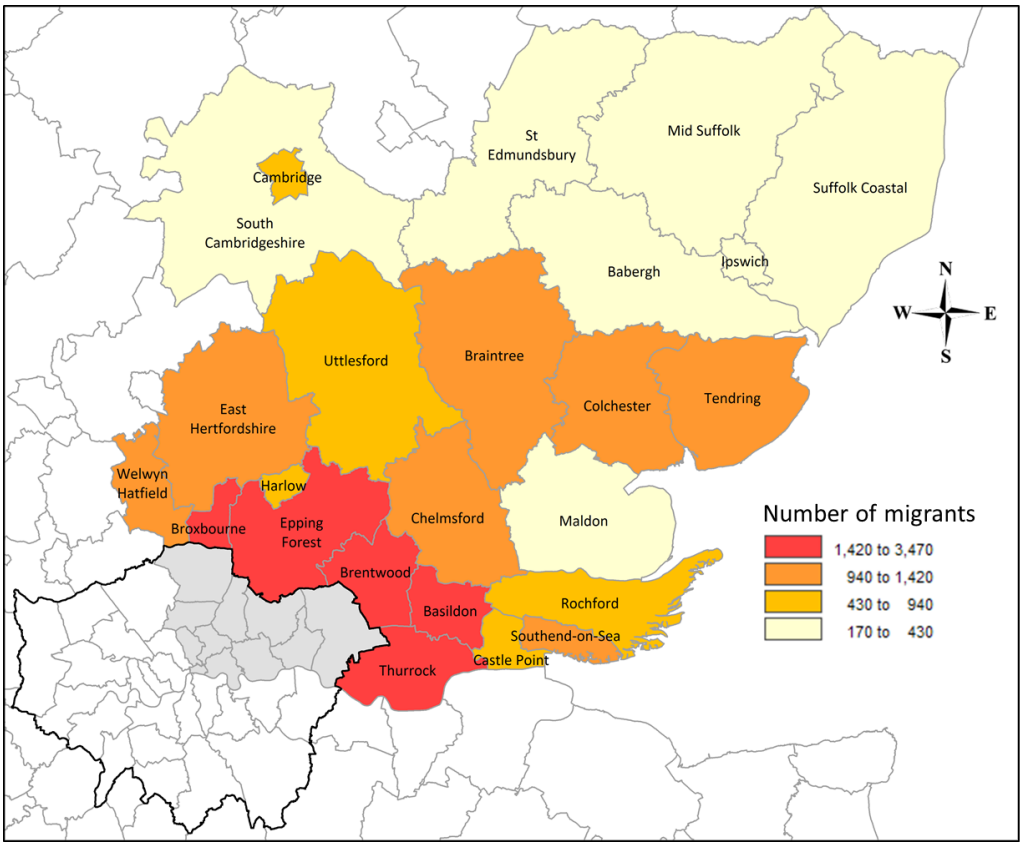
6.5 The demographic measurement of internal migration relies upon statistics captured by the process of GP registration; the Patient Register Data Service (PRDS). When an individual relocates, re-registration with a new GP results in a migration event being recorded, identifying where a person has moved from and to. Each household member that re-registers will be captured as an individual migrant.

6.6 PRDS statistics provide the basis for estimating the annual impact of internal migration in ONS mid-year population estimates. This historical evidence subsequently provides the basis for the derivation of internal migration assumptions in the ONS sub-national trend projections.

6.7 The latest PRDS data provides migration statistics to mid-year 2010. The analysis presented here examines the five-years of migration history prior to 2010, illustrating change over time and its average annual impact upon the Greater Essex local authorities.

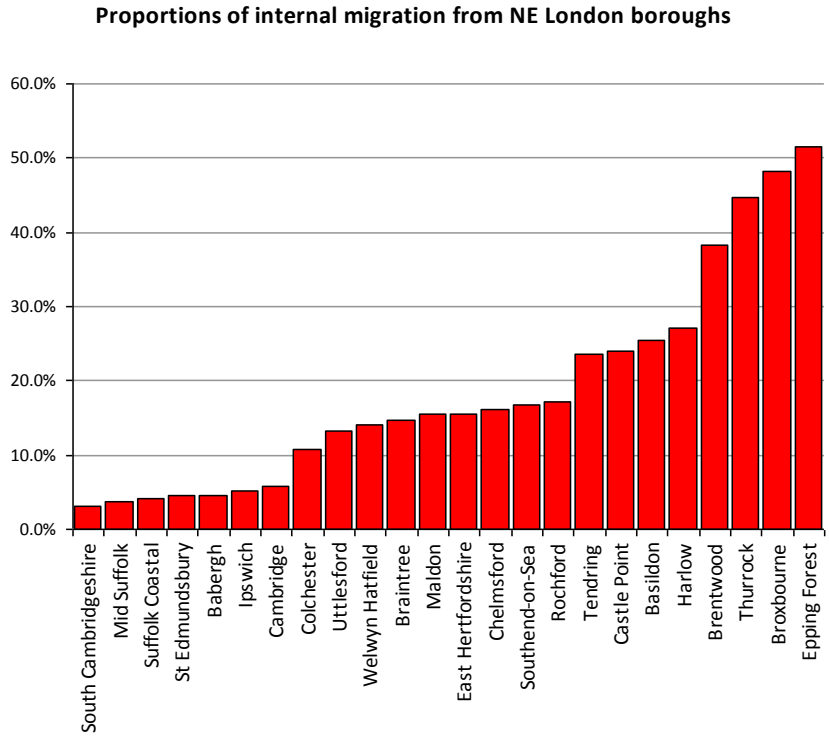
6.8 The migration relationship between the north east London Boroughs and the Greater Essex local authorities is most significant for those areas that are immediately contiguous with the Greater London boundary. Thurrock, Basildon, Brentwood, Epping Forest and Broxbourne all received in excess of 1,400 new migrants per year from north east London during 2006-2010 (Figure 58). The level of migrant inflow generally reduces as distance from London increases.

6.9 The movement of migrants to and from the Greater Essex local authorities is a complex mix of inflows and outflows but it is the relative importance of the north east London Boroughs that is of particular interest. During 2006-10, over 51% of Epping Forest's migrant inflow originated from north east London; over 45% in the case of Broxbourne and Thurrock, 38% for Brentwood and approximately 25% in Basildon, Castle Point, Harlow and Tendring.



Source: PRDS (average flows 2006-2010)

Figure 58: Migration from NE London Boroughs to Greater Essex local authorities



Source: PRDS (average flows 2006-2010)

Figure 59: Internal Migration proportions

6.10 Whilst the directional pattern of migration from north east London has continued since the onset of the current recession, the level of flow has reduced significantly. Since the high-point in 2007, the outflow of migrants from north east London to the Greater Essex local authorities has reduced by approximately 20% (Figure 60)

Source: PRDS (2006-2010)

Figure 60: Migration from NE London Boroughs to EPOA study areas

Internal Migration – growth forecasts

6.11 Previous phases of the EPOA study have focused on the 'components' of demographic change, illustrating how natural change (the difference between births and deaths), internal migration and international migration have each contributed to both estimated population growth since 2001 and forecasts of long-term growth. The 2010-based sub-national population projections for the Greater Essex local authorities suggest an average annual net impact of +12,500 due to internal migration to 2020, accounting for just over 45% of the anticipated growth in population (Figure 60).

Average Annual Growth 2010/11 - 2020/21

Area	Natural Change	Net Internal Migration	Net International Migration	Total	Internal Migration %
Basildon	958	196	145	1,299	15.1
Braintree	497	1,018	6	1,520	66.9
Brentwood	139	459	93	691	66.5
Castle Point	-99	613	-35	479	127.9
Chelmsford	679	459	94	1,231	37.2
Colchester	1,028	494	1,141	2,663	18.6
Epping Forest	416	809	34	1,258	64.3
Harlow	702	-222	265	745	-29.8
Maldon	-62	480	27	446	107.6
Rochford	79	602	-46	635	94.7
Tendring	-573	1,959	56	1,442	135.8
Uttlesford	233	795	151	1,179	67.4
Southend-on-Sea	683	805	47	1,536	52.4
Thurrock	1,375	144	607	2,125	6.8
Cambridge	498	-953	139	-317	301.1
South Cambridgeshire	733	867	427	2,027	42.8
Broxbourne	578	365	-69	874	41.7
East Hertfordshire	603	630	136	1,369	46.0
Welwyn Hatfield	690	-196	1,338	1,832	-10.7
Babergh	-155	535	-43	337	158.8
Ipswich	942	-259	510	1,192	-21.7
Mid Suffolk	21	951	-11	962	98.9
Suffolk Coastal	-275	1,347	76	1,147	117.4
St Edmundsbury	254	608	-93	769	79.2
All Areas	9,947	12,504	4,992	27,442	45.6

Source: ONS, 2010-based SNPP

Figure 61: Components of population change, 2010/11 – 2020/21

6.12 This 45% average for net internal migration varies substantially between local authorities. In certain areas internal migration is expected to exert a negative impact upon growth over the next ten years (Cambridge, Welwyn Hatfield, Harlow and Ipswich). In other areas, the annual net impact is anticipated to be in excess of +1,000 per year (Braintree, Suffolk Coastal and Tendring).

6.13 For those local authorities which have had an historically strong migration association with the north east London Boroughs, the relative importance of the internal migration component of change in the ONS forecast is important when considering likely future population growth.

Epping Forest has had the strongest migration link with the north east Boroughs and 64% of its population growth to 2020 is expected to originate from net internal migration. In Brentwood, Castle Point, Tendring and Broxbourne, each demonstrated to have important

migration links with north east London, internal migration is expected to be the dominant driver of population growth to 2020.

In contrast, despite significant migration inflows from north east London over the last five years, the 'net' effect of internal migration is expected to be small or negative in Basildon, Harlow and Thurrock. Natural change and net international migration are expected to be more significant components of change in these areas.

GLA – population forecasts

6.14 Whilst ONS publishes its official sub-national projections for local authority areas, the GLA routinely produces its own population forecasts for London Boroughs. These forecasts incorporate the latest available demographic statistics and the key assumptions on fertility, mortality and international migration from the ONS 2010-based alternatives, but they are also 'constrained' to expected future housing development in each of the London Boroughs.

http://data.london.gov.uk/datastore/package/gla-population-projections-2011-round-shlaa-borough-sya

These GLA forecasts provide an additional source of evidence to EPOA planners, particularly in those authorities where internal migration from London Boroughs has been demonstrated to be an important driver of demographic change.

6.15 The latest GLA forecasts have been produced with a 'derived' 2011 base population estimate. The GLA has not used published mid-year population estimates to constrain its historical population estimates; choosing to 'derive' estimated mid-year population totals based on its own evidence of household development in each London Borough. For this reason, there are significant differences in the 2010 populations recorded in the ONS and GLA forecasts. Furthermore, the forecasts do not yet incorporate the latest evidence from the 2011 Census.

Updated GLA forecasts, with base year populations consistent with the 2011 Census, are due for publication early in 2013.

6.16 For the collection of north east London Boroughs, the GLA population forecast is 4.1% lower in 2021 than the 2010-based ONS alternative (Figure 62). The uncertainty over the speed and scale of new housing development across London means that the GLA growth forecasts have a tendency to decelerate in later years, compared to the ONS projection which

continues the 'trend' throughout the projection period.

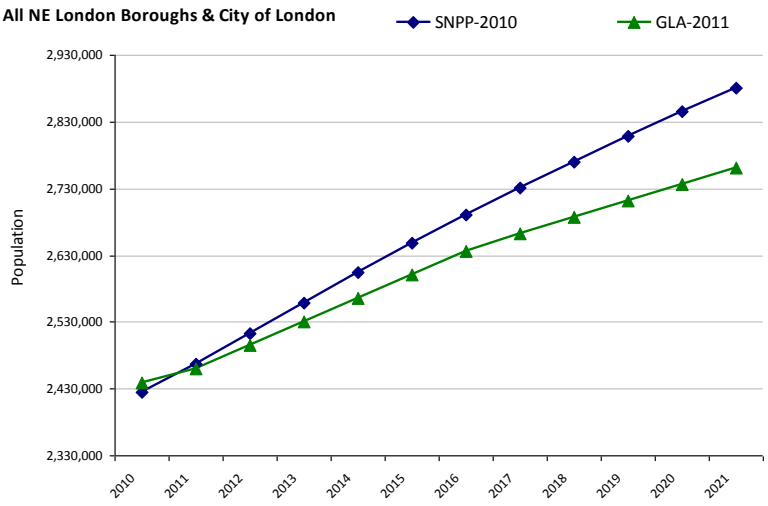


Figure 62: Comparison of 2010-based SNPP with 2011-based GLA forecasts

6.17 For the ten Boroughs in north east London (excluding the City of London for which numbers are small) there are a number of contrasts between the GLA forecasts and the ONS alternative (Figure 63). Newham, Hackney and Waltham Forest stand out as having existing GLA population estimates that are significantly higher than ONS mid-year figures. This is primarily due to the uncertainty associated with the estimation of international migration, particularly problematic in the high density Boroughs of London.

6.18 Despite the base population differences, the GLA growth forecast parallels that suggested by the ONS projection in five of the Boroughs: Barking & Dagenham, Havering, Islington, Newham and Tower Hamlets. In the remaining five Boroughs the GLA growth forecast tends to tail-off relative to the trend projection suggested by ONS: Enfield, Hackney, Haringey, Redbridge and Waltham Forest.

Comments

6.19 The ONS population projection methodology is a multi-regional approach, linking individual districts based upon their migration connection. Growth that is forecast for London Boroughs will fuel higher in-migration to those Greater Essex areas which have historically been linked through migration. Interpretation of the ONS trend projections should therefore give due consideration to the potential sensitivity of trend projections to variations in internal migration from London Boroughs.

6.20 GLA forecasts are published on an annual cycle and provide an alternative perspective to the

ONS trend projections for London Boroughs, constraining population growth to expected housing growth, in a similar way to the dwelling-led forecasts produced for the EPOA study. The GLA is to produce an update of its Borough forecasts early in 2013, taking full account of the 2011 Census and integrating the latest evidence on likely housing development. This new evidence should be considered alongside evidence for Greater Essex local authorities which updates trend and policy forecasts during Spring 2013.

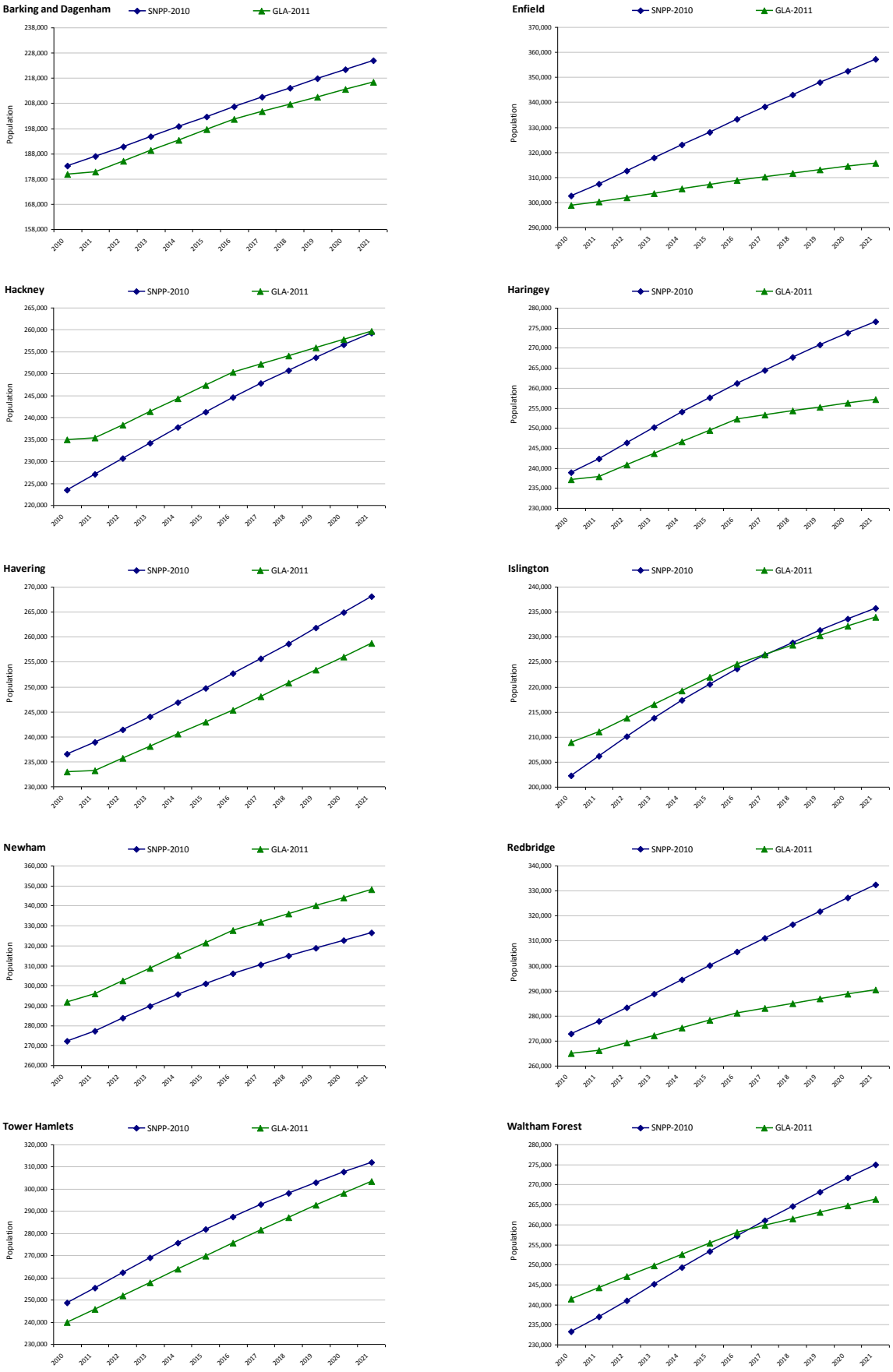


Figure 63: Comparison of 2010-based SNPP with 2011-based GLA forecasts - selected London Boroughs

7. Conclusion

Phase 4 conclusions

7.1 The 2011 Census has resulted in some significant adjustments to the populations of a small number of the Greater Essex authorities. These adjustments have been due to a mixture of: (i) enumeration issues in the 2001 Census; (ii) the robustness of the estimation methodologies applied to the calculation of mid-year population statistics since 2001.

7.2
- The 2011 population now provides a definitive statistic from which to base future forecasting analysis; both an improved age-structure and a new basis for household estimation.
- The latest, 2011-based projections from ONS provide only an 'interim' perspective on likely population growth.
- The release of a revised historical data series of 2001-2010 mid-year estimates will provide a more robust basis for the determination of both population and household forecasts which run from the 2011 base period.

7.3 The UK's economic position remains uncertain, the timing, speed and scale of recovery yet to be determined. At the same time, the longer-term impact of demographic change remains unclear. Significant ageing of local populations is inevitable with implications for a wide variety of public services. What is less clear is the degree to which migration, both internal and international, will influence growth in local communities.

7.4 Whilst student moves will continue to be a dominant feature of internal migration, stagnation in the rate of new housing development and little improvement in affordability have reduced levels of mobility. There is little sign of a quick turnaround in either of these issues. It would appear that average occupancy rates are likely to continue to rise until economic conditions enable the housing market to begin to recover some of its previous vitality.

7.5 The future impact of international migration also remains highly uncertain. Net immigration is a demographic phenomenon that is here to stay, but the future level of this net inflow could have a significant influence on local population growth in those areas where immigration has been a dominant driver of population change since 2001. ONS long-term assumptions suggest +250k as the likely net annual impact of international migration across

the UK, whilst the government seeks to achieve a +100k target through tighter immigration controls, where possible.

7.6 For the Greater Essex local authorities, the internal and international migration assumptions for growth are the most sensitive. For internal migration, the proximity to Greater London is a key relationship, with growth rates in the north east London Boroughs, in particular, having an important influence upon subsequent migration to adjacent Greater Essex localities.

EPOA project review

7.7 During the course of the four phases of this EPOA-sponsored project, a range of demographic forecasts representing a variety of scenarios have been presented, together with other relevant demographic material, including results of the 2011 Census. The project has been completed at a time of unprecedented economic uncertainty and during a period of significant variation in the drivers of demographic change and in the statistics used to measure population growth.

7.8 Throughout the four phases of the project, EPOA's objective has been, not to produce a recommended or preferred demographic forecast for any area, but to encourage examination of the demography of each area from different perspectives. To enable an appreciation of how the demography of an authority may be influenced by local circumstances and local policy choices and to allow each local planning authority to determine its use of the forecasts and other outputs from this project to inform its future spatial policy development.

7.9 At each phase of the project a range of trend and policy scenarios have been presented, examining ONS sub-national population projections against dwelling-led and jobs-led alternatives. The integration of RSS and AMR information, plus regional economic forecasts, has provided the evidence against which to contrast policy alternatives against trend expectations. During each phase the imperative has been to present evidence for each local authority in a consistent and coherent manner using robust and appropriate methodologies.

7.10 Phase 4 has concluded the EPOA analysis with an examination of the latest evidence from the 2011 Census and a summary investigation of the Greater London effect and its potential impact upon Greater Essex authorities. During 2013, new demographic statistics will continue to be published, providing an ongoing source of evidence against which EPOA members might consider their spatial planning options.

Recommendations

7.11 Whilst this phase 4 report concludes the analysis originally commissioned by EPOA, it is recommended that the group continues to produce consistent and detailed evidence on local demographic statistics; as new data becomes available and as spatial planning perspectives evolve. In the absence of a population register, local authorities will continue to rely on mid-year population estimates to update the 2011 Census statistics and as the basis for analysis and forecast development.

7.12 During 2013, the following new evidence will emerge to add to the existing evidence base:

- Updated household projections
- Further census data releases
- Revised 2001-2010 mid-year population estimates
- Updated GLA forecasts for London Boroughs
- Housing growth alternatives from local authorities
- Economic forecasts of growth in local labour markets
- Statistics on internal migration flows between local authorities
- Statistics on international migration data – from ONS and administrative sources

It is recommended that EPOA considers each of these sources as new evidence is released.

7.13 During each of the four phases of project development, a range of growth scenarios have been presented, for population, households, housing, labour force and jobs. It is recommended that EPOA continues to consider a variety of trend and policy scenarios as economic conditions evolve, as new demographic evidence emerges and as the policy and planning initiatives of each participating local authority develop.

Appendix 1: Glossary

AMR	Annual Monitoring Reports
ASFR	Age Specific Fertility Rate
ASMR	Age Specific Mortality (Migration) Rate
CLG	Communities and Local Government
Commuting ratio	Ratio between the resident labour force and number of jobs
Dwelling	A domestic property, either occupied or vacant
EEDA	East of England Development Agency
EEFM	East of England Forecasting Model
EELGA	East of England Local Government Association
EERA	East of England Regional Assembly
Emigration	Migration overseas from the UK
EPOA	Essex Planning Officers Association
GVA	Gross Value Added
Household	A person or a group of people living in the same residence
Immigration	Migration to the UK from overseas
Internal Migration	Migration within the UK
International Migration	Migration that crosses the UK border
Labour Force	Economically active population aged 16+ (employed or unemployed)
LGA	Local Government Association
MYE	Mid-year estimate (population)
Natural change	Difference between the level of births and deaths
Net migration	Difference between the level in-migration and out-migration
ONS	Office for National Statistics
POPGROUP	Demographic forecasting software (Local Government Association)
RES	Regional Economic Strategy
RSS	Regional Spatial Strategy
SMR	Standardised Mortality Ratio
SNPP	Sub-national Population Projection
TFR	Total Fertility Rate
Unemployment rate	Number of people out of work as a percentage of the labour force

Appendix 2: 2011 Census populations

Area	2011 Census population
Basildon	174,497
Braintree	147,084
Brentwood	73,601
Castle Point	88,011
Chelmsford	168,310
Colchester	173,074
Epping Forest	124,659
Harlow	81,944
Maldon	61,629
Rochford	83,287
Tendring	138,048
Uttlesford	79,443
Southend-on-Sea	173,658
Thurrock	157,705
Cambridge	123,867
South Cambridgeshire	148,755
Broxbourne	93,609
East Hertfordshire	137,687
Welwyn Hatfield	110,535
Babergh	87,740
Ipswich	133,384
Mid Suffolk	96,731
Suffolk Coastal	124,298
St Edmundsbury	111,008
Total	2,892,564

Macro Area	2011 Census population
Essex CC	1,393,587
Greater Essex	1,724,950
Essex Thames Gateway	677,158
Heart of Essex	303,540
Essex Haven Gateway	519,835
Suffolk Haven Gateway	442,153
Haven Gateway	961,988
West Essex	286,046
Hertfordshire (East)	231,296
Stansted/M11 Corridor	517,342
Harlow Joint Working Area	344,290

Source: ONS

Note that caution needs to be maintained when comparing data presented in Appendix 2 with 'rolled-forward' estimates and mid-year population estimates as the 2011 Census numbers refer to population counts as they were on 27th March 2011 (Census day).

Appendix 3: 2011-based SNPP data

2011-based SNPP

Area	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2011-21 Difference	2011-21 % Difference
Basildon	174,971	176,099	177,331	178,611	179,891	181,203	182,512	183,827	185,166	186,525	187,879	12,908	7.4%
Braintree	147,514	148,929	150,391	151,910	153,463	155,006	156,556	158,108	159,673	161,239	162,805	15,291	10.4%
Brentwood	73,841	74,420	75,029	75,702	76,404	77,122	77,844	78,592	79,380	80,171	80,979	7,138	9.7%
Castle Point	87,964	88,519	89,092	89,715	90,344	90,970	91,611	92,257	92,922	93,595	94,288	6,324	7.2%
Chelmsford	168,491	169,471	170,546	171,700	172,921	174,149	175,403	176,672	177,960	179,255	180,563	12,072	7.2%
Colchester	173,614	176,610	179,518	182,352	185,123	187,820	190,427	192,981	195,474	197,917	200,324	26,710	15.4%
Epping Forest	124,880	126,077	127,377	128,755	130,181	131,631	133,096	134,591	136,128	137,695	139,274	14,394	11.5%
Harlow	82,177	82,897	83,642	84,407	85,171	85,942	86,704	87,458	88,212	88,969	89,720	7,543	9.2%
Maldon	61,720	62,195	62,696	63,227	63,744	64,263	64,790	65,313	65,857	66,406	66,971	5,251	8.5%
Rochford	83,333	84,063	84,801	85,548	86,295	87,032	87,760	88,518	89,270	90,046	90,840	7,507	9.0%
Tendring	138,062	139,806	141,599	143,421	145,272	147,141	149,018	150,915	152,846	154,808	156,797	18,735	13.6%
Uttlesford	80,032	81,083	82,199	83,336	84,512	85,680	86,841	88,012	89,199	90,386	91,569	11,537	14.4%
Southend-on-Sea	174,274	175,284	176,379	177,533	178,710	179,926	181,158	182,413	183,711	185,037	186,399	12,125	7.0%
Thurrock	158,268	160,444	162,685	164,962	167,239	169,523	171,808	174,073	176,337	178,599	180,844	22,576	14.3%
Cambridge	122,725	122,389	122,439	122,461	122,322	122,050	121,756	121,522	121,300	121,078	120,882	-1,843	-1.5%
South Cambridgeshire	149,842	152,222	154,603	156,932	159,234	161,496	163,680	165,820	167,923	169,962	171,941	22,099	14.7%
Broxbourne	93,702	94,401	95,172	96,001	96,857	97,711	98,578	99,462	100,354	101,267	102,184	8,482	9.1%
East Hertfordshire	138,155	139,238	140,450	141,775	143,187	144,645	146,109	147,590	149,091	150,664	152,255	14,100	10.2%
Welwyn Hatfield	110,727	113,893	116,762	119,388	121,766	123,960	126,013	127,994	129,894	131,716	133,480	22,753	20.5%
Babergh	87,901	88,037	88,244	88,507	88,808	89,131	89,489	89,875	90,290	90,755	91,251	3,350	3.8%
Ipswich	133,729	134,566	135,462	136,395	137,348	138,292	139,224	140,146	141,059	141,979	142,893	9,164	6.9%
Mid Suffolk	97,076	98,021	98,993	99,986	100,987	101,980	102,975	103,954	104,950	105,956	106,957	9,881	10.2%
Suffolk Coastal	124,590	125,690	126,871	128,087	129,322	130,565	131,806	133,070	134,374	135,718	137,095	12,505	10.0%
St. Edmundsbury	111,443	111,829	112,295	112,793	113,328	113,877	114,438	115,018	115,613	116,226	116,851	5,408	4.9%
Total	2,899,031	2,926,183	2,954,575	2,983,502	3,012,428	3,041,115	3,069,597	3,098,183	3,126,984	3,155,970	3,185,041	286,010	9.9%

Source: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-274527

Appendix 4: Macro areas summaries

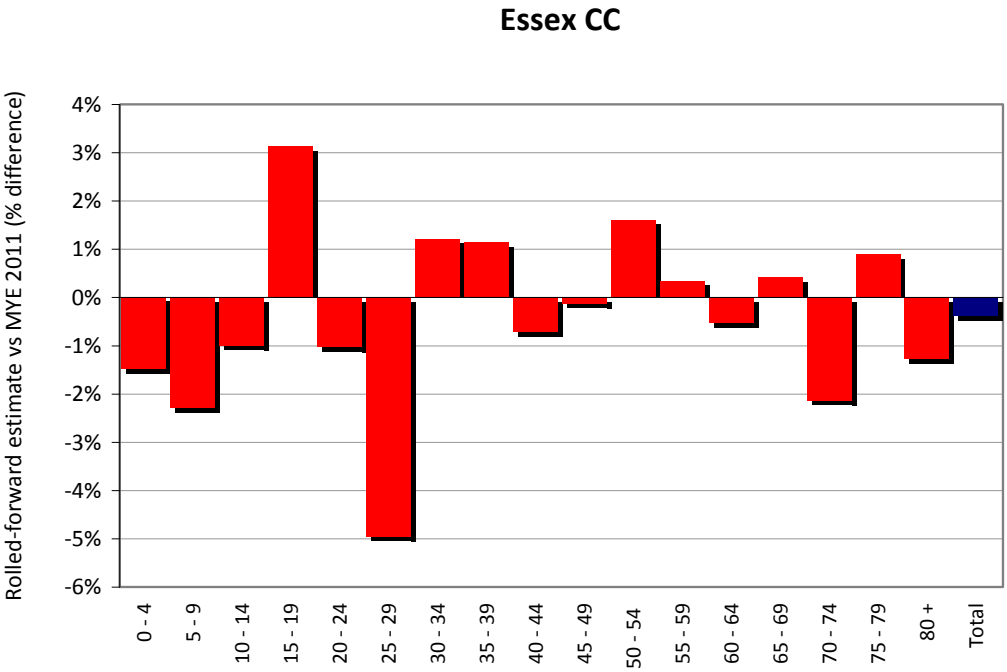
a) This section provides a profile for each of the Greater Essex macro areas, summarising the 'impact' of the latest demographic evidence.

b) *Population estimates compared*

The first summary provides an indication of the adjustments to the population age profile that have resulted from the latest 2011 Census information. A direct comparison is made between the 'rolled-forward' population estimate for 2011 and the latest 2011 mid-year estimate that has been derived from Census statistics.

c) *Population growth scenarios compared*

The second summary benchmarks the ONS 2011-based projection with previous scenarios prepared in the phase 3 analysis. The aim of this analysis is to indicate where the 2011-based scenario has resulted in significant variations over and above those associated with the different base-year populations. .

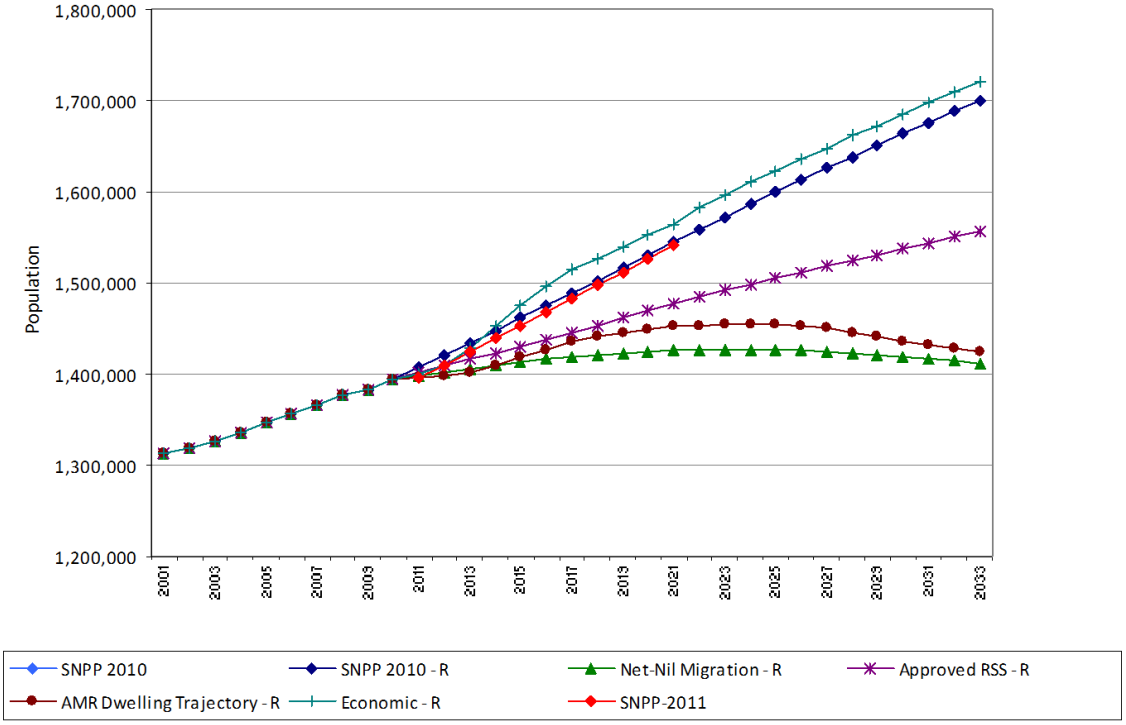


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	83,233	81,996	-1%
5 - 9	79,731	77,907	-2%
10 - 14	83,482	82,651	-1%
15 - 19	83,556	86,170	3%
20 - 24	80,421	79,589	-1%
25 - 29	82,126	78,061	-5%
30 - 34	79,873	80,842	1%
35 - 39	88,512	89,516	1%
40 - 44	105,053	104,302	-1%
45 - 49	106,073	105,943	0%
50 - 54	92,296	93,781	2%
55 - 59	83,781	84,071	0%
60 - 64	94,084	93,593	-1%
65 - 69	75,856	76,176	0%
70 - 74	60,129	58,847	-2%
75 - 79	49,326	49,768	1%
80 +	74,328	73,386	-1%
Total	1,401,861	1,396,599	0%

Figure 64: Essex CC - rolled-forward population estimate vs new Mid-year estimate 2011

Essex CC

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	324,863	23.3%	174,594	29.9%	10,767	7,804	4,748
SNPP 2010	305,408	21.9%	170,722	28.8%	10,203	7,637	4,254
SNPP 2010 - R	305,408	21.9%	168,364	28.8%	10,203	7,531	4,254
Approved RSS - R	161,952	11.6%	111,075	19.0%	4,741	4,961	1,578
AMR Dwelling Trajectory - R	28,966	2.1%	58,610	10.0%	-439	2,620	-1,348
Net-Nil Migration - R	16,243	1.2%	62,522	10.7%	0	2,783	-1,795

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

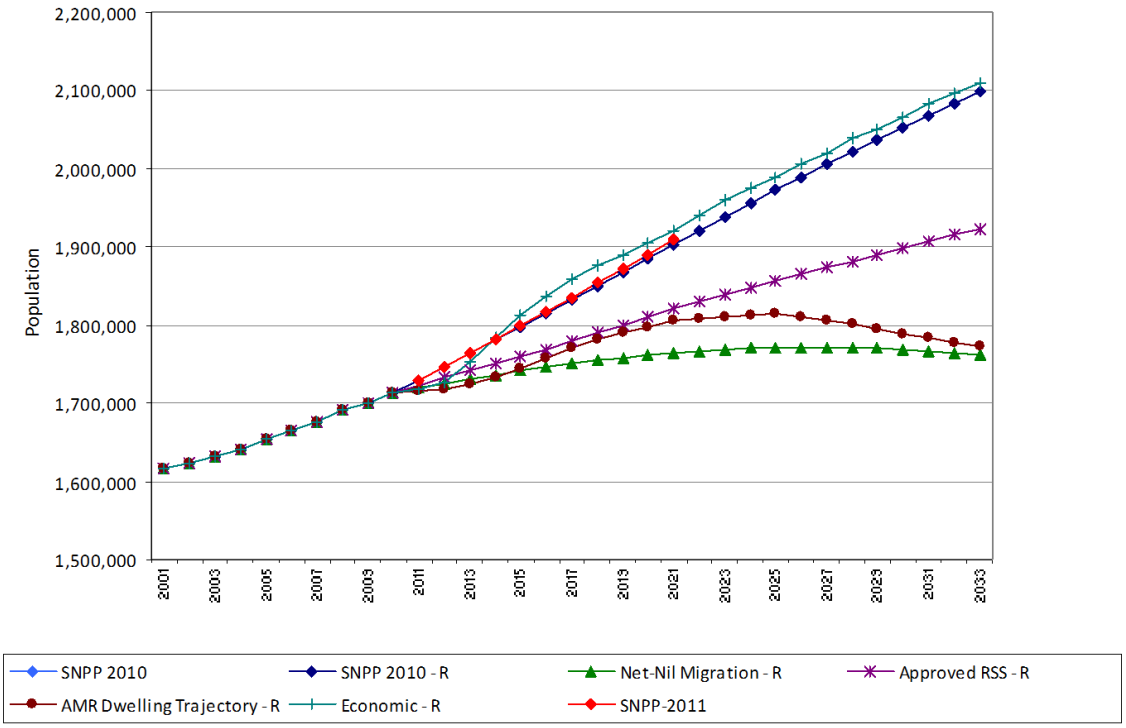
Figure 65: Essex CC – comparison of 2011-based SNPP with previous scenarios

	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	106,126	105,343	-1%
5 - 9	98,914	97,786	-1%
10 - 14	102,650	102,718	0%
15 - 19	102,282	106,503	4%
20 - 24	99,507	99,125	0%
25 - 29	102,983	100,530	-2%
30 - 34	101,336	104,424	3%
35 - 39	111,266	113,837	2%
40 - 44	129,419	129,935	0%
45 - 49	129,905	130,430	0%
50 - 54	112,291	114,299	2%
55 - 59	101,262	102,135	1%
60 - 64	113,053	112,668	0%
65 - 69	90,751	91,086	0%
70 - 74	71,696	70,183	-2%
75 - 79	58,875	59,324	1%
80 +	90,052	88,815	-1%
Total	1,722,368	1,729,141	0%

Figure 66: Greater Essex - rolled-forward population estimate vs new Mid-year estimate 2011

Greater Essex

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

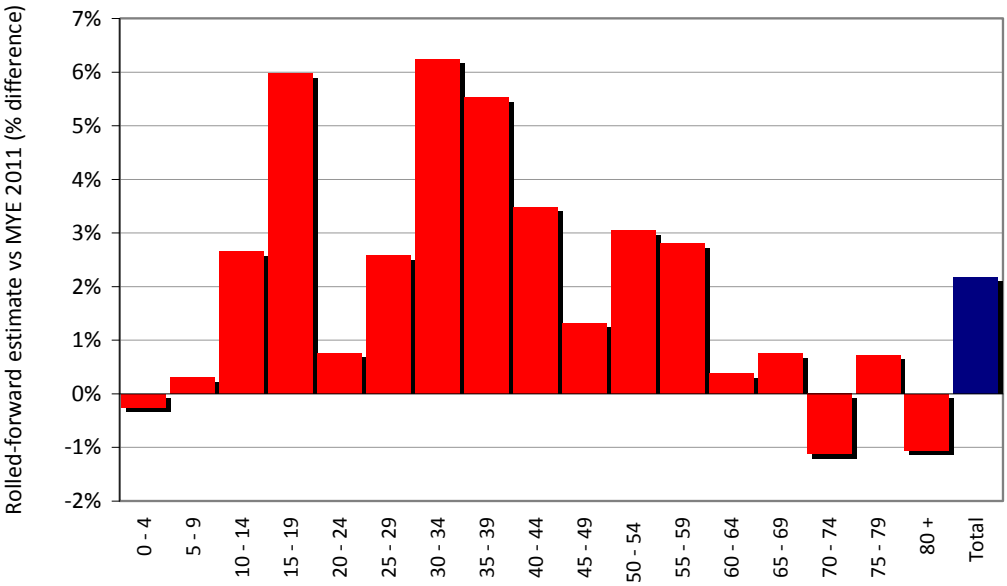
Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	396,948	23.2%	213,369	29.6%	12,004	9,531	6,313
SNPP 2010	385,669	22.5%	214,479	29.3%	11,749	9,591	5,934
SNPP 2010 - R	385,669	22.5%	211,643	29.3%	11,749	9,464	5,934
Approved RSS - R	209,332	12.2%	139,410	19.3%	5,106	6,219	2,666
AMR Dwelling Trajectory - R	58,675	3.4%	79,953	11.1%	-847	3,567	-682
Net-Nil Migration - R	49,140	2.9%	87,300	12.1%	0	3,888	-1,129

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 67: Greater Essex – comparison of 2011-based SNPP with previous scenarios

Essex Thames Gateway

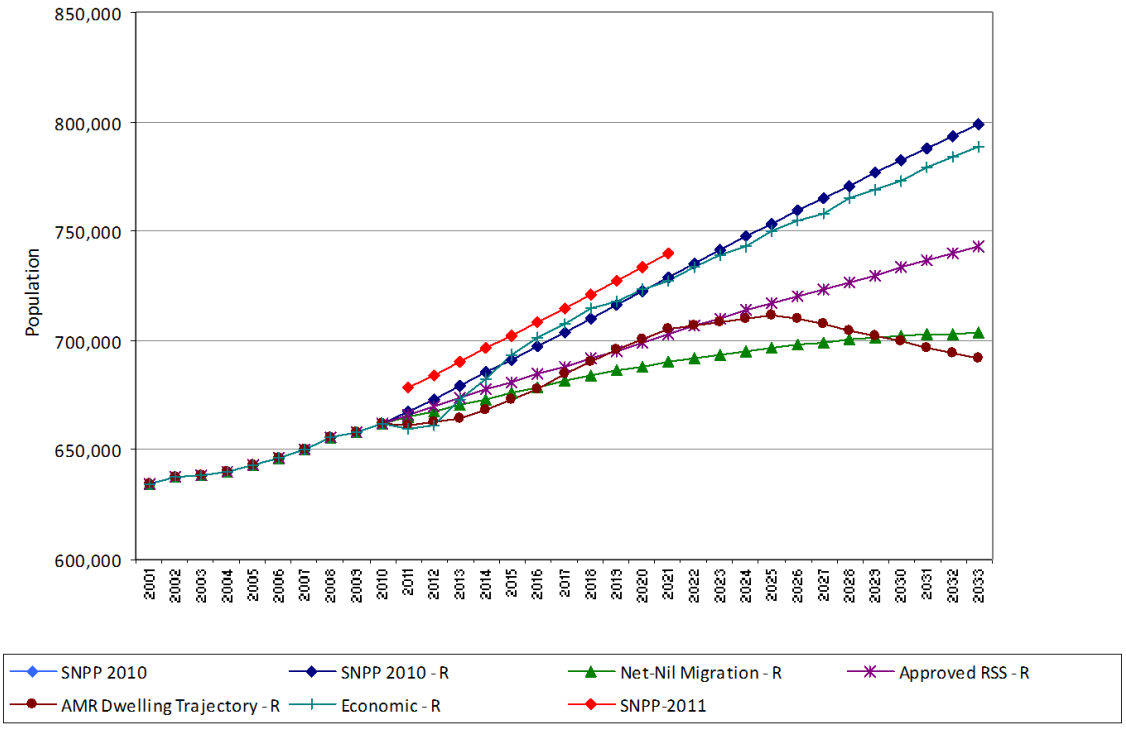


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	43,395	43,284	0%
5 - 9	39,236	39,355	0%
10 - 14	40,122	41,184	3%
15 - 19	39,786	42,160	6%
20 - 24	38,307	38,597	1%
25 - 29	40,286	41,324	3%
30 - 34	40,779	43,325	6%
35 - 39	44,021	46,453	6%
40 - 44	49,976	51,716	3%
45 - 49	49,952	50,612	1%
50 - 54	42,640	43,938	3%
55 - 59	37,706	38,762	3%
60 - 64	42,400	42,559	0%
65 - 69	33,759	34,010	1%
70 - 74	26,717	26,417	-1%
75 - 79	22,221	22,383	1%
80 +	33,080	32,731	-1%
Total	664,382	678,810	2%

Figure 68: Essex Thames Gateway - rolled-forward population estimate vs new Mid-year estimate 2011

Essex Thames Gateway

Phase 3 scenarios vs 2011-based SNPP scenario



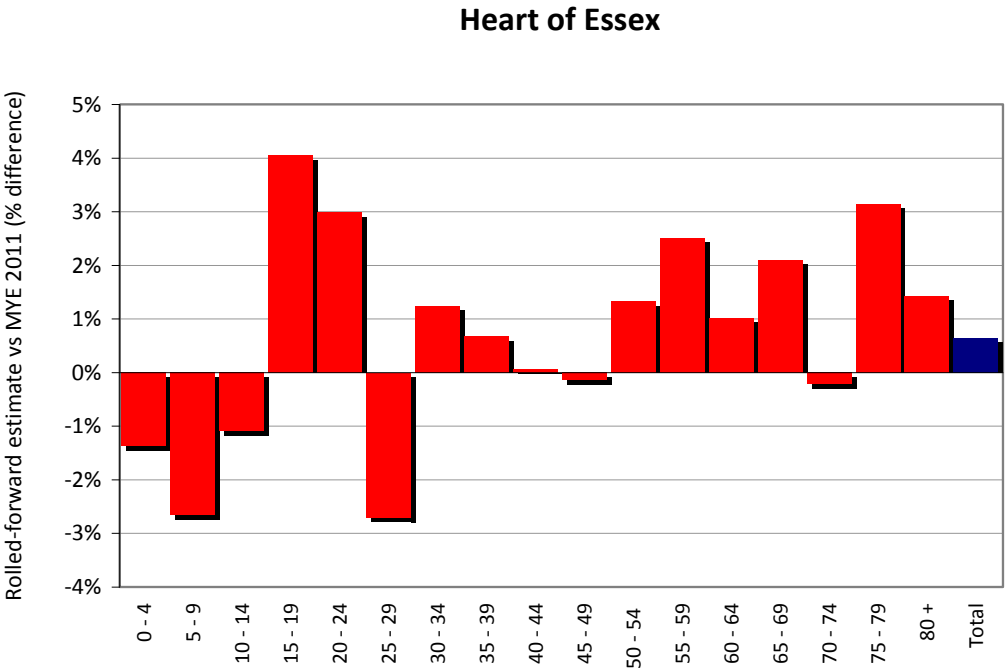
Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	137,025	20.7%	78,148	27.4%	3,312	3,481	2,006
SNPP 2010 - R	137,025	20.7%	76,963	27.4%	3,312	3,429	2,006
Economic - R	126,804	19.2%	70,911	25.3%	2,919	3,153	1,787
Approved RSS - R	80,953	12.2%	52,646	18.8%	1,235	2,338	1,047
Net-Nil Migration - R	41,741	6.3%	40,280	14.3%	0	1,795	227
AMR Dwelling Trajectory - R	29,850	4.5%	32,306	11.5%	-833	1,434	10

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 69: Essex Thames Gateway – comparison of 2011-based SNPP with previous scenarios

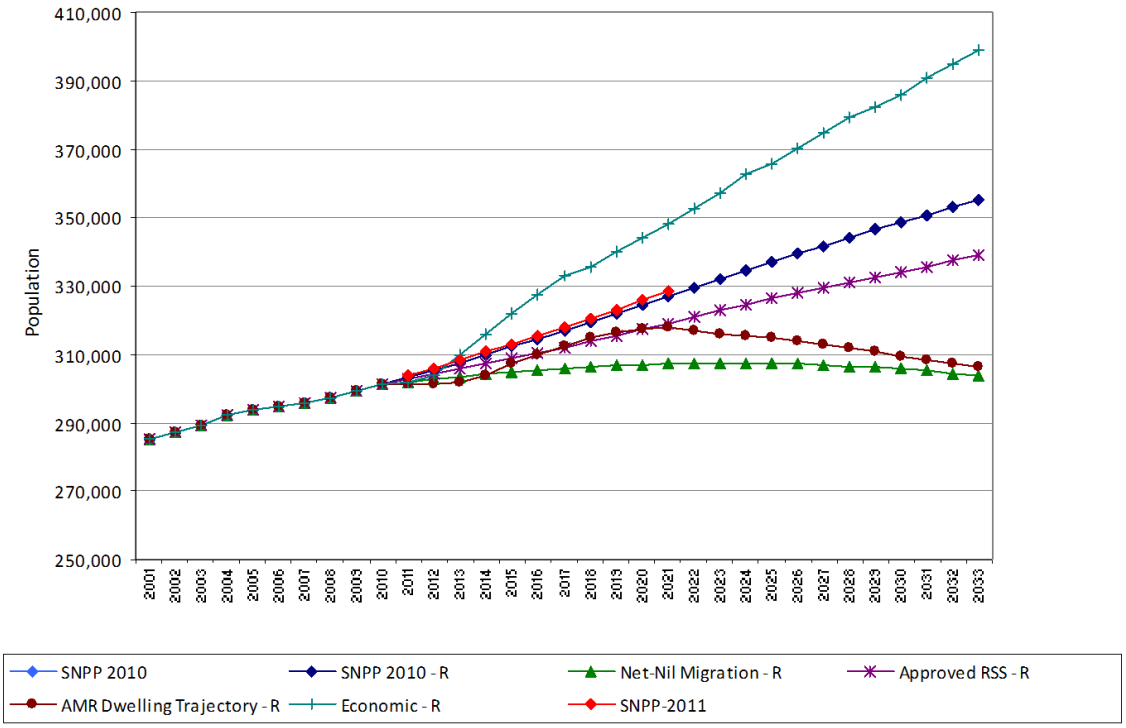


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	17,133	16,899	-1%
5 - 9	17,394	16,932	-3%
10 - 14	18,163	17,964	-1%
15 - 19	17,765	18,484	4%
20 - 24	15,924	16,400	3%
25 - 29	17,420	16,949	-3%
30 - 34	17,431	17,648	1%
35 - 39	19,900	20,034	1%
40 - 44	23,190	23,205	0%
45 - 49	23,980	23,947	0%
50 - 54	20,765	21,040	1%
55 - 59	18,373	18,833	3%
60 - 64	20,395	20,604	1%
65 - 69	16,130	16,468	2%
70 - 74	12,526	12,498	0%
75 - 79	10,295	10,618	3%
80 +	15,311	15,529	1%
Total	302,092	304,052	1%

Figure 70: Heart of Essex - rolled-forward population estimate vs new Mid-year estimate 2011

Heart of Essex

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

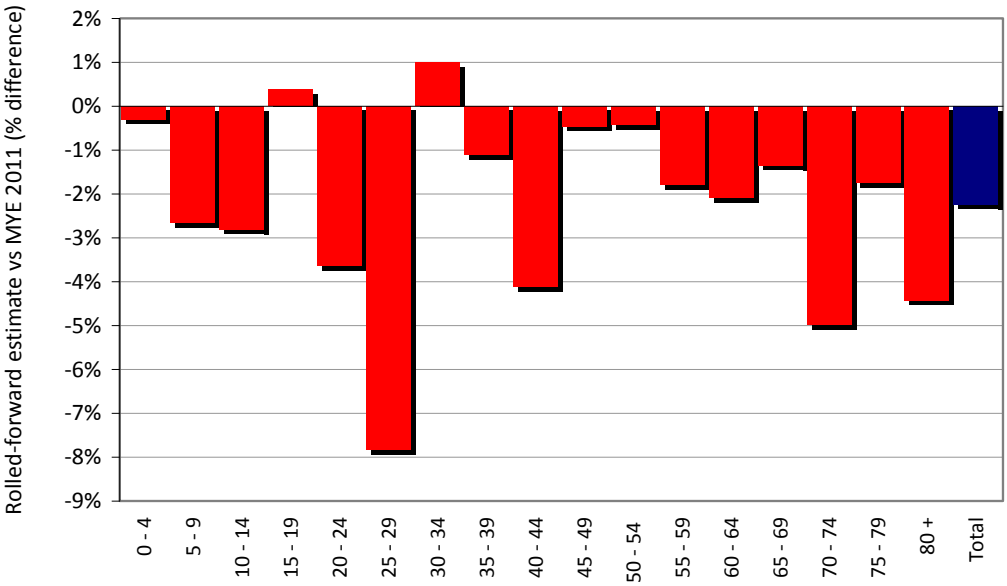
	Change 2010 - 2033				Average per year		
Scenario	**Population Change**	**Population Change %**	**Households Change**	**Households Change %**	**Net Migration**	**Dwellings**	**Jobs**
Economic - R	97,627	32.4%	47,858	37.9%	3,363	2,135	2,078
SNPP 2010	54,049	18.0%	31,964	25.1%	1,814	1,428	972
SNPP 2010 - R	54,049	18.0%	31,647	25.1%	1,814	1,414	972
Approved RSS - R	37,903	12.6%	25,098	19.9%	1,175	1,118	716
AMR Dwelling Trajectory - R	5,048	1.7%	12,018	9.5%	-128	535	-129
Net-Nil Migration - R	2,758	0.9%	12,265	9.7%	0	546	-229

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 71: Heart of Essex – comparison of 2011-based SNPP with previous scenarios

Essex Haven Gateway

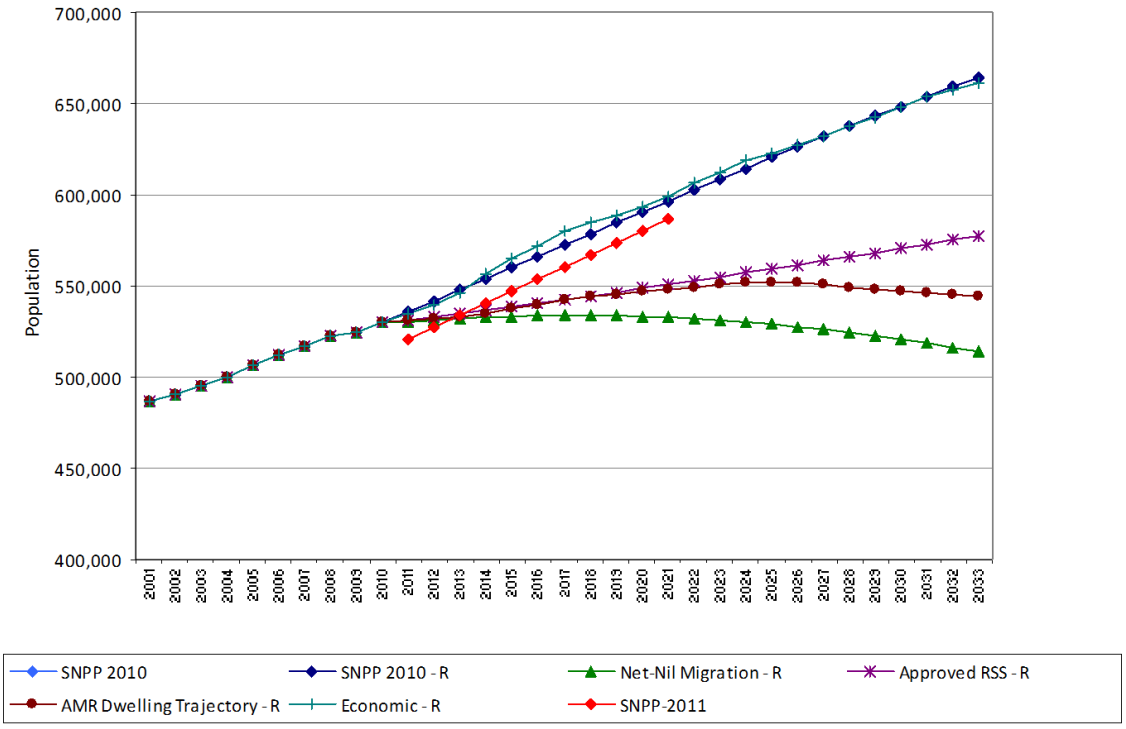


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	30,091	30,002	0%
5 - 9	28,725	27,963	-3%
10 - 14	30,776	29,911	-3%
15 - 19	31,677	31,799	0%
20 - 24	32,877	31,680	-4%
25 - 29	30,922	28,498	-8%
30 - 34	28,294	28,578	1%
35 - 39	32,300	31,940	-1%
40 - 44	39,362	37,741	-4%
45 - 49	38,294	38,118	0%
50 - 54	33,881	33,738	0%
55 - 59	32,181	31,605	-2%
60 - 64	37,675	36,888	-2%
65 - 69	31,085	30,665	-1%
70 - 74	24,668	23,439	-5%
75 - 79	19,495	19,155	-2%
80 +	30,540	29,190	-4%
Total	532,844	520,910	-2%

Figure 72: Essex Haven Gateway - rolled-forward population estimate vs new Mid-year estimate 2011

Essex Haven Gateway

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

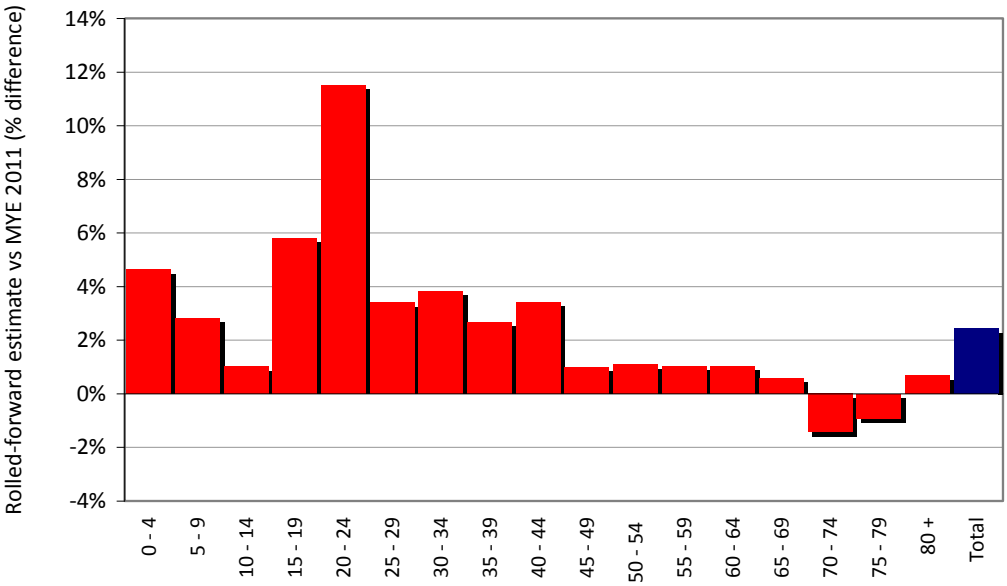
	Change 2010 - 2033				Average per year		
Scenario	**Population Change**	**Population Change %**	**Households Change**	**Households Change %**	**Net Migration**	**Dwellings**	**Jobs**
SNPP 2010	134,532	25.4%	74,149	32.7%	5,381	3,337	1,832
SNPP 2010 - R	134,532	25.4%	72,867	32.8%	5,381	3,278	1,832
Economic - R	131,943	24.9%	71,954	32.4%	5,259	3,238	1,713
Approved RSS - R	47,842	9.0%	38,452	17.3%	2,095	1,728	233
AMR Dwelling Trajectory - R	14,650	2.8%	25,274	11.4%	741	1,138	-463
Net-Nil Migration - R	-15,891	-3.0%	18,116	8.2%	0	808	-1,268

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 73: Essex Haven Gateway – comparison of 2011-based SNPP with previous scenarios

Suffolk Haven Gateway

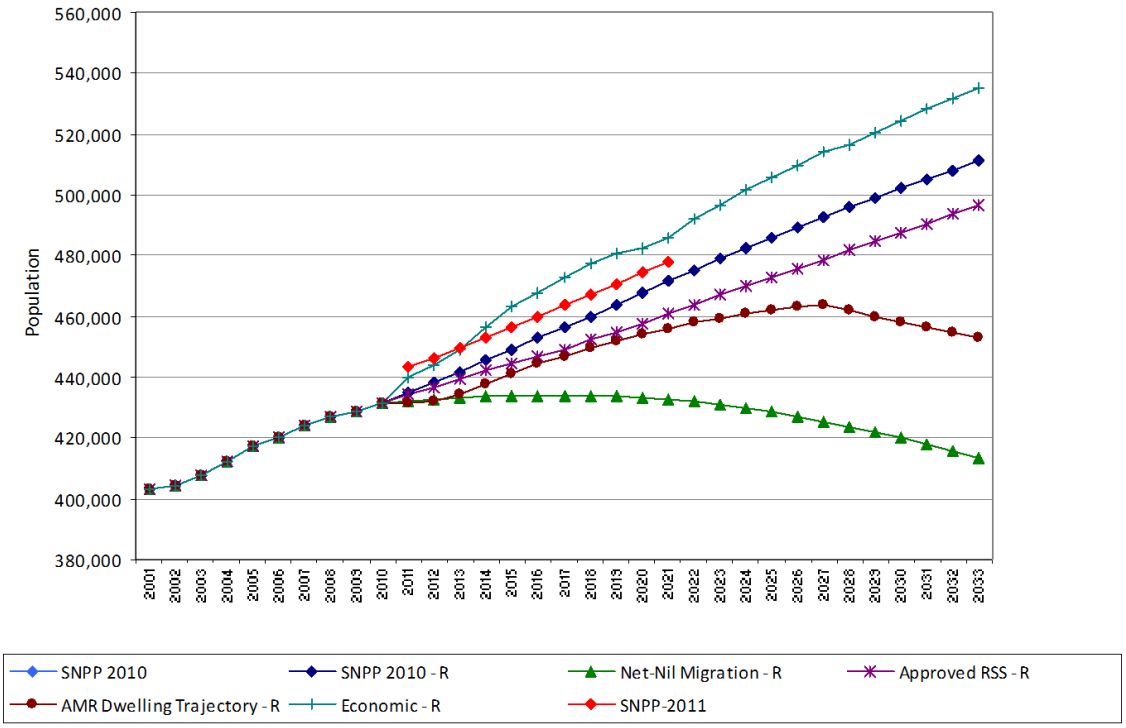


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	24,056	25,171	5%
5 - 9	23,818	24,492	3%
10 - 14	26,095	26,361	1%
15 - 19	25,588	27,074	6%
20 - 24	21,068	23,495	12%
25 - 29	23,471	24,269	3%
30 - 34	23,522	24,424	4%
35 - 39	25,861	26,554	3%
40 - 44	30,752	31,802	3%
45 - 49	32,403	32,723	1%
50 - 54	29,642	29,963	1%
55 - 59	27,501	27,784	1%
60 - 64	31,170	31,495	1%
65 - 69	25,533	25,681	1%
70 - 74	20,060	19,773	-1%
75 - 79	16,857	16,701	-1%
80 +	25,363	25,534	1%
Total	432,761	443,296	2%

Figure 74: Suffolk Haven Gateway - rolled-forward population estimate vs new Mid-year estimate 2011

Suffolk Haven Gateway

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

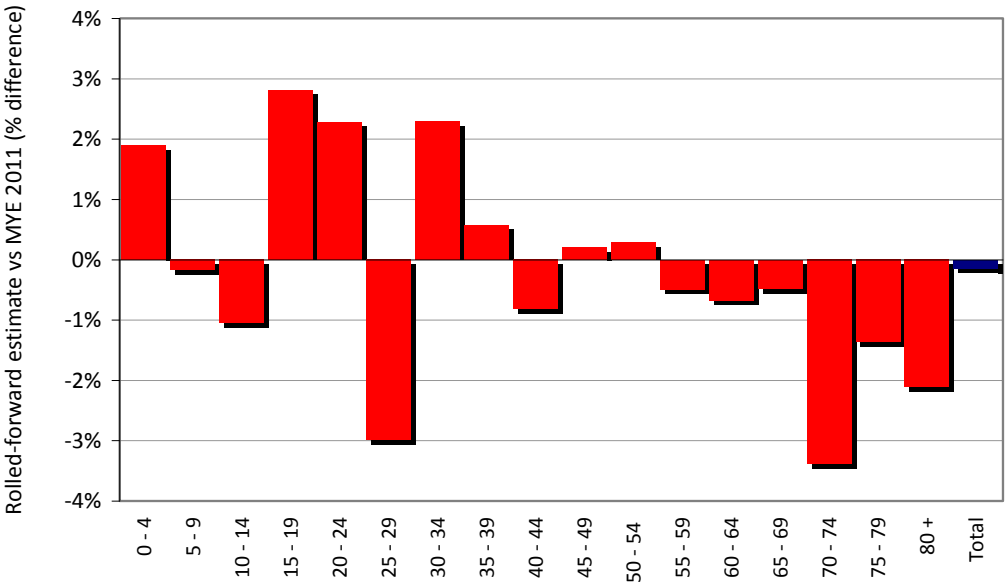
Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	103,533	24.0%	60,788	32.4%	4,232	2,769	1,574
SNPP 2010	79,674	18.5%	51,295	27.3%	3,363	2,339	1,138
SNPP 2010 - R	79,674	18.5%	51,140	27.3%	3,363	2,332	1,138
Approved RSS - R	65,452	15.2%	46,047	24.6%	2,732	2,086	1,122
AMR Dwelling Trajectory - R	21,636	5.0%	27,627	14.7%	1,050	1,257	-17
Net-Nil Migration - R	-18,088	-4.2%	18,311	9.8%	24	829	-884

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 75: Suffolk Haven Gateway – comparison of 2011-based SNPP with previous scenarios

Haven Gateway

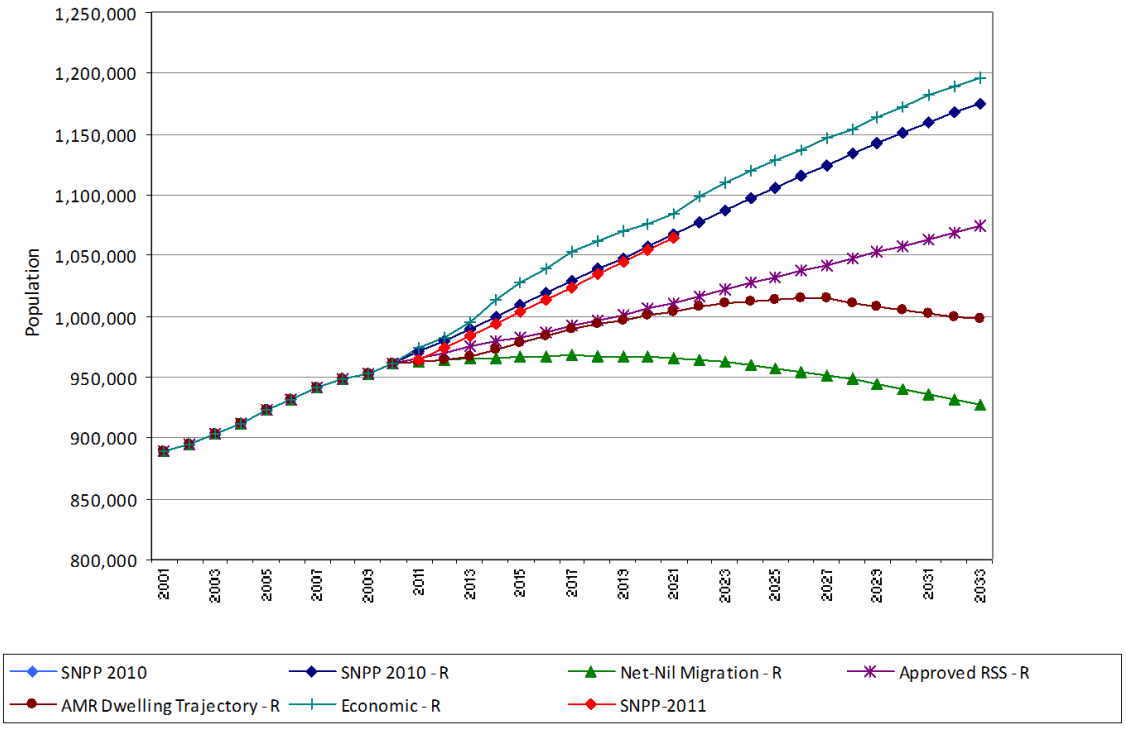


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	54,148	55,173	2%
5 - 9	52,544	52,455	0%
10 - 14	56,871	56,272	-1%
15 - 19	57,265	58,873	3%
20 - 24	53,946	55,175	2%
25 - 29	54,393	52,767	-3%
30 - 34	51,816	53,002	2%
35 - 39	58,162	58,494	1%
40 - 44	70,114	69,543	-1%
45 - 49	70,697	70,841	0%
50 - 54	63,523	63,701	0%
55 - 59	59,682	59,389	0%
60 - 64	68,845	68,383	-1%
65 - 69	56,618	56,346	0%
70 - 74	44,728	43,212	-3%
75 - 79	36,352	35,856	-1%
80 +	55,904	54,724	-2%
Total	965,605	964,206	0%

Figure 76: Haven Gateway - rolled-forward population estimate vs new Mid-year estimate 2011

Haven Gateway

Phase 3 scenarios vs 2011-based SNPP scenario



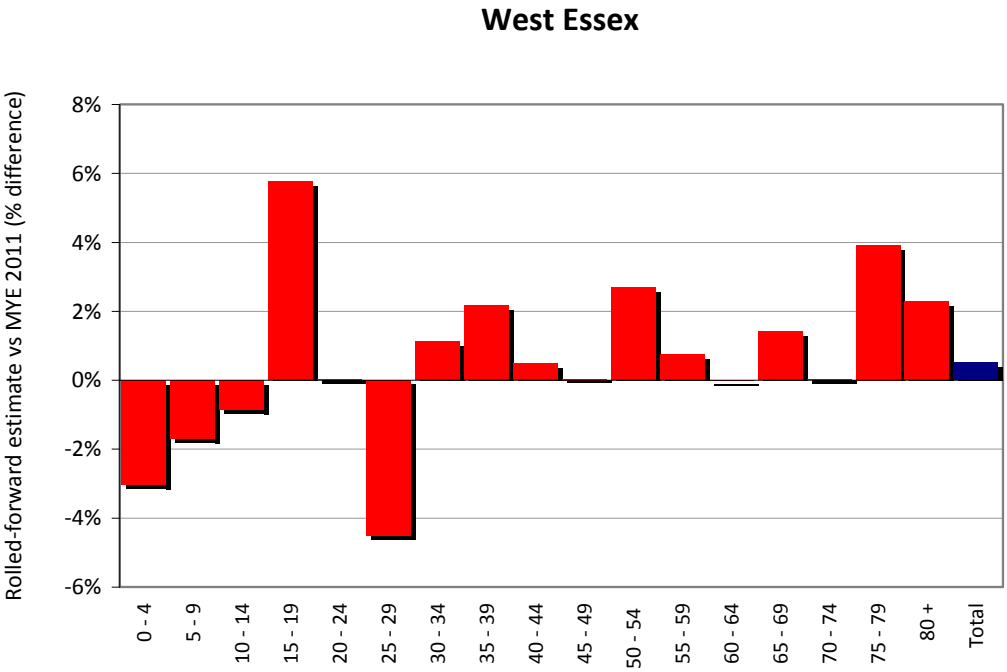
Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Economic - R	235,477	24.5%	132,742	32.4%	9,492	6,008	3,287
SNPP 2010	214,206	22.3%	125,444	30.3%	8,744	5,676	2,970
SNPP 2010 - R	214,206	22.3%	124,007	30.3%	8,744	5,610	2,970
Approved RSS - R	113,294	11.8%	84,499	20.6%	4,827	3,814	1,355
AMR Dwelling Trajectory - R	36,286	3.8%	52,901	12.9%	1,791	2,395	-480
Net-Nil Migration - R	-33,979	-3.5%	36,427	8.9%	24	1,637	-2,152

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 77: Haven Gateway – comparison of 2011-based SNPP with previous scenarios

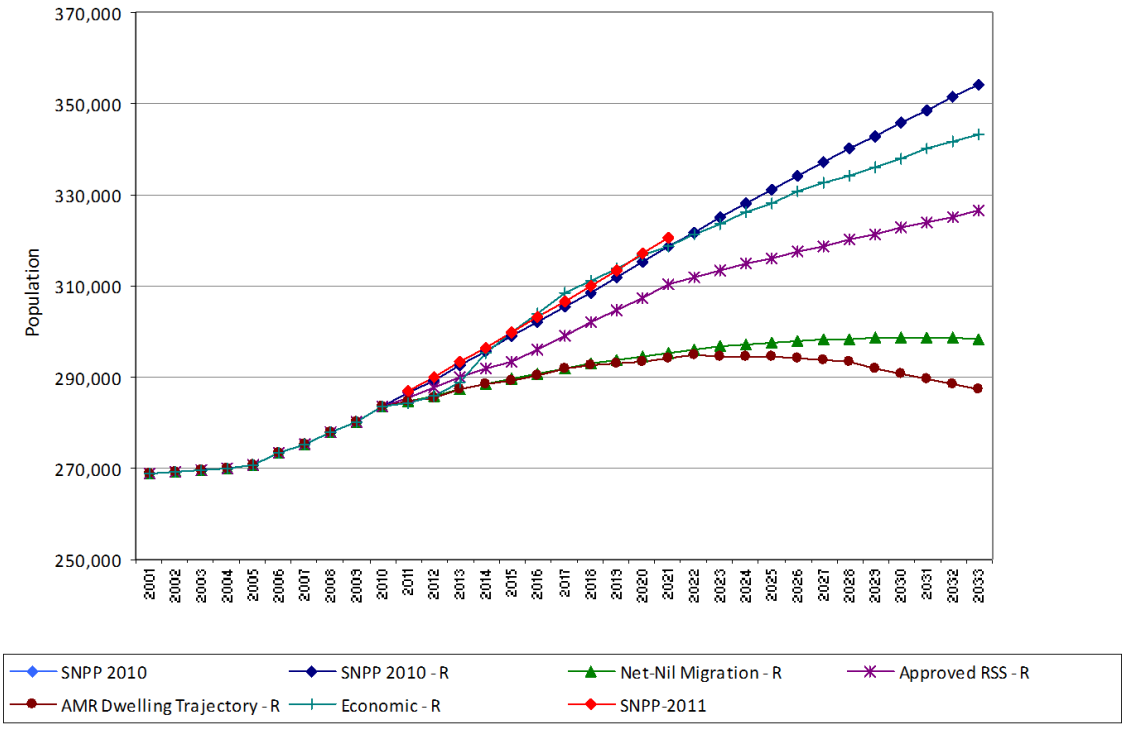


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	18,725	18,159	-3%
5 - 9	17,098	16,809	-2%
10 - 14	17,537	17,387	-1%
15 - 19	16,688	17,649	6%
20 - 24	15,336	15,337	0%
25 - 29	16,990	16,226	-4%
30 - 34	17,526	17,723	1%
35 - 39	18,662	19,068	2%
40 - 44	21,961	22,065	0%
45 - 49	22,641	22,649	0%
50 - 54	19,661	20,190	3%
55 - 59	17,174	17,303	1%
60 - 64	17,648	17,643	0%
65 - 69	13,900	14,095	1%
70 - 74	10,787	10,788	0%
75 - 79	9,130	9,488	4%
80 +	14,187	14,510	2%
Total	285,649	287,089	1%

Figure 78: West Essex - rolled-forward population estimate vs new Mid-year estimate 2011

West Essex

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

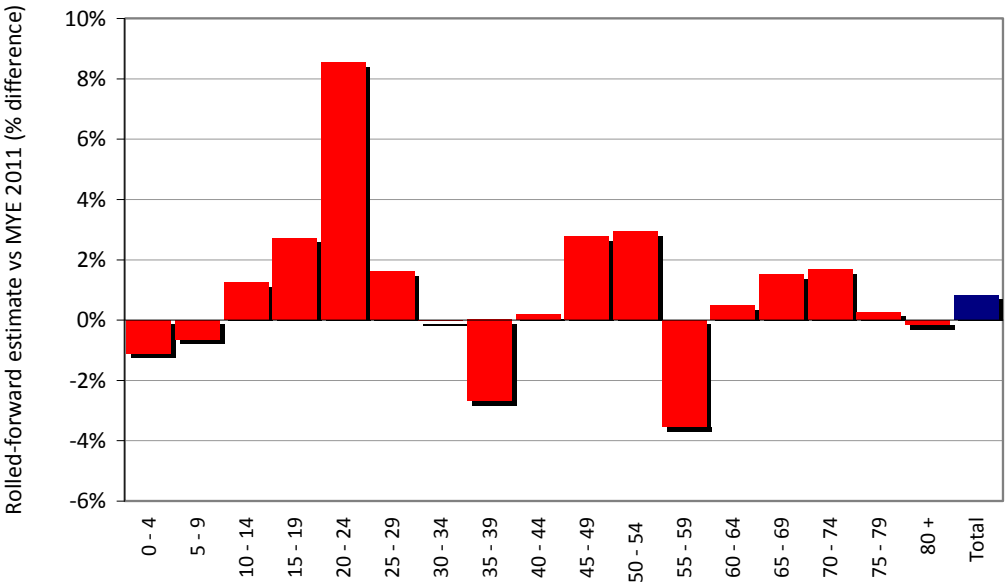
Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	70,507	24.9%	36,935	30.9%	1,843	1,649	1,178
SNPP 2010 - R	70,507	24.9%	36,661	30.9%	1,843	1,636	1,178
Economic - R	59,663	21.0%	32,308	27.3%	1,398	1,442	922
Approved RSS - R	42,966	15.2%	25,761	21.7%	801	1,150	564
Net-Nil Migration - R	14,825	5.2%	17,361	14.6%	0	773	-77
AMR Dwelling Trajectory - R	3,751	1.3%	10,691	9.0%	-657	476	-293

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 79: West Essex – comparison of 2011-based SNPP with previous scenarios

Eastern Hertfordshire

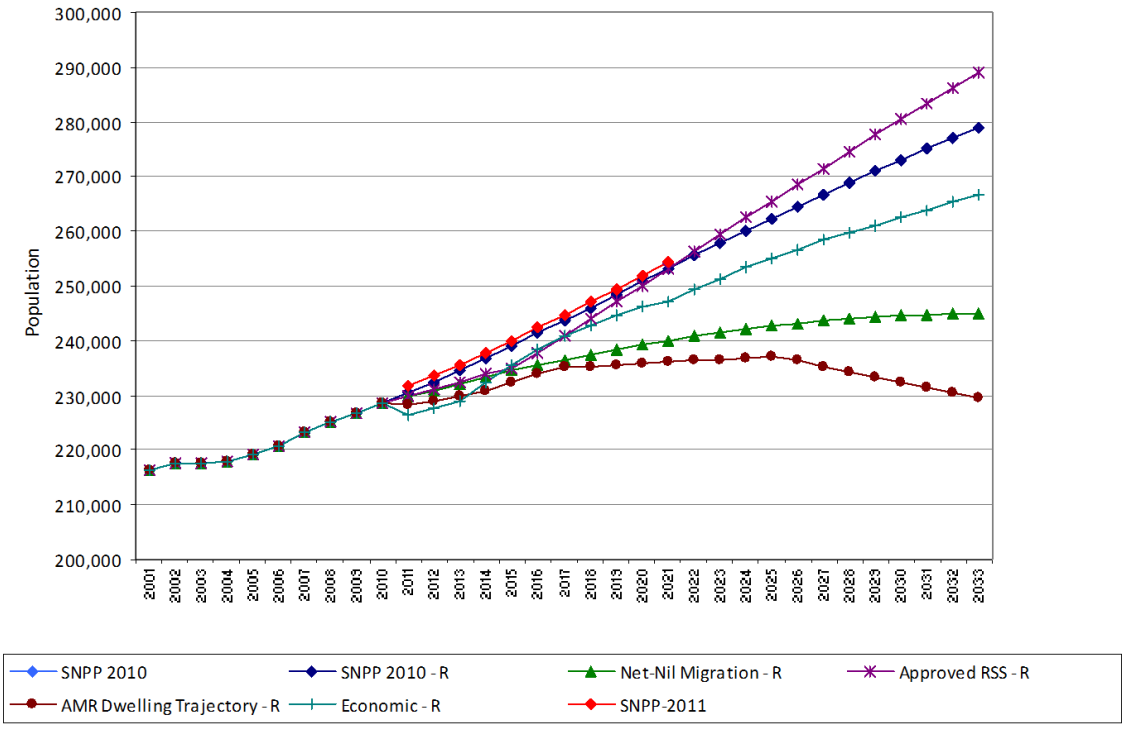


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	14,664	14,503	-1%
5 - 9	13,958	13,868	-1%
10 - 14	14,686	14,868	1%
15 - 19	14,367	14,757	3%
20 - 24	11,081	12,026	9%
25 - 29	12,773	12,979	2%
30 - 34	14,862	14,858	0%
35 - 39	16,736	16,287	-3%
40 - 44	18,915	18,951	0%
45 - 49	18,612	19,129	3%
50 - 54	15,569	16,026	3%
55 - 59	13,604	13,122	-4%
60 - 64	13,539	13,603	0%
65 - 69	10,626	10,785	1%
70 - 74	8,481	8,623	2%
75 - 79	7,400	7,419	0%
80 +	10,068	10,053	0%
Total	229,942	231,857	1%

Figure 80: Eastern Hertfordshire - rolled-forward population estimate vs new Mid-year estimate 2011

Eastern Hertfordshire

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

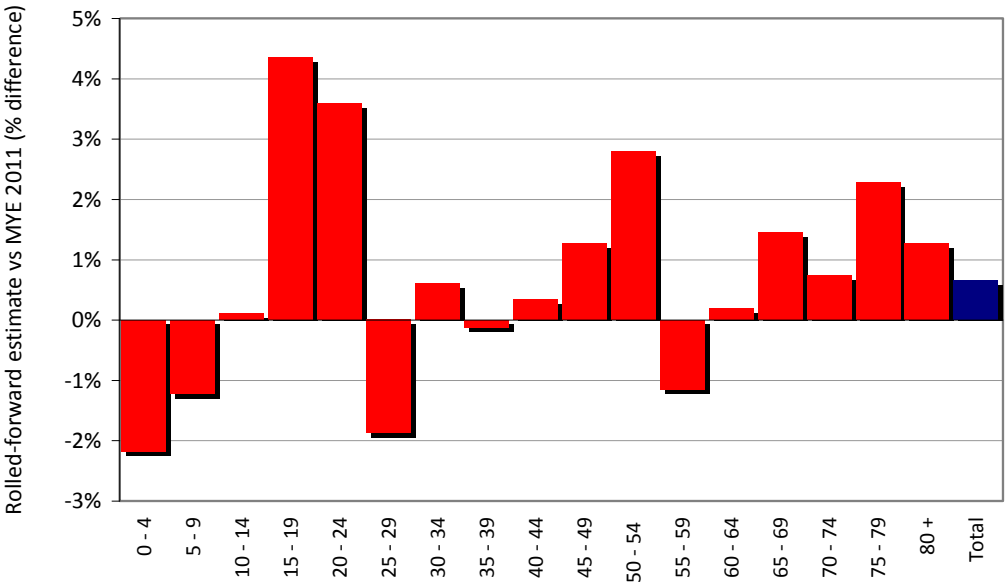
Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Approved RSS - R	60,307	26.4%	31,660	33.5%	1,526	1,410	1,016
SNPP 2010 - R	50,373	22.0%	27,941	29.6%	1,144	1,245	836
SNPP 2010	50,373	22.0%	27,939	29.6%	1,144	1,245	836
Economic - R	38,069	16.7%	22,983	24.3%	704	1,024	548
Net-Nil Migration - R	16,434	7.2%	15,791	16.7%	0	704	110
AMR Dwelling Trajectory - R	996	0.4%	8,535	9.0%	-673	380	-240

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 81: Eastern Hertfordshire – comparison of 2011-based SNPP with previous scenarios

Stansted/M11 Corridor

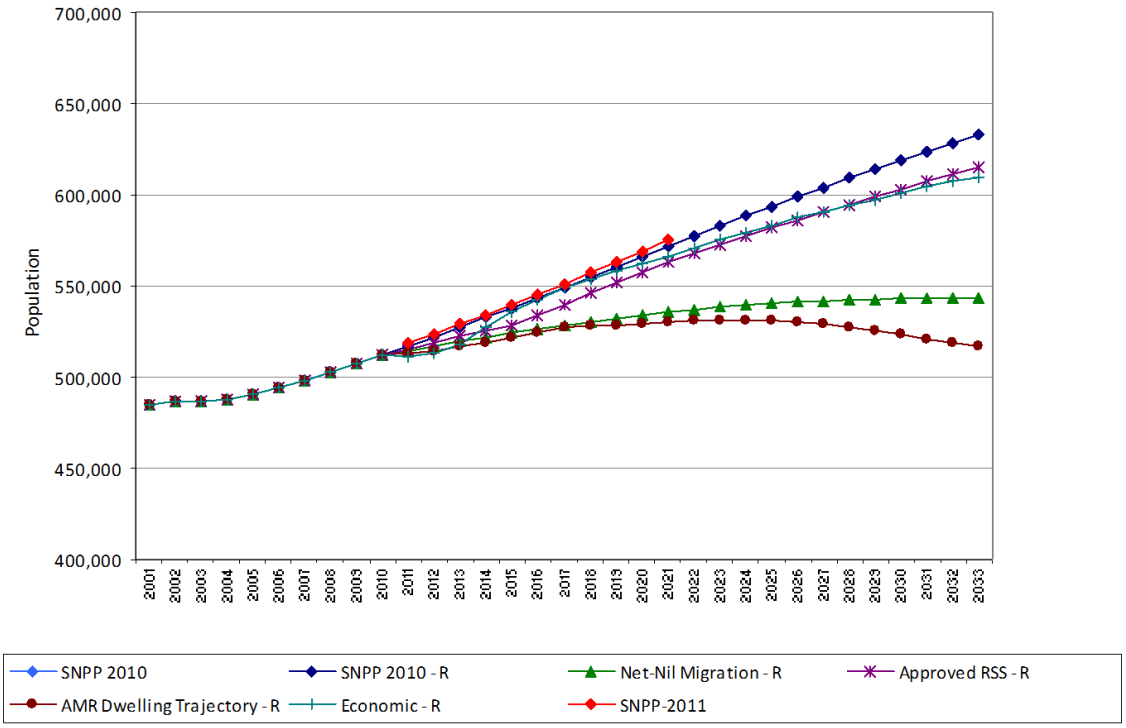


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	33,389	32,662	-2%
5 - 9	31,056	30,677	-1%
10 - 14	32,222	32,255	0%
15 - 19	31,055	32,406	4%
20 - 24	26,417	27,363	4%
25 - 29	29,763	29,205	-2%
30 - 34	32,388	32,581	1%
35 - 39	35,398	35,355	0%
40 - 44	40,877	41,016	0%
45 - 49	41,253	41,778	1%
50 - 54	35,230	36,216	3%
55 - 59	30,779	30,425	-1%
60 - 64	31,186	31,246	0%
65 - 69	24,526	24,880	1%
70 - 74	19,268	19,411	1%
75 - 79	16,530	16,907	2%
80 +	24,255	24,563	1%
Total	515,591	518,946	1%

Figure 82: Stansted / M11 Corridor - rolled-forward population estimate vs new Mid-year estimate 2011

Stansted/M11 Corridor

Phase 3 scenarios vs 2011-based SNPP scenario



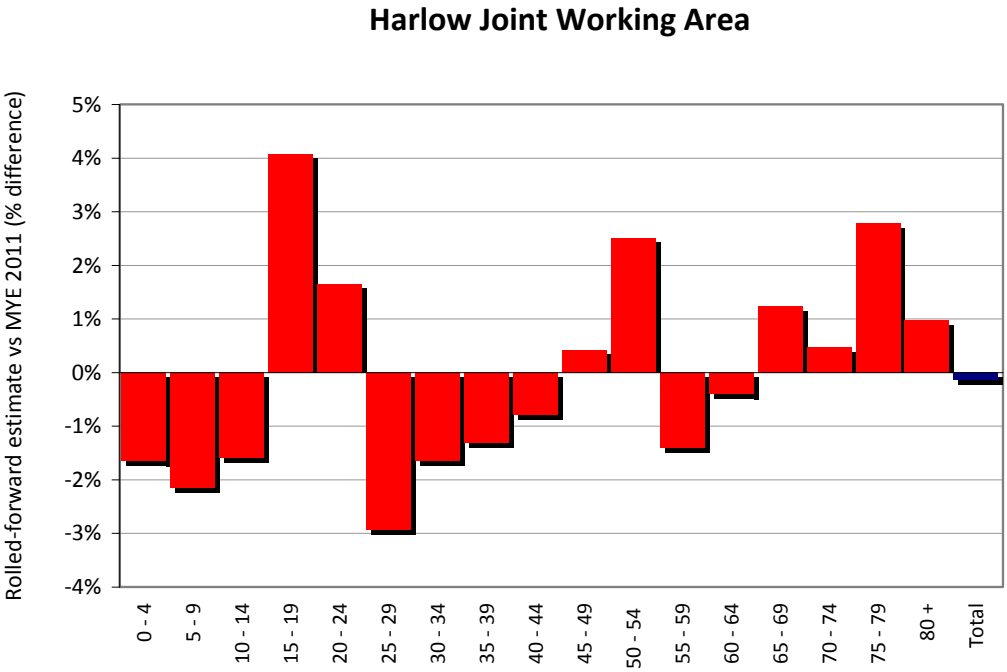
Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	120,879	23.6%	64,875	30.4%	2,987	2,894	2,014
SNPP 2010 - R	120,879	23.6%	64,601	30.3%	2,987	2,882	2,014
Approved RSS - R	103,273	20.2%	57,421	27.0%	2,328	2,560	1,580
Economic - R	97,733	19.1%	55,290	26.0%	2,102	2,466	1,470
Net-Nil Migration - R	31,259	6.1%	33,152	15.6%	0	1,476	32
AMR Dwelling Trajectory - R	4,747	0.9%	19,226	9.0%	-1,331	856	-533

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 83: Stansted / M11 Corridor – comparison of 2011-based SNPP with previous scenarios

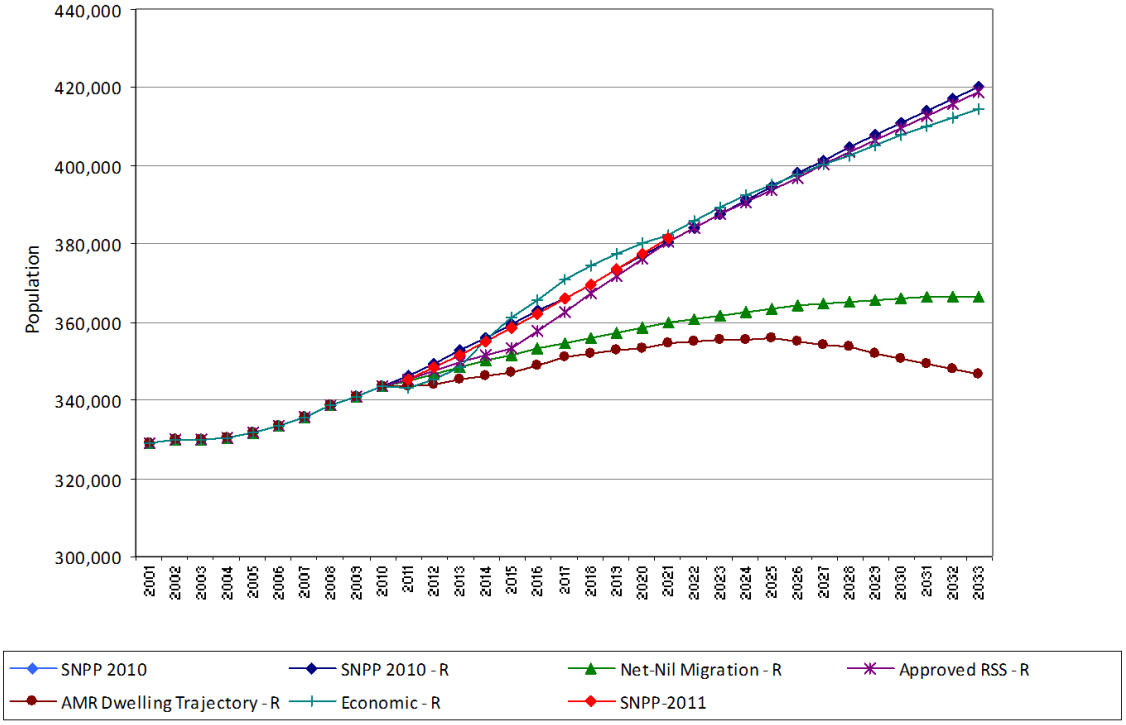


	Population		
	Old	*New*	
Age group	**Rolled-forward estimate**	**Mid-year Estimate 2011**	**% difference**
0 - 4	22,255	21,886	-2%
5 - 9	20,519	20,076	-2%
10 - 14	21,412	21,069	-2%
15 - 19	20,547	21,385	4%
20 - 24	17,736	18,030	2%
25 - 29	20,527	19,924	-3%
30 - 34	22,537	22,166	-2%
35 - 39	24,321	24,001	-1%
40 - 44	27,463	27,247	-1%
45 - 49	27,707	27,825	0%
50 - 54	23,407	23,995	3%
55 - 59	20,597	20,307	-1%
60 - 64	20,737	20,652	0%
65 - 69	15,992	16,189	1%
70 - 74	12,597	12,656	0%
75 - 79	10,918	11,222	3%
80 +	16,422	16,582	1%
Total	345,694	345,212	0%

Figure 84: Harlow Joint Working Area - rolled-forward population estimate vs new Mid-year estimate 2011

Harlow Joint Working Area

Phase 3 scenarios vs 2011-based SNPP scenario



Phase 3 scenario outcomes

Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP 2010	76,862	22.4%	43,490	29.9%	1,783	1,934	1,289
SNPP 2010 - R	76,862	22.4%	43,109	29.9%	1,783	1,917	1,289
Approved RSS - R	75,525	22.0%	42,039	29.2%	1,709	1,870	1,222
Economic - R	70,883	20.6%	40,273	27.9%	1,522	1,791	1,139
Net-Nil Migration - R	23,173	6.7%	23,510	16.3%	0	1,044	119
AMR Dwelling Trajectory - R	3,134	0.9%	13,527	9.4%	-950	600	-304

Scenario definition (The –R suffix indicates that household headship rates have been re-scaled to meet 2010 household totals)

AMR Dwelling Trajectory:	Controlled by the latest housing development trajectory available from each local authority
Approved RSS:	A 'dwelling-led' scenario based on the Approved RSS (or equivalent)
Economic:	Controlled by an employment growth trajectory derived from the most recent forecasts from the EEFM
Net-Nil Migration:	Maintains in-migration and out-migration but sets the overall net balance to be zero
SNPP 2010	Reproduces the 2010-based sub-national population projections from ONS

Figure 85: Harlow Joint Working Area – comparison of 2011-based SNPP with previous scenarios