Addendum to the South Essex Strategic Housing Market Assessment

May 2017

Turley
Economics

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Executive Summary

1. Turley and Edge Analytics were appointed by the South Essex authorities of Basildon, Castle Point, Rochford, Southend-on-Sea and Thurrock to prepare a Strategic Housing Market Assessment (SHMA) which objectively assesses the need for housing across the South Essex housing market area (HMA). The final report was published in May 2016.

2. The SHMA concluded that there was an objectively assessed need (OAN) for 3,275 – 3,750 dwellings per annum in South Essex over the period from 2014 to 2037. This uplifted the then '*starting point*' of the official 2012-based household projections by circa 30% through a demographic adjustment to take account of anticipated growth pressures in London – on the basis of an assumed return to the longer-term trend of higher net in-migration – a positive adjustment to household formation rates and an allowance for stronger growth in the labour force to support forecast job growth.

3. Whilst the SHMA was based upon the most up-to-date data available at the time that it was prepared, the importance of continuing to take account of newly published evidence was identified. In particular, the SHMA recognised that the availability of the following evidence in particular could impact upon the concluded OAN for South Essex:

   - The release of the **2014-based sub-national population and household projections** (SNPP/SNHP), providing a new demographic 'starting point' for the assessment of housing needs in line with Planning Practice Guidance (PPG); and

   - The findings of the **South Essex Economic Development Needs Assessment** (EDNA), which considers likely future job growth in detail and supersedes the economic analysis presented in the SHMA.

4. Following the release of the 2014-based projections in May and July 2016 and the availability of the emerging findings from the EDNA, this addendum considers the implications of this newly available evidence on the OAN concluded in the 2016 SHMA. The addendum does not represent a comprehensive update of all elements of the SHMA, and is intended to be read alongside the earlier document.

5. The updated analysis follows the guidance and methodology currently set out in the PPG, as well as its recent interpretation through Inspectors' decisions in a comparable manner to that followed in the SHMA. In the absence of any guidance at the current point in time on the alternative standardised methodology for calculating OAN – as proposed within the Government's recently published Housing White Paper *'Fixing our broken housing market'* (February 2017) – this is considered a reasonable, consistent and appropriate basis through which this updated position can be robustly established to inform ongoing plan-making in South Essex. It is recognised that the implications of any alternative methodology formally adopted through an updating of Government guidance will need to be considered by the Councils in the future.

6. The addendum concludes that the latest evidence indicates that the OAN for housing across South Essex is higher than previously concluded in the SHMA. The updated analysis identifies an objectively assessed need (OAN) for between **3,750 – 4,000**

dwellings per annum across South Essex between 2014 and 2037. Table 1.1 compares the updated assessment with the OAN concluded in the 2016 SHMA across South Essex.

Table 1.1: Implications of Updated OAN (dwellings per annum, 2014 – 2037)

	2016 SHMA	**2017 SHMA Addendum**
South Essex	**3,275 – 3,750**	**3,750 – 4,000**

Source: Turley; Edge Analytics

7. The updated OAN for South Essex again reflects a series of positive adjustments to the new demographic 'starting point' provided by the 2014-based SNHP, which in isolation imply a need for 3,021 dwellings per annum.

8. The analysis confirms that the 'starting point' is underpinned by a level of population growth which appears reasonable and positive in the context of recent historic trends which have seen strong levels of growth driven by comparatively high levels of migration. The evidence does not suggest that the use of longer-term population growth trends would be more representative of future housing needs in South Essex. However, an adjustment to the 'starting point' projection is considered to be required to allow for a recovery in the levels of household formation for younger households, given the underlying assumption in the DCLG dataset that household formation amongst these groups will continue to be suppressed. As in the SHMA, an adjustment to younger household formation rates to allow for a return to the conditions last seen in 2001 implies an uplifted level of housing need. The adjustment results in a 13% uplift which generates a projected need for 3,418 dwellings per annum across South Essex. Provision of this scale would meet the need generated both by long-term and short-term demographic trends, and would provide a positive response in offsetting the distinct demographic effect on household formation considered to be reflective of worsening market conditions over recent years.

9. The 2016 SHMA identified that there was evidence of a moderate worsening in a number of market signals in South Essex when compared to the national picture and a set of comparator areas. In accordance with the PPG, this is recognised as indicating an imbalance between housing supply and demand, justifying the application of an additional supply response through a reasonable adjustment to the household projections (demographic driven need). Consideration has been given to the judgements made by a number of Local Plan Inspectors on the scale of adjustment '*reasonable*' to address comparable evidence of affordability constraints. The scale of a separate adjustment to be applied has also been considered in the context of the implied increase in housing need resulting from the adjustment to household formation rates, which allows for a recovery to a more balanced market context in terms of the comparative affordability of housing for each authority individually. In this context, it is considered reasonable to apply a separate and additional upward adjustment of 10% to the adjusted demographic projection across South Essex. This recognises the operation of the area as a functional housing market area, with a positive supply response therefore required across the area to support an improvement in affordability recognising that households will move within and across the area. The application of this adjustment to

the demographic projection of need (3,418 dwellings per annum) results in an identified need for **3,760 dwellings per annum.**

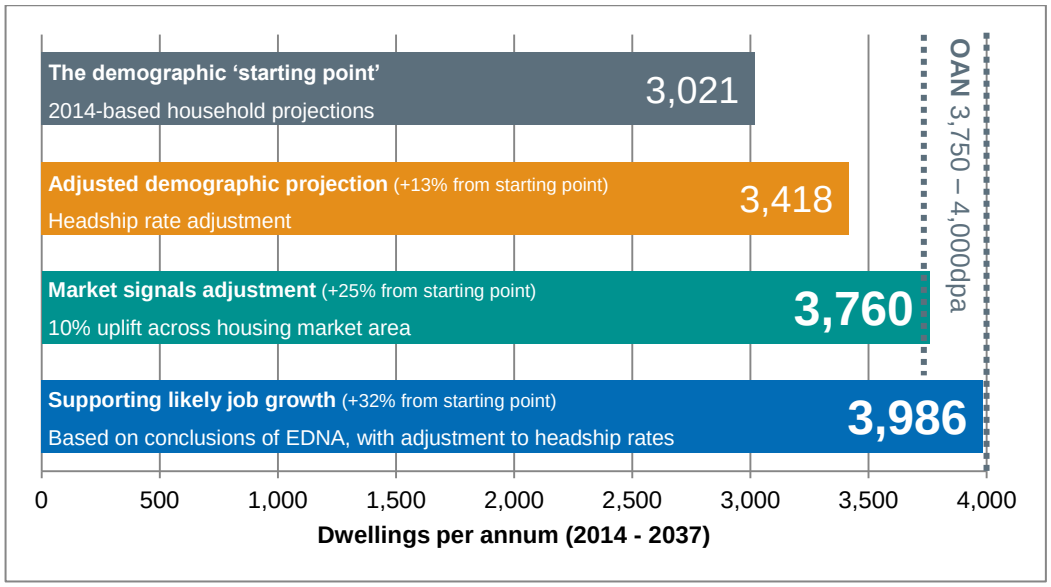
10. The Councils' EDNA suggests that some 62,675 additional jobs are likely to be created in South Essex over the period assessed in this addendum (2014 – 2037). The population growth projected by the 2014-based SNPP is projected to result in a significant growth in the working age population and the labour force across South Essex, with the analysis suggesting that in excess of 50,000 new jobs could be supported on the basis of the area's growing population. However, supporting the scale of job growth anticipated in the EDNA would, without notable changes to labour-force behaviour, require a higher level of population growth, supported by above trend migration. This is based upon the retention and attraction of greater numbers of working age people in particular.

11. Modelling based on the 2014-based SNPP and SNHP indicates that supporting the job growth predicted in the EDNA would generate a greater need for housing than implied by the demographic projection, with a need for **3,986 dwellings per annum** estimated when simultaneously allowing for the return to higher levels of household formation for younger households.

12. Providing for a level of housing growth which falls within the range of OAN figures identified (3,750 – 4,000 dwellings per annum) will provide for the anticipated demographic growth pressures in the area and result in a significant growth in the labour force in South Essex, supporting a sustained growth in employment. The lower end of the range also provides for an uplift considered to represent the minimum response necessary to the moderate worsening in market signals in South Essex. The upper end of the range would support the further growth in the population of South Essex above historic trends to align with the scale of job growth considered likely in the EDNA, based upon a consistent set of labour-force adjustments. In addition the upper end of the range would also provide a greater uplift from the demographic projection of need, representing a more pronounced contribution to supporting the provision of the identified need for affordable housing provision based upon the Councils' adopted or proposed affordable housing targets. In accordance with the conclusion reached in the 2016 SHMA, it is recommended that greater weight is given to the upper end of the OAN range in the assessment of the five year housing land supply at an authority level and in the development of Local Plan policy.

1.2 The concluded range uplifts the demographic 'starting point' by up to 32% and increases the adjusted demographic projection by up to 17%, and would significantly boost the supply of both market and affordable housing in South Essex. The adjustments applied in arriving at this position are illustrated below.

Figure 1.1: Adjustments to the 'Starting Point' in Arriving at the OAN



Source: Turley; Edge Analytics

13. This updated position on the OAN for housing across South Essex has implications both for the level of housing growth needed in each authority and the need for different sizes and types of housing over the assessment period. In relation to the latter, the updated analysis in section 5 of this addendum highlights the likely continued demand for housing of all sizes, with the greatest demand for housing generated by households who would typically require three bedrooms. Some 60% of households forming in South Essex are expected to require housing with at least three bedrooms, although local variation is evident and a demand for additional smaller housing is also expected to be generated over the period assessed in this addendum. The outputs of this modelling exercise should be used only for guidance, however, and it is recommended that policies are not overly prescriptive given that the profile of housing delivered will be driven by the market.

14. Furthermore, this addendum has continued to highlight the sizeable growth in the older population projected over the period to 2037, which could generate demand for specialist older persons' housing. The application of prevalence rates suggests that circa 327 bedspaces will be needed annually across South Essex over the assessment period based on the upper end of the concluded OAN range, which is included within the OAN for housing derived from this scenario. An additional need to annually provide 131 bedspaces in communal establishments in South Essex is also identified, but is excluded from and is therefore additional to the overall OAN established. While this is separately identified by the modelling developed to inform this addendum, it is important to recognise that the respective housing strategies of South Essex authorities may seek to meet this implied institutional need through both social and market housing designed to cater for older persons' housing need, and any such adjustment to provide for needs within housing (Use Class C3) would need to be reflected through a quantifiable upward adjustment to the OAN.

1. Introduction

1.1 Turley and Edge Analytics were appointed by the South Essex authorities of Basildon, Castle Point, Rochford, Southend-on-Sea and Thurrock to prepare a Strategic Housing Market Assessment (SHMA) which objectively assesses the need for housing across the South Essex housing market area (HMA). The final report[1] was published in May 2016.

1.2 The SHMA identified the importance of continuing to take account of newly published evidence throughout the preparation of authorities' individual Local Plans, recognising that the updated evidence could impact upon the concluded objectively assessed need (OAN) in the SHMA. The report makes specific reference to two key milestones, namely:

- **The release of the 2014-based sub-national population and household projections (SNPP/SNHP) in May and July 2016 respectively[2].** This provides a new demographic 'starting point' for the assessment of housing needs – in line with Planning Practice Guidance[3] (PPG) – which updates the official 2012-based projections referenced within the SHMA. While the PPG clearly states that housing needs assessments are not automatically rendered out of date when new projections are issued[4], the Planning Inspectorate (PINS) in practice typically require local authorities to demonstrate an awareness and appreciation of updated evidence released throughout Local Plan preparation, particularly where a '*meaningful change in the housing situation*' is implied[5]; and

- **The findings of the South Essex Economic Development Needs Assessment (EDNA)[6].** This considers likely future job growth in detail, moving beyond the economic analysis in the SHMA to consider the latest forecasts, key sectors for future growth and the role of South Essex's strategic sites in delivering employment growth across the area. The conclusions of this study will supersede the interim conclusions reached on likely economic growth within the SHMA.

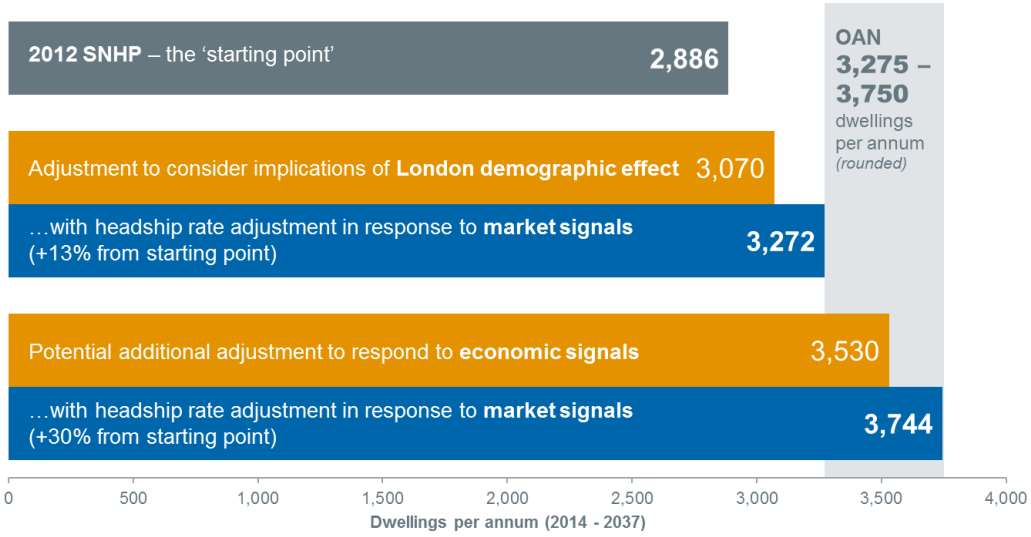
1.3 On this basis, the release of new 2014-based population and household projections and the availability of the emerging findings from the EDNA collectively justify a review of the OAN concluded in the SHMA. This addendum report has been prepared to consider the implications of this newly published evidence on the OAN for housing in South Essex, but does not represent a comprehensive updating of all elements of the SHMA and is intended to be read alongside the earlier document.

1.4 Whilst the publication of the 2014-based SNHP alone represents an important consideration for the calculation of the OAN, this update is of particular relevance given that the upper end of the previously concluded OAN range was linked to an initial analysis of available economic forecasts which preceded the publication of the EDNA.

[1] Turley (2016) South Essex Strategic Housing Market Assessment
[2] Ibid (para 3.59)
[3] PPG Reference ID 2a-015-20140306
[4] PPG Reference ID 2a-016-20150227
[5] PPG Reference ID 2a-016-20150227
[6] Turley (2016) South Essex Strategic Housing Market Assessment (para 1.32 and sections 4/7)

As summarised at Figure 7.4 of the SHMA – and replicated below – the concluded need for 3,275 – 3,750 dwellings per annum in South Essex over the period from 2014 to 2037 uplifted the then '*starting point*' of the official 2012-based household projections by circa 30% at the upper end. This included a demographic adjustment to take account of a return to higher levels of net migration from London, an adjustment to household formation rates and an allowance for stronger growth in the labour force to support forecast job growth.

Figure 1.1: Adjustments Applied in Arriving at the OAN for South Essex



Source: Turley, 2016

1.5 The analysis in this addendum report follows the guidance and methodology currently set out in the PPG as well as its recent interpretation through Inspectors' decisions. This remains the latest available official guidance on calculating housing needs, pending the planned consultation on an updated standard methodology intended to apply from April 2018[7]. In the absence of any guidance on a preferred alternative methodology at the current point in time – and to maintain the Councils' ongoing progress in developing Local Plans, in line with the Government's expectation that all areas are covered by an up-to-date plan – this is considered a reasonable, consistent and appropriate basis through which this updated position can be robustly established. However, the implications of any alternative methodology will need to be considered by the Councils in future.

Wider Context

1.6 While the addendum makes reference to updated local evidence shaping the need for housing in South Essex, it also recognises changes in the regional and national context where appropriate.

1.7 In July 2016, the Department for Communities and Local Government (DCLG) issued a call for ideas to inform the development of an ambitious vision and delivery plan for the Thames Estuary, which covers South Essex, North Kent and East London[8]. This follows

[7] DCLG (2017) Fixing our Broken Housing Market
[8] DCLG (2016) Thames Estuary 2050 Growth Commission – call for ideas

the establishment of the Thames Estuary 2050 Growth Commission in March 2016. This recognises the '*huge untapped potential*' of the region and expects to see '*significant economic growth – in terms of the number of jobs, businesses and homes*', with a vision for '*high-quality growth that recognises the existing strengths of the area whilst realising its significant economic potential*'[9]. The EDNA considers the implications of this policy-led growth strategy alongside its consideration of likely future job growth. The EDNA clearly makes a distinction between its consideration of 'baseline' (policy-off) job growth and the potential scale of growth associated with realising the ambitions of the Growth Commission. The latter moves beyond a baseline view of job growth which is likely to occur, which is required to underpin the objective assessment of housing need. The importance of distinguishing between 'policy on' and 'policy off' employment growth scenarios in establishing the OAN has been previously recognised by the Planning Inspectorate[10], although any 'policy on' scenario provides important context for plan-makers across South Essex when considering the evidence of housing need and establishing appropriate long-term planning policy.

1.8 In June 2016, the UK voted to leave the European Union (EU) following a national referendum. Migration was central to the referendum debate, and is a key element of future population growth projections and therefore housing need. The decision to leave is expected to result in changes to existing international migration trends at a national level. However, the exact nature and scale of change remains unknown, pending the outcome of two years of formal negotiations which commenced when the Prime Minister triggered Article 50 in March 2017[11]. Further consideration is given to the projected scale of international migration in South Essex in section 2 of this addendum.

1.9 The outcome of the referendum could also have long-term implications for the UK economy, creating some long-term uncertainty[12]. The potential impact of Brexit on economic growth in South Essex falls outside of the scope of this report, and is considered separately in the EDNA.

Structure

1.10 In following the PPG methodology to establish the OAN for housing in South Essex, reference is made throughout this addendum to the analysis presented in the SHMA, which is not replicated or updated in full in this addendum report.

1.11 In particular, the evidence around market signals presented in the SHMA is not revisited in full. The detailed analysis in section 5 of the SHMA continues to provide a clear position on the extent to which trends are worsening over the long-term relative to appropriate comparator areas, with the limited availability of new data unlikely to significantly impact upon the long-term trends observed within the SHMA. The implications of the market signals evidence presented within the SHMA are, however, considered as part of the updated OAN process, taking account of the latest case law and the views of recent Local Plan Inspectors.

[9] Ibid (paras 5 – 8)

[10] Elizabeth C. Ord (2015) Gloucester, Cheltenham and Tewkesbury Joint Core Strategy – Inspector's request for additional evidence arising from the Stage 1 hearings, focused on Objectively Assessed Housing Need, the Strategic Housing Market Assessment, Employment Requirements and Retail Need

[11] Prime Minister's Letter to Donald Tusk triggering Article 50, 29 March 2017

[12] Speech by Mark Carney, Governor of the Bank of England – Uncertainty, the economy and policy (30 June 2016)

1.12 In addition, the addendum does not fully update the affordable housing need calculation presented in section 6 of the SHMA, but integrates the latest demographic projections in the calculation. The other inputs to the calculation – including the detailed analysis of Housing Register data provided by the Councils to inform the 2016 SHMA – are considered up-to-date and sufficiently representative for the purpose of updating the OAN within this addendum.

1.13 This addendum report is evidently not intended to replace or supersede the SHMA and should therefore be read alongside it. As set out above, it presents a focused update to the SHMA's concluded OAN, specifically taking into account new data and information – referenced at paragraph 1.2 above – and the latest available legal judgments and interpretation of the PPG methodology.

1.14 This report is structured as follows:

- **Section 2 – Updated Demographic Projections of Housing Need** – the latest 2014-based population and household projections are introduced and compared with alternative trend-based demographic projections modelled by Edge Analytics using the latest available demographic data. The need for adjustment to this new 'starting point' is considered through a detailed interrogation of its underpinning assumptions, with further sensitivity testing presented to show the impact of alternative demographic assumptions;

- **Section 3 – Likely Change in Job Numbers and Implications for Housing Need** – drawing upon the conclusions of the EDNA, the scale of labour force growth required to support likely job creation in South Essex is considered, with the implications for housing need established;

- **Section 4 – Updated Objective Assessment of Need** – the evidence presented in preceding sections is evaluated and drawn together to objectively assess the updated need for housing in South Essex and its constituent authorities. This considers the need for adjustments to the 'starting point' to take account of demographic factors, likely employment growth, market signals and affordable housing need;

- **Section 5 – Need for Different Types of Housing** – following the guidance in the PPG, the size and type of households projected to form under the recommended OAN are identified, with the implications for housing need established; and

- **Section 6 – Conclusions** – a concise summary of the addendum and its implications for the conclusions of the SHMA.

2. Updated Demographic Projections of Housing Need

2.1 The SHMA identified the underlying demographic projections as an important component of the concluded OAN range for South Essex.

2.2 Following the guidance in the PPG[13], the SHMA referenced the then-latest 2012-based sub-national population projections (SNPP) and sister 2012-based sub-national household projections (SNHP) as the 'starting point' for the assessment of housing needs in South Essex. The SHMA concluded that this dataset represented '*an appropriate starting point for considering population growth and therefore demographic based need for TGSE*'[14], in the context of a detailed analysis of underpinning assumptions and the consideration of a range of variant sensitivity scenarios relating to the demographic evidence presented.

2.3 Whilst the 2012-based SNPP was considered to represent an appropriate and reasonable '*starting point*', the important implications of the demographic relationships with London were also considered. An alternative demographic scenario developed by Edge Analytics ('SNPP London') was considered to represent an appropriate adjustment in order to derive the lower end of the OAN range[15], assuming that the outflow of migrants from London to neighbouring authorities increases beyond the levels implied by the 2012-based SNPP to more closely reflect the return to pre-recession trends planned for by the Greater London Authority (GLA). The justification for the resultant higher level of population growth was also supported by evidence within the most recently published ONS mid-year estimates of population that the population was growing at a faster rate than projected by the 2012-based SNPP across South Essex[16].

2.4 Following publication of the SHMA, the 2014-based SNPP were released by the Office for National Statistics (ONS) on 25 May 2016. This updated population growth projection underpinned the 2014-based SNHP later released by DCLG on 12 July 2016. While the demographic assessment in the SHMA is not automatically rendered out of date by these new datasets, the PPG requires local authorities to consider any '*meaningful change*' to ensure that housing needs assessments are informed by the latest available information[17].

2.5 This section introduces the new 2014-based projections and their underpinning assumptions, drawing comparisons with the scale of growth implied under each of the demographic scenarios presented in the SHMA. Consideration is given to the need for adjustment in order to arrive at an appropriate demographic projection of housing need in South Essex, which forms a key component of the OAN process set out in section 4 of this addendum.

[13] PPG Reference ID 2a-015-20140306
[14] Turley (2016) South Essex Strategic Housing Market Assessment (para 3.122)
[15] Ibid (paras 3.81 – 3.101, para 7.47)
[16] Ibid (paras 3.57 – 3.58)
[17] PPG Reference ID 2a-016-20150227

A New 'Starting Point'

2.6 Over the period from 2014 to 2037, the following table shows the projected change in population and households across South Essex, based on the latest 2014-based projections. Household growth is converted to dwellings using 2011 Census vacancy rates, for consistency with the SHMA[18].

Table 2.1: 2014-based Population and Household Projections 2014 – 2037

	Change 2014 – 2037				Average per year	
	Population	%	Households	%	Net migration	Dwellings
Basildon	34,197	18.9%	17,396	23.0%	588	770
Castle Point	9,723	10.9%	5,561	15.0%	669	250
Rochford	10,464	12.3%	5,740	16.7%	475	256
Southend-on-Sea	33,359	18.7%	19,151	24.9%	980	876
Thurrock	41,062	25.1%	19,502	30.2%	574	869
South Essex	**128,805**	**18.5%**	**67,350**	**23.4%**	**3,286**	**3,021**

Source: DCLG; ONS; Edge Analytics

2.7 The 2014-based projections suggest that the population of South Essex will increase by circa 19% over the period from 2014 to 2037, with around 128,800 additional residents projected to live in the area. This projected growth slightly exceeds the national rate (17%) projected for England over the same period, with Castle Point and Rochford the only authorities in South Essex projected to grow at a rate which falls below this benchmark.

2.8 Based on the latest 2014-based household formation rates ('headship rates') applied within this official dataset, a need for 3,021 additional dwellings will be generated annually under this 'starting point' projection, when allowing for vacancy and second home ownership. The projected 23% increase in the number of households in South Essex again slightly exceeds the 22% growth projected nationally over the period presented.

2.9 The implied annual housing need under this scenario can be directly compared with the demographic scenarios presented within the SHMA[19], which draw upon earlier past growth (PG) trends and official projections but apply consistent vacancy rates. No adjustments to the headship rates published by DCLG in each of their household projections have been applied in any of the scenarios presented below.

[18] Turley (2016) South Essex Strategic Housing Market Assessment (Figure 3.1)

[19] The alternative trend-based demographic projections presented in the SHMA were not advanced beyond the demographic analysis in section 3 and therefore for clarity only the Past Growth 10yr variant scenario is presented in this table

Table 2.2: Implied Annual Housing Need 2014 – 2037

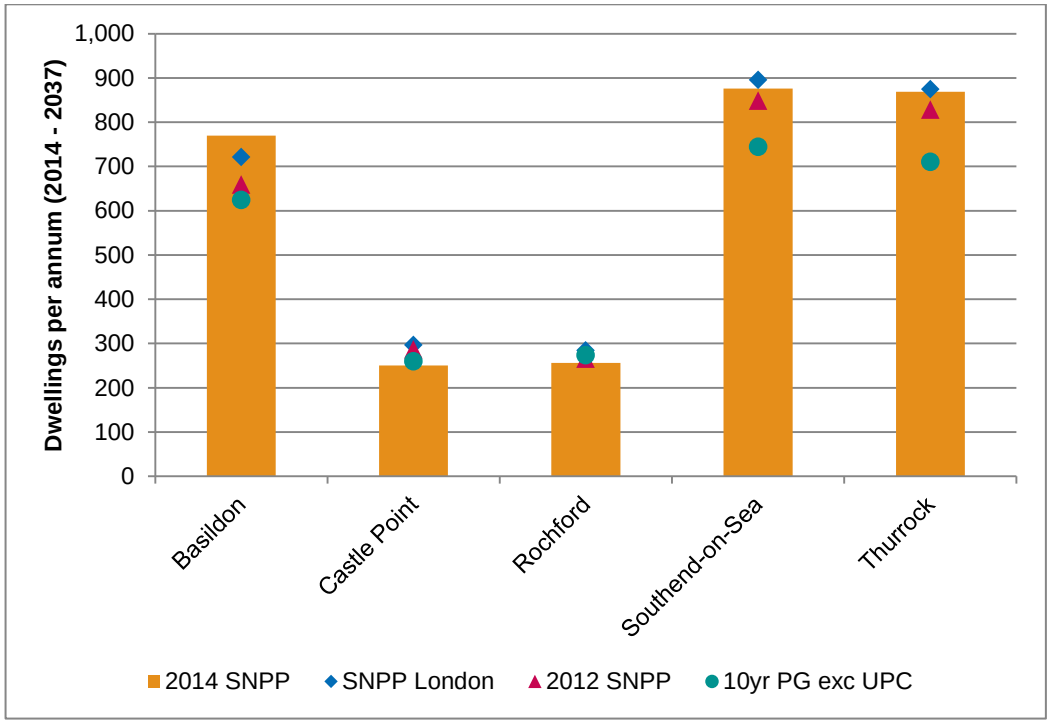
	Basildon	Castle Point	Rochford	Southend -on-Sea	Thurrock	South Essex
SNPP London	721	296	284	895	874	3,070
2014 SNPP	**770**	**250**	**256**	**876**	**869**	**3,021**
2012 SNPP	659	286	265	848	828	2,886
10yr PG exc UPC	624	259	273	744	710	2,610

Source: Edge Analytics

2.10 It is evident that across South Essex as a whole the implied need for 3,021 dwellings per annum under the 2014 SNPP scenario falls between the 2012 SNPP and adjusted SNPP London scenario, with the latter considered an important demographic adjustment in the SHMA and forming – with a further adjustment to headship rates – the basis of the lower end of the recommended OAN range as referenced earlier in this section.

2.11 The impact is more variable between authorities, however, with the implied demographic need for housing under the 2014-based SNHP higher than previously suggested in Basildon but lower in Castle Point and Rochford. For Southend-on-Sea and Thurrock whilst the scale of need projected under the 2014 SNHP exceeds the previous official dataset and trend-based projections it is relatively closely aligned to the SNPP London scenario. This is illustrated further through the following chart.

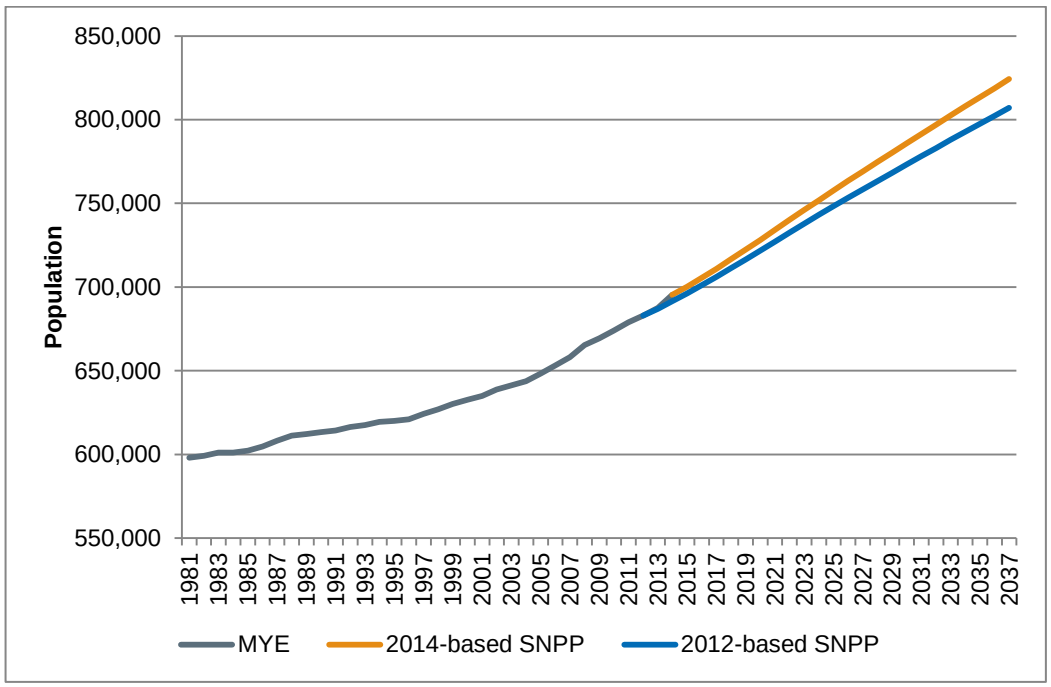
Figure 2.1: Comparing Implied Annual Housing Need 2014 – 2037



Source: Edge Analytics

2.12 The implied higher need for housing is considered to primarily result from the 2014-based SNPP projecting a higher level of population growth across South Essex relative to the preceding 2012-based dataset as opposed to changes resulting from the updated household formation rates. This is illustrated in the following chart. The scale of projected population growth within the latest 2014-based dataset would result in the population of South Essex being approximately 17,000 persons higher by 2037 than suggested by the previous projection (2012 SNPP).

Figure 2.2: Historic and Projected Population in South Essex

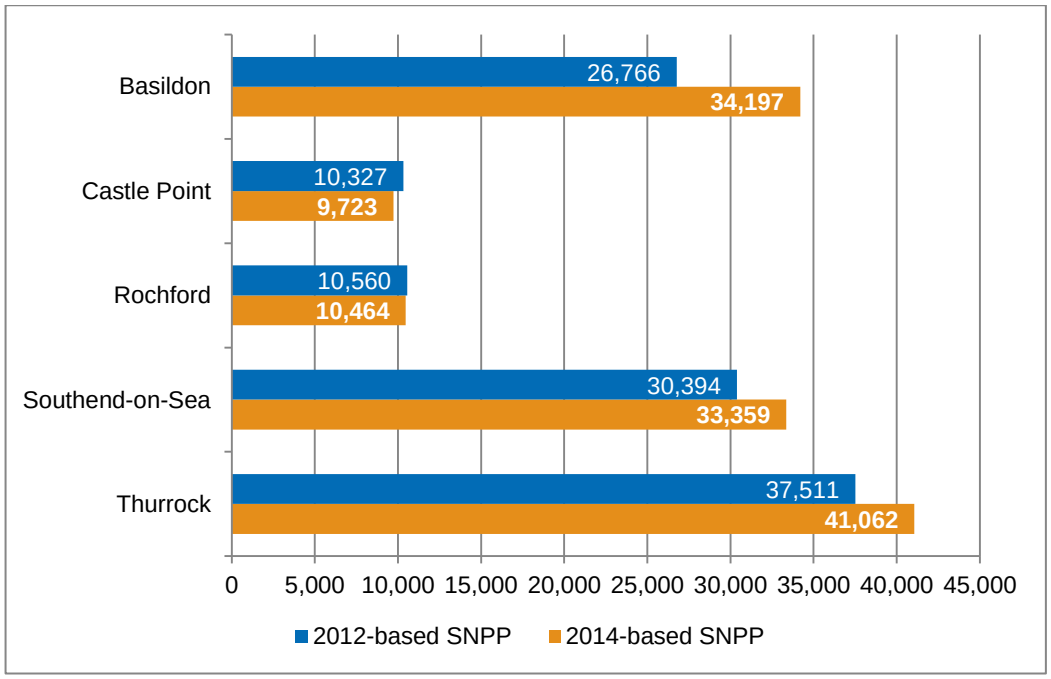


Source: ONS

2.13 The different population growth trend between the two datasets is not consistent across all five South Essex authorities, however, as shown in the following graph. The 2014-based SNPP projects population growth of a greater scale than suggested by the 2012-based SNPP in Basildon, Southend-on-Sea and Thurrock.

2.14 By contrast, the scale of difference in absolute terms is less pronounced in Rochford and Castle Point, with both seeing a slightly lower level of population growth projected. The difference in the population projection for these two authorities is less pronounced than the resultant difference in housing implied in the modelling outputs presented in Table 2.2, in particular for Castle Point. This suggests that other factors are also having an impact, with this potentially relating to the application of different headship rates in the latest dataset and potentially differences in the projected age profile of the population to which these rates are applied. This is considered further later in this section.

Figure 2.3: Comparing Projected Population Growth 2014 – 2037



Source: ONS

Considering the Need for Adjustment

2.15 The PPG makes clear that the 'starting point' may require adjustment to reflect local demographic factors which are not captured in past trends, with sensitivity testing based on '*alternative assumptions in relation to the underlying demographic projections and household formation rates*' advocated[20]. The need to apply – and appropriateness of – alternative assumptions should therefore be established and justified, based both on the underlying population projection and the application of household formation rates. Each of these factors are separately considered below.

Population

2.16 Each iteration of the official projections draws upon a different historic time period, basing trends on the immediately preceding 5/6 year period. The 2014-based SNPP is therefore primarily based on trends recorded between 2009 and 2014, unlike the 2007 to 2012 period covered by the preceding 2012-based dataset.

2.17 The SHMA notably identified Southend-on-Sea, Thurrock and particularly Basildon as recording higher than projected levels of population growth between 2012 and 2014[21]. On this basis, the higher level of population growth projected in these authorities was foreseeable, with the inclusion of this period of higher growth within the official projections likely to be an important contributing factor.

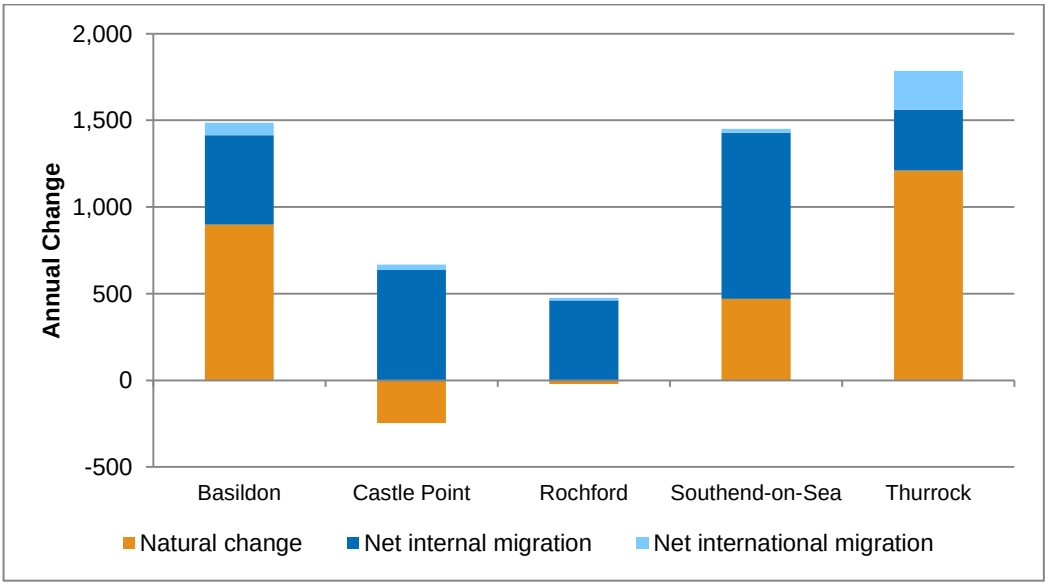
2.18 When considering the components of population change, the 2014-based SNPP continues to assume that net migration is a significant driver of population growth in

[20] PPG Reference ID 2a-017-20140306
[21] Turley (2016) South Essex Strategic Housing Market Assessment (Appendix 2, Figure 2.18)

South Essex. As summarised in the following chart, this is principally assumed to originate from within the UK, with international migration expected to make a comparatively small contribution towards future population growth in South Essex. The largest net inflow of international migrants over the assessment period is projected in Thurrock, although even here only 13% of the annual population growth projected is attributable to international migration. Across England over the same period, the 2014-based national population projections (NPP) indicate that 49% of the population growth projected is attributable to net international migration.

2.19 Births are expected to outnumber deaths in Basildon, Southend-on-Sea and Thurrock, driving a positive natural change in the population in contrast with Rochford and particularly Castle Point where it is projected to have a net negative effect on population.

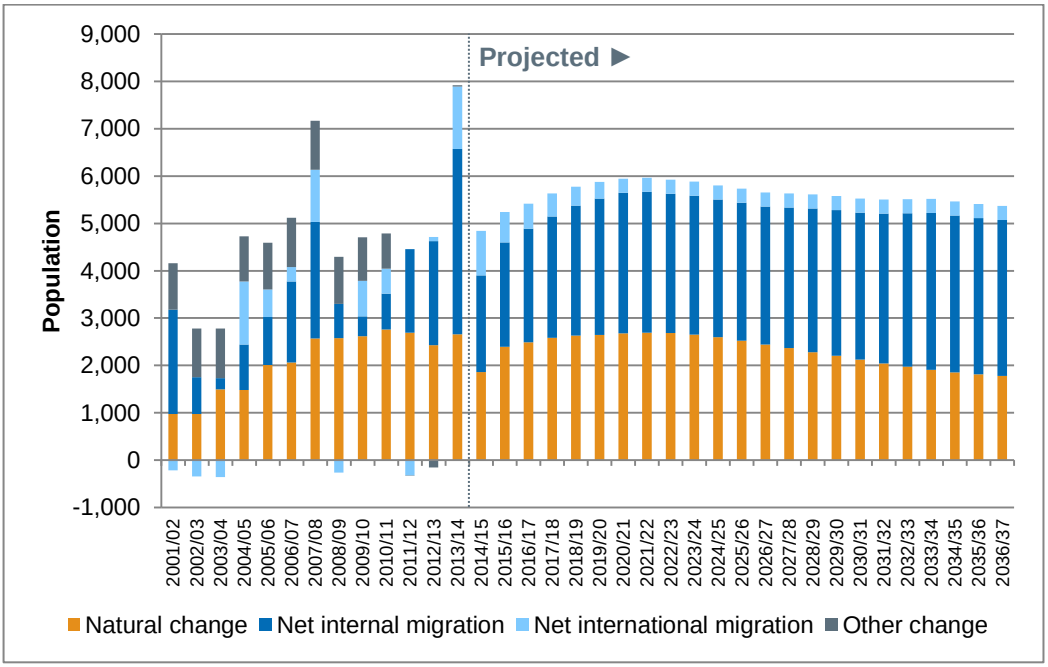
Figure 2.4: Projected Components of Population Change in South Essex 2014 – 2037 (2014-based SNPP)



Source: ONS

2.20 When set within the context of historic population trends across South Essex, the following chart shows that the 2014-based SNPP allows for annual levels of population growth which largely exceed past trends, with the exception of the spikes observed in 2007/08 and 2013/14. The level of natural change in the population projected is reflective of the growing recent trend, and – as recognised in the 2016 SHMA – migration is assumed within the official datasets to be a key driver of future population growth in South Essex, to a largely greater extent than observed historically.

Figure 2.5: Historic and Projected Components of Population Change in South Essex (2014-based SNPP)



Source: ONS

2.21 Alongside net migration and natural change, Figure 2.5 also presents a component labelled 'other change'. As introduced in the SHMA[22], this primarily results from the rebasing of earlier population estimates (2002 – 2010) following the 2011 Census to ensure the correct transition of the age profile over the decade. This unattributable population change (UPC) is not explicitly assigned to any other component of change by the ONS, suggesting that they were not able to accurately identify the cause of any mis-estimation. The SHMA found the historic impact of UPC to be variable across South Essex, having a small impact in most authorities but representing a substantial upward adjustment in Southend-on-Sea inferring that population growth in the borough was previously underestimated by the ONS between Census years. While Edge Analytics' analysis within the SHMA suggested that this could be attributable to an undercount in the 2001 Census, it was noted that the source of such an adjustment is difficult to accurately verify, presenting a challenge in establishing the most appropriate use of historic evidence for the borough[23].

2.22 In this regard, it is important to note that official projections – both the 2014-based and earlier 2012-based datasets – do not explicitly seek to include UPC[24]. While the SHMA developed sensitivities to test the inclusion or exclusion of adjustments for UPC, this was found to have a comparatively limited effect at South Essex level, with the uncertainty associated with this component – and its relatively close alignment with the

[22] Ibid (paras 3.23 – 3.24)
[23] Ibid (para 3.31)
[24] Ibid (para 3.37)

2012-based SNPP when applied to a long-term past growth trend-based scenario – justifying the use of the official projection[25].

2.23 Figure 3.5 of the SHMA compared the historic and projected components of change, based on the 2012-based SNPP. This analysis is updated in the following table, summarising the annual change projected by the 2014-based SNPP relative to the five and ten year periods prior to its base date.

Table 2.3: Annual Historic and Projected Components of Change

	Historic		Projected
	5 year average 2009 – 2014	10 year average 2004 – 2014	2014-based SNPP 2014 – 37
Natural change	2,631	2,387	2,314
Net internal migration	1,809	1,590	2,921
Net international migration	472	543	365
Other change	305	653	–
Annual population change	**5,218**	**5,173**	**5,600**

Source: ONS

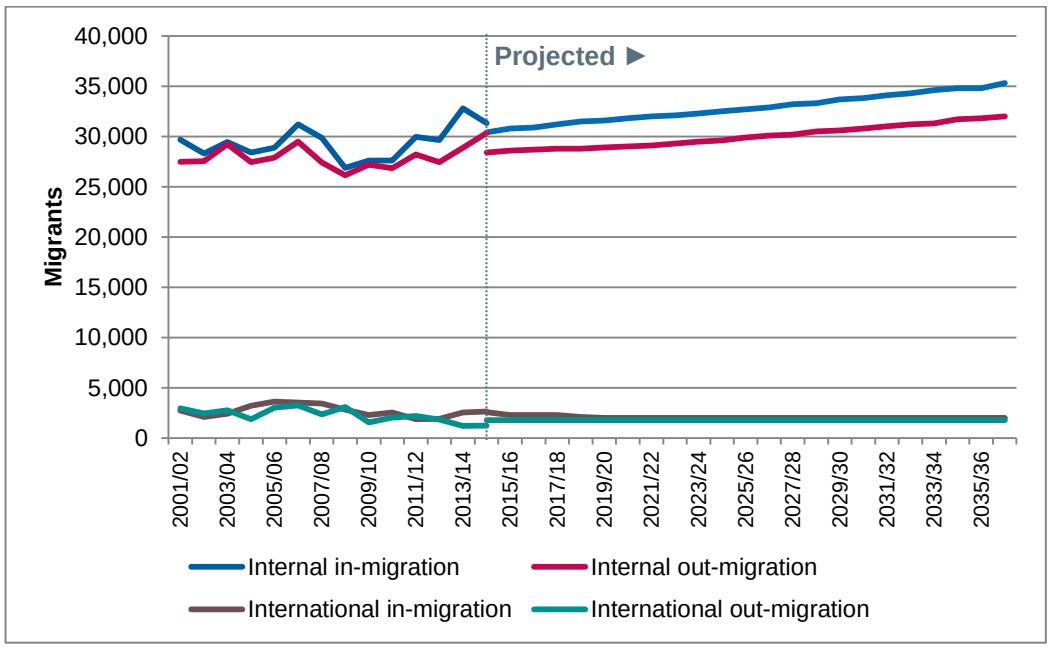
2.24 It is evident that the 2014-based SNPP assumes a slightly higher level of population growth across South Essex relative to the recent five year historic trend. This principally relates to net migration, given that the overall impact of natural change – while remaining positive, with births outnumbering deaths to a significant degree – is expected to diminish relative to the most recent five year historic trend. The higher level of growth projected by the 2014-based SNPP is slightly more pronounced when compared with the 10 year average.

2.25 Higher levels of net internal migration are projected compared to recent historic trends, with a projected inflow of approximately 2,920 persons per annum. The projected net inflow of international migrants is slightly lower than observed over recent years, although the overall level of population growth projected annually (5,600) is not considered to be significantly disproportionate to the total change recorded over the five or ten year period presented. However, the contributing factors to the slightly higher projection of growth compared to historic trends are considered further below.

2.26 Further context on the assumed level of net migration in South Essex under the 2014-based SNPP can be established through analysis of the projected inflow and outflow of internal and international migrants. Both historic and projected levels of migration are presented in the following chart.

[25] Ibid (paras 3.120 – 3.121)

Figure 2.6: Historic and Projected In and Out-Migration in South Essex (2014-based SNPP)



Source: ONS

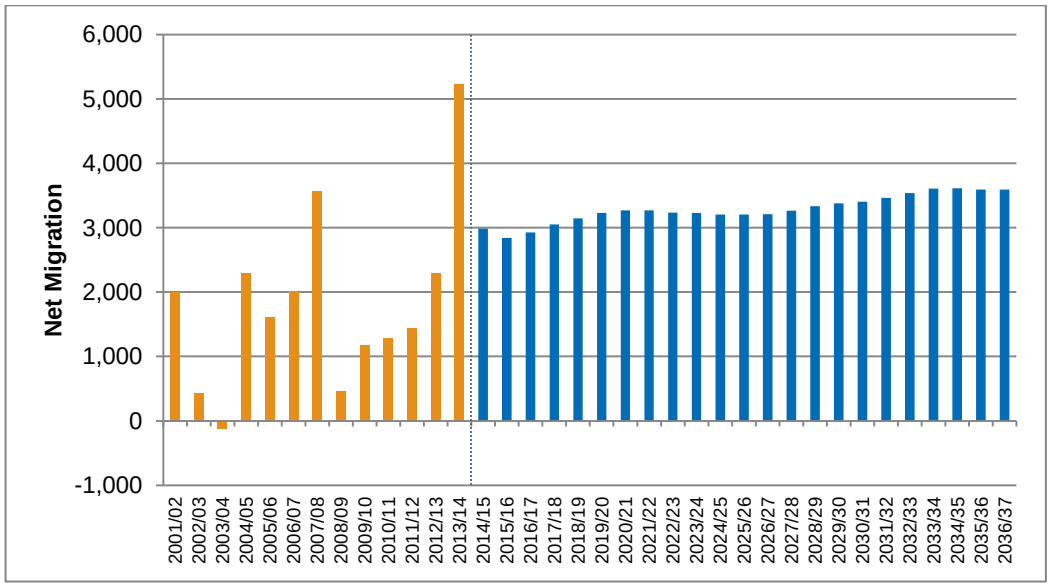
2.27 The 2014-based SNPP evidently assumes that the inflow of internal migrants to South Essex from other parts of the UK will increase to surpass historic levels, which fell at the onset of the recession but have more recently recovered to surpass the pre-recession peak. The projected outflow of people from South Essex to the rest of the UK is consistently lower than the projected inflow, remaining broadly in line with that seen historically but growing in scale over time. When considering international migration, it is evident that the 2014-based SNPP assumes a smaller inflow of international migrants over the projection period relative to the peak seen around ten years ago, with the outflow of international migrants assumed to remain fixed at a rate which broadly reflects that seen over recent years. While this relates to international migration to and from South Essex, it is noted that the secondary moves of international migrants – from their point of arrival to elsewhere in the country – are classified as internal. For example, the SHMA noted that London receives a significant number of international migrants, who subsequently drive population growth in other parts of the country when they move[26]. The SHMA identified the strong migration links with London, which have historically influenced the demographic profile of South Essex[27].

2.28 Collectively, these assumptions result in the 2014-based SNPP allowing for an ongoing annual overall level of net in-migration which exceeds that seen in all but two years since 2001. While levels of net migration have fallen over recent years – most notably following the onset of the recession (2008 – 2012) – there is no indication that the 2014-based SNPP assumes a continuation of this suppressed position, with the assumed flow of migrants to South Essex exceeding that seen even during more positive market

[26] Ibid (para 3.82)
[27] Ibid (para 3.81)

conditions prior to 2008 and continuing a generally upwards positive trend seen since 2012. This is illustrated in the following chart[28].

Figure 2.7: Historic and Projected Net Migration to South Essex (2014-based SNPP)



Source: ONS

2.29 The assumed higher net inflow of migrants over the assessment period relative to both short-term and longer-term historic counts reflects the methodology developed by ONS in its projections, which take account of the age-specific migration rates of those moving out of a given authority based on recent trends. This inherently means that the number of people leaving an authority – and entering another – will be influenced by the size of the population in that authority. On this basis, any local authority which has a strong migration relationship with South Essex and has experienced a change in the projected size of the population will impact upon the assumed number of people moving into the area, with out-migration from South Essex similarly influenced by the projected change in its population over time. This suggests that any implied deviation from historic migration trends in South Essex is reflective of projected changes in the population in those areas which share a strong relationship with South Essex. This could include London, recognising its continued demographic growth and the strong migration links identified in the SHMA[29].

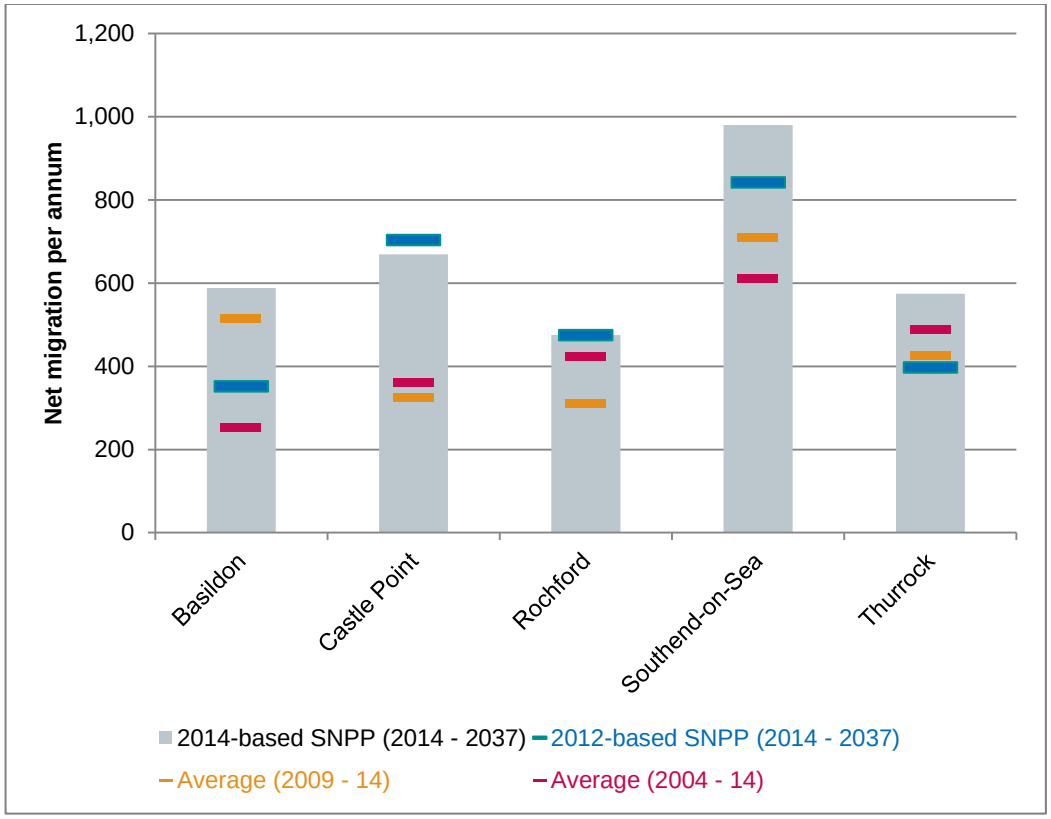
2.30 In understanding the local implications of these assumptions, it is beneficial to benchmark the scale of migration implied by the 2014-based SNPP against historic trends. The following chart shows the assumed net inflow of migrants to each authority

[28] Historic figures presented do not include unattributable population change (UPC). As shown in Figure 2.4 and Table 2.3, at a South Essex level this is a positive factor which would means that the difference between projected migration and historic migration could be less pronounced than shown in Figure 2.7

[29] Turley (2016) South Essex Strategic Housing Market Assessment (paras 2.13 – 2.20)

annually under the 2014-based SNPP, benchmarked against the comparable assumption in the preceding 2012-based SNPP and historic trends[30].

Figure 2.8: Comparing Historic and Projected Net Migration



Source: Edge Analytics; ONS

2.31 Relative to the preceding 2012-based SNPP, Basildon is projected to see a higher level of net migration over the assessment period under the 2014-based SNPP, reflecting and indeed closely aligning with the increased flows seen over more recent years, with this also to a lesser extent true of Southend-on-Sea and Thurrock. The projected level of net migration to Rochford is comparable between the two datasets, and the latest dataset suggests a slightly lower level of migration to Castle Point under the 2014-based SNPP when compared with the 2012-based SNPP.

2.32 All authorities are projected to see levels of net migration which to varying degrees exceed the historic levels recorded over the period presented. This is most pronounced in Castle Point, where both the 2014-based and 2012-based SNPP expect higher levels of net migration to the borough than seen over recent years. The projected net inflow to Southend-on-Sea is also higher than recent historic trends suggest, although it is important to recognise – as noted in the SHMA – that there is some uncertainty associated with longer-term historic migration evidence in the borough in particular due to the past influence of unattributable population change (UPC). If included in the historic averages presented above, higher levels of historic net migration would be

[30] Historic figures presented do not include unattributable population change (UPC). 2012-based SNPP based on change projected over assessment period (2014 – 2037) and therefore does not directly compare with the analysis presented at Figure 3.6 of the SHMA

implied. While Thurrock and Rochford are also projected to see slightly higher levels of net migration in future, there is a more limited deviation from the longer term historic trend.

2.33 In interpreting these observations, it remains important to reflect upon the conclusions of the SHMA which found that historic trends may have been at least partially influenced by the comparatively low levels of development over recent years, particularly during the recession[31]. As with the 2012-based SNPP, the allowance for an increase from this historic trend provides some assurance that the 2014-based SNPP is unlikely to be assuming a continued suppression linked to this historic potential constraint. This is considered further later in this report.

Considering the Implications of Recent Demographic Evidence

2.34 The SHMA included a number of variant demographic scenarios[32] based upon differing historic periods and taking into account issues related to the mis-estimation of population counts by the ONS (UPC). It is appropriate to apply this approach within this addendum using the latest demographic data to enable sensitivity testing of the 2014-based SNPP through the development of alternative trend-based demographic projections, as in the SHMA and reflecting the guidance in the PPG.

2.35 These alternative scenarios integrate the latest available mid-year population estimates (MYE) released by ONS for 2015. Although this suggests that the population in 2015 fell marginally below (0.05%) the level projected in the 2014-based SNPP, this level of difference is not considered to be statistically significant, and suggests a relatively close alignment between the official projection and the most recent population estimate. Whilst this represents only one year of data into the projection period, this provides a level of reassurance to the trend projected under the 2014-based SNPP at a South Essex level. The scale of growth implied by population estimates over recent years similarly aligns with the change recorded in administrative data sources over the same period, with quality assurance data issued by ONS therefore indicating that the total population of South Essex is being accurately estimated[33].

2.36 To illustrate this further, the following table compares projected and estimated components of population change between 2014 and 2015 in South Essex, in a comparable format to the analysis presented at Figure 3.10 of the SHMA. It should be noted that the projected components of change are rounded to the nearest 100 and therefore do not sum to the total population.

[31] Turley (2016) South Essex Strategic Housing Market Assessment (para 3.119)
[32] Ibid (paras 3.61 – 3.80)
[33] ONS (2016) Population Estimates Quality Tools, mid-2015

Table 2.4: 2014-based SNPP and Mid-year Population Estimates 2014 – 2015

	2014-based SNPP	MYE
Mid-2014	**695,405**	**695,405**
Natural change	1,800	2,126
Net internal migration	2,000	995
Net international migration	800	1,393
Other change	–	5
Mid-2015	**700,247**	**699,924**

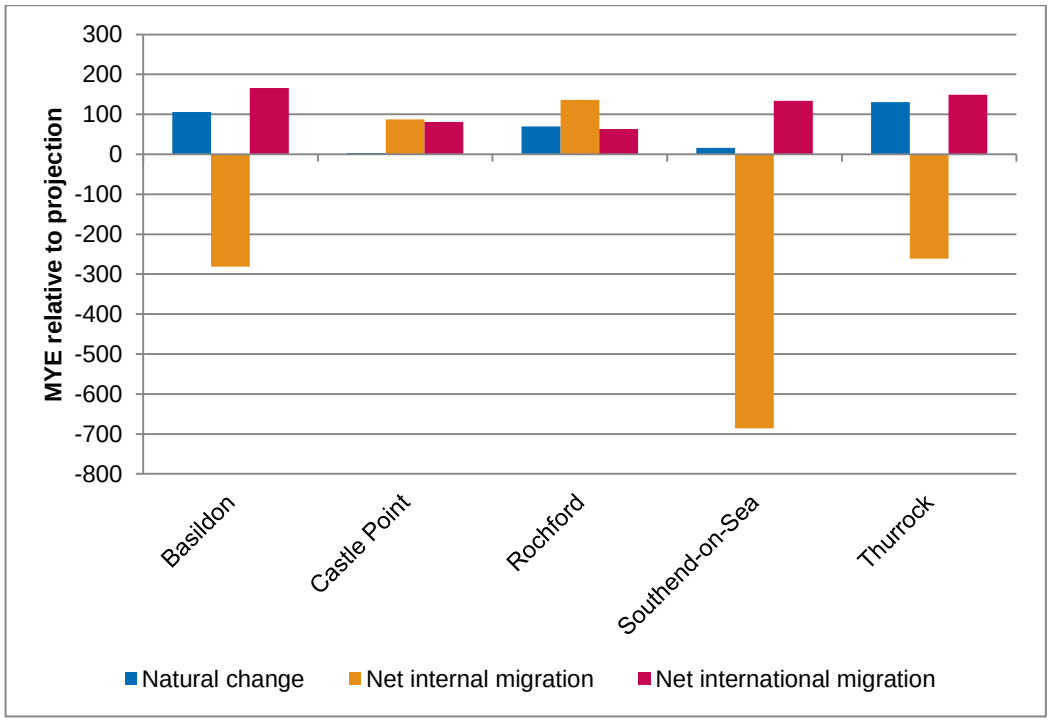
Source: ONS

2.37 Analysis of the components of change suggests a slightly greater level of difference between the projections and estimates, with a stronger natural growth of the population than anticipated and a larger net inflow of international migrants. However, it is notable that the net inflow of migrants from other parts of the UK was less than half the size projected.

2.38 This can be further disaggregated by local authority. The following chart compares the MYE components of change against those projected[34] between 2014 and 2015, identifying the areas and components where the actual change was higher or lower than expected within the official 2014-based SNPP.

[34] Other change is not presented as this is not projected in official datasets

Figure 2.9: Comparing Actual and Projected Components of Change 2014 – 15



Source: ONS

2.39 The MYE datasets indicate that the net inflow of internal migrants to Basildon, Thurrock and particularly Southend-on-Sea in 2014/15 was lower than projected. This contrasts with Castle Point and Rochford, where higher than expected levels of net migration were key factors influencing their slightly higher than projected population growth over this year.

2.40 While this analysis provides useful context, it is important to recognise that it represents, as noted above, only a single year of the projection, with a wide range of factors potentially influencing this single year of data.

2.41 This latest data has, however, been incorporated into a series of updated trend-based projections which uses the latest demographic data to sensitivity test the 'starting point' and consider the need for adjustments.

2.42 For the purposes of this update, an updated 10 year Past Growth (PG) scenario has been developed by Edge Analytics using POPGROUP which integrates the latest 2015 MYE dataset and bases demographic trends[35] on a longer 10 year period (2005 – 2015), as opposed to the shorter period (2009 – 2014) used to develop the official 2014-based SNPP. This excludes UPC for consistency with the methodology applied by the ONS in developing the 2014-based SNPP and as previously considered appropriate for

[35] Consistently with the SHMA and official ONS datasets, POPGROUP uses historic demographic evidence to define future migration *rates* for internal migration and fixed migration *counts* for international migration

South Essex in the SHMA[36]. The outputs of this modelling are summarised in the following table.

Table 2.5: Modelling Outputs – Updated 10 year Past Growth (2005 – 15)

	Change 2014 – 2037				Average per year	
	Population	%	Households	%	Net migration	Dwellings
Basildon	24,198	13.4%	13,606	18.0%	222	602
Castle Point	8,106	9.1%	5,021	13.6%	618	226
Rochford	10,085	11.9%	5,830	17.0%	485	260
Southend-on-Sea	25,881	14.5%	16,402	21.3%	713	751
Thurrock	31,593	19.4%	15,490	24.0%	164	690
South Essex	**99,863**	**14.4%**	**56,350**	**19.5%**	**2,202**	**2,528**

Source: Edge Analytics, 2017

2.43 The continuation of a longer-term migration trend which excludes UPC would result in population growth of around 100,000 persons over the assessment period in South Essex, falling below the level of growth projected by the 2014-based SNPP (128,800) and presented in Table 2.1. This primarily relates to the net inflow of migrants projected, with an annual inflow of circa 2,200 projected under this scenario compared to around 3,200 per annum under the 2014-based SNPP. This reflects and aligns with the analysis presented at Figure 2.8.

2.44 The 2012-based SNPP similarly made allowance for a higher annual level of net migration (2,764) than implied by longer-term historic trends, and the conclusions of the SHMA therefore remain appropriate in this regard:

"The headline analysis of development activity highlights that the area saw comparatively low levels of development when benchmarked against the national picture, particularly through the middle part of the last decade. This therefore suggests that trends based upon the historic period may, in part at least, be reflective of the comparatively low development rate and on this basis should not be considered as being more representative of future projections of need than the higher level of growth projected under the 2012 SNPP"[37]

2.45 Although the SHMA concluded that trend-based scenarios which included UPC were unlikely to provide a justifiable alternative population projection for South Essex[38], it remains beneficial to consider the impact of including this component, particularly given its associated uncertainty. A further sensitivity has therefore been developed by Edge Analytics, based on the same 10 year period (2005 – 2015) which underpins the scenario presented at Table 2.5 but adjusting some of the historic estimates from which

[36] Turley (2016) South Essex Strategic Housing Market Assessment (para 3.121)
[37] Ibid (para 3.119)
[38] Ibid (para 3.121)

trends are drawn (up to 2011) to account for UPC. The outputs of this scenario are presented in the following table, highlighting that the inclusion of UPC in deriving the longer-term trend would result in a higher overall level of net migration to South Essex than the projection excluding this component (Table 2.5) and a stronger overall growth in the population over the assessment period.

Table 2.6: Modelling Outputs – Updated 10 year Past Growth including UPC (2005 – 15)

	Change 2014 – 2037				Average per year	
	Population	%	Households	%	Net migration	Dwellings
Basildon	26,226	14.5%	14,779	19.6%	292	654
Castle Point	7,074	8.0%	4,954	13.4%	561	223
Rochford	10,505	12.4%	6,275	18.3%	501	280
Southend-on-Sea	35,472	19.9%	20,904	27.2%	1,062	957
Thurrock	30,980	19.0%	14,554	22.6%	112	648
South Essex	**110,256**	**15.9%**	**61,466**	**21.3%**	**2,529**	**2,761**

Source: Edge Analytics, 2017

2.46 The following table compares the implied number of homes needed to accommodate the projected population growth in each authority within the 2014-based SNPP and the alternative long-term past growth scenarios which include and exclude UPC.

Table 2.7: Comparing Implied Annual Housing Need 2014 – 2037

	Basildon	Castle Point	Rochford	Southend-on-Sea	Thurrock	South Essex
2014 SNPP	**770**	**250**	256	876	**869**	**3,021**
10yr PG (inc UPC)	654	223	**280**	**957**	648	2,761
10yr PG (exc UPC)	602	226	**260**	751	690	2,528

Source: Edge Analytics

2.47 This suggests that a continuation of longer term demographic trends would result in a lower level of housing need in South Essex, although the impact at local authority level is more variable and requires consideration in the context of the conclusions previously established in the SHMA.

2.48 Rochford is the only authority where the implied annual housing need based on an updated 10 year past growth trend slightly exceeds that implied by the 2014-based SNPP, regardless of whether UPC is included or excluded. As in the SHMA, it remains possible that the '*distinctive shift in the district's migration profile following the recession*

and subsequent recovery'[39] – potentially linked to the rate of development – may adversely influence the official projection. It is, however, of note that the scale of difference between the 2014-based SNPP and the long-term past growth scenario – where UPC is excluded, as previously considered appropriate and as per the methodology used by the ONS in developing official projections – is comparatively minor at 4 dwellings per annum. Such factors could, however, justify a modest uplift beyond the 'starting point' in Rochford, and this is considered in establishing the local implications of the concluded OAN in the district in section 4 of this addendum.

2.49 A higher level of need is also implied for Southend-on-Sea where a longer-term migration trend which includes UPC is assumed to persist. There does, however, remain considerable uncertainty associated with UPC in Southend-on-Sea, with the SHMA similarly identifying a wide range of potentially implied demographic needs when modelled using historic data[40]. The updated scenarios presented in this report equally form a relatively broad range when testing the inclusion or exclusion of UPC (751 – 957dpa), with the 2014-based SNPP suggesting a level of need which falls close to the centre of this range (876dpa). Following the same rationale as presented within the SHMA, this reinforces the validity of the latest official projection as a demographic 'starting point' for Southend-on-Sea.

2.50 The level of need implied by the 2014-based SNPP in Basildon, Castle Point and Thurrock exceeds that suggested by the longer-term trend-based scenarios presented.

2.51 In Basildon, this is driven by the 2014-based SNPP taking account of the recent evidence of strong demographic growth. The SHMA highlighted the importance of taking these more recent trends into account, and noted that the 2012-based SNPP could underestimate future needs if these short-term trends persist[41]. While this official projection formed the 'starting point', the need for adjustment to '*capture potentially higher levels of need indicated by more recent levels of population growth*'[42] was noted, and that the 2014-based SNPP captures this higher growth within its trend period indicates that it therefore represents an appropriate projection of demographic need in the borough.

2.52 The demographic scenarios presented for Castle Point suggest a relatively narrow range (223 – 250dpa), with the official 2014-based SNPP representing the upper end. The 2012-based SNPP similarly projected a level of need which exceeded that suggested by a continuation of historic trends, although the SHMA noted that this higher suggested need reflected a range of factors including '*internal migration…[and] higher out-migration from London*' which indicated that the official projection represented the '*most appropriate starting point*'[43]. On the same basis, the 2014-based SNPP can therefore be seen to remain an appropriate demographic projection of the future need for housing in Castle Point.

[39] Ibid (para 7.66)
[40] Ibid (para 7.70)
[41] Ibid (para 3.70)
[42] Ibid (para 7.59)
[43] Ibid (para 3.123)

2.53 The 2014-based SNPP suggests a level of need for housing in Thurrock which is notably higher than that which could be generated if longer-term trends were to persist, like the preceding official 2012-based projection. The SHMA highlighted the recent evidence of strong population growth and concluded that this '*coupled with a recognition of comparatively low historic rates of development…indicates that lower levels of need as implied by the trend-based projections should not be considered in preference to the official dataset*'[44]. On the same basis, it is considered that there is no justification for preferring an alternative trend-based projection over the official dataset.

2.54 The analysis evidently does not suggest that a continuation of longer-term trends will generate a need for housing which exceeds that implied by the 'starting point', and there is no evidence that this projection will underestimate the future need for housing if long-term demographic trends continue. Conversely – as in the SHMA – the 'starting point' appears to represent a comparatively positive and reasonable projection of future population growth in South Essex based upon the demographic information reviewed and the detailed consideration of historic contextual factors undertaken in the SHMA.

International Migration

2.55 As noted in the introduction to this report, there is an expectation that the UK's decision to leave the EU will lead to a change in national immigration policy, although this will not occur before 2019. This evidently creates some uncertainty when projecting forward international migration based on past trends.

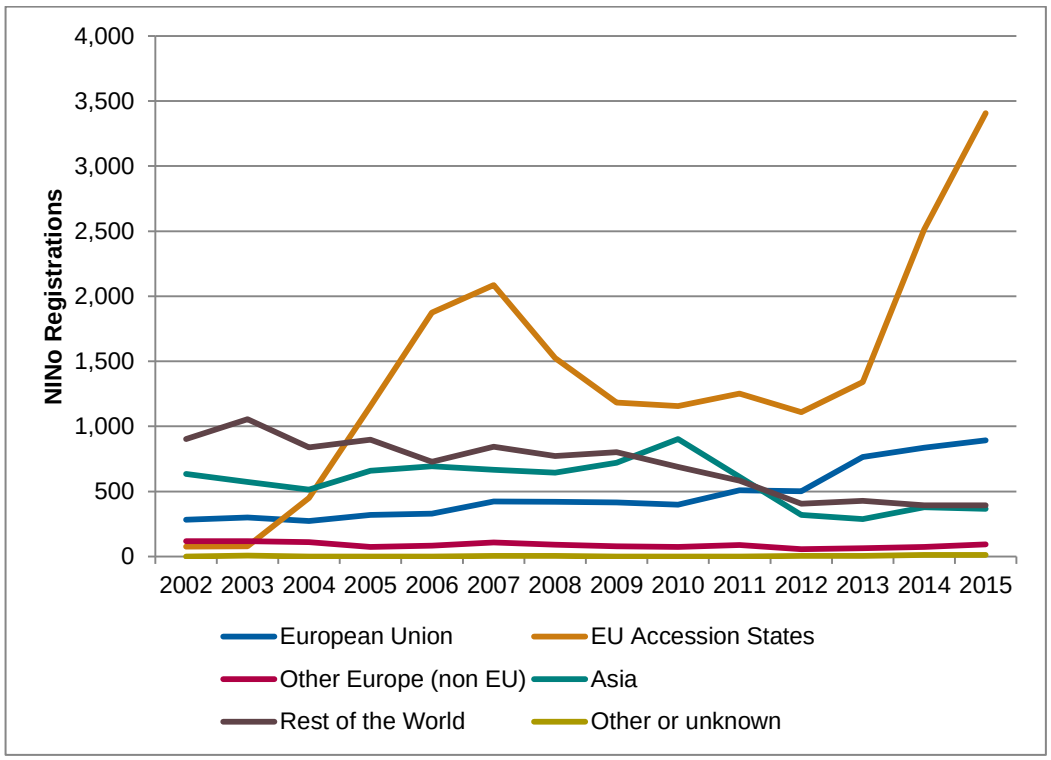
2.56 The earlier analysis shows that a net inflow of international migrants is projected under the 2014-based SNPP in each South Essex authority, representing an annual net flow of circa 365 people per annum. This official projection makes no assumption on the origin or nationality of future international migrants, as confirmed by the National Statistician and Chief Executive of the UK Statistics Authority:

"The migration assumptions are set in terms of in and out flows for the constituent countries of the UK by age and sex; they are not produced by nationality or country of last residence. Therefore ONS does not have an estimate of the number of immigrants from other EU and EEA member states who will (a) enter and (b) settle in the UK in each of the next five years"[45]

2.57 While EU migrants cannot be isolated within official projections, the origin of past international migrants can be understood using National Insurance Number (NINo), sourced from the Department for Work and Pensions. This groups migrants by world regions, but provides a measure of gross registrations and therefore only captures inward international migration rather than emigration. It therefore cannot be directly compared with net figures presented in this report.

[44] Ibid (para 3.123)
[45] Letter from John Pullinger CB CStat to William Wragg MP (29 April 2016)

Figure 2.10: NINo Registrations to Adult Overseas Nationals Entering the UK in South Essex



Source: DWP

2.58 This suggests that South Essex saw a strong inflow of international migrants from EU accession countries between 2003 and 2007, which fell over subsequent years before increasing significantly over the past two years. EU nationals accounted for approximately 56% of NINo registrations in South Essex over the period shown, increasing to circa 80% over the past three years (2013 – 2015). This shows that a sizeable number of internationals migrating to South Essex historically have originated from the EU.

2.59 Future change in immigration policy as the UK leaves the EU is likely to influence the scale of this inflow, which – at a national level – could be expected to reduce from its current level.

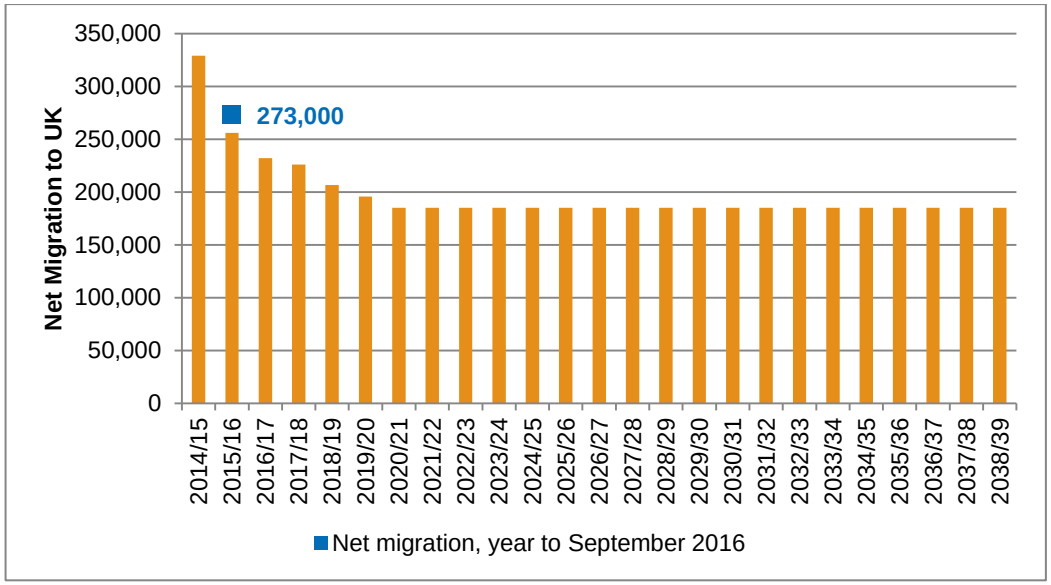
2.60 The latest migration data for the UK[46] shows that there was a net inflow of 273,000 international migrants over the year ending September 2016. This indicates that the net outflow of 56,000 British citizens was outnumbered by the net inflow of 164,000 non-EU migrants and 165,000 from EU member states during this period. Although this overall net flow is slightly lower than the recent peak, the ONS view this recent decline as '*not statistically significant*' and confirm that '*it is too early to say what effect the referendum result has had on long-term international migration*'[47].

[46] ONS (2017) Migration Statistics Quarterly Report – February 2017
[47] Ibid

2.61 Within this context, it is important to interrogate the latest 2014-based national population projections (NPP) in further detail, recognising that they underpin the 2014-based SNPP and therefore the official 'starting point' of the 2014-based household projections. While the methodological assumptions predate the outcome of the EU referendum, they equally do not seek to take account of political factors and instead extrapolate projections on the basis of historic trends. They are explicitly '*produced without trying to predict any potential impacts of unrealised factors*'[48].

2.62 Over its full projection period, the 2014-based NPP projects a short-term reduction in the scale of international migration, reaching approximately 185,000 by 2020/21 and remaining at this level thereafter. This is illustrated in the following chart, with the latest statistics – covering the year ending September 2016 – also shown for context.

Figure 2.11: Projected Net International Migration to UK – 2014-based NPP



Source: ONS

2.63 The 2014-based NPP evidently does not maintain net international migration at current levels, and inherently assumes that international migration falls to around 185,000 per annum within five years. This represents a significant reduction of some 32% in the net inflow compared to the latest national statistics. Assuming that non-EU migration levels and the outflow of British nationals remain at their recent rates, this could only be achieved through a 53% reduction in the flow of migrants from the EU over the next five years.

2.64 On this basis, there is no evidenced justification for viewing the projections of population growth implied by the 2014-based NPP, SNPP and SNHP as an overestimate of future growth in the short term or indeed over a longer term plan period at a national or indeed at a more local level in South Essex.

2.65 It is understood that no further iterations of the official national projections are planned for release in advance of the 2016-based dataset, which will not be published before

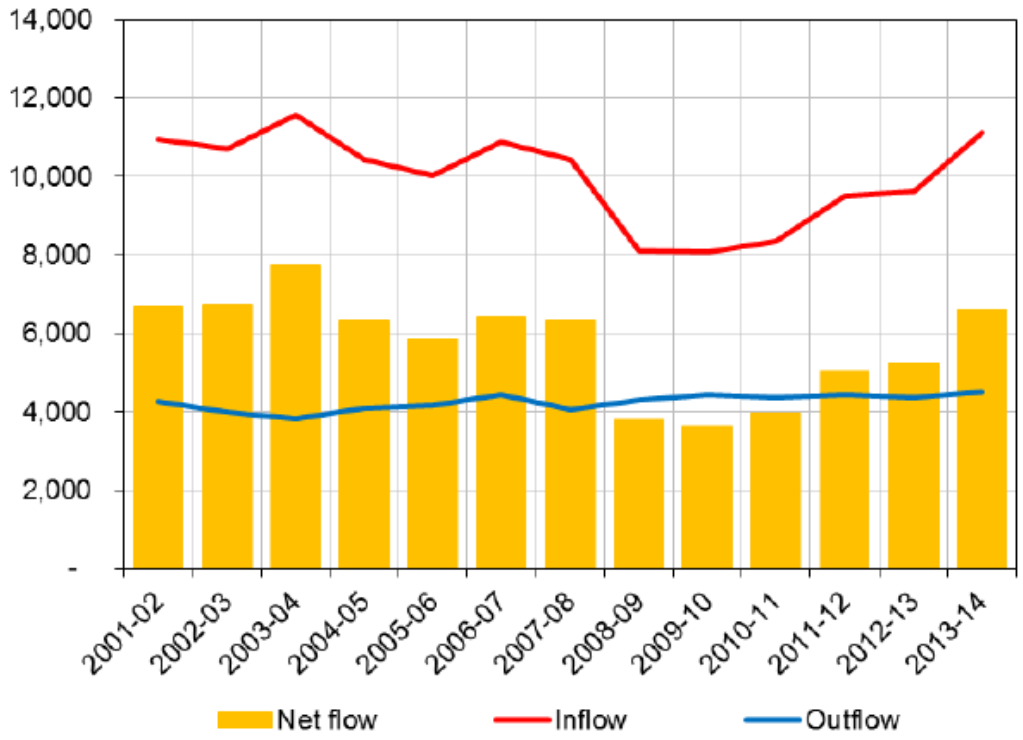
[48] ONS (2016) Information Paper Quality and Methodology Information

late 2017 following the usual timetable. This will be the first set of official national projections to be published following the decision to leave the EU.

Impact of Planned Population Growth in London

2.66 As noted earlier in this section, the SHMA developed an alternative SNPP London scenario, which adjusted the 2012-based SNPP to allow for a return to higher levels of net migration from London in line with pre-recession trends[49]. This recognised that net migration from London fell in 2008/09, with the 2012-based SNPP therefore capturing a period of comparatively suppressed migration from the capital and not fully taking account of the recovery seen over more recent years. This is illustrated in the following chart, replicated from Figure 3.15 of the SHMA.

Figure 2.12: Internal Migration Flows between London and South Essex



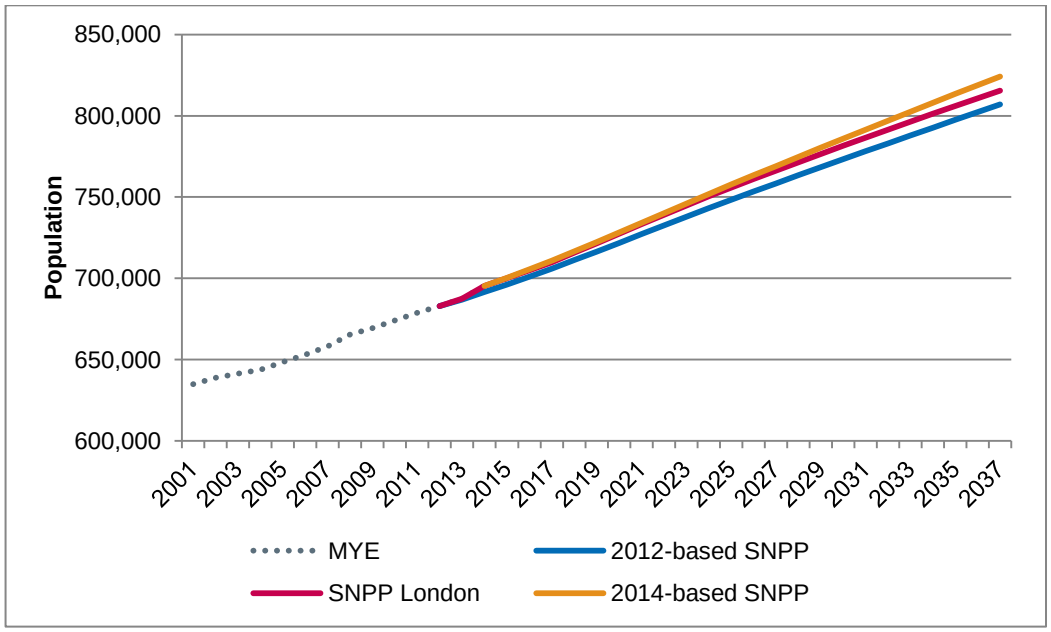
Source: Patient Register Data Service (PRDS) by ONS; Edge Analytics

2.67 By basing trends on the historic period from 2009 to 2014, the 2014-based SNPP captures a trend which is returning to the levels of net migration seen prior to the recession. Indeed, the SHMA[50] identified that there had been a return to pre-recession flows in Basildon, Thurrock and Southend-on-Sea in 2013/14, which is likely a contributing factor towards the higher level of population growth projected in these authorities under the 2014-based SNPP. Although there has not been a comparable recovery in Castle Point and Rochford, the SHMA noted that their '*more limited relationships with London*' reduced the overall population impact of assuming a return to pre-recession trends[51]. As shown in the following chart, the adjustments applied within

[49] Turley (2016) South Essex Strategic Housing Market Assessment (paras 3.81 – 3.101)
[50] Ibid (para 3.88)
[51] Ibid (para 3.88, para 3.97)

the SNPP London scenario resulted in a projected level of population growth which demonstrates a closer alignment with the 2014-based SNPP.

Figure 2.13: Comparing Official Population Projections for South Essex with SNPP London



Source: ONS; Edge Analytics

2.68 In developing the SNPP London scenario presented in the SHMA, Edge Analytics adjusted the 2012-based SNPP to align with the Central projection scenario produced by the Greater London Authority (GLA) in the 2013 London SHMA[52]. The Central scenario underpins the assessed need for at least 49,000 dwellings per annum in London, and informs the adopted requirement for approximately 42,000 dwellings per annum, which reflects London's capacity[53].

2.69 The London Plan does, however, state that trends will be closely monitored with a view towards revising the adopted housing requirement through a future review of the London Plan. The GLA is currently undertaking a full review of the London Plan, with consultation on a draft anticipated in autumn 2017 prior to its examination in summer 2018. It is expected that the final London Plan will be published in autumn 2019.

2.70 To inform this full review, a wide-ranging consultation on the Mayor's vision for the future direction of London[54] was held in late 2016. It is understood that an updated Strategic Housing Land Availability Assessment (SHLAA) will be published in summer 2017, with a new SHMA also being produced to provide an updated position on London's housing needs. This will update the conclusions reached in the 2013 SHMA, where the Central scenario was identified as the most appropriate basis for housing requirements. Although no technical evidence has yet been published, available

[52] Mayor of London (2013) London Strategic Housing Market Assessment
[53] Mayor of London (2016) The London Plan: the spatial development strategy for London consolidated with alterations since 2011 (Policy 3.3)
[54] Mayor of London (2016) A City for all Londoners

consultation material[55] suggests that at least 55,000 new homes may be needed annually in London – a level of need which exceeds that implied by the Central scenario.

2.71 It is anticipated that the new SHMA will update the Central scenario based on the latest demographic projections developed by the GLA. The latest available long-term projection released (2015 round[56]) – which discussions with the GLA suggest should be used to inform long-term planning for housing development – assumes a larger net outflow of internal migrants from London to other parts of the UK than implied by the Central scenario, or indeed the 2014-based SNPP produced by ONS. However, while Edge Analytics previously adjusted the 2012-based SNPP to consider the possible local implications of such assumptions, a comparable adjustment to the 2014-based SNPP is restricted by the absence of the more detailed migration flow statistics previously made available. Appendix 2 of this addendum illustratively considers the potential implications of these assumptions in South Essex.

2.72 However, while this distinct adjustment was previously considered appropriate to reflect the planned level of housing provision relative to needs in London, the 2015 round of projections inherently carry less weight at this point in time, given that they are yet to be tested and evaluated through the forthcoming production of a new London SHMA. This will form the basis of the housing requirement set through the new London Plan, and is likely to involve the release of projections for all local authorities in England to illustrate the wider implications of these bespoke projections developed for London by the GLA[57]. The availability of such information would evidently supersede any adjusted London scenario developed solely for South Essex to inform this addendum.

2.73 On this basis, it is considered premature to apply a quantifiable adjustment to the 2014-based SNPP at this time to allow for the demographic implications of London. Such a local and isolated adjustment would be inappropriate given the ongoing work by the GLA to update the evidence base to inform the review of the London Plan. It is recommended that the South Essex authorities continue to partake and engage with the development of this evidence where required in order to consider the implications of London's assessed housing needs and its capacity to meet this need.

Household Formation Rates

2.74 The official population and household projections released by ONS and DCLG are interlinked, with the latter derived from the application of household formation rates ('headship rates') to the projected growth in population. This provides an estimate of the total number of households projected to form as the population grows, providing the 'starting point' for the assessment of housing need.

2.75 However, the PPG recognises that household formation rates are one element which could require adjustment, recognising that they are largely trend-based and therefore do not take account of factors influencing local demography. The PPG notes that '*formation rates may have been suppressed historically by under-supply and worsening*

[55] Mayor of London (November 2016) Accommodating Growth Workshop

[56] The interim 2015-based projections were released by the GLA in February 2017, and are the first to be run using a new housing-led model. The implications of this dataset have not been considered within this report

[57] Wider South East Summit (December 2015) Annex 2 – Towards a common understanding of the evidence

affordability of housing'[58]. The SHMA concluded that the modest worsening in local market conditions justified an adjustment to headship rates, enabling a return to rates last seen in 2001 for younger age groups where household formation has fallen but is not projected to recover within the official projections[59].

2.76 The publication of the 2014-based SNHP provides new headship rates, and the charts at Appendix A of the Edge Analytics methodology note (Appendix 1) summarise these assumptions for each authority by age group[60]. Comparisons are made with the previous 2012-based rates applied in the SHMA, which show that the 2014-based SNHP continues to assume that household formation remains suppressed for younger people in South Essex over the period to 2037. No recovery to rates previously seen for many younger age groups is assumed[61].

2.77 Recognising that these younger age groups are most affected by the worsening affordability of housing, it is considered important to ensure that this suppressed market context does not form the basis for assessing future housing needs, reflecting the guidance in the PPG and the conclusions reached in the SHMA in this regard.

2.78 The increased number of younger households unable to access the housing market has been consistently recognised as a fundamental issue by the Government. The explanatory notes[62] released with the Housing and Planning Act 2016 cite the one in four (26%) younger people aged 20 to 34 who were still living with parents in 2014, and young adults in this age group are more likely to be sharing a home with their parents than at any time since 1996[63]. The recently published Redfern Review considers the implications and causes of these changes:

"The most obvious example of the hidden household in the context of this Review is young adults living at home with mum and dad because they cannot afford to move out – either to buy or to rent…It is difficult to believe that, all of a sudden, the preference for 25-34 year olds has changed so that they want to stay at home. Their decisions must be influenced by the changing availability of housing and the changing affordability constraints faced by this group"[64]

2.79 If unaddressed, an extrapolation of the suppressed trends seen over more recent years would effectively accept that the worsening affordability and historic undersupply of housing will restrict the formation of younger households in future. This conflicts with the clear emphasis of the NPPF towards significantly boosting the supply of housing to meet needs and address acknowledged issues relating to affordability. This also contradicts the Government's recently stated intentions to '*create a more efficient housing market*

[58] PPG Reference ID 2a-015-20140306

[59] Turley (2016) South Essex Strategic Housing Market Assessment (para 7.34)

[60] While the 2016 SHMA interrogated headship rates by five year age groups, the updated analysis is based on the broader ten year age groups used in the Stage 2 data published by DCLG. This provides additional detail on household typologies which is required to assess the size and type of households likely to form over the projection period

[61] Table 2 of Appendix 1 identifies the age groups where headship rates are not assumed to return to 2001 rates by 2024

[62] Explanatory Notes, Housing and Planning Act 2016

[63] ONS Digital (February 2016) Why are more young people living with their parents?

[64] Redfern Review (2016) The Redfern Review into the decline of home ownership

whose outcomes more closely match the needs and aspirations of all households and which supports wider economic prosperity'[65].

2.80 On this basis, there remains a clear rationale for adjusting the 2014-based household formation rates amongst younger people to positively plan for a reversal of this trend, as the SHMA concluded was necessary in relation to the 2012 SNHP. Allowing for a return to higher levels of household formation amongst younger people through an adjustment to the underlying headship rate assumptions in the official projections has been recognised as an appropriate adjustment in objectively assessing the need for housing[66]. Inspectors have also recognised that:

"Low household formation rates can and do have harmful social impacts, such as the creation of concealed households. Because of this I am not persuaded that the correct response is simply to reflect these projected rates in the OAN…rather than seeking to address and improve the situation"[67]

2.81 The POPGROUP model has therefore been used by Edge Analytics to apply alternative household formation rates to younger age groups where the official projections do not, by 2024, expect household formation to improve and return to respective levels last seen in 2001. Since this point – as shown at Figure 5.1 of the 2016 SHMA – price growth has far exceeded comparable rises in earnings at a national level, with the turn of the century broadly the last point at which the ratio between house prices and earnings was at the long-term average. It should, however, be noted that even in 2001 the supply of housing at a national level continued to fall short of projected need, therefore potentially continuing to inhibit households' ability to form.

2.82 Applying an adjustment to household formation rates explores the impact of gradually returning to a healthier and more sustainable set of market conditions. The impact of this adjustment on the assumed household formation rate for younger people is illustrated within the charts presented at Appendix A of the Edge Analytics assumptions note, at Appendix 1 of this report. The following table summarises the number of additional households formed by the population under the adjustment.

[65] DCLG (2017) Fixing our broken housing market (p16)
[66] Report on the Examination into the Brighton and Hove City Plan Part One, February 2016 (para 21); Report on the Examination of the Tamworth Local Plan 2006 – 2031, February 2016
[67] Appeal Ref APP/C3240/W/3025042

Table 2.8: Impact of Headship Rate Return Sensitivity – households (2014 – 2037)

	Total growth in households 2014 – 2037		
	Unadjusted 2014-based rates	**Headship rate return sensitivity**	Difference
Basildon	17,396	**19,967**	2,571
Castle Point	5,561	**6,295**	734
Rochford	5,740	**6,740**	1,000
Southend-on-Sea	19,151	**21,292**	2,141
Thurrock	19,502	**21,922**	2,420
South Essex	**67,350**	**76,216**	**8,866**

Source: Edge Analytics, 2017

2.83 The following table summarises the impact of such an adjustment to household formation rates on the implied number of additional homes needed annually between 2014 and 2037 under the 2014-based SNPP.

Table 2.9: Impact of Headship Rate Return Sensitivity – dwellings per annum

	Dwellings per annum 2014 – 2037		
	Unadjusted 2014-based rates	**Headship rate return sensitivity**	% uplift
Basildon	770	**883**	15%
Castle Point	250	**283**	13%
Rochford	256	**301**	17%
Southend-on-Sea	876	**974**	11%
Thurrock	869	**976**	12%
South Essex	**3,021**	**3,418**	**13%**

Source: Edge Analytics, 2017

2.84 This adjustment uplifts the implied number of homes needed annually to support the growth in population projected by the 2014-based SNPP, as a direct result of the additional younger households assumed to form. Over the full assessment period, Table 2.8 shows that this adjustment allows for the formation of approximately 8,900 additional younger households who would otherwise be unable to form if the unadjusted, lower 2014-based household formation rates were applied. The formation of these households is supported and indeed enabled through the circa 13% increase in housing provision over the assessment period, as indicated by the table above.

2.85 This adjustment evidently has a greater impact than the comparable adjustment made in the SHMA, where the adjusted headship rates elevated the implied annual housing need by around 7%. While this could be influenced by change in the underlying demographic profile, it is understood that this primarily results from the application of the adjustment to Stage 2 headship rates published by DCLG as opposed to Stage 1 headship rates by Edge Analytics in their modelling. The Stage 2 rates include additional detail on the size and type of households forming, which forms part of the assessment of the need for different types of housing modelling in section 5, but provide household formation rates only for broader, ten year age cohorts. This differs from the five year age groups available under Stage 1, which formed the basis for the similar adjustment applied in the SHMA and results in the adjustment being applied to different groups in the population[68]. The rationale for adjustment – explored above – remains the same, however, and further sensitivity modelling by Edge Analytics has confirmed that assuming a return to the levels of household formation previously seen in 2001 based on either Stage 1 or Stage 2 household formation rates produces comparable household growth outcomes when applied to a consistent set of age groups[69]. This suggests that the use of Stage 1 or Stage 2 headship rates in the case of the modelling in South Essex does not fundamentally influence the resultant need for housing.

Summary and Implications

2.86 Although the PPG makes clear that housing needs assessments are not automatically outdated by the release of new projections, any implied '*meaningful change in the housing situation*' should be considered to ensure that assessments are informed by the latest available information[70]. Within this context, the release of the 2014-based household projections provides a new 'starting point' for the assessment of housing needs, suggesting a need for 3,021 dwellings per annum across South Essex over the assessment period (2014 – 2037) when allowing for vacancy. This is higher than the 2,886 homes needed annually to accommodate the growth projected by the earlier 2012-based dataset.

2.87 Across South Essex, this primarily results from the higher underlying level of population growth projected by the 2014-based SNPP, which suggests that the population of Basildon, Southend-on-Sea and Thurrock will grow to a greater extent than previously anticipated over the period to 2037. A marginally lower level of population growth is projected in Rochford and Castle Point relative to the preceding dataset.

2.88 Reflecting the guidance in the PPG, the analysis within this section has sought to determine whether adjustments to the 'starting point' are required to reflect demographic factors which are not captured in past trends. The underlying population projection and the assumed rate of household formation have been separately considered within this section.

[68] Paragraph 5.108 of the SHMA can be compared with Table 1 of Appendix 1 to this addendum to identify the groups where adjustments are and were previously applied

[69] Following the methodology set out in Appendix 1 adjusting Stage 2 headship rates for the 2014-based SNPP uplifts the implied housing need by 13%. Edge Analytics have undertaken further modelling which confirms that adjusting Stage 1 headship rates for the same age groups results in an 11% uplift

[70] PPG Reference ID 2a-016-20150227

2.89 The analysis suggests that the 'starting point' of the 2014-based SNPP represents a reasonable and comparatively positive projection of future population growth in South Essex, allowing for a relatively high level of net in-migration which primarily originates from elsewhere in the country. A continuation of longer-term trends would not result in a higher level of population growth across the housing market area, and there is therefore no indication that this projection would underestimate the future need for housing if long-term demographic trends were to persist. Equally, however – reflecting on the conclusions of the SHMA – the factors influencing this historic profile mean that this is considered unlikely to be more representative of the future demographic growth of South Essex, or the future need for housing.

2.90 At a local level, migration from within the UK is expected to be a significant driver of population growth in each authority, with all authorities to varying degrees projected to see net migration which exceeds historic levels. This is most pronounced in Castle Point, where the 2014-based SNPP – and preceding 2012-based dataset – projected a higher net inflow than seen over recent years. The projected net inflow to Southend-on-Sea is also higher than recent trends suggest, although there is some uncertainty associated with historic migration estimates due to UPC. The projected inflow to Basildon is reflective of the increased migration seen over more recent years – which is higher than seen over the long-term – while Thurrock and Rochford are projected to see a more limited deviation from the longer term historic trend. Such an implied deviation from historic trends is reflective of the methodology developed by ONS, which captures the wider demographic effects of growth in those areas which share a strong relationship with South Essex in terms of migration. Furthermore, the projections allowing for an increase in recent levels of net migration provides assurance that any historic factors constraining demographic growth in the past are not assumed to persist in the future.

2.91 It is not considered appropriate at this time to apply any distinct adjustment to the 2014-based SNPP to allow for the demographic implications of London, given the ongoing work by the GLA to review the London Plan and update its evidence base. Such an isolated adjustment risks misaligning with this updated position, and it is instead recommended that the South Essex authorities continue to partake and engage with the development of this evidence where required to consider the implications of London's assessed housing needs. In arriving at an updated position on OAN, however, the possibility of future demographic pressure from London is considered in the context of other factors and adjustments.

2.92 An adjustment to the level of housing growth needed to support the population growth projected by the 2014-based SNPP is, however, considered necessary, given the underlying assumption that household formation amongst many younger age groups in South Essex will continue to be suppressed. This is consistent with the adjustment concluded as being required in the SHMA in relation to the 2012 SNHP dataset.

2.93 This adjustment allows for a short-term recovery to higher levels of household formation for younger age groups where this is not already projected, in order to ensure that this suppressed market context does not form the basis for future plan-making. This adjustment allows for the formation of approximately 8,900 additional younger households over the assessment period who would otherwise be projected as being

unable to form if the unadjusted, lower 2014-based household formation rates were applied. The formation of these households is supported and indeed enabled through the circa 13% increase in housing provision over the assessment period, uplifting the 'starting point' household projection.

2.94 On this basis, it is considered that the 2014-based SNPP with an adjustment to younger household formation rates represents an appropriate demographic projection of housing need in South Essex. This suggests a need for 3,418 dwellings per annum across South Essex between 2014 and 2037, increasing the 'starting point' by 397 dwellings per annum or 13%. This adjustment is relatively uniform in scale across each authority, ranging from 11% in Southend-on-Sea to 17% in Rochford.

3. Likely Change in Job Numbers and Implications for Housing Need

3.1 The PPG clearly highlights the importance of taking employment trends into account when assessing housing need, in order to ensure that likely job growth can be supported by an economically active labour supply[71]. Although new guidance on a standard methodology is to be introduced by Government, it has continued to recognise that planning for '*the right homes in the right places…is critical to the success of our modern industrial strategy*' given that '*growing businesses need a skilled workforce living nearby, and employees should be able to move easily to where jobs are without being forced into long commutes*'[72]. Based on documentation published to date, it appears that the Government believes that a standardised approach provides a basis through which consistency with its modern Industrial Strategy can be established[73].

3.2 Following the methodology set out in the PPG and the approach adopted within the SHMA, this section considers how a continuation of the trends underpinning the recommended demographic projection will change the size of the labour force in South Essex over the period to 2037, and identifies the scale of labour force growth likely to be necessary to support forecast levels of job creation. Section 4 of the SHMA drew upon the detailed analysis presented in its Appendix 3 to consider the inter-relationship between forecast employment growth and the resultant impact on demographic growth and therefore housing need. The approach taken in this addendum report is consistent with that used in the SHMA, which was considered reasonable and appropriate.

3.3 As set out in section 1 of this addendum, the economic evidence base for South Essex has been updated and revisited following the completion of the SHMA. The authorities commissioned the preparation of an Economic Development Needs Assessment (EDNA), to inform the development of respective Local Plans by providing evidence on the likely level of future job growth across South Essex. The SHMA recognised the future preparation and publication of this important part of the area's evidence base, and in the absence of this evidence reviewed available forecasts from Experian and Oxford Economics but noted that its conclusions on a likely level of job growth in South Essex would require review following completion of the EDNA[74]. Whilst the EDNA had not been published at the time that this addendum report has been prepared, the economic forecasts which form the basis for its recommendations were made available to inform the analysis presented herein and it is understood are not intended to be subject to change.

Projecting Change in the Labour Force

3.4 As established in the previous section, the 2014-based SNPP demonstrates on the basis of a trend-based projection how demographic trends will change the population of South Essex. These trends will also shape the labour force, as the demographic profile

[71] PPG Reference ID 2a-018-20140306
[72] DCLG (2017) Fixing our Broken Housing Market (p14)
[73] Ibid (para 1.12)
[74] Turley (2016) South Essex Strategic Housing Market Assessment (para 7.80)

of the area changes. The following table shows how the working age (16 – 64), younger and older populations are projected to change by the 2014-based SNPP over the period from 2014 to 2037.

Table 3.1: Projected Population Change by Age 2014 – 2037 (2014-based SNPP)

	15 and under	16 to 64	Over 65	Total
Basildon	6,107	11,470	16,621	34,197
Castle Point	1,534	-1,468	9,658	9,723
Rochford	1,561	-428	9,331	10,464
Southend-on-Sea	4,519	9,618	19,222	33,359
Thurrock	6,499	19,222	15,341	41,062
South Essex	**20,219**	**38,414**	**70,173**	**128,805**

Source: ONS, 2016

3.5 It is evident that a continuation of demographic trends in South Essex will result in growth of all age groups across the housing market area, with the most substantial growth projected in the older population aged 65 and over. While the working age population of South Essex would grow by around 38,400 under this demographic scenario, it is of note that this suggests that the working age population of Castle Point and Rochford will decline if recent demographic trends continue. The analysis presented within the SHMA[75] noted a comparable assumption within the preceding 2012-based SNPP for Castle Point, with only a modest growth in the working age population projected in Rochford[76]. This was identified as a risk in terms of supporting future job growth in each authority.

3.6 Change in the age structure of the population will influence the future size of the labour force, in combination with anticipated changes in labour force behaviour. The implications for the number of jobs which can be potentially supported can be estimated through POPGROUP. This requires a number of key assumptions on labour force behaviour to be applied within the modelling. The labour force behaviour assumptions used in the modelling are summarised below with additional detail provided in Appendix 1:

- **Unemployment** – defined for each authority based on historic local evidence until 2015, and subsequently assumed to gradually return to pre-recession (2004 – 2007) average by 2020. In Southend-on-Sea and Rochford, the pre-recession average unemployment rate is higher than the 2015 value, and therefore the latter is applied and fixed throughout the modelling period;

- **Economic activity** – baseline economic activity rates by age group and sex derived for each authority from the 2011 Census, with all age groups then

[75] Ibid (Figure 4.7)
[76] Ibid (para 7.63, para 7.67)

adjusted to change in line with forecasts produced by the Office for Budget Responsibility (OBR);

- **Commuting** – commuting ratio from the 2011 Census fixed throughout the forecast period; and

- **People holding more than one job ('double jobbing')** – allowing for a fixed proportion of employed people to occupy more than one job, based on the long-term ten year average (2006 – 2015) recorded in each authority by the Annual Population Survey (APS).

3.7 The assumptions set out above are considered reasonable in the current economic context and broadly align with those applied in the 2016 SHMA. Where there are differences with the approach used in the SHMA – principally relating to assumptions around economic activity and double jobbing – the rationale for the changes is set out below.

3.8 The SHMA presented two sensitivities to establish the impact of known changes to the state pension age and illustrate how the changes forecast by the OBR would increase economic activity amongst older cohorts beyond that which would result solely from these changes to the state pension age[77]. Each sensitivity held economic activity rates for those aged under 60 constant. The updated approach set out above adjusts economic activity rates for all age groups solely on the basis of OBR forecasts, which have been given weight in a recent appeal decision[78] and feature within the LPEG recommendations[79]. This is considered a prudent and appropriate assumption.

3.9 The SHMA acknowledged the implications of double jobbing, and identified forecasting houses' inherent assumptions on the relationship between people and jobs through their publication of people-based and job-based measures of employment[80]. The SHMA presented modelling based on each of these counts, with the 'people' scenarios taking account of the forecasts' in-built assumptions on future changes to double jobbing and the 'jobs' scenarios in contrast making no allowance for additional people undertaking more than one job. Reflecting on the long-term availability of local evidence on double jobbing in South Essex from the APS, the updated assumption holds double jobbing fixed at respective local average rates, thereby taking this into account using local data but making no assumption that it will change over time. This makes no assumption that this group will make a disproportionate contribution towards supporting future job growth relative to their current role in the local economy, and is again considered a prudent and robust assumption in this regard.

3.10 The following table summarises the number of jobs which could be supported over the assessment period based on projected population change and assumed change in labour force behaviour, outlined above.

[77] Ibid (para 4.68)
[78] Appeal Decision APP/V0728/W/15/3018546 (para 21)
[79] Local Plans Expert Group (2016) Local Plans Report to Government, Appendix 6
[80] Turley (2016) South Essex Strategic Housing Market Assessment (para 4.69, para 4.77)

Table 3.2: Jobs Supported by Demographic Change 2014 – 2037

	Total jobs supported 2014 – 2037	Average jobs supported per annum 2014 – 2037
Basildon	15,757	685
Castle Point	1,605	70
Rochford	1,978	86
Southend-on-Sea	13,570	590
Thurrock	17,151	746
South Essex	**50,060**	**2,177**

Source: Edge Analytics, 2017

3.11 The labour force growth resulting from the 2014-based SNPP could support the creation of new jobs in each of the South Essex authorities. While the number of jobs supported varies in each authority – reflecting their demographic profile – in excess of 50,000 additional jobs could be supported under this scenario across South Essex over the period to 2037.

Likely Future Job Growth – EDNA

3.12 As outlined in the introduction to this section, the EDNA was commissioned by the South Essex authorities to provide an evidenced position on likely future job growth, which will inform the respective development of Local Plans.

3.13 The employment growth scenarios developed through the EDNA are based on the latest 2016 iteration of the East of England Forecasting Model (EEFM), now developed by Cambridge Econometrics. The EDNA uses this forecast as a baseline which is then subsequently adjusted to take account of known 'policy-off' factors which reflect local economic evidence and circumstances, through engagement with each authority. It therefore represents a 'bespoke' forecast of likely job growth developed by the authors of the EDNA (GVA), as opposed to an 'off the shelf' economic forecast. The EDNA includes a full and transparent explanation of the adjustments applied to the forecasts to reflect local information. This forecast has been directly used in this addendum report on the basis that the South Essex authorities consider it to represent the most up-to-date and robust job growth forecast for the area. It is also recognised that alongside the SHMA, the EDNA will form a common evidence base document to be used by each authority in the respective development of Local Plans.

3.14 This adjusted baseline forecast suggests that 62,675 additional jobs will be created in South Essex over the period assessed in this update (2014 – 2037). Reflecting on the historic analysis presented in section 4 of the SHMA, this represents a comparable level of annual employment growth on average (0.8%) to that seen historically in recent economic cycles[81]. As summarised in the following table, Thurrock, Basildon and

[81] Ibid (para 4.22, para 4.48) – '*analysis of recent economic cycle growth rates implies an annual historic growth of between 0.7% and 0.8% per annum across TGSE'*

Southend-on-Sea are forecast to see the strongest growth in employment, with more modest employment growth anticipated in Rochford and particularly Castle Point.

Table 3.3: Forecast Employment Growth 2014 – 2037 (EDNA Baseline)

	Total additional jobs forecast 2014 – 2037	Average additional jobs per annum 2014 – 2037
Basildon	17,722	771
Castle Point	846	37
Rochford	2,942	128
Southend-on-Sea	13,172	573
Thurrock	27,994	1,217
South Essex	**62,675**	**2,725**

Source: GVA; Cambridge Econometrics

3.15 As outlined above, this represents the baseline level of job growth considered likely in the EDNA which is considered appropriate to use as the basis for assessing future housing need in accordance with the PPG. The EDNA includes further employment growth sensitivity scenarios around this baseline to provide a range of employment growth scenarios for each authority. It is understood that these scenarios are intended to move beyond a baseline view of job growth to take account of future policy intervention, amongst other factors, and it is therefore important to distinguish between 'policy on' and 'policy off' scenarios in the objective assessment of the related need for housing, as previously recognised by the Planning Inspectorate[82].

3.16 On this basis, it is considered appropriate and important to establish the housing need implications of the EDNA baseline scenario, with any subsequent supporting of 'policy on' growth scenarios a matter for the Councils to consider as their respective Local Plans are prepared. This will require a broader consideration of the wider policy interventions necessary to support implied levels of job growth and the potential implications of any subsequent redistribution or variant distribution of job growth between the authorities.

Implications for Housing Need

3.17 While the analysis above indicates that the 2014-based SNPP can grow the labour force to support the creation of in excess of 50,000 additional jobs between 2014 and 2037, this evidently falls below the level of job growth considered likely in the EDNA. Supporting this higher level of job growth in South Essex would therefore require either a substantial change in labour force behaviour – moving beyond the prudent assumptions applied by Edge Analytics – or a further growth in the labour force through above-trend migration, or a combination thereof.

[82] Elizabeth C. Ord (2015) Gloucester, Cheltenham and Tewkesbury Joint Core Strategy – Inspector's request for additional evidence arising from the Stage 1 hearings, focused on Objectively Assessed Housing Need, the Strategic Housing Market Assessment, Employment Requirements and Retail Need

3.18 In such circumstances, the PPG indicates that plan-makers should consider how the provision of new housing can help to address any imbalance between labour supply and likely job growth[83].

3.19 As in the SHMA, the scale of labour force growth necessary to support this level of job growth over the assessment period to 2037 can be estimated through the development of employment-led scenarios in POPGROUP.

3.20 This modelling applies the same labour force behaviour assumptions set out earlier in this section, which are acknowledged will differ from those applied by Cambridge Econometrics in their development of the EEFM forecast. This forecast has, however – as noted above – been subsequently adjusted by the authors of the EDNA to establish a baseline job growth scenario. It is understood from the EDNA that the Cambridge Econometrics forecast is primarily a 'demand' driven forecast with the level of job growth projected not constrained by labour force and therefore population factors. This further validates the approach taken to separately assess the demographic and therefore housing need implications of forecast job growth through POPGROUP. Whist the justification for this approach was also explored in detail in the SHMA[84], it is also important to recognise that a recent High Court judgment has since confirmed the appropriateness of applying '*realistic future*' assumptions on labour force behaviour where – as in this case – adjustments have been applied to a published forecast outside of the forecasting model[85]. This was recently reinforced by a Local Plan Inspector supporting a '*cautious approach*' to estimating future labour force behaviour, in forecasting models' outputs on economic participation[86].

3.21 Furthermore, it is important to recognise that this modelling approach is considered preferable for the purpose of considering housing need in South Essex as it is aggregated from a local authority level, applying local level assumptions on likely job growth and labour force behaviour which inherently reflect the demographic profile of each authority and assume that existing commuting relationships between South Essex authorities remain fixed.

3.22 The employment-led scenarios developed through POPGROUP integrate official population estimates for the period to 2015, with subsequent demographic change modelled based on the growth in employment considered likely in the EDNA. The implied change in population, households and dwellings necessary to support the EDNA baseline job forecast is summarised in the following table.

[83] PPG Reference ID 2a-018-20140306

[84] Turley (2016) South Essex Strategic Housing Market Assessment (paras 4.60 – 4.65, para 4.76, para 4.83, paras 4.97 – 4.98, Appendix 3)

[85] Chelsmford City Council v Secretary of State for Communities and Local Government and Gladman Developments, December 2016 [2016] EWHC 3329 (QB)

[86] Examination of the Telford and Wrekin Local Plan (2011 – 2031) Inspector's note to Telford and Wrekin Council – 30 March 2017, paragraphs 4 and 5

Table 3.4: Supporting Likely Job Growth 2014 – 2037

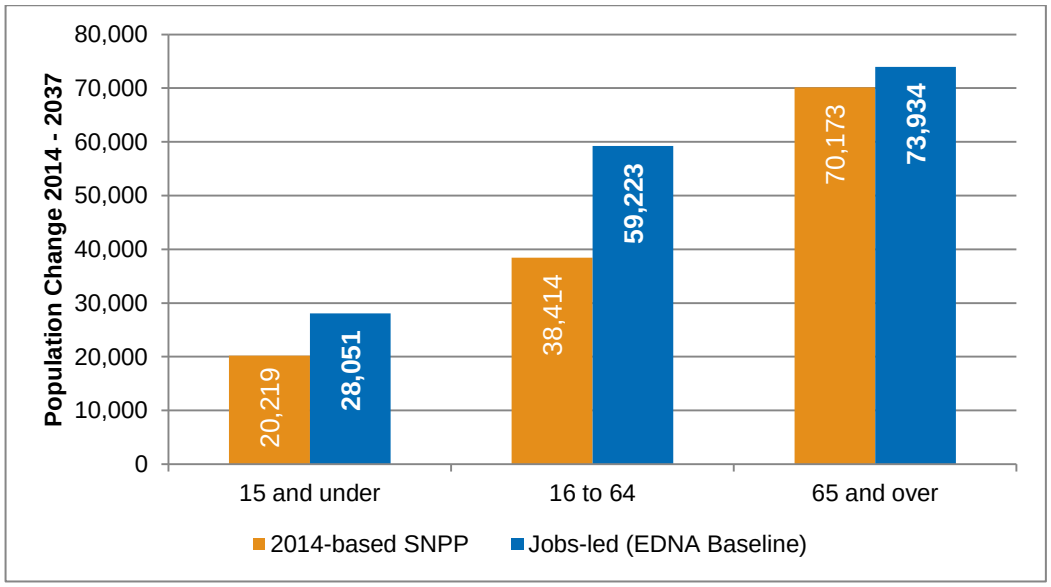
	Change 2014 – 2037				Average per year	
	Population	%	Households	%	Net migration	Dwellings
Basildon	39,765	22.0%	19,645	26.0%	782	869
Castle Point	8,057	9.1%	5,002	13.5%	592	225
Rochford	13,756	16.2%	7,051	20.6%	605	315
Southend-on-Sea	34,683	19.5%	19,733	25.7%	1,042	903
Thurrock	64,947	39.8%	28,237	43.8%	1,459	1,258
South Essex	**161,208**	**23.2%**	**79,668**	**27.6%**	**4,480**	**3,569**

Source: Edge Analytics, 2017

3.23 The modelling indicates that population growth of circa 161,200 will be necessary in South Essex over the period to 2037 to support likely job growth, increasing the population by approximately 23%. This is higher than the 19% growth projected by the 2014-based SNPP, reflecting the conclusion reached above which found that a continuation of past demographic trends would not sufficiently grow the labour force in order to support likely job growth without more pronounced labour-force behaviour changes.

3.24 The higher level of population growth implied by this scenario is underpinned by a more significant growth in the working age population, adjusting the profile of population growth which would occur if past demographic trends continue (Table 3.1). The following chart illustrates this variation between the starting point and the employment-led scenario.

Figure 3.1: Modelled Change in Population by Age 2014 – 2037

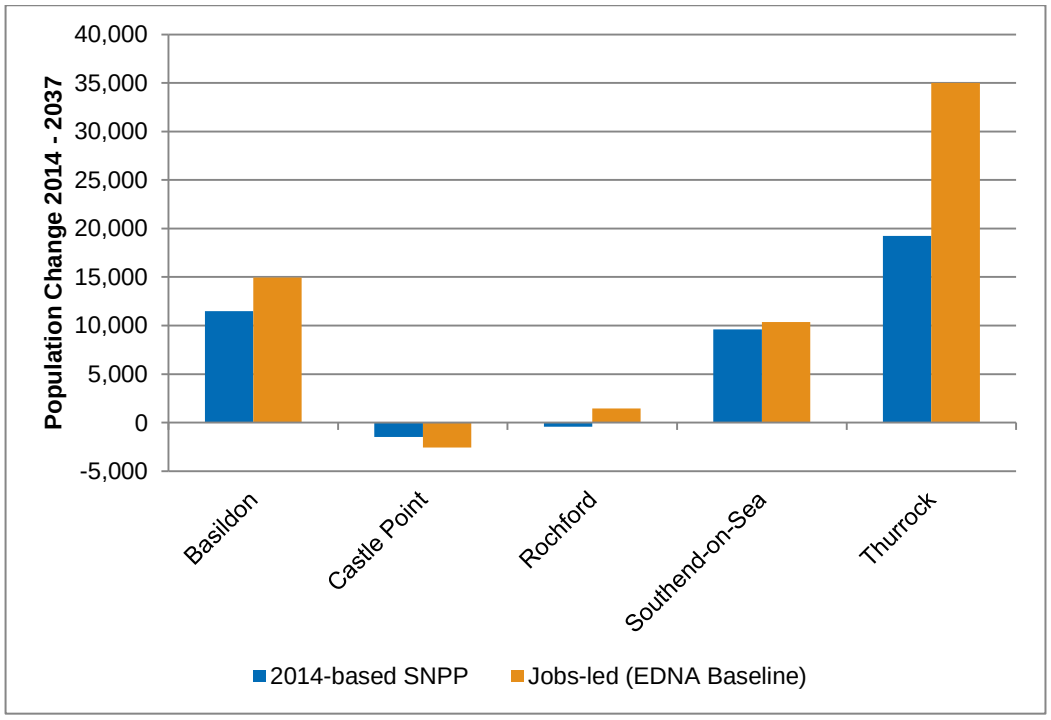


Source: Edge Analytics; ONS

3.25 It is notable that the larger modelled growth in working age residents also indirectly grows the number of younger residents aged 15 and under, reflecting assumed fertility rates amongst the larger working age population. Similarly, there is a modest uplift in the implied growth of older residents, albeit the growth in this age group is predominantly underpinned by long-term demographic trends and is less likely to be influenced by the creation of new employment opportunities over the period considered here.

3.26 The higher implied growth in the working age population can be further disaggregated by local authority, as shown in the following chart.

Figure 3.2: Modelled Change in Working Age Population 2014 – 2037



Source: Edge Analytics; ONS

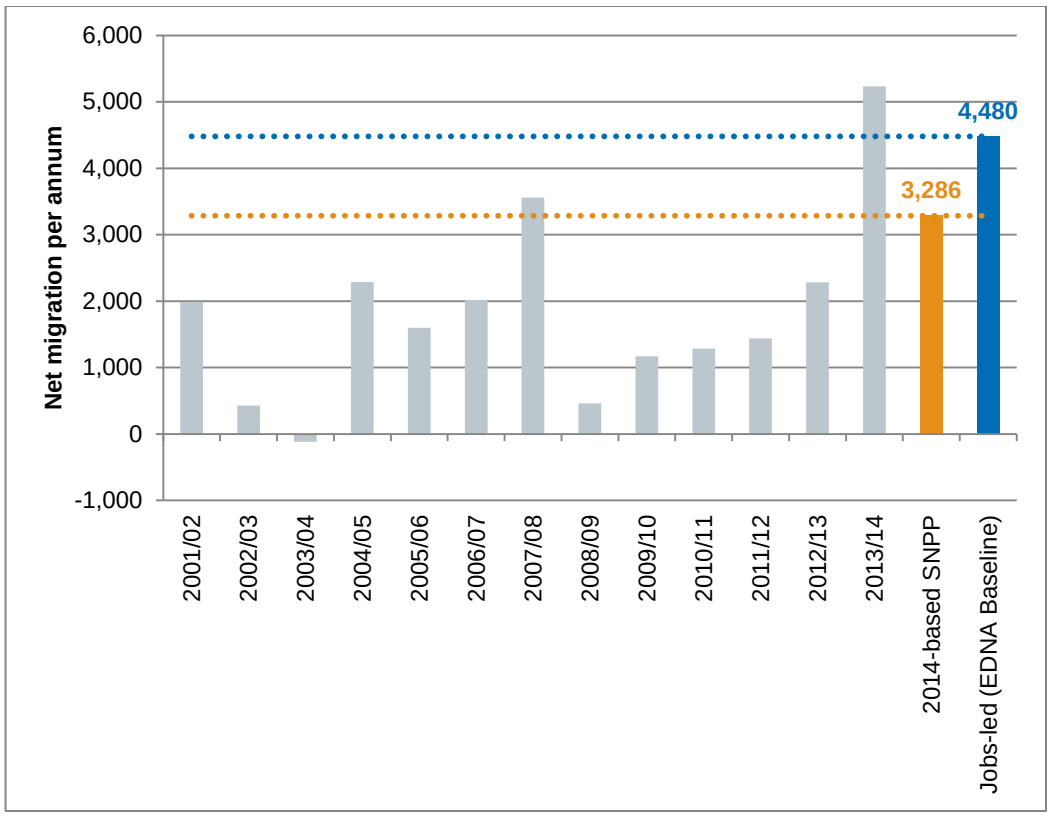
3.27 The modelling indicates that supporting likely job growth in the majority of authorities requires a further growth in the working age population beyond that implied by the 2014-based SNPP, with this increase most pronounced in Thurrock. In contrast, the employment-led scenario implies a larger reduction in the working age population of Castle Point. This suggests that the labour force growth resulting from the 2014-based SNPP for Castle Point – which is assumed to arise from changes in labour force behaviour – will be sufficient to support the very limited number of additional jobs likely to be created in the borough.

3.28 While this provides valuable local context, in practice the interrelated nature of the South Essex economy – and the likelihood that labour force growth in one authority could be expected to support employment growth elsewhere in the South Essex economy – suggests that it is appropriate to understand the implications of this scenario at a housing market area level.

3.29 Across South Essex, the higher level of population growth projected results from the modelling assuming a higher level of net migration to South Essex over the assessment period, relative to the 2014-based SNPP and historic trends. The employment-led scenario developed by Edge Analytics suggests that a net inflow of 4,480 people will be needed annually to grow the labour force and support likely job growth, with this exceeding that projected by the 2014-based SNPP (3,286pa) and the longer-term trend-based demographic scenario presented in section 2 of this report (2,202pa). As shown in the following chart, such a level of net migration would require a significant increase in the recent trend, which would broadly sustain the net inflow at the highest rate recorded in 2013/14. In comparing with earlier estimates of migration, however, it should be

recognised – as noted within the SHMA and revisited in section 2 of this addendum – that there is some uncertainty associated with UPC, and attributing this to migration would modestly increase the historic levels implied by the ONS dataset at housing market area level.

Figure 3.3: Historic and Projected Net Migration Required to Support Likely Job Growth in South Essex



Source: Edge Analytics; ONS

Adjusting Household Formation Rates

3.30 In order to convert the population into households, the modelling outputs presented at Table 3.4 apply the unadjusted 2014-based household formation rates to the level of population growth required to support likely job growth. However, the analysis in section 2 – and the SHMA – identified an assumption inherent within official projections that household formation for younger people remains suppressed in South Essex, having deteriorated over recent years. A sensitivity was therefore developed and applied in section 2 to allow for a return to the levels of household formation last seen in 2001 for those younger age groups where this is not already assumed within the official unadjusted projections.

3.31 Applying this adjustment to the jobs-led scenario is considered reasonable and appropriate, recognising the justification for its application in section 2. An important premise of the jobs-led scenarios is that South Essex will see an above-trend growth in the working age population, which will include younger households who are assumed to be attracted to the area for employment. In this context, it is reasonable to assume that an improvement in household formation rates will be sought by this larger cohort, and

indeed this approach is consistent with that used within the SHMA[87]. It is also considered that failing to apply this adjustment could risk underestimating the full need for new homes to accommodate this larger younger cohort recognising the historic evidence of worsening affordability and the undersupply of housing across South Essex.

3.32 Applying this sensitivity to the scenario developed to support likely job growth serves to uplift the number of households forming over the assessment period, increasing the number of homes needed to circa 3,986 dwellings per annum. This represents an uplift of circa 12% relative to the modelling outputs produced based on the unadjusted 2014-based headship rates, as summarised in the following table.

Table 3.5: Impact of Headship Rate Return Sensitivity on the Jobs-led (EDNA Baseline) Scenario – dwellings per annum

	Dwellings per annum 2014 – 2037		
Jobs-led (EDNA Baseline)	Unadjusted 2014-based rates	**Headship rate return sensitivity**	% uplift
Basildon	869	**986**	13%
Castle Point	225	**256**	14%
Rochford	315	**361**	15%
Southend-on-Sea	903	**1,002**	11%
Thurrock	1,258	**1,381**	10%
South Essex	**3,569**	**3,986**	**12%**

Source: Edge Analytics

Summary and Implications

3.33 The importance of taking employment trends into account when assessing housing needs is clearly articulated within the PPG, given the need to ensure that likely job growth can be sustainably supported by an economically active labour force. The Housing White Paper also continues to recognise the importance of the economy in planning for housing.

3.34 Following completion of the SHMA, the Councils commissioned an Economic Development Needs Assessment (EDNA) to inform the respective development of Local Plans and provide evidence on likely future job growth across South Essex. This supersedes the interim conclusions reached on likely job growth in the SHMA, with the baseline forecast suggesting that 62,675 additional jobs could be created across South Essex over the period assessed within this report (2014 – 2037).

3.35 The application of prudent labour force behaviour assumptions to the demographic projection of housing need (2014-based SNPP) suggests that in excess of 50,000 jobs could be supported by the population growth projected to 2037. This is driven both by a

[87] Turley (2016) South Essex Strategic Housing Market Assessment (Figure 5.27)

sizeable projected growth in the working age population and reasonable assumptions on the changing behaviour of the existing population.

3.36 This falls below the level of job growth considered likely in the EDNA, indicating that this higher level of job growth in South Essex would require either a substantial change in labour force behaviour – moving beyond the prudent assumptions applied by Edge Analytics, and potentially constraining employment growth if more significant assumed changes do not materialise – or a further growth in the labour force through above-trend migration, or a combination thereof. When allowing for only modest changes in labour force behaviour, it is estimated that population growth of circa 161,200 will be required in South Essex over the assessment period to support the level of job growth considered likely by the EDNA. This would grow the population by some 23%, exceeding the 19% growth projected by the 2014-based SNPP. This suggests a need to allow for a further growth in the population on the basis of above-trend migration to support likely job growth and a higher level of growth in the working age population. This can be achieved by attracting new working age residents and retaining existing working age residents who would otherwise move elsewhere, and similarly formed part of the rationale for uplifting the demographic projection of need in the SHMA as summarised in section 1 of this report.

3.37 Accommodating this higher level of population growth will generate a greater need for housing than implied by the demographic projection, and – reflecting the PPG – it is therefore appropriate to consider the need for an uplift to the OAN to support likely job growth in South Essex. The modelling indicates that 3,569 dwellings per annum will be needed to grow the labour force and support the baseline scenario developed in the EDNA, increasing to 3,986 dwellings per annum when allowing for a return to higher levels of household formation amongst younger people. This is considered further in the derivation of the OAN in the following section.

4. Updated Objective Assessment of Need

4.1 The SHMA concluded that there was a need for 3,275 – 3,750 dwellings per annum in South Essex over the period from 2014 to 2037, uplifting the then '*starting point*' of the official 2012-based household projections by circa 30% through a demographic adjustment to take account of the demographic effects of London, an adjustment to household formation rates and an allowance for stronger growth in the labour force to support forecast job growth. As noted in the introduction to this report, however, the SHMA made clear that the release of new evidence – introduced throughout this report – would impact upon this conclusion and require review.

4.2 This section draws upon the updated evidence presented throughout this report – and the earlier analysis in the SHMA – to arrive at an updated and evidenced position on the objectively assessed need (OAN) for housing in South Essex, following the latest official guidance in the PPG as drafted in February 2017. This remains the latest official guidance on calculating housing needs, pending the planned consultation on options for the introduction of a standard methodology which – in the absence of a housing requirement adopted in an up-to-date plan – is intended to apply as '*the baseline for assessing five year housing land supply and housing delivery*' from April 2018[88]. The Government has suggested that '*in specific circumstances where authorities are collaborating on ambitious proposals for new homes*', additional time could be given by the Secretary of State before this new baseline is applied. Equally, although the Government intends to incentivise authorities to use the new approach in producing Local Plans, it has acknowledged that this may not be universally adopted by stating that:

"We will expect Councils that decide not to use the new approach to explain why not and to justify the methodology they have adopted in their area. We will consult on what constitutes a reasonable justification for deviating from the standard methodology, and make this explicit in the National Planning Policy Framework"[89]

4.3 In the absence of any guidance on a preferred alternative methodology at this time – with the Housing White Paper silent on the standardised approach proposed by the Local Plans Expert Group (LPEG), for example – this update seeks to establish whether the latest evidence implies a '*meaningful change*'[90] in the housing situation in South Essex. This is essential in maintaining an evidenced and up-to-date understanding of housing needs in the housing market area – as required by adopted policy[91] and guidance available at the current point in time – and will enable continued progress in producing Local Plans in South Essex, as expected by Government. This is considered a reasonable, consistent and appropriate basis through which this updated position can be established, although the implications of a new methodology should be monitored by the Councils.

[88] DCLG (2017) Fixing our Broken Housing Market (para 1.15)
[89] Ibid (para A.23)
[90] PPG Reference ID 2a-016-20150227
[91] DCLG (2012) National Planning Policy Framework (para 159)

4.4 As in the SHMA, this updated assessment is structured around the methodological steps set out within the PPG, seeking to identify:

- An appropriate **demographic projection of housing need**, adjusting the new 'starting point' of the latest 2014-based official projections where necessary to reflect demographic factors which are not captured in past trends[92];
- The extent to which **likely job growth** can be supported through labour force availability[93];
- The level of adjustment necessary to respond to **market signals** of imbalance between housing demand and supply[94]; and
- The implications of the identified scale of **affordable housing need** in South Essex and its likely delivery over the plan period[95].

4.5 In accordance with the NPPF and PPG, the need for housing is established across the South Essex housing market area, which – as per the SHMA – continues to represent an appropriate self-contained geography within which housing needs can be robustly assessed.

Demographic Projection of Need

4.6 The release of the official 2014-based household projections provides a new 'starting point' for the assessment of housing needs in South Essex, suggesting that **3,021 dwellings per annum** will be needed over the assessment period (2014 – 2037) to accommodate population growth across the housing market area when allowing for vacancy. This is higher than the 2,886 homes needed annually to accommodate the growth projected by the earlier 2012-based dataset over the same period.

4.7 This primarily results from the higher underlying level of population growth projected by the 2014-based sub-national population projections (SNPP), with a 19% growth in the population projected such that around 128,800 additional residents will live in the area by 2037. Basildon, Southend-on-Sea and Thurrock are projected to see the strongest proportionate growth in the population, with the latest 2014-based SNPP suggesting that the population of each authority will grow to a greater extent than previously anticipated by the 2012-based dataset. A marginally lower level of population growth is projected in Rochford and Castle Point, relative to the preceding dataset.

4.8 Reflecting the guidance in the PPG, this assessment has sought to determine whether demographic adjustments to the 'starting point' are required to reflect factors which are not captured in past trends. The underlying population projection and the assumed rate of household formation have been separately considered.

4.9 The analysis within this report suggests that the 'starting point' of the 2014-based SNPP represents a reasonable and comparatively positive projection of future population

[92] PPG Reference ID 2a-017-20140306
[93] PPG Reference ID 2a-018-20140306
[94] PPG Reference ID 2a-019-20140306; PPG Reference ID 2a-020-20140306
[95] PPG Reference ID 2a-029-20140306

growth in South Essex, allowing for a relatively high level of net in-migration which primarily originates from elsewhere in the country and supporting a continuation of recently observed demographic trends. A continuation of longer-term trends would not result in a higher level of population growth across the housing market area, and there is therefore no indication that this projection would underestimate the future need for housing if long-term demographic trends were to persist. Equally, however – reflecting on the conclusions of the SHMA – the factors influencing this historic profile mean that this is considered unlikely to be more representative of the future demographic growth of South Essex, or the future need for housing. This conclusion is therefore consistent with that reached within the SHMA in relation to the previous official 2012-based SNPP dataset[96].

4.10 At a local level, migration from within the UK is expected to be a significant driver of population growth in each authority, with all authorities to varying degrees projected to see net migration which exceeds historic levels. This is most pronounced in Castle Point, where the 2014-based SNPP – and preceding 2012-based dataset – projected a higher net inflow than seen over recent years. The projected net inflow to Southend-on-Sea is also higher than recent trends suggest, although as recognised within the SHMA there remains some uncertainty associated with historic migration estimates due to the historic effects of unattributable population change (UPC). The projected inflow to Basildon is reflective of the increased migration seen over more recent years – which is higher than observed over the long-term – while Thurrock and Rochford are projected to see a more limited deviation from the longer-term historic trend. Such an implied deviation from historic trends is reflective of the methodology developed by the ONS, which captures the wider demographic effects of growth in those areas which share a strong relationship with South Essex in terms of migration. Furthermore, the projections allowing for an increase in recent levels of net migration – beyond the potentially constrained trends suggested by historic evidence[97] – provides some assurance that any historic factors constraining demographic growth in the past are not serving to unduly constrain the projections.

4.11 It is not considered appropriate at this time to apply any distinct adjustment to the 2014-based SNPP to allow for the demographic implications of London, given the ongoing work by the GLA to review the London Plan and update its evidence base. Such an isolated adjustment risks misaligning with this updated position, and it is instead recommended that the South Essex authorities continue to partake and engage with the development of this evidence where required to consider the implications of London's assessed housing needs.

4.12 Although the population projection underpinning the 'starting point' appears reasonable, an adjustment to the level of housing growth needed to support this growth is considered necessary, given the underlying assumption in the 2014-based SNHP that household formation rates amongst many younger age groups in South Essex will continue to be suppressed following a trend seen since 2001. The rationale for this adjustment is consistent with that concluded as being required in the SHMA in relation to the 2012-based SNHP dataset.

[96] Turley (2016) South Essex Strategic Housing Market Assessment (para 7.11)
[97] Ibid (para 3.119)

4.13 This adjustment allows for a short-term return to higher levels of household formation for younger age groups where this is not already projected, in order to ensure that this suppressed market context does not form the basis for future plan-making. This adjustment allows for the formation of approximately 8,900 additional younger households over the assessment period who would otherwise be unable to form if the unadjusted, lower 2014-based household formation rates were applied. The formation of these households is supported and indeed enabled through the circa 13% increase in housing provision over the assessment period, uplifting the 'starting point' household projection.

4.14 On this basis, it is considered that the 2014-based SNPP with an adjustment to younger household formation rates represents an appropriate demographic projection of housing need in South Essex. This suggests a need for **3,418 dwellings per annum** across South Essex between 2014 and 2037, increasing the 'starting point' by 397 dwellings per annum or 13%. This adjustment is relatively uniform in scale across each authority, ranging from 11% in Southend-on-Sea to 17% in Rochford.

Supporting Likely Job Growth

4.15 The importance of taking employment trends into account when assessing housing needs is clearly articulated within the PPG, given the need to ensure that likely future job growth can be sustainably supported by an economically active labour force. The Government's Housing White Paper also continues to recognise the importance of the economy in planning for housing.

4.16 Within the SHMA, available forecasts from Experian and Oxford Economics were reviewed in order to arrive at an interim position on likely future job growth in South Essex which informed the conclusions on housing need. Following completion of the SHMA, the Councils commissioned an Economic Development Needs Assessment (EDNA) to inform the respective development of Local Plans and provide evidence on likely future job growth in South Essex. The EDNA has developed employment growth scenarios based on the latest 2016 iteration of the East of England Forecasting Model (EEFM), with this baseline explicitly adjusted to take account of known 'policy-off' factors which reflect local circumstances identified following engagement with each authority. This adjusted baseline suggests that 62,675 additional jobs could be created across South Essex between 2014 and 2037.

4.17 The application of labour force behaviour assumptions which are considered reasonable to the demographic projection of housing need (2014-based SNPP) suggests that in excess of 50,000 jobs could be supported by the population growth projected to 2037. This is driven both by a sizeable projected growth in the working age population under the demographic projections (38,400 people aged 16 – 64) and reasonable assumptions around future labour force behaviours of the existing population.

4.18 Importantly, however, the analysis in section 3 confirms that whilst this represents a strong level of job growth which could be supported it falls below the level of job growth considered likely in the EDNA, indicating that this higher level of job growth in South Essex would require either a substantial change in labour force behaviour – moving beyond the assumptions applied by Edge Analytics, and potentially constraining

employment growth if more significant assumed changes do not materialise – or a further growth in the labour force through above-trend migration, or a combination thereof. When applying consistent assumptions around labour force behaviour to those used in the demographic projections, it is estimated that population growth of circa 161,200 will be required in South Essex over the assessment period to support the baseline level of job growth considered likely by the EDNA. This would grow the population by some 23%, exceeding the 19% growth projected by the 2014-based SNPP. This suggests a need to allow for a further growth in the population on the basis of above-trend migration to support likely job growth and further grow the working age population. This can be achieved by attracting new working age residents and retaining existing working age residents who would otherwise move elsewhere, and similarly formed part of the rationale for uplifting the demographic projection of need in the SHMA.

4.19 Accommodating this higher level of population growth will generate a greater need for housing than implied by the demographic projection, and – reflecting the PPG – it is therefore considered appropriate to apply an uplift to the OAN to support likely job growth in South Essex. The modelling indicates that **3,569 dwellings per annum** will be needed to grow the labour force and support the baseline scenario developed in the EDNA, increasing to **3,986 dwellings per annum** when allowing for a return to higher levels of household formation amongst younger people. This represents an uplift of circa 18 – 32% above the 'starting point', or 4 – 17% above the adjusted demographic projection.

Taking Account of Market Signals

4.20 The analysis of market signals in the SHMA highlighted a worsening in some indicators in South Essex, although it was noted that:

'The picture is by no means consistent across the market signals, nor does the area as a whole – or any one authority – demonstrate a significant or consistent level of market imbalance when compared in particular against national benchmarks. Unlike many areas in and around London and across the southern regions, there are comparatively large parts where prices and rents are comparatively low and where there is evidence of a demand for housing as a result.'[98]

4.21 The evidence did, however, point towards affordability pressures across the housing market area, necessitating an upward adjustment to the implied housing need from the household projections. This follows the guidance in the PPG, which states that any adjustment should be set at '*a level which is reasonable*'[99].

4.22 The PPG does not clarify the precise scale of adjustment required to reasonably respond to worsening market signals, nor how this should be applied. The PPG does, however, expect the uplift in housing supply to address or alleviate recognised affordability issues, reflecting the longstanding national recognition of the need to elevate levels of supply.

[98] Turley (2016) South Essex Strategic Housing Market Assessment (para 7.32)
[99] PPG Reference ID 2a-020-20140306

4.23 Indeed, the recently published Redfern Review concludes that '*all long-term sustainable solutions to high house prices and availability depend on increasing long-term supply*'[100]. Modelling was undertaken to support the review, advancing the position that:

"In order for real house prices to rise in line with real earnings in the longer run, with current low interest rates, we would have to substantially 'out build' the growth in the number of households, assuming that in this scenario all the elasticities remain the same. With real earnings growing at 1.5% per year, real house price rises would be in the order of 3% annually, all other things being equal. This implies we would have to 'out build' the growth in households to trim the real house price rate increases back to anything near 1.5% – i.e. the same as real earnings growth – and so stabilise prices relative to earnings"[101]

4.24 The report concludes that '*boosting housing supply will have a material impact on house prices, but only if sustained over a long period*', and considers the '*very relevant*' implications for policymakers:

"Restrictions on new housing supply have not been the main culprit when it comes to price rises over the past 25 years, although they have constrained availability. But looking forward, if the number of households in the UK were to grow at around 200,000 per year, new supply of 300,000 dwellings per year over a decade would be expected to cut house price inflation by around 5% points (0.5 percentage points a year)"

4.25 Section 5 of the SHMA highlighted the relatively broad interpretation of market signals by Local Plan Inspectors in the approach to setting a '*reasonable*' adjustment to respond to market signals at the time[102]. Consideration was given specifically to the Local Plan Inspectors examining the Eastleigh and Canterbury Local Plans where in each case the Inspector arrived at a clear position on an appropriate response to market signals evidence in each authority. The conclusion of the Inspector examining the Eastleigh Local Plan in particular is widely cited as a benchmark in interpreting this stage of the PPG methodology, with the Inspector advocating an uplift of 10% to respond to the '*modest*' pressure reflected by market signals. The interpretation of modest pressure recognised that '*not all signals demonstrate that Eastleigh is worse than the national or regional/sub regional averages. But on some crucial indicators it is*'[103].

4.26 The Inspector considering the Canterbury Local Plan recommended an uplift of 20% associated with evidence of worsening market signals[104], advising that this uplift needed to be considered in the context of other adjustments relating to household formation and the alignment of population change with economic growth. He noted that '*the amount of uplift to be applied to the starting point estimate is a matter of judgement*' and identified the potential for '*a degree of overlap between [the market signals uplift] and some of the other assumptions*', before recommending that '*an uplift that took reasonable account of*

[100] Redfern Review (2016) The Redfern Review into the Decline of Home Ownership
[101] Ibid (part 2, para 12)
[102] Turley (2016) South Essex Strategic Housing Market Assessment (para 5.94)
[103] Ibid (para 40)
[104] 'Canterbury District Local Plan: Note on main outcomes of Stage 1 hearings', August 2015

market signals, economic factors, a return to higher rates of household formation and affordable housing needs' was appropriate as a full OAN for Canterbury[105].

4.27 Additional reference was made, however, to other Local Plan Inspectors, including the Inspector's report on the Horsham Local Plan, which avoided arriving at a prescriptive uplift but endorsed the use of an adjustment to the headship rates of younger households as a reasonable response. In the context of the information reviewed at the time that the SHMA was prepared, the position was concluded that taking into account the adjustment to headship rates as a minimum was required by way of response to evidence of worsening market signals in the area[106]. The SHMA did, however, also note that it was *"recognised that further supply based adjustments can be considered alongside this uplift"*[107]. In section 7 of the SHMA, this was further acknowledged:

"It is recognised that the PPG also recognises the potential need for an adjustment based on elevating supply further in order to improve affordability in particular. It is considered that this supply-led adjustment needs to be considered in the context of the evidenced need for affordable housing and alongside the other adjustments made in response to demographic and economic factors."[108]

4.28 As referenced in section 1 of this report, whilst the Government has not endorsed the LPEG recommended methodology for calculating OAN, this methodology explicitly requires a separate market signals adjustment which is applied to the demographic projection and is therefore separate to any adjustment made to household formation rates. Other Local Plan Inspectors have in recent months also sought clarification on the scale of a distinct market signals uplift. One such example is set out within the Inspector's interim conclusions on the Mid Sussex Local Plan. Here, the Inspector concluded that *'a significant uplift should be made to the OAN in response to market signals, to the point where it could be expected to improve affordability, in accordance with government policy'*[109]. The Inspector concluded that the application of a 20% uplift to the official household projections was reasonable and would counter worsening affordability[110]. This reflected the Inspector's view that there was no evidence that the suggested uplift associated solely with an adjustment to household formation rates of younger households – which represented an uplift of approximately 3% – would *'improve affordability either generally, or for the 20-34 age group on which the uplift was targeted'*.

4.29 As set out above, section 5 of the SHMA considered in detail the evidence of market signals across South Essex and in each of the component authorities. As noted above, in considering the area collectively, the conclusion was reached that there was evidence of worsening market signals and affordability pressures, albeit – when compared to national benchmarks – there was no evidence of a significant or consistent level of market imbalance between the supply of and demand for housing. Consideration has been given to the relative performance of market signals against Eastleigh and

105 Ibid (para 25/26)
106 Turley (2016) South Essex Strategic Housing Market Assessment (para 5.101)
107 *Ibid (para 5.105)*
108 *Ibid (para. 7.36)*
109 Interim conclusions of the Inspector examining the Mid Sussex District Plan, 20 February 2017, pg 5
110 *Ibid, pg 6*

Canterbury recognising the regularly cited position of these Inspectors' decisions, with this included at Appendix 4.

4.30 The review does not provide a conclusive position but suggested overall that it can be considered that the worsening in market signals in South Essex is broadly comparable to that seen in these authorities, with at least a modest adjustment to the demographic projection therefore justifiable.

4.31 Establishing an appropriate level of housing provision by fully and objectively assessing the need for housing provides a vehicle to support the elevation of supply over the longer term in those areas where there is evidence of a high demand for housing. Whilst this may not stop or reverse price growth, this can ensure that such growth is not unsustainable in scale.

4.32 The scale of a separate adjustment to be applied has also been considered in the context of the implied increase in housing need resulting from the adjustment to household formation rates in arriving at an adjusted demographic projection of need. This allows for a recovery to a more balanced market context in terms of the comparative affordability of housing.

4.33 On this basis – and in the context of the positions advanced by other Local Plan Inspectors – uplifting the demographic projection of need by a minimum of 10% is considered an appropriate and '*reasonable*' supply-led response to the moderate worsening of market signals in South Essex. For the purpose of this addendum report, this has been applied uniformly to the overall assessed need across South Essex. This recognises the operation of the area as a functional housing market area, with a positive supply response therefore required across the area to support an improvement in affordability recognising that households will move within and across the area. It is recognised – based upon the analysis of market signals presented within the SHMA – that there is a level of variation with regards to the relative worsening of market signals in individual authorities. This is considered further in the context of the implications for the housing need of each of the individual authorities later in this section.

4.34 Coupled with the demographic adjustment to improve household formation rates and increase the 'starting point' by 13%, it is considered that this further 10% upward adjustment would address the demographic impact of worsening affordability over recent years and support a long-term improvement in market conditions in South Essex. Applying this uplift to the adjusted demographic projection therefore suggests a need for **3,760 dwellings per annum** over the assessment period, which is circa 24% above the 'starting point'.

Affordable Housing Need

4.35 The SHMA identified a need for 1,877 affordable homes across South Essex over five years to clear the backlog while meeting the needs of newly forming and existing households falling into need. After the backlog is cleared, 1,767 affordable homes will be needed annually across the housing market area to meet newly arising needs. This calculation is presented at section 6 of the SHMA.

4.36 This addendum has not fully reviewed the affordable housing need calculation in full, given that the inputs remain up-to-date and sufficiently representative of needs for the purposes of this addendum. However, a minor update can be made at Stage 4 of the calculation – presented at Figure 6.10 of the SHMA – to reflect the increased number of newly forming households anticipated under the updated demographic projection (Step 4.1). This update is applied at Appendix 2 of this addendum, and suggests a short-term need for **2,239 affordable homes annually** to clear the backlog over five years reducing to **2,128 affordable homes per annum** thereafter.

4.37 This indicates that there remains a sizeable need for affordable housing across South Essex. The PPG makes clear that this need should be '*considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments, given the probable percentage of affordable housing to be delivered by market housing led developments*'[111]. This can be established through a review of adopted or drafted local policies, with the affordable housing requirement variable across South Essex:

- 25% of housing delivered in Basildon on sites with 11 units or more will be required to be affordable, based on Policy H34 of the draft Local Plan[112];
- The Local Plan for Castle Point[113] submitted for examination proposes a requirement for at least 15% of housing delivered on larger housing sites (11+) in Canvey Island to be affordable, with a higher requirement of 25% in Benfleet, Hadleigh and Thundersley;
- The adopted Rochford Core Strategy[114] requires at least 35% of dwellings delivered on development sites with 15 or more units to be affordable;
- The adopted Core Strategy for Southend-on-Sea[115] sets out the Council's commitment to negotiate with developers to ensure that at least 20% of units on smaller (10 – 49 units) sites and 30% of units on larger (50+) sites are affordable; and
- At least 35% of residential units built on larger development sites (10+ units) in Thurrock should be provided as affordable housing, based on the amended Core Strategy[116].

4.38 Based on these policies, the number of homes that would be required across South Essex to deliver sufficient affordable housing in each authority to meet its calculated needs can be estimated and considered. This is based on the annual net new need calculated, and addressing the backlog would require a higher level of provision over a short-term five year period. Similarly, this illustrate approach infers that all sites will deliver affordable housing, and with smaller sites exempt from local policies, a higher overall level of housing provision may subsequently be necessary.

111 PPG Reference ID 2a-029-20140306
112 Basildon Borough Council (2016) Draft Local Plan
113 Castle Point Borough Council (2016) New Local Plan 2036
114 Rochford District Council (2011) Local Development Framework – Core Strategy Adopted Version
115 Southend-on-Sea Borough Council (2007) Core Strategy Development Plan Document
116 Thurrock District Council (2015) Core Strategy and Policies for Management of Development (as amended)

Table 4.1: Housing Provision Required to Meet Affordable Housing Need in Full

	Annual affordable housing need	Affordable housing requirement	Overall housing provision required
Basildon	288	25%	1,152
Castle Point	291	15 – 25%	1,164 – 1,940
Rochford	238	35%	680
Southend-on-Sea	649	20 – 30%	2,163 – 3,245
Thurrock	663	35%	1,894
South Essex	**2,129**		**7,054 – 8,911**

Source: Turley

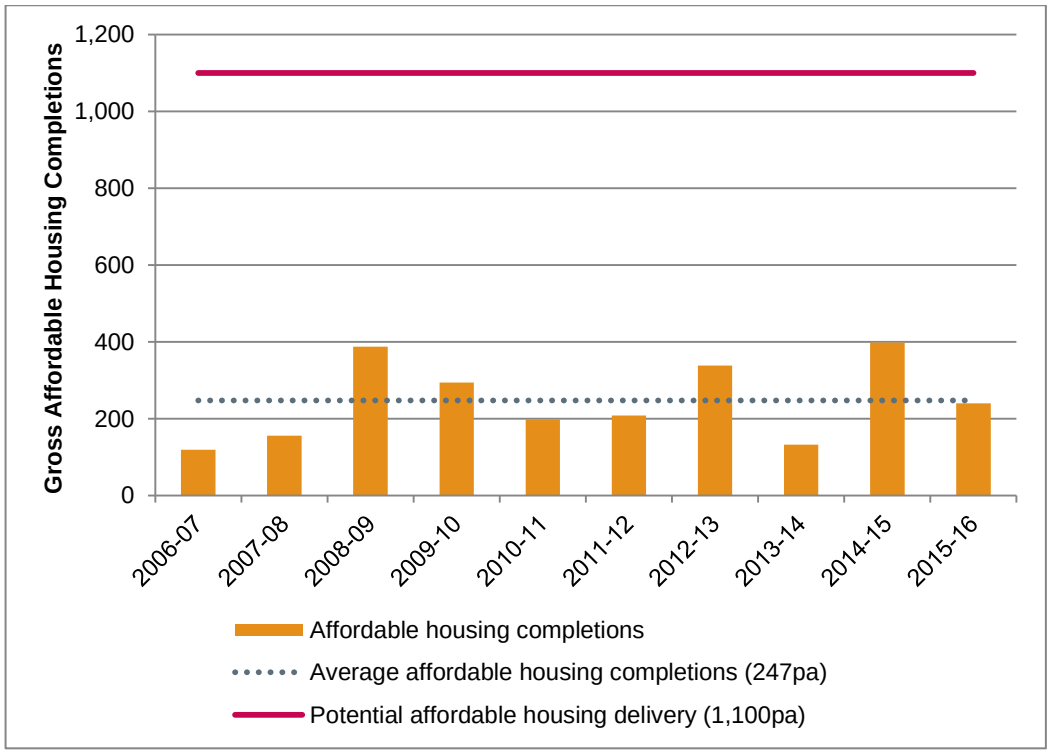
4.39 Meeting affordable housing needs in full through the delivery of market housing would require the provision of in excess of 7,000 dwellings per annum across South Essex. This evidently far exceeds the level of housing growth needed to accommodate demographic growth in the population, grow the labour force or respond to market signals. Indeed, over half of the housing provision needed across South Essex to support likely job growth (3,986dpa) or respond to market signals (3,760dpa) would need to be affordable if the calculated need (2,129pa) were to be met in full, which exceeds the adopted and emerging policy requirements and is unlikely to be viable. As noted in the SHMA, it has been confirmed through the High Court that the PPG does not require the OAN to meet the total need for affordable housing through its full inclusion[117].

4.40 Allowing for an improving rate of younger household formation and providing a supply-led response to worsening market signals to uplift the calculated need above the household projections can be expected to contribute towards addressing the need for affordable housing in South Essex. Provision at the upper end of the range identified through the stages introduced above (3,986dpa) could result in the delivery of circa 1,100 affordable homes annually, when the Councils' adopted and proposed delivery targets are applied to the level of housing growth needed in each authority under this scenario. This reduces to circa 1,000 affordable homes per annum when providing for the demographic projection of need with a market signals adjustment (3,760dpa).

4.41 Nevertheless, provision of this broad scale would significantly boost the existing level of affordable housing delivery in South Essex, with Council monitoring indicating that 247 affordable homes have been annually completed on average across the housing market area over the past ten years (2006 – 2016). This is illustrated below.

[117] Borough Council of Kings Lynn and West Norfolk v Secretary of State for Communities and Local Government, Elm Park Holdings Limited [2015] EWHC 2464 (Admin)

Figure 4.1: Gross Affordable Housing Completions 2006 – 2016



Source: Council monitoring

4.42 An approximate fourfold increase in the annual supply of new affordable housing could be expected to positively contribute towards addressing the recognised need for affordable housing in South Essex. Evidently, recognising the comparative scale of the affordable housing need concluded in the SHMA, it is considered that there is benefit in ensuring that the development of policy based upon the evidence of OAN seeks to support higher levels of affordable housing provision. This provides important context in recommending an updated OAN based on the scenarios introduced above.

Recommending an Updated OAN

4.43 Drawing together the analysis above, the evidence presented in this addendum suggests that the demographic 'starting point' for South Essex – implying a need for **3,021 dwellings per annum** between 2014 and 2037 – is underpinned by a level of population growth which appears reasonable and positive in the context of recent historic trends. This allows for a relatively high level of net in-migration which primarily originates from elsewhere in the country, and assumes a continuation of recent demographic growth trends. There is no indication that this projection would underestimate future housing needs if long-term population growth trends were to persist. Equally, it is not considered appropriate to apply any downward adjustment to this projection, given that it is reflective of recently observed evidence of population growth and recognising the integrated nature of the movement of people in and out of South Essex.

4.44 An adjustment to the 'starting point' is, however, required to allow for a return to higher levels of household formation amongst younger people, given the underlying assumption that household formation amongst many younger age groups in South Essex will continue to be suppressed. This adjustment results in an implied need for **3,418 dwellings per annum** across South Essex, uplifting the 'starting point' by 13%. Provision of this scale would meet the need generated both by long-term and short-term demographic trends, and would offset this distinct demographic effect of worsening market conditions over recent years.

4.45 Whilst the scale of implied population growth in the demographic projection would significantly grow the labour force and support in excess of 50,000 new jobs across South Essex – based on reasonable and evidence-based assumptions on future labour force behaviour – the Councils' EDNA suggests that some 62,675 additional jobs are likely to be created across the area over the same period. This evidently surpasses the level of job growth which could be supported by demographic growth in the labour force, requiring either a substantial change in labour force behaviour or a further growth in the labour force through above-trend migration if this higher level of job growth is to be supported. Accommodating the higher level of population growth required to support likely job growth in South Essex – based on reasonable up-to-date labour force behaviour assumptions – will generate a greater need for housing than implied by the demographic projection, requiring circa **3,569 dwellings per annum** or **3,986 dwellings per annum** when simultaneously allowing for a return to higher levels of younger household formation. This represents an uplift of circa 18 – 32% above the 'starting point'. It is recognised that there is a degree of uncertainty in aligning housing and employment growth and this range is therefore considered to represent a reasonable approximation of the need related to this aspect of the methodology in the PPG.

4.46 The evidenced worsening in a number of market signals in South Essex – indicating an imbalance between housing supply and demand, as explored in the SHMA – similarly suggests that an upward adjustment to the demographic projection is required. Although the PPG does not clarify the scale of adjustment required to reasonably respond to worsening market signals, a comparison of market signals in South Essex relative to those areas where Inspectors have arrived at a clear position on the necessary response (Eastleigh and Canterbury in particular) suggests that a comparable adjustment is justifiable. Uplifting the demographic projection of need by a minimum of 10% across South Essex is considered an appropriate and '*reasonable*' minimum supply-led response to the moderate worsening of market signals observed in South Essex, which – coupled with the demographic adjustment to improve household formation rates and address this demographic impact of worsening affordability over recent years – could be expected to support a long-term improvement in market conditions. Applying this adjustment to the demographic projection suggests a need for **3,760 dwellings per annum**, which is circa 24% above the 'starting point'. This evidently falls within the range implied by the employment-led scenarios presented above, providing further justification for uplifting the demographic projection.

4.47 Furthermore, recognising that the Inspector examining the Canterbury Local Plan[118] clearly advised that any uplift associated with worsening market signals should be

[118] 'Canterbury District Local Plan: Note on main outcomes of Stage 1 hearings', August 2015

considered alongside other adjustments to the demographic projection – including the alignment of population change with economic growth – it is important to note that providing for the upper end of the range implied by the employment-led scenario would result in a more marked uplift (17%) to the demographic projection. This could be viewed as providing a more marked response to the moderate worsening in market signals observed in South Essex. Such a level of delivery would also support the greatest increase in the level of affordable housing provision based on Councils' adopted or proposed affordable housing targets, of the scenarios presented in this addendum. This would inherently provide the greatest response to the evidenced need for affordable housing in South Essex.

4.48 The adjustments applied above collectively indicate that there is an objectively assessed need (OAN) for between 3,760 – 3,986 dwellings per annum across South Essex between 2014 and 2037, which could be reasonably rounded to **3,750 – 4,000 dwellings per annum**. Provision within this range will sufficiently grow the labour force and support likely job creation, with the lower end of the range providing the minimum response considered necessary to the moderate worsening in market signals in South Essex. The upper end of the range would provide a more marked uplift responding to market signals and accommodate in full the projected need for housing associated with supporting job growth while allowing for a recovery of household formation rates of younger households.

4.49 The range uplifts the demographic 'starting point' of the latest 2014-based household projections by up to 32%, and increases the adjusted demographic projection by up to 17%. Adjustments of this scale are comparable and proportionate to those previously considered appropriate in the SHMA[119], albeit applied to a higher updated 'starting point' projection which is viewed as representative of the future demographic need for housing in South Essex.

4.50 Such a level of provision would significantly boost the supply of both market and affordable housing in South Essex. The analysis in the SHMA indicated that 1,431 dwellings were completed annually across the housing market area between 2001 and 2014, with a peak delivery of 2,301 dwellings in 2005/06. As shown in the following table – in a comparable format to Figure 7.3 of the SHMA – even the lower end of the OAN range would more than double the long-term annual rate of development, and consistently deliver a level of housing growth which is almost two thirds higher than the peak achieved prior to the recession[120].

[119] Adjustments ranged from 13 – 30% as illustrated at Figure 7.4

[120] It is noted that this level of '*boosting*' aligns with the previously concluded upper end of the range within the SHMA, presented at Figure 7.3

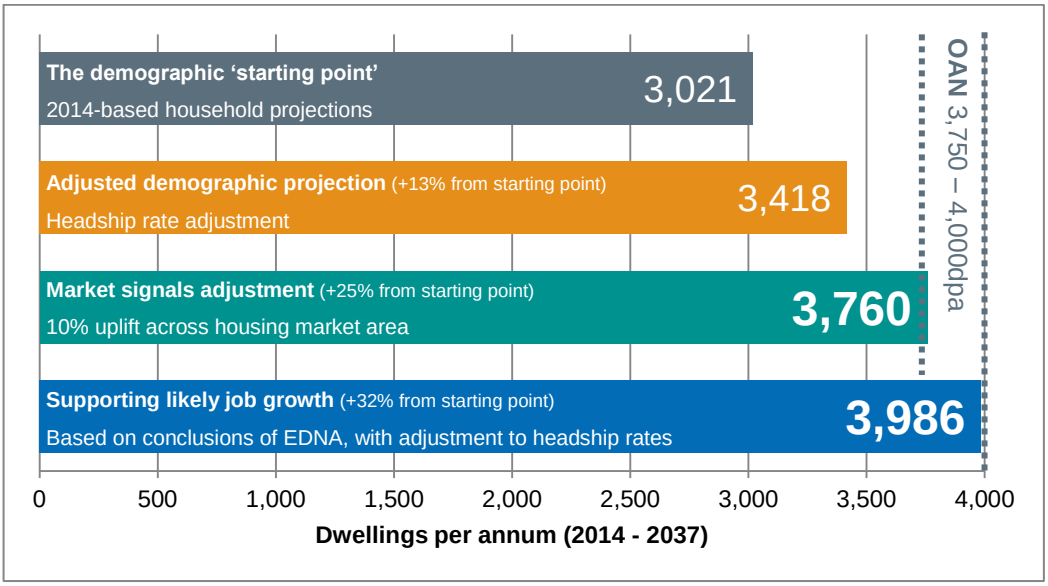
Table 4.2: Benchmarking OAN Range with Past Housing Delivery

	Average historic net completions 2001 – 2014	Highest recorded annual completions 2005/06
Annual completions (dpa)	**1,431**	**2,301**
Uplift relative to lower OAN (**3,750dpa**)	162%	63%
Uplift relative to upper OAN (**4,000dpa**)	180%	74%

Source: Council monitoring; Turley and Edge Analytics, 2017

4.51 The adjustments applied in arriving at this position are illustrated below. Appendix 5 provides an indication of the phasing of housing need over the period to 2037, and the resultant change in population and households over the same period.

Figure 4.2: Adjustments to the 'Starting Point' in Arriving at the OAN



Source: Turley; Edge Analytics

4.52 Across South Essex, the updated OAN range evidently surpasses that previously concluded for the housing market area (3,275 – 3,750dpa). The SHMA previously afforded the greatest weight to the upper end of this range, reflecting the '*strong economic growth potential…as well as the evidenced need for affordable housing*' while positively responding to affordability issues in the area[121]. The updated evidence presented in this addendum continues to support the upper end of the previously concluded range (3,750dpa), but indicates that this is now considered to represent the minimum level of housing growth needed across South Essex. A lower level of provision would not provide the further uplift to the demographic projection necessary to respond to the moderate worsening in market signals, and indeed a higher level of provision (4,000dpa) would be required to fully support likely job growth in South Essex while

[121] Turley (2016) South Essex Strategic Housing Market Assessment (para 7.79)

simultaneously allowing for a short-term return to higher levels of younger household formation.

Implications for Local Authorities in South Essex

4.53 As in the SHMA – and following the guidance in the PPG – the need for adjustment at each stage of the methodology presented above has been assessed across the South Essex housing market area, based on aggregated projections for each authority but considering the need for adjustment collectively. The integrated nature of South Essex means that an overall uplift in housing provision across the housing market area can respond to and address localised evidence of imbalance between housing supply and demand or provide the labour force required to support likely job growth across this area[122], for example.

4.54 It is, however, recognised that a disaggregated position on the need for housing in each of the South Essex authorities provides valuable local evidence to inform the respective preparation of individual Local Plans. This section therefore considers the implications of the adjustments applied above at a local level.

4.55 In order to maintain the lower end of the range at South Essex level, an overarching principle is required such that the scenario associated with this minimum position – the adjusted demographic projection with a market signals uplift – forms the minimum level of need in each of the authorities. A lower level of need cannot be inferred, even if the employment-led modelling suggests that local job growth can be supported by a smaller growth in the labour force than generated by this trend-based demographic projection. This reflects the guidance in the PPG, which states that an employment-led adjustment to housing provision is appropriate only where the supply of working age population is '*less than…projected job growth*'[123]. Applying this guiding principle ensures that each of the conclusions inferred locally sum to the minimum end of the range.

4.56 It is also recognised that a number of the authorities – namely Castle Point and Rochford – demonstrate more significant symptoms of imbalance between housing supply and demand, as identified in the analysis of market signals in the SHMA. This forms an important context with regards to the OAN for these authorities recognising that a consistent adjustment was made at a South Essex level to provide a supply-led response to market signals.

4.57 In this context and in accordance with the conclusion reached in the 2016 SHMA it is recommended that greater weight is given to the upper end of the OAN range in the assessment of the five year housing land supply at an authority level and in the development of Local Plan policy.

Basildon

4.58 The following table summarises how the adjustments applied to the 'starting point' in arriving at the OAN for South Essex influence the implied need for housing in Basildon.

[122] It is important to note that the employment-led modelling presented in this addendum makes no assumption on changing commuting dynamics between South Essex authorities

[123] PPG Reference ID 2a-018-20140306

Table 4.3: Basildon – Local Implications of OAN Adjustments

	Adjustment (dwellings per annum)	**Dwellings per annum** 2014 – 2037	% uplift from 'starting point'
Demographic 'starting point'		**770**	
Adjusted demographic projection	+113	**883**	15%
Market signals adjustment (+10%)	+89	**972**	26%
Supporting likely job growth with adjustment to headship rates	+14	**986**	28%
Implied OAN range		**972 – 986**	26 – 28%

Source: Turley; Edge Analytics

4.59 The analysis suggests that there is a need for **972 – 986 dwellings per annum in Basildon** over the period from 2014 to 2037, which is higher than the range concluded in the SHMA (763 – 837dpa). This is due both to the higher demographic projection – which suggests that a continuation of more recent trends would result in a greater demographic need for housing than previously implied – and a need to accommodate the labour force required to support the higher level of job growth concluded as likely in the borough. At the upper end of this range, the modelling presented in this report indicates that provision of this scale could grow the population of Basildon by circa 39,800 persons over the assessment period.

4.60 The lower end of this range (972dpa) also incorporates the market signals adjustment necessary to provide a supply-led response to evidence of a worsening imbalance between housing demand and supply.

Castle Point

4.61 The following table summarises how the adjustments applied to the 'starting point' in arriving at the OAN for South Essex influence the implied need for housing in Castle Point.

Table 4.4: Castle Point – Local Implications of OAN Adjustments

	Adjustment (dwellings per annum)	**Dwellings per annum** 2014 – 2037	% uplift from 'starting point'
Demographic 'starting point'		**250**	
Adjusted demographic projection	+33	**283**	13%
Market signals adjustment (+10%)	+28	**311**	24%
Supporting likely job growth with adjustment to headship rates		(256)	2%
Implied OAN range		**311**	24%

Source: Turley; Edge Analytics

4.62 The analysis indicates that there is a need for at least **311 dwellings per annum in Castle Point** over the assessment period, in order to accommodate the 9,700 additional residents projected by the 2014-based SNPP with an adjustment to household formation rates and the moderate uplift applied across South Essex and considered necessary to respond to worsening market signals.

4.63 Although the modelling indicates that forecast job growth in the borough could be supported by a smaller growth in the population than projected by the 2014-based SNPP, the implied lower level of housing provision needed (256dpa) would not meet demographic needs when allowing for a return to higher levels of younger household formation. Equally, provision of this scale would not provide the supply response necessary to respond to worsening market signals both locally and across South Essex. On this basis, this is not considered to form an appropriate indicator of future housing need in Castle Point, and does not form part of a range implied by the demographic modelling for the borough.

4.64 The analysis in the SHMA confirms that against a number of market signals Castle Point shows more significant evidence of affordability issues. In this context, it is considered that the scale of implied need for housing in Castle Point should be considered very much as a minimum position which is established in the context of higher levels of provision across other parts of South Essex.

4.65 The implied need for at least 311 dwellings per annum in Castle Point is slightly lower than the bottom end of the range previously concluded (326 – 410dpa) in the SHMA. In the context of the conclusion reached in the SHMA with regards to the identified high need for affordable housing – which suggested that greater weight be attributed to the upper end of the range – it is again considered that the updated OAN position should be viewed very much as a minimum. Providing for a higher level of provision would evidently have significant positive benefits with regards to providing against high affordable housing needs in the borough.

4.66 The upper end of the range was associated with aligning with economic forecast data used in the SHMA. The EDNA, however, concludes with a lower likely level of job

growth relative to the interim analysis of employment forecasts presented in the SHMA. It is important to therefore recognise that the level of job growth able to be supported by the OAN for Castle Point arrived at in this addendum would be relatively modest, which could present a risk if the Council is planning to support – through provision of land – a level of employment growth which is significantly more ambitious than that suggested as likely by the EDNA.

Rochford

4.67 The following table summarises how the adjustments applied to the 'starting point' in arriving at the OAN for South Essex influence the implied need for housing in Rochford.

Table 4.5: Rochford – Local Implications of OAN Adjustments

	Adjustment (dwellings per annum)	**Dwellings per annum** 2014 – 2037	% uplift from 'starting point'
Demographic 'starting point'		**256**	
Adjusted demographic projection	+45	**301**	18%
Market signals adjustment (+10%)	+30	**331**	29%
Supporting likely job growth with adjustment to headship rates	+30	**361**	41%
Implied OAN range		**331 – 361**	29 – 41%

Source: Turley; Edge Analytics

4.68 The analysis indicates that there is a need for **331 – 361 dwellings per annum in Rochford** over the assessment period. The lower end of the range results from an adjustment to the demographic 'starting point' to improve the assumed level of younger household formation and provide the necessary response to an evidenced worsening in market signals, both locally and across South Essex. This could support population growth of circa 13,750 in Rochford over the assessment period.

4.69 The analysis in the SHMA confirms that against a number of market signals Rochford shows more significant evidence of affordability issues. In this context it is considered reasonable to suggest that the lower end of the range is unlikely to reflect the full need for housing in Rochford. The upper end of the range would represent an uplift of close to 20% above the adjusted demographic projection and would evidently accommodate the labour force growth required to support the level of job growth considered likely in Rochford by the EDNA, elevating the 'starting point' by some 41%.

4.70 The range implied for Rochford narrows the previously concluded range (312 – 392dpa). As with Castle Point, it is important to recognise that the OAN is lower than the upper end of need recommended within the SHMA as a result of a lower level of employment growth concluded by the EDNA, relative to the interim position established in the SHMA. The Council should consider the implications of this in its aligning of economic and housing policies.

Southend-on-Sea

4.71 The following table summarises how the adjustments applied to the 'starting point' in arriving at the OAN for South Essex influence the implied need for housing in Southend-on-Sea.

Table 4.6: Southend-on-Sea – Local Implications of OAN Adjustments

	Adjustment (dwellings per annum)	**Dwellings per annum** 2014 – 2037	% uplift from 'starting point'
Demographic 'starting point'		**876**	
Adjusted demographic projection	+98	**974**	11%
Market signals adjustment (+10%)	+98	**1,072**	22%
Supporting likely job growth with adjustment to headship rates		(1,002)	14%
Implied OAN range		**1,072**	22%

Source: Turley; Edge Analytics

4.72 The analysis suggests that at least **1,072 dwellings per annum will be needed in Southend-on-Sea** over the period from 2014 to 2037. Provision of this scale will accommodate the 33,350 additional residents projected by the 2014-based SNPP whilst allowing for an improved level of younger household formation and providing a supply-led response to worsening market signals.

4.73 As in Castle Point, the modelling suggests that the job growth considered likely in the borough by the EDNA could be supported by a smaller growth in the labour force than generated by the 2014-based SNPP, resulting in a lower implied need for housing (1,002dpa). This would not, however, provide the supply-led response necessary to respond to market signals, and therefore does not represent an appropriate conclusion on the need for housing in Southend-on-Sea.

4.74 The SHMA previously concluded that there was a need for 953 – 1,132 dwellings per annum in Southend-on-Sea, and the updated conclusion for the borough evidently lies within this range. It is, however, clear that the lower end of this earlier range would not meet the needs implied by the latest demographic and market evidence presented in this addendum, with the higher need at the upper end of this previously concluded range resulting only from a level of job growth which exceeds that concluded as likely by the EDNA.

Thurrock

4.75 The following table summarises how the adjustments applied to the 'starting point' in arriving at the OAN for South Essex influence the implied need for housing in Thurrock.

Table 4.7: Thurrock – Local Implications of OAN Adjustments

	Adjustment (dwellings per annum)	**Dwellings per annum** 2014 – 2037	% uplift from 'starting point'
Demographic 'starting point'		**869**	
Adjusted demographic projection	+107	**976**	12%
Market signals adjustment (+10%)	+98	**1,074**	24%
Supporting likely job growth with adjustment to headship rates	+307	**1,381**	59%
Implied OAN range		**1,074 – 1,381**	24 – 59%

Source: Turley; Edge Analytics

4.76 The updated analysis presented within this addendum indicates that there is a need for **1,074 – 1,381 dwellings per annum in Thurrock** over the assessment period. This exceeds the range previously concluded in the SHMA (919 – 973dpa).

4.77 The updated analysis suggests that even the upper end of the previously concluded range would not meet the need for housing resulting from an improvement in younger household formation rates (976pda), nor provide the supply-led response to worsening market signals. The higher level of need implied by the upper end of the revised range (1,381dpa) results from a need to accommodate 65,000 additional residents to grow the labour force and support likely job creation in Thurrock based on the conclusions of the EDNA, which exceeds that used as an interim position within the earlier SHMA analysis. Providing for a level of housing growth within the previously concluded range would not grow the labour force to the extent required to support this level of job creation.

4.78 The scale of job growth forecast in Thurrock is evidently significant within the EDNA. In contrast, the authority does not demonstrate the same level of evidence of market signals imbalances as a number of the other authorities within South Essex. In the context of these factors, it is considered appropriate that the OAN continues to be presented as a comparatively wide range for Thurrock

5. Need for Different Types of Housing

5.1 The PPG highlights the importance of considering the size and type of housing required once an overall housing figure has been identified[124]. Responding to this guidance, the SHMA presented analysis of recent trends in the occupation of housing in South Essex before considering the implications for future need.

5.2 This analysis can be updated based on the updated projections analysed within this addendum. This provides an updated position on the types of households likely to form over the assessment period, and the size of housing likely to be required to meet this need.

5.3 Furthermore, the NPPF and PPG both specify that the specific needs of different household groups should be assessed. Section 8 of the SHMA provides a detailed overview of the housing requirements of older people, people with disabilities and self- and custom-builders. This update builds upon this analysis, providing a limited update only for older people where updated evidence is now available. The SHMA therefore continues to represent the main source of evidence on the specific needs of different household groups, and should continue to be read alongside the updated evidence presented in this section.

Size of Housing Required (all tenures)

5.4 The analysis in this section explores how a changing demographic profile may generate a need for housing of different sizes over the plan period. Existing housing trends form the basis for this assessment, with the approach assuming that the current tendencies of different household types to occupy different sizes of housing are maintained throughout the period assessed. This does not seek to estimate how market factors – such as changes to house prices, incomes and household preferences – will impact upon the propensity of households to occupy different sizes of property. Recognising market volatility over longer term periods, this approach is considered prudent, albeit illustrative.

5.5 It is therefore necessary to establish a profile of the size of housing currently occupied by different household types in South Essex, based on the number of bedrooms and drawn from the 2011 Census. This builds upon and can be read alongside the current housing trends presented in section 8 of the SHMA, which drew upon Census data to profile the existing housing stock and its occupation by different age groups and household types.

5.6 It is noted that the Census household categories – presented at Figure 8.9 of the SHMA, and broken down by authority within its Appendix 6[125] – do not directly align with the household types used within the 2014-based SNHP, which underpins the modelling presented in this report. A process of aggregation is therefore necessary, resulting in the identification of three broad household typologies within this analysis as follows:

[124] PPG Reference ID 2a-021-20160401

[125] The analysis previously presented in the SHMA was based on *persons* living in different types of households, and the updated analysis presented in this addendum is based on *households*. The analysis presented is therefore not directly comparable

- One person households;
- One family households; and
- Other households not captured by the definitions above ('other households').

5.7 The following table shows the tendency of each of these household types to occupy different sizes of housing, based on the 2011 Census.

Table 5.1: Number of Bedrooms by Household Type in South Essex 2011

	1 bed	2 beds	3 beds	4+ beds
Basildon				
One person households	31%	32%	30%	7%
One family households	4%	22%	47%	27%
Other households	4%	22%	46%	28%
Castle Point				
One person households	24%	41%	28%	7%
One family households	4%	24%	45%	27%
Other households	3%	19%	40%	38%
Rochford				
One person households	24%	38%	30%	8%
One family households	3%	22%	45%	30%
Other households	3%	19%	40%	38%
Southend-on-Sea				
One person households	38%	34%	22%	6%
One family households	7%	28%	43%	22%
Other households	8%	29%	37%	25%
Thurrock				
One person households	31%	32%	34%	4%
One family households	5%	24%	56%	16%
Other households	6%	24%	48%	22%
South Essex				
One person households	32%	34%	28%	6%
One family households	5%	24%	47%	24%
Other households	6%	24%	43%	27%

Source: Census 2011

5.8 Across South Essex, it is evident that households containing one person demonstrate a tendency to occupy smaller housing, with approximately one in three occupying a house with a single bedroom and a comparable proportion occupying two bedroom properties. Family households in South Essex are more likely to occupy larger housing, with some 71% living in housing containing three bedrooms or more. Other households demonstrate a similar tendency towards occupying larger housing.

5.9 This is broadly similar across South Essex, although there is some local variation. Castle Point and Rochford demonstrate a slightly different profile, with one person households in each authority demonstrating a greater tendency towards occupying larger housing. Furthermore, all household types in Thurrock display a more limited tendency towards occupying larger housing with four or more bedrooms, with three bed housing more prevalent. This trend is also evident in Southend-on-Sea, albeit with an evident shift towards smaller housing.

5.10 These trends can be considered in the context of the projected change in each of these household types under the employment-led scenario – with headship rate adjustment – which forms the upper end of the concluded OAN range for South Essex (3,986dpa). The following table summarises the scale of growth in different household types projected under this dataset over the plan period.

Table 5.2: Change in Household Profile (Jobs-led EDNA Baseline with headship rate adjustment) 2014 – 2037

	One person households	One family households	Other households	**All households**
Basildon	8,340	11,315	2,627	**22,283**
Castle Point	743	3,817	1,144	**5,704**
Rochford	1,365	5,745	978	**8,088**
Southend-on-Sea	7,169	10,588	4,133	**21,890**
Thurrock	9,695	18,313	2,999	**31,007**
South Essex	**27,312**	**49,779**	**11,882**	**88,973**

Source: DCLG

5.11 Growth in all household types is projected over the period to 2037 in South Essex, although family households are expected to see the greatest growth both across the housing market area and in each authority.

5.12 This profile of household growth will shape the demand for different sizes of housing over the assessment period. By proportionately applying households' existing tendencies to occupy different sizes of housing – based on the local 2011 Census data presented at Table 5.1 – an illustrative profile of the size of housing likely to be required by additional households forming can be established. This analysis relates to all households projected to form and is not broken down by tenure, although the updated affordable housing need analysis in Appendix 3 contains a separately calculated breakdown by size. While this exercise is based on the household growth underpinning

the employment-led modelling, its outcomes – both at South Essex and local authority level – are almost identical when applied to the growth projected by the 2014-based SNHP.

Table 5.3: Implied Size of Housing Required 2014 – 2037

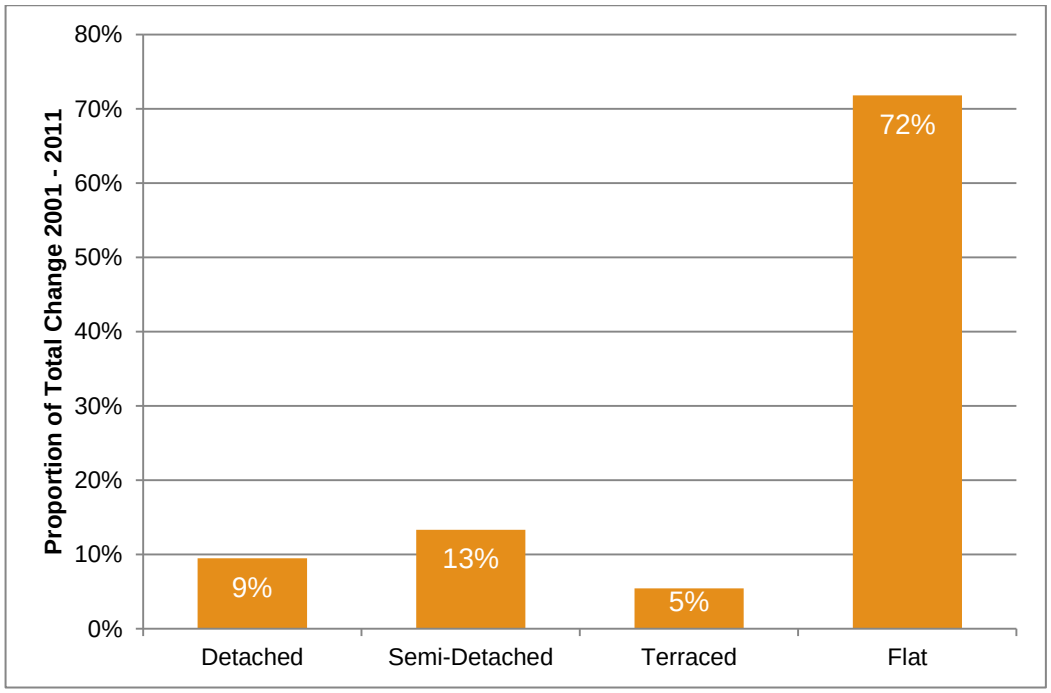
	Proportion of additional households requiring…				
	1 bed	2 beds	3 beds	4+ beds	Total
Basildon	14%	26%	40%	20%	100%
Castle Point	7%	25%	42%	27%	100%
Rochford	7%	24%	42%	27%	100%
Southend-on-Sea	18%	30%	35%	17%	100%
Thurrock	13%	26%	48%	13%	100%
South Essex	**14%**	**27%**	**42%**	**18%**	**100%**

Source: Turley; Edge Analytics; DCLG; Census 2011

5.13 Across South Essex, the analysis suggests that there will be a demand for housing of all sizes, with the greatest additional demand generated by households who would typically occupy housing with three bedrooms. Some 60% of households are expected to require housing with at least three bedrooms, although there is some local variation. In Castle Point and Rochford, 69% of households are estimated to require at least three bedrooms, with a smaller proportion (52%) in Southend-on-Sea. Indeed, in Southend-on-Sea, the analysis suggests a strong demand for smaller housing, with 18% of households requiring only one bedroom. Almost half (48%) of households in Thurrock are estimated to require three bedrooms, while the scale of demand for smaller housing in Thurrock is comparable to Basildon and indeed the wider South Essex position implied.

5.14 At a headline level – and as in the SHMA – this can be broadly compared against the profile of stock delivered over recent years, based on change recorded between the 2001 and 2011 Census. Only limited conclusions can be drawn from this analysis, however, given that the number of bedrooms was only recorded in 2011. Understanding the respective contributions of different types of dwellings in growing the housing stock over this decade nevertheless provides valuable context in highlighting how the housing stock could change if recent trends continue. The following chart summarises how change in the stock of different types of housing contributed to the overall growth recorded between the 2001 and 2011 Census.

Figure 5.1: Housing Stock Growth in South Essex by Type 2001 – 2011



Source: Census 2011; Census 2001

5.15 It is evident that a considerable proportion of the additional household spaces delivered over the decade to 2011 were flats, with other types of housing making a smaller contribution towards growing the housing stock over this time.

5.16 While the impact of this change on the overall size profile of dwellings in South Essex cannot be established using this data, the 2011 Census did identify that the stock of flatted accommodation is significantly weighted towards smaller properties with one or two bedrooms, with detached and semi-detached housing in contrast more likely to contain three bedrooms or more. This is summarised in the following table.

Table 5.4: Accommodation Type by Number of Bedrooms 2011

	1 bed	2 beds	3 beds	4+ beds
Detached	3%	15%	32%	49%
Semi-detached	3%	25%	56%	16%
Terraced	4%	25%	62%	10%
Flat	49%	44%	7%	1%

Source: Census 2011

5.17 On this basis, while the delivery of flats may contribute towards meeting additional demand for smaller housing, there will be a clear need to ensure a balanced delivery of different types of housing to meet the demand for different sizes of housing across South Essex.

Interpreting the Evidence

5.18 This modelling exercise provides an illustrative interpretation of available historic evidence to estimate the size of housing which may be required in South Essex over the assessment period. In reality, the profile of housing delivered is likely to be driven by the market, which will judge the type of housing most appropriate to meet demand at any point in time.

5.19 The analysis presented above should therefore only be used for guidance in its translation into policy and monitoring purposes of future development. While this evidence provides a valuable overall indication of the broad mix of housing which may be required, it is recommended that policies are not overly prescriptive in directly basing requirements for individual sites on the illustrative mix presented above. The individual mix of housing provided on a site-by-site basis will need to take account of local market evidence and viability considerations, which will have an important influence on the appropriate mix.

Older Persons Housing Need

5.20 Within section 8, the SHMA separately identified the potential need for additional specialist older persons housing in South Essex over the assessment period, including residential care housing (Use Class C2). This can be updated to reflect the updated modelling produced to inform this addendum, which would result in a sizeable growth in the number of older people (65+) over the period to 2037. This is summarised in the following table, based on the scenario underpinning the upper end of the OAN range (3,986dpa).

Table 5.5: Projected Change in Older People 2014 – 2037

	65 – 74	75 – 84	85+	**Total 65+**	Total 75+
Basildon	6,612	5,798	4,985	**17,395**	10,783
Castle Point	1,759	3,611	4,048	**9,418**	7,659
Rochford	3,026	3,686	3,375	**10,087**	7,061
Southend-on-Sea	7,087	6,753	5,672	**19,513**	12,425
Thurrock	8,263	5,644	3,616	**17,523**	9,260
South Essex	**26,746**	**25,492**	**21,696**	**73,934**	**47,188**

Source: Edge Analytics

5.21 As in the SHMA, the Strategic Housing for Older People Analysis (SHOP@) tool can be used to identify the prevalence of those aged 75+ to require different forms of specialist housing provision:

- Demand for **125 sheltered housing** units per 1,000 residents aged 75+;
- Demand for **20 enhanced sheltered housing** units per 1,000 residents aged 75+; and

- Demand for **25 extra care units with 24/7 support** per 1,000 residents aged 75+.

5.22 Edge Analytics' modelling presented above suggests that the population of South Essex residents aged 75 and over will increase by 47,188 over the assessment period, although a component of this growth (3,010) is assumed to be accommodated within communal establishments as separately considered later in this section. The number of residents aged 75 and over living in private households in South Essex is projected to grow by 44,178 over the period from 2014 to 2037. This falls slightly below the growth in older persons projected at both the upper and lower end of the previously concluded OAN in the SHMA.

5.23 As in the SHMA, estimating the need for specialist housing inputs the projected change in the older private household population, and is therefore **included** within the objectively assessed need for dwellings derived from this scenario. The additional demand for different types of specialist accommodation generated by this population growth is presented in the following table.

Table 5.6: Projected Need for Specialist Housing 2014 – 2037

	Basildon	Castle Point	Rochford	Southend-on-Sea	Thurrock	**South Essex**
Sheltered housing	1,262	886	850	1,424	1,101	**5,522**
Enhanced sheltered housing	202	142	136	228	176	**884**
Extra care units	252	177	170	285	220	**1,104**
Total	**1,716**	**1,205**	**1,156**	**1,937**	**1,497**	**7,510**
Average per annum	75	52	50	84	65	**327**

Source: Edge Analytics; Housing LIN

5.24 The analysis suggests that the projected growth in the older population at the upper end of the concluded OAN range could generate a need for circa 327 specialist older persons accommodation units annually in South Essex, with a total need for 7,510 units over the full assessment period.

5.25 Furthermore, as noted above, the demographic modelling produced by Edge Analytics assumes a growth in the number of people living in communal establishments, which is entirely attributable to growth in the number of older people aged 75 and over[126]. These persons are not assumed to live within private dwellings, and are therefore **excluded from and additional to** the overall OAN established for South Essex. As such, they should be considered and presented separately, and the following table shows that the upper end of the range would grow the communal population by circa 3,010 persons

[126] Paragraph 8.54 of 2016 SHMA

over the full assessment period. This will generate a need for 131 additional bedspaces annually across South Essex in addition to the overall OAN established within this addendum.

Table 5.7: Projected Change in Communal Population (75+) 2014 – 2037

	Total change in communal population 2014 – 2037	Average annual change in communal population
Basildon	688	30
Castle Point	573	25
Rochford	260	11
Southend-on-Sea	1,033	45
Thurrock	455	20
South Essex	**3,010**	**131**

Source: Edge Analytics

5.26 In considering how this need for specialist and institutional accommodation is met, it is important to recognise that there is a high level of uncertainty associated with estimating the number of older residents requiring – or preferring – accommodation in residential institutions (Use Class C2) or extra care housing (C3). As in the SHMA, it is important to recognise that the respective housing strategies of South Essex authorities may seek to meet the implied institutional need through both social and market housing designed to cater for older persons' needs, for example in C2 housing. This can reflect Councils' housing and social strategies which seek to promote independent living for older people. The analysis presented here has not applied any further adjustment in this regard. Where a Council sought to provide for or indeed anticipated an element of the need for extra care housing identified above (C3) being met through C2 accommodation, this would result in a higher OAN given that the latter would be included within the assessment of need.

6. Conclusions

6.1 Turley and Edge Analytics were appointed by the South Essex authorities of Basildon, Castle Point, Rochford, Southend-on-Sea and Thurrock to prepare a Strategic Housing Market Assessment (SHMA) which objectively assesses the need for housing across the South Essex housing market area (HMA). The final report was published in May 2016.

6.2 The SHMA concluded that there was an objectively assessed need (OAN) for 3,275 – 3,750 dwellings per annum in South Essex over the period from 2014 to 2037. This uplifts the then '*starting point*' of the official 2012-based household projections by circa 30% through a demographic adjustment to take account of anticipated growth pressures in London – on the basis of an assumed return to the longer-term trend of higher net in-migration – a positive adjustment to household formation rates and an allowance for stronger growth in the labour force to support forecast job growth.

6.3 Whilst the SHMA was based upon the most up-to-date data available at the time that it was prepared, the importance of continuing to take account of newly published evidence was identified. In particular, the SHMA recognised that the availability of the following evidence in particular could impact upon the concluded OAN for South Essex:

- The release of the **2014-based sub-national population and household projections** (SNPP/SNHP), providing a new demographic 'starting point' for the assessment of housing needs in line with Planning Practice Guidance (PPG); and

- The findings of the **South Essex Economic Development Needs Assessment** (EDNA), which considers likely future job growth in detail and supersedes the economic analysis presented in the SHMA.

6.4 The release of new 2014-based projections and the availability of the emerging findings from the EDNA therefore collectively justify a review of the OAN concluded in the SHMA. The analysis in this addendum considers the implications of this newly published evidence, following the guidance and methodology currently set out in the PPG as well as its recent interpretation through Inspectors' decisions. In the absence of any guidance at the current point in time on the alternative methodology planned to be introduced by Government, this is considered a reasonable, consistent and appropriate basis through which this updated position can be robustly established to inform ongoing plan-making in South Essex, although the implications of any alternative methodology will need to be considered by the Councils in the future. Appendix 6 identifies a number of factors which require ongoing monitoring in this regard.

6.5 The updated analysis presented within this addendum indicates that there is an objectively assessed need (OAN) for between **3,750 – 4,000 dwellings per annum** across South Essex between 2014 and 2037, which evidently surpasses the previously concluded range.

6.6 The analysis confirms that the 'starting point' is underpinned by a level of population growth which appears reasonable and positive in the context of recent historic trends which have seen strong levels of growth driven by comparatively high levels of

migration. The evidence does not suggest that the use of longer-term population growth trends would be more representative of future housing needs in South Essex. However, an adjustment to the 'starting point' is required to allow for a return to higher levels of household formation, given the underlying assumption that household formation amongst many younger age groups will continue to be suppressed. As in the SHMA, an adjustment to younger household formation rates to allow for a return to the conditions last seen in 2001 implies a need for 3,418 dwellings per annum across South Essex, uplifting the 'starting point' by 13%. Provision of this scale would meet the need generated both by long-term and short-term demographic trends, and would provide a positive response in offsetting the distinct demographic effect of worsening market conditions over recent years.

6.7 The 2016 SHMA identified that there was evidence of a moderate worsening in a number of market signals in South Essex when compared to the national picture and a set of comparator areas. In accordance with the PPG, this is recognised as indicating an imbalance between housing supply and demand, justifying the application of an additional supply response through a reasonable adjustment to the household projections (demographic driven need). Consideration has been given to the judgements made by a number of Local Plan Inspectors on the scale of adjustment '*reasonable*' to address comparable evidence of affordability constraints. The scale of a separate adjustment to be applied has also been considered in the context of the implied increase in housing need resulting from the adjustment to household formation rates, which allows for a recovery to a more balanced market context in terms of the comparative affordability of housing for each individual authority. In this context, it is considered reasonable to apply a separate and additional upward adjustment of 10% to the adjusted demographic projection across South Essex. This recognises the operation of the area as a functional housing market area, with a positive supply response therefore required across the area to support an improvement in affordability recognising that households will move within and across the area. The application of this adjustment to the demographic projection of need (3,418 dwellings per annum) results in an identified need for **3,760 dwellings per annum.**

6.8 The Councils' EDNA suggests that some 62,675 additional jobs are likely to be created in South Essex over the period assessed in this addendum (2014 – 2037). Although the population growth projected by the 2014-based SNPP would significantly grow the labour force and support in excess of 50,000 new jobs across South Essex over the same period, this evidently falls below the level of growth needed to support likely job creation. Supporting likely job growth would require either a substantial change in labour force behaviour or a further growth in the labour force through above-trend migration. Accommodating the higher level of population growth required to support likely job growth in South Essex – based on reasonable and up-to-date assumptions on labour force behaviour – will generate a greater need for housing than implied by the demographic projection, requiring **3,986 dwellings per annum** when simultaneously allowing for the return to higher levels of household formation for younger households.

6.9 Providing for a level of housing growth which falls within this range (3,750 – 4,000 dwellings per annum) will sufficiently grow the labour force and support likely job creation, with the lower end of the range also providing an uplift considered to represent the minimum response necessary to the moderate worsening in market signals in South

Essex. The upper end of the range would provide a more marked uplift, and support the greatest increase in the level of affordable housing provision based on Councils' adopted or proposed affordable housing targets, providing the greatest response to the evidenced need for affordable housing. In accordance with the conclusion reached in the 2016 SHMA, it is recommended that greater weight is given to the upper end of the OAN range in the assessment of the five year housing land supply at an authority level and in the development of Local Plan policy.

6.10 This range uplifts the demographic 'starting point' by up to 32% and increases the adjusted demographic projection by up to 17%, and would significantly boost the supply of both market and affordable housing in South Essex.

6.11 This updated position on the OAN for housing across South Essex has implications both for the level of housing growth needed in each authority and the need for different sizes and types of housing over the assessment period. In relation to the latter, the updated analysis in section 5 of this addendum highlights the likely continued demand for housing of all sizes, with the greatest demand for housing generated by households who would typically require three bedrooms. Some 60% of households forming in South Essex are expected to require housing with at least three bedrooms, although local variation is evident and a demand for additional smaller housing is also expected to be generated over the period assessed in this addendum. The outputs of this modelling exercise should be used only for guidance, however, and it is recommended that policies are not overly prescriptive given that the profile of housing delivered will be driven by the market.

6.12 Furthermore, this addendum has continued to highlight the sizeable growth in the older population projected over the period to 2037, which could generate demand for specialist older persons' housing. The application of prevalence rates suggests that circa 327 bedspaces will be needed annually across South Essex over the assessment period based on the upper end of the concluded OAN range, which is included within the OAN for housing derived from this scenario. An additional need to annually provide 131 bedspaces in communal establishments in South Essex is also identified, but is excluded from and additional to the overall OAN established. While this is separately identified by the modelling developed to inform this addendum, it is important to recognise that the respective housing strategies of South Essex authorities may seek to meet this implied institutional need through both social and market housing designed to cater for older persons' housing need, and any such adjustment to provide for needs within housing (Use Class C3) would need to be reflected through a quantifiable upward adjustment to the OAN.

Appendix 1: Edge Analytics Modelling Assumptions

Thames Gateway South Essex

Data inputs, assumptions & methodology

April 2017

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Acknowledgements

Demographic statistics used in this report have been derived from data from the Office for National Statistics licensed under the Open Government Licence v.3.0.

The authors of this report do not accept liability for any costs or consequential loss involved following the use of the data and analysis referred to here; this is entirely the responsibility of the users of the information presented in this report.

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POPGROUP Methodology

Forecasting Methodology

1.1 Evidence is often challenged on the basis of the appropriateness of the methodology that has been employed to develop growth forecasts. The use of a recognised forecasting product which incorporates an industry-standard methodology (a cohort component model) removes this obstacle and enables a focus on assumptions and output, rather than methods.

1.2 Demographic forecasts have been developed using the POPGROUP suite of products. POPGROUP is a family of demographic models that enables forecasts to be derived for population, households and the labour force, for areas and social groups. The main POPGROUP model (Figure 1) is a cohort component model, which enables the development of population forecasts based on births, deaths and migration inputs and assumptions.

1.3 The Derived Forecast (DF) model (Figure 2) sits alongside the population model, providing a headship rate model for household projections and an economic activity rate model for labour-force projections.

1.4 For further information on POPGROUP, please refer to the Edge Analytics website (http://www.edgeanalytics.co.uk/).

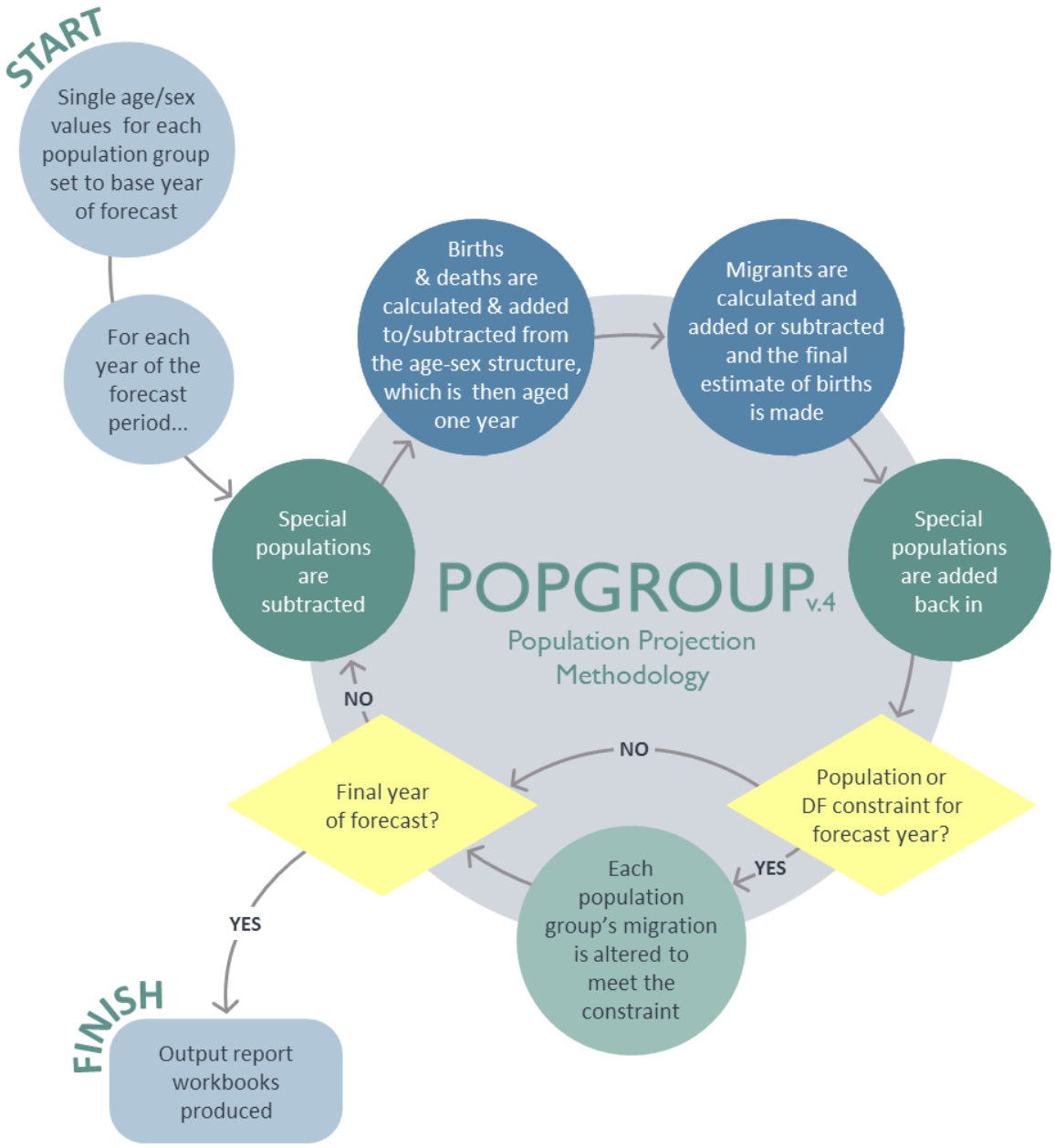
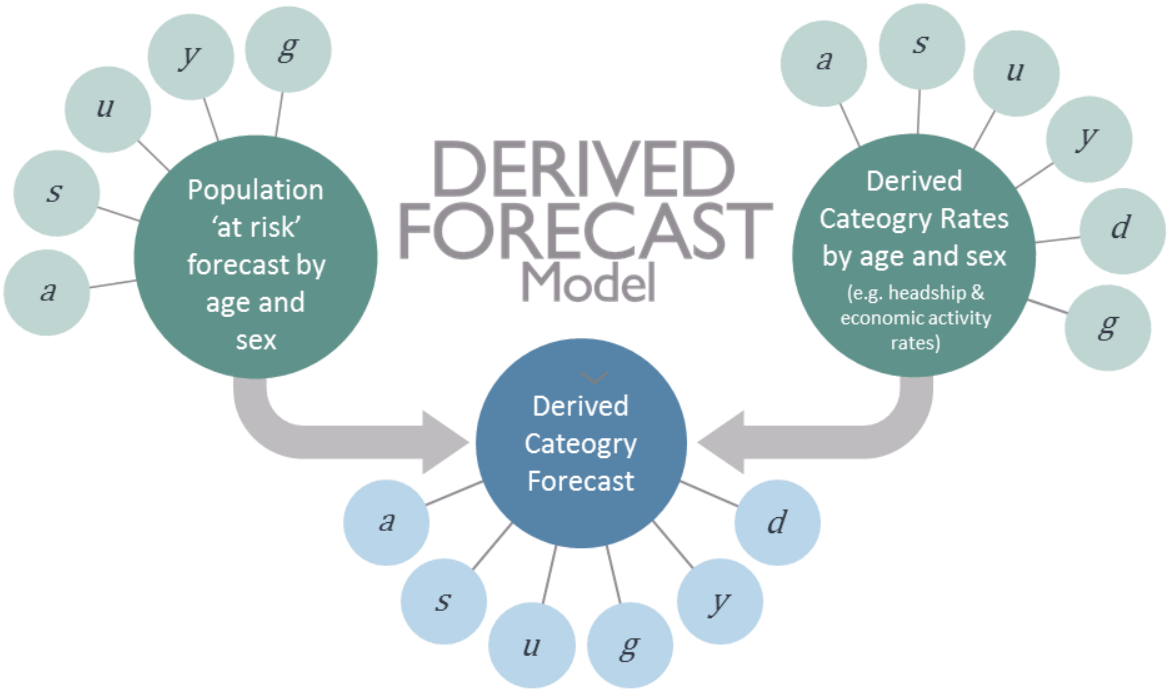


Figure 1: POPGROUP population projection methodology



$$D_{a,s,u,y,d,g} = \frac{P_{a,s,u,y,g}\ R_{a,s,u,y,d,g}}{100}$$

D	Derived Category Forecast	y	Year
P	Population 'at risk' Forecast	d	Derived category
R	Derived Category Rates	g	Group (usually an area, but can be an ethnic group or social group)
a	Age-group		
s	Sex		
u	Sub-population		

Figure 2: Derived Forecast (DF) methodology

2 Data Inputs & Assumptions

Introduction

2.1 Edge Analytics has developed a suite of demographic scenarios for Thames Gateway South Essex (TGSE) using POPGROUP v.4 and the Derived Forecast model. The POPGROUP suite of demographic models draws data from a number of sources, building an historical picture of population, households, fertility, mortality and migration on which to base its scenario forecasts. Using historical data evidence for 2001–2015, in conjunction with information from Office for National Statistics (ONS) sub-national population projections (SNPPs) and Department for Communities and Local Government (DCLG) household projections, a series of assumptions have been derived which drive the scenario forecasts.

2.2 The following scenarios have been produced for the 2014–2037 plan period:

- SNPP-2014
- SNPP-2014-LDN
- PG-10yr
- PG-10yr-X
- Jobs-led (Jan17)

2.3 In the following sections, a narrative on the data inputs and assumptions underpinning the scenarios is presented.

Scenario Definition

Official Projection

2.4 In accordance with the Planning Practice Guidance (PPG), all scenarios are 'benchmarked' against the most recent official population projection from the ONS, the 2014-based SNPP. The **SNPP-2014** scenario replicates this official projection.

Alternative Trend Scenarios

2.5 The following alternative trend scenarios have been developed based upon the latest demographic evidence:

- **PG 10yr:** Internal migration rates and international migration flow assumptions are based on the last ten years of historical evidence (2005/06–2014/15), with the unattributable population change (UPC) component included in the international migration assumptions.
- **PG 10yr-X:** Internal migration rates and international migration flow assumptions are based on the last ten years of historical evidence (2005/06–2014/15), with the UPC *excluded* in the international migration assumptions.
- **SNPP-2014-LDN:** This scenario considers the growth impact of the migration uplift suggested by the GLA 2015 round Long Term scenario, over-and-above what was implied by the previous **SNPP-2012-LDN** scenario.

Jobs-led Scenario

2.6 One jobs-led scenario has been configured:

- **Jobs-led (Jan17):** Demographic change is linked to the growth in employment from the January 2017 forecast for the TGSE areas.

Population, Births & Deaths

Population

2.7 In each scenario, historical population statistics are provided by the mid-year population estimates (MYEs), with all data recorded by single-year of age and sex. These data include the revised MYEs for 2002–2010, which were released by the ONS in May 2013. The revised MYEs provide consistency in the measurement of the components of change (i.e. births, deaths, internal migration and international migration) between the 2001 and 2011 Censuses.

2.8 In the **SNPP-2014** and **SNPP-2014-LDN** scenarios, the historical MYEs are used up to 2014.

2.9 In the **SNPP-2014** scenario, from 2014, future population counts are provided by single-year of age and sex to ensure consistency with the trajectory of the ONS 2014-based SNPP.

2.10 In the other scenarios, the historical MYEs are used up to 2015.

Births & Fertility

2.11 In each scenario, historical mid-year to mid-year counts of births by sex have been sourced from the ONS MYEs.

2.12 In the **SNPP-2014** and **SNPP-2014-LDN** scenarios, historical births are used from 2001/02 to 2013/14.

2.13 In the **SNPP-2014** scenario, from 2014/15, future counts of births are specified, to ensure consistency with the 2014-based official projection.

2.14 In the **SNPP-2014-LDN** scenario, from 2014/15, an area- and age-specific fertility rate (ASFR) schedule, derived from the ONS 2014-based SNPP, is included in the POPGROUP model assumptions. Long-term assumptions on changes in ASFRs are taken from the ONS 2014-based SNPP.

2.15 In all other scenarios, historical births are used from 2001/02 to 2014/15. From 2015/16, an area-specific ASFR schedule, derived from the ONS 2014-based SNPP, is included in the

POPGROUP model assumptions. Long-term assumptions on changes in ASFRs are taken from the ONS 2014-based SNPP.

2.16 In combination with the 'population-at-risk' (i.e. all women between the ages of 15–49), the area-specific ASFR and future fertility rate assumptions provide the basis for the calculation of births in each year of the forecast period (i.e. from 2014 onwards).

Deaths & Mortality

2.17 In each scenario, historical mid-year to mid-year counts of deaths by 5-year age group and sex have been sourced from the ONS MYEs.

2.18 In the **SNPP-2014** and **SNPP-2014-LDN** scenarios, historical deaths are used from 2001/02 to 2013/14.

2.19 In the **SNPP-2014** scenario, from 2014/15, future counts of deaths are specified, to ensure consistency with the 2014-based official projection.

2.20 In **SNPP-2014-LDN** scenario, from 2014/15, an area- and age-specific mortality rate (ASMR) schedule, derived from the ONS 2014-based SNPP, is included in the POPGROUP model assumptions. Long-term assumptions on changes in ASMRs are taken from the ONS 2014-based SNPP.

2.21 In all other scenarios, historical deaths are used from 2001/02 to 2014/15. From 2015/16, an area-specific ASMR schedule, derived from the ONS 2014-based SNPP, is included in the POPGROUP model assumptions. Long-term assumptions on changes in ASMRs are taken from the ONS 2014-based SNPP.

2.22 In combination with the 'population-at-risk' (i.e. the whole population), the area-specific ASMR and future mortality rate assumptions provide the basis for the calculation of deaths in each year of the forecast period (i.e. from 2014 onwards).

Migration

Internal Migration

2.23 In each scenario, historical mid-year to mid-year estimates of internal in- and out-migration by 5-year age group and sex have been sourced from the 'components of population change' files that underpin the ONS MYEs. These internal migration flows are estimated using data from the Patient Register (PR), the National Health Service Central Register (NHSCR) and the Higher Education Statistics Agency (HESA).

2.24 In the **SNPP-2014** and **SNPP-2014-LDN** scenarios, historical counts of internal in- and out-migrants are used from 2001/02 to 2013/14. In all other scenarios, historical counts of internal in- and out-migrants are used from 2001/02 to 2014/15.

2.25 In the **SNPP-2014** scenario, from 2014/15, future counts of migrants are specified, to ensure consistency with the 2014-based official projection.

2.26 In the **SNPP-2014-LDN** scenario, future counts of internal migrants are specified that include migration uplift suggested by the GLA 2015 round Long Term scenario added to the previous **SNPP-2012-LDN** scenario.

2.27 In the **PG-10yr and PG-10yr-X** scenarios, the 2005/06–2014/15 historical time period is used to derive the age-specific migration rate (ASMigR) schedules, which are then used to determine the future number of in- and out-migrants.

2.28 The **Jobs-led (Jan17)** scenario calculates its own internal migration assumptions to ensure an appropriate balance between the population and the targeted increase in the number of jobs that is defined in each year of the forecast period. A higher level of net internal migration will occur if there is insufficient population and resident labour force to meet the forecast number of jobs. In the **Jobs-led (Jan17)** scenario, the profile of internal migrants is defined by an ASMigR schedule, derived from the ONS 2014-based SNPP.

2.29 In the case of internal in-migration, the ASMigR schedules are applied to an external 'reference' population (i.e. the population 'at-risk' of migrating into the area). This is different to the other components (i.e. births, deaths, internal out-migration), where the schedule of rates is applied to

the area-specific population (i.e. the population 'at-risk' of migrating out of the area). The reference population used in the development of the scenarios presented here is the UK population.

International Migration

2.30 Historical mid-year to mid-year counts of immigration and emigration by 5-year age group and sex have been sourced from the 'components of population change' files that underpin the ONS MYEs. Any 'adjustments' made to the MYEs to account for asylum cases are included in the international migration balance.

2.31 In all scenarios, future international migrant counts are specified.

2.32 In the **SNPP-2014** and **SNPP-2014-LDN** scenarios, historical counts of migrants are used from 2001/02-2013/14. In all other scenarios, historical counts of migrants are used from 2001/02-2014/15.

2.33 In the **SNPP-2014** scenario, from 2014/15, the international in- and out-migration counts are drawn directly from the 2014-based official projection.

2.34 In the **SNPP-2014-LDN** scenario, future counts of international migrants are specified that include migration uplift suggested by the GLA 2015 round Long Term scenario added to the previous **SNPP-2012-LDN** scenario.

2.35 In the **PG-10yr** and **PG-10yr-X** scenarios, from 2015/16, future international migration counts are based on the area-specific historical migration data (2005/06 to 2014/15). The same data is used to derive an ASMigR schedule of rates that is used to distribute future counts by single year of age.

2.36 Implied within the international migration component of change in the 'non-X' **PG** scenario (i.e. **PG-10yr**) is an 'unattributable population change' (UPC) figure, which ONS identified within its mid-year estimate revisions in 2013. The POPGROUP model has assigned the UPC to international migration as it is the component with the greatest uncertainty associated with its estimation. In the '**X**' scenario (i.e. **PG-10yr-X**), the UPC adjustment is excluded from the international migration assumptions.

Households & Dwellings

2.37 The 2011 Census defines a household as:

> *"one person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area."*

2.38 In POPGROUP, a dwelling is defined as a unit of accommodation which can either be occupied by one household or vacant.

2.39 In all scenarios, the household and dwelling implications of the population growth trajectory have been evaluated through the application of headship rate statistics, communal population statistics and a dwelling vacancy rate. These data assumptions have been sourced from the 2001 and 2011 Censuses and the 2014-based household projection model from the DCLG. The 2014-based model was released by the DCLG in July 2016, and is underpinned by the 2014-based SNPP from ONS.

Household Headship Rates

2.40 A household headship rate (also known as household representative rate) is the *"probability of anyone in a particular demographic group being classified as being a household representative"*[1].

2.41 The household headship rates used in the POPGROUP modelling have been taken from the latest DCLG 2014-based household projection model, which is underpinned by the ONS 2014-based SNPP. The DCLG household projections are derived through the application of projected headship rates to a projection of the private household population. The methodology used by DCLG in its household projection models consists of two distinct stages:

- **Stage One** produces the national and local authority projections for the total number of households by sex, age-group and relationship-status group over the projection period.

[1] Household Projections 2014-based: Methodological Report. Department for Communities and Local Government (July 2016). https://www.gov.uk/government/statistics/2014-based-household-projections-methodology

- **Stage Two** provides the detailed 'household-type' projection by age-group, controlled to the previous Stage One totals.

2.42 In POPGROUP, the Stage Two headship rates have been applied by 10-year age group in an 8-fold household type classification (Table 1).

Table 1: DCLG Stage Two headship rate classification household type classification

DCLG Category	Description
One person male	One person households: Male
One person female	One person: Female
Couple no child	One family and no others: Couple households: No dependent children
Cple+adlts no child	A couple and one or more other adults: No dependent children
One child	Households with one dependent child
Two children	Households with two dependent children
Three+ children	Households with three or more dependent children
Other households	Other households with two or more adults

2.43 Two sets of headship rates have been applied to the scenarios (refer to Appendix A for headship rate sensitivity charts):

- **HH-14**: 2014-based DCLG headship rates
- **HH-14 Return**: 2014-based headship rates, with the rates for selected age groups returned to their respective 2001 values by 2024, following the original trend thereafter. Note that this adjustment has been made for all household types within the defined age groups (Table 2).

Table 2: Age groups adjusted under the headship rate sensitivity

District	HH-14 Return		
	15-24	25-34	35-44
Basildon	X	X	
Castle Point		X	
Rochford	X	X	
Southend-on-Sea	X	X	X
Thurrock	X	X	

Communal Population Statistics

2.44 Household projections in POPGROUP exclude the population 'not-in-households' (i.e. the communal/institutional population). These data are drawn from the DCLG 2014-based household projections, which use statistics from the 2011 Census. Examples of communal establishments include prisons, residential care homes and student halls of residence.

2.45 For ages 0–74, the number of people in each age group not-in-households is fixed throughout the forecast period. For ages 75–85+, the proportion of the population not-in-households is recorded. Therefore, the population not-in-households for ages 75–85+ varies across the forecast period depending on the size of the population.

Vacancy Rate

2.46 The relationship between households and dwellings is modelled using a 'vacancy rate', sourced from the 2011 Census[2]. The vacancy rate is calculated using statistics on households (occupied household spaces) and dwellings (shared and unshared).

2.47 The vacancy rates for the TGSE local authority districts listed below (Table 3) have been applied, fixed throughout the forecast period. Using these vacancy rates, a 'dwelling requirement' of each household growth trajectory has been evaluated.

[2] Census Table KS401EW: Dwellings, household spaces and accommodation type

Table 3: 2011 Census Dwelling Vacancy Rate

District	2011 Census Vacancy Rate
Basildon	1.7%
Castle Point	3.3%
Rochford	2.6%
Southend-on-Sea	5.0%
Thurrock	2.4%

Labour Force & Jobs

2.48 Apart from in the **Jobs-led (Jan17)** scenario, the labour force and jobs implications of the population growth trajectory are evaluated through the application of three key data items: economic activity rates, an unemployment rate and a commuting ratio.

2.49 In the **Jobs-led (Jan17)** scenario, these assumptions are used to determine the level of population growth required by the defined jobs growth trajectory.

Economic Activity Rates

2.50 The level of labour force participation is recorded in the economic activity rates. Economic activity rates by 5-year age group (ages 16-75+) and sex have been derived from Census statistics (Figure 3–Figure 7).

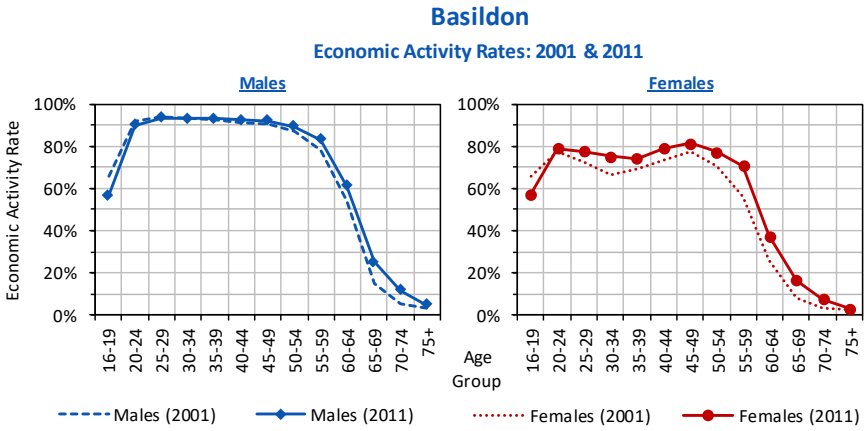


Figure 3: Basildon economic activity rates: 2001 and 2011 Census comparison (source: ONS)

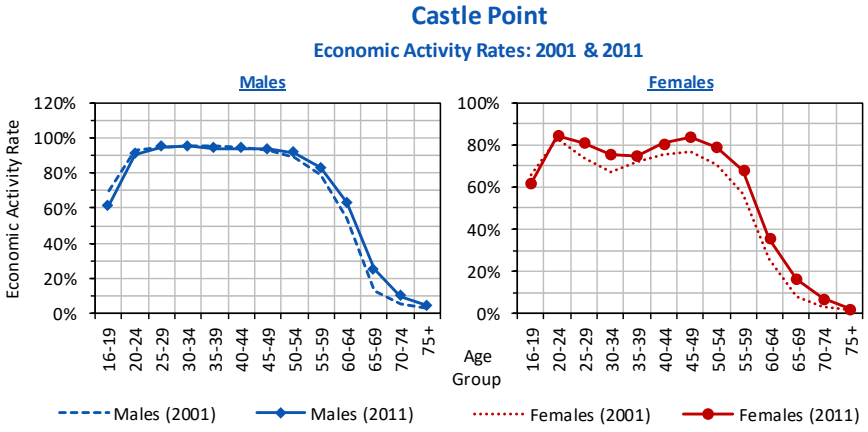


Figure 4: Castle Point economic activity rates: 2001 and 2011 Census comparison (source: ONS)

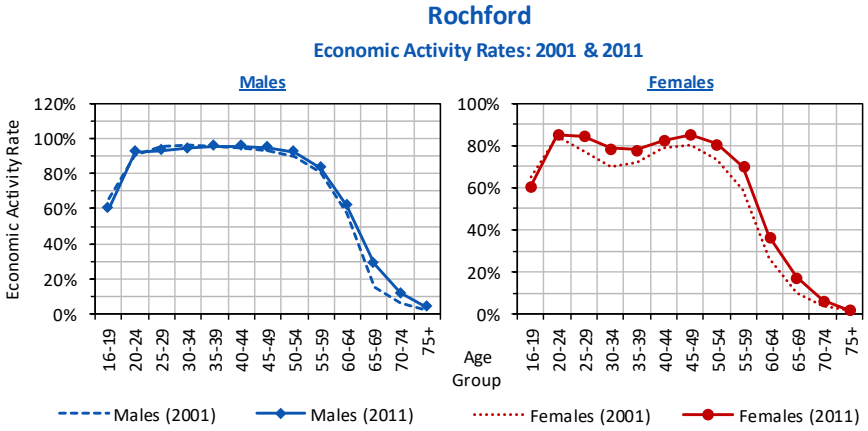


Figure 5: Rochford economic activity rates: 2001 and 2011 Census comparison (source: ONS)

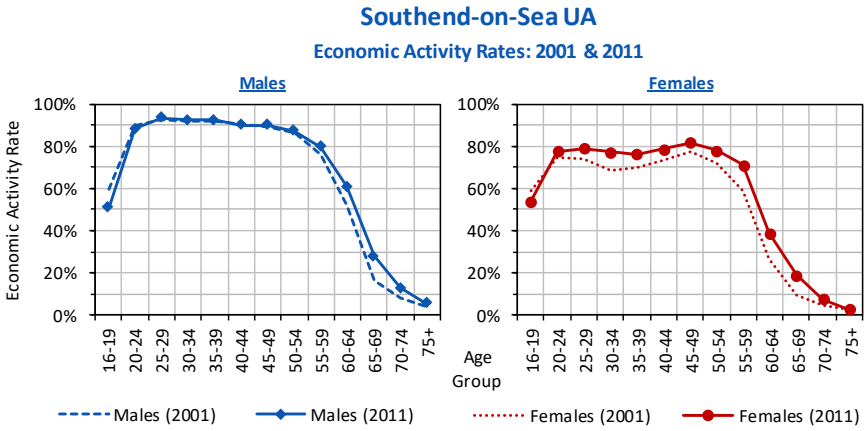


Figure 6: Southend-on-Sea economic activity rates: 2001 and 2011 Census comparison (source: ONS)

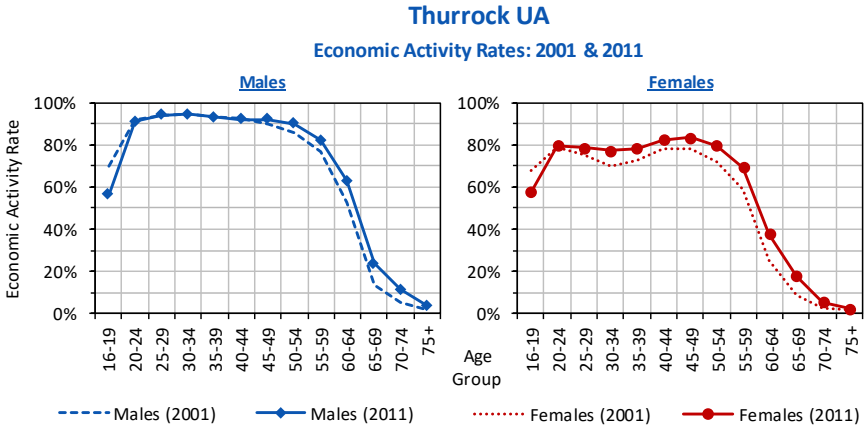


Figure 7: Thurrock economic activity rates: 2001 and 2011 Census comparison (source: ONS)

OBR Rates

2.51 The Office for Budget Responsibility (OBR) has undertaken analysis of labour market trends in its 2015 Fiscal Sustainability Report[3]. Included within its analysis is a forecast of changing economic activity rates for males and females, extending to a long-term 2066 forecast horizon. This forecast has been used to generate economic activity rates for each of the TGSE districts. Adjustments have been made to all ages 16–75+ (Table 4).

[3] http://budgetresponsibility.org.uk/docs/dlm_uploads/49753_OBR-Fiscal-Report-Web-Accessible.pdf

Table 4: OBR Economic Activity Rate adjustments for all TGSE Districts

OBR Economic Activity Rates Change 2011–2037			
Males		Females	
16–19	1%	16–19	-2%
20–24	2%	20–24	1%
25–29	-2%	25–29	-3%
30–34	-3%	30–34	-4%
35–39	-3%	35–39	1%
40–44	-5%	40–44	0%
45–49	-4%	45–49	2%
50–54	-2%	50–54	1%
55–59	1%	55–59	9%
60–64	17%	60–64	75%
65–69	62%	65–69	117%
70–74	36%	70–74	113%
75+	52%	75+	315%

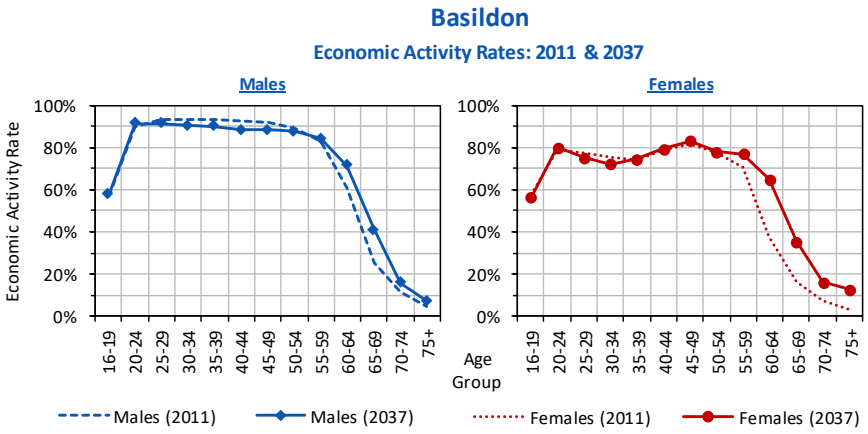


Figure 8: OBR economic activity rate profile for Basildon

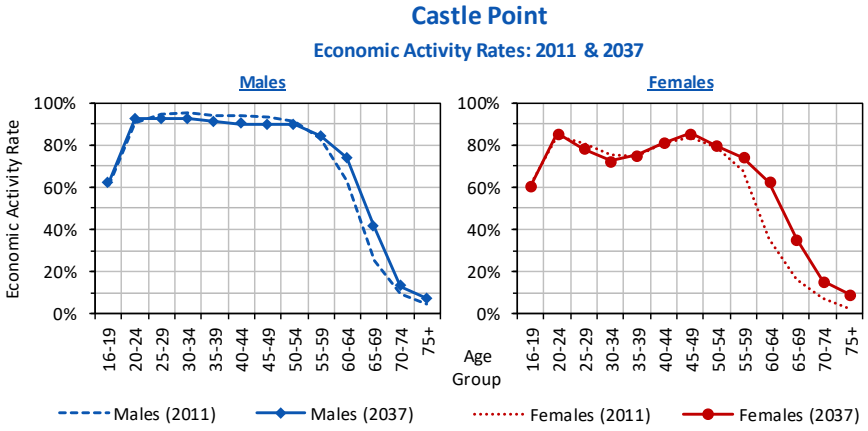


Figure 9: OBR economic activity rate profile for Castle Point

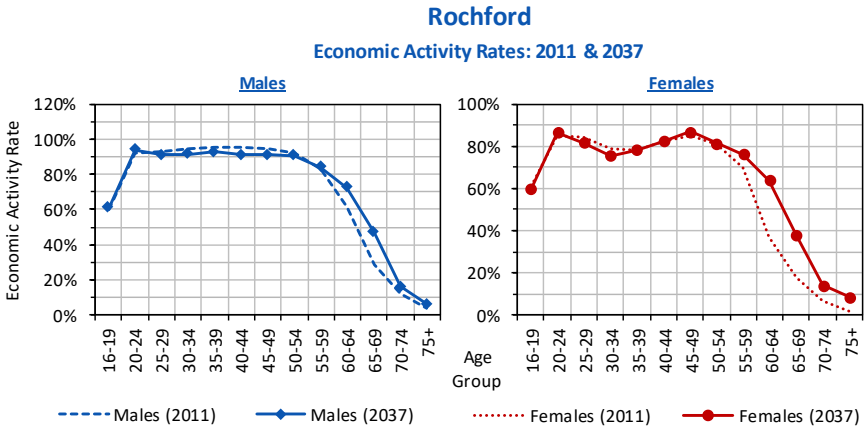


Figure 10: OBR economic activity rate profile for Rochford

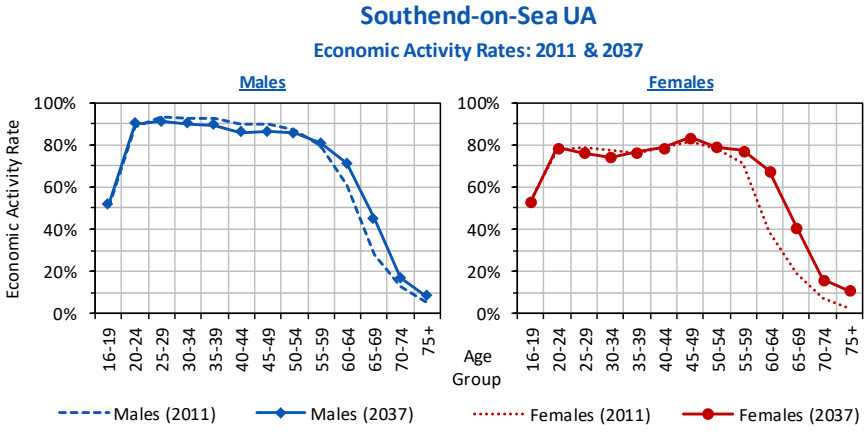


Figure 11: OBR economic activity rate profile for Southend-on-Sea

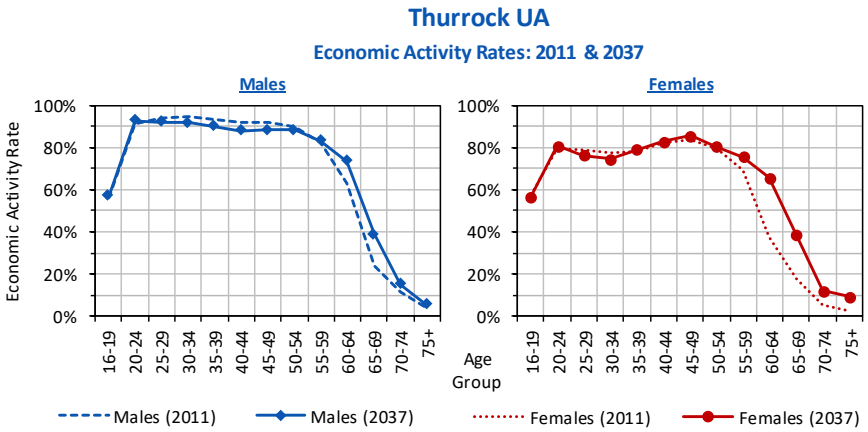


Figure 12: OBR economic activity rate profile for Thurrock

Commuting Ratio

2.52 The commuting ratio, together with the unemployment rate, controls the balance between the number of workers living in a district (i.e. the resident labour force) and the number of jobs available in the district.

2.53 A commuting ratio greater than 1.00 indicates that the size of the resident workforce exceeds the number of jobs available in the district, resulting in a net out-commute. A commuting ratio less than 1.00 indicates that the number of jobs in the district exceeds the size of the labour force, resulting in a net in-commute.

2.54 From the 2011 Census 'Travel to Work' statistics, published by ONS in July 2014, commuting ratios have been derived for the districts in TGSE. This is compared to the 2001 Census values in Table 5.

Table 5: Commuting Ratio Comparison

District	Commuting Ratio	
	2001 Census	2011 Census
Basildon	1.01	1.00
Castle Point	1.90	1.63
Rochford	1.65	1.52
Southend-on-Sea	1.11	1.13
Thurrock	1.21	1.21

Note: 2001 data from Census Table *T101 – UK Travel Flows*; 2011 data from Census Table *WU02UK - Location of usual residence and place of work by age*.

Unemployment Rate

2.55 The unemployment rate, together with the commuting ratio, controls the balance between the size of the labour force and the number of jobs available within an area.

2.56 In all scenarios, historical unemployment rates are defined up to 2015. From 2015, the unemployment rates reduce to a pre-recession average (2004–2007) by 2020 and remain fixed thereafter (Table 6). For Rochford and Southend-on-Sea, the 'pre-recession' average unemployment rate was higher than the 2015 value. Therefore, the 2015 unemployment rate is applied, fixed throughout the forecast period (Table 6).

Table 6: Unemployment rate assumptions

District	Historical Unemployment Rate (UR)												UR in 2020
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Basildon	4.3%	4.7%	4.9%	4.2%	5.3%	7.7%	8.0%	7.7%	7.8%	8.1%	6.3%	4.6%	**4.5%**
Castle Point	3.1%	3.4%	4.0%	3.6%	4.3%	6.9%	6.8%	7.0%	7.3%	6.1%	5.5%	3.7%	**3.5%**
Rochford	3.0%	3.2%	3.6%	3.7%	3.8%	5.3%	4.6%	5.1%	5.4%	5.1%	4.4%	3.1%	**3.1%**
Southend-on-Sea	5.2%	5.1%	5.8%	5.7%	5.8%	7.4%	7.5%	8.3%	7.7%	7.2%	7.5%	5.2%	**5.2%**
Thurrock	3.9%	4.5%	5.0%	4.3%	5.8%	7.8%	8.2%	9.2%	8.3%	7.3%	6.6%	5.6%	**4.4%**

Source: ONS model-based estimates of unemployment, from NOMIS. Note that red indicates that the 2015 unemployment rate has been applied.

Appendix A Headship Rates

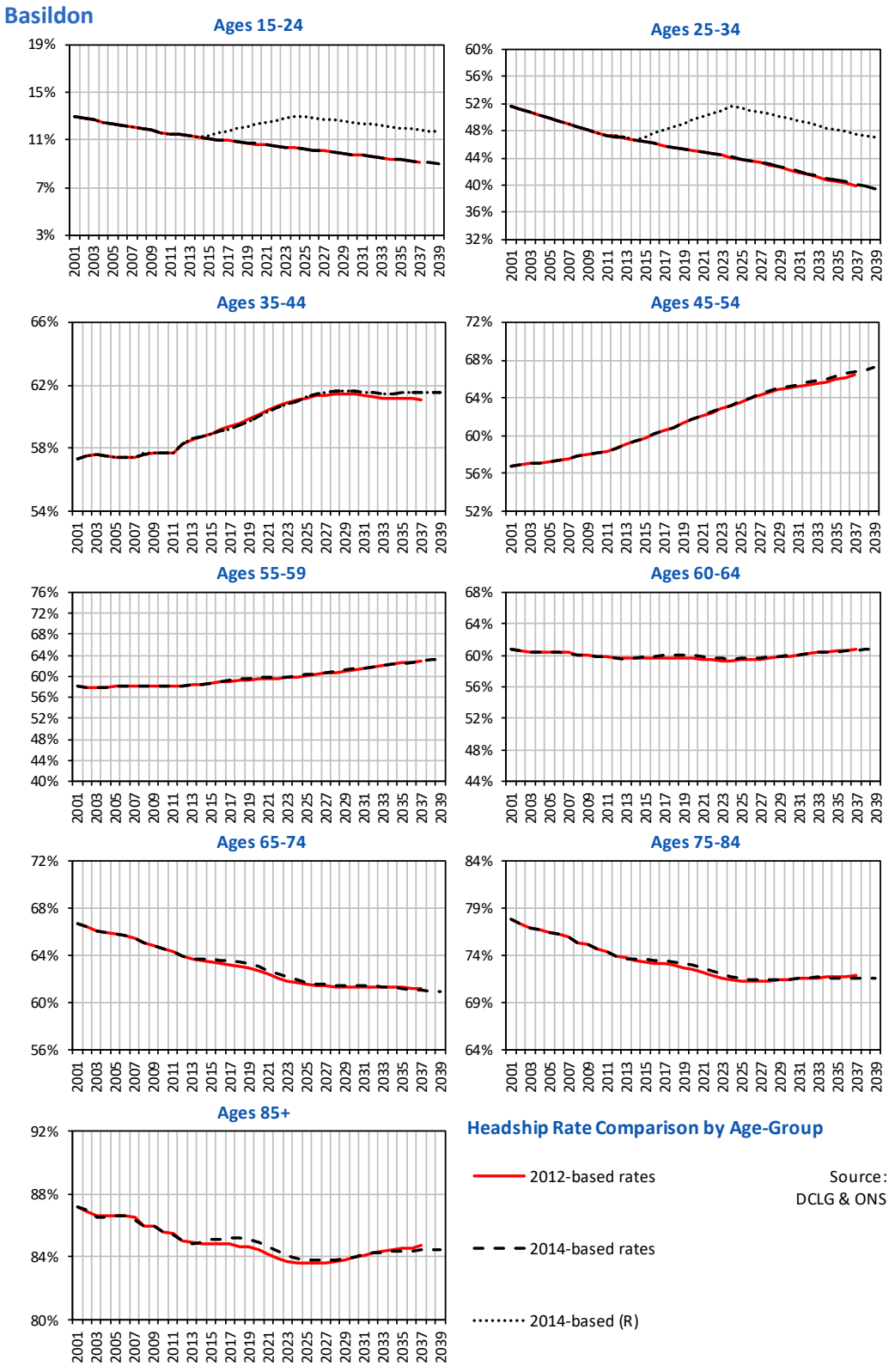


Figure 13: Basildon HH-12, HH-14 and HH-14 Return headship rates

Castle Point

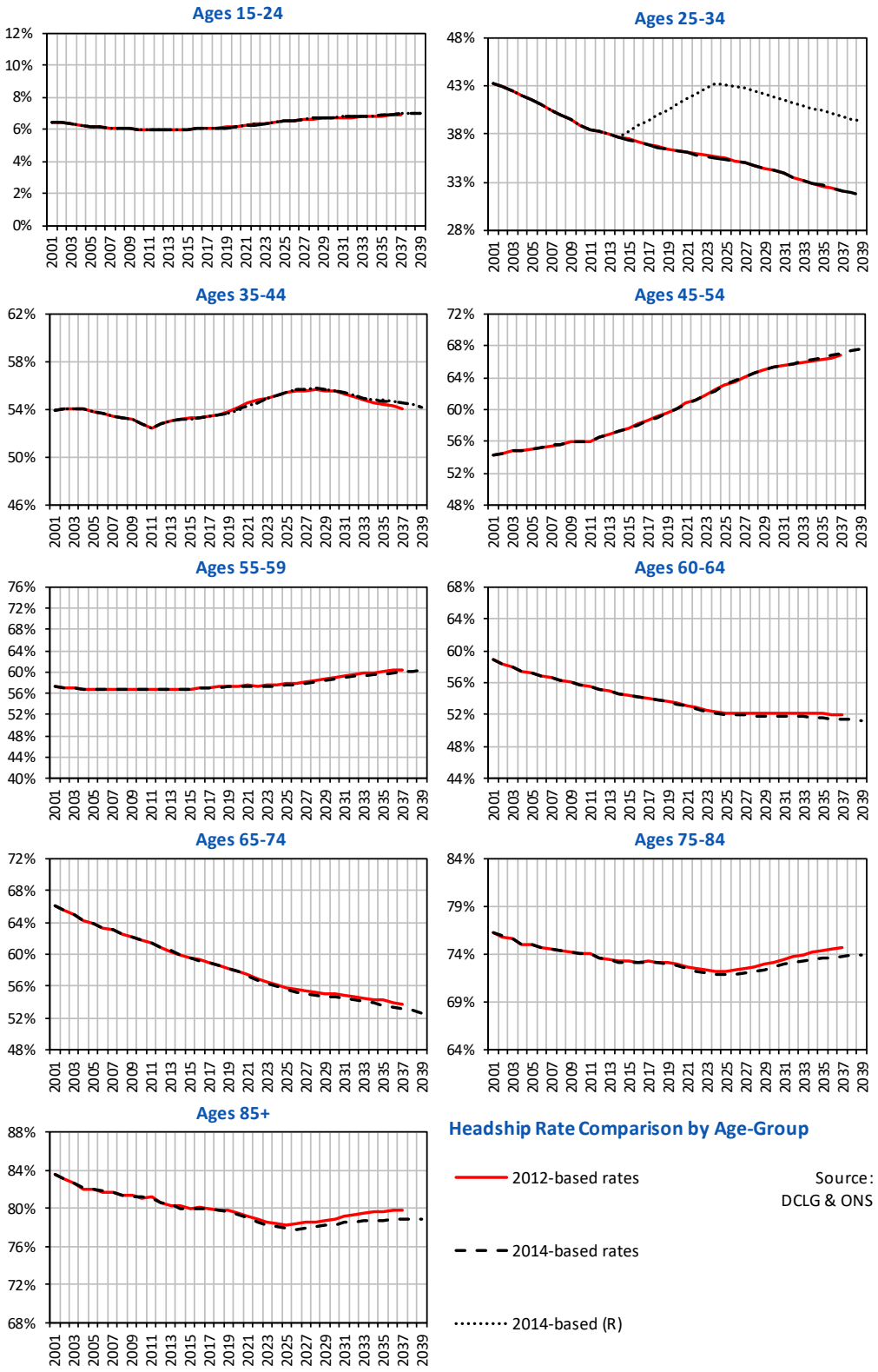


Figure 14: Castle Point HH-12, HH-14 and HH-14 Return headship rates

Rochford

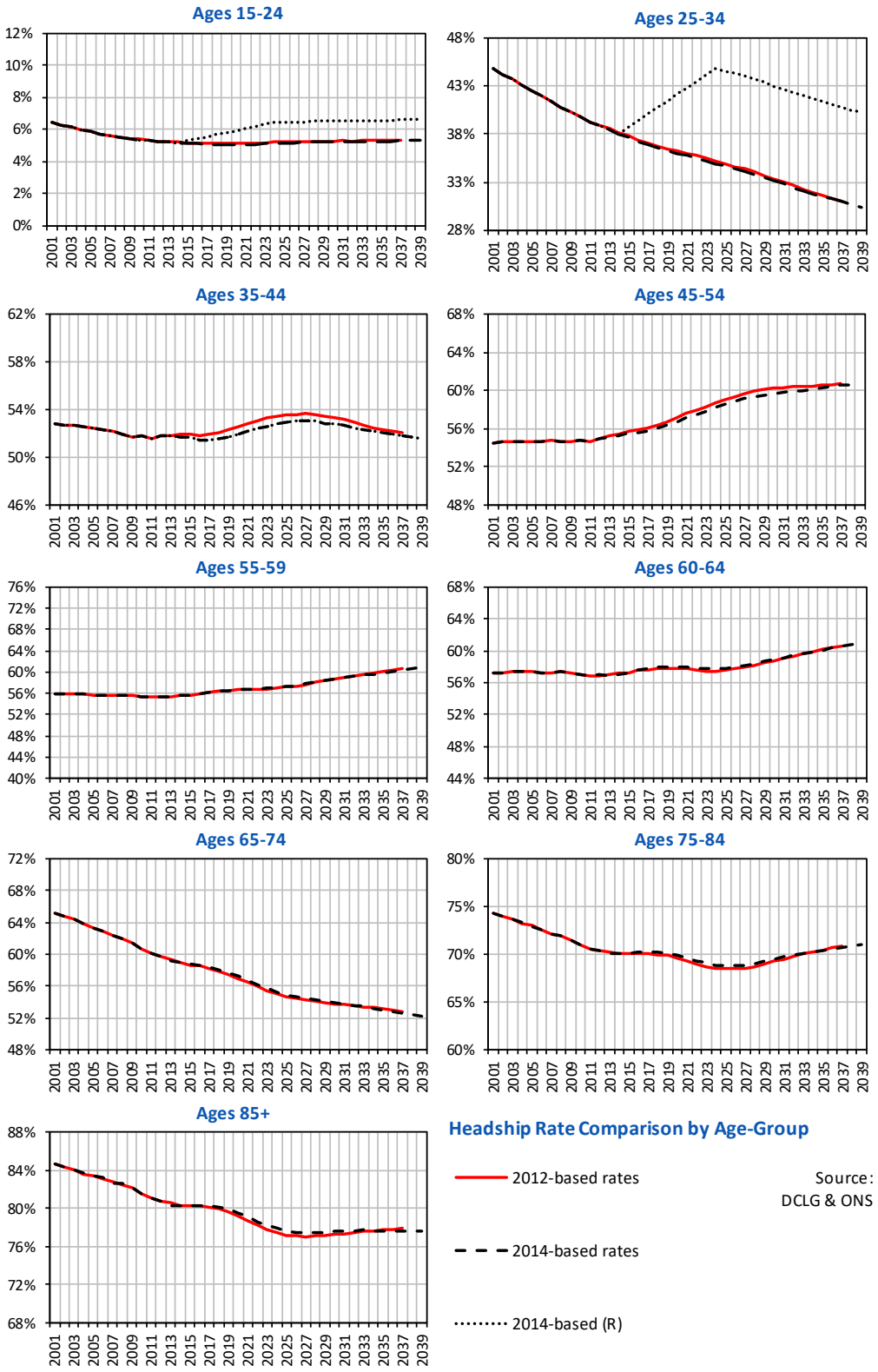


Figure 15: Rochford HH-12, HH-14 and HH-14 Return headship rates

Southend-on-Sea

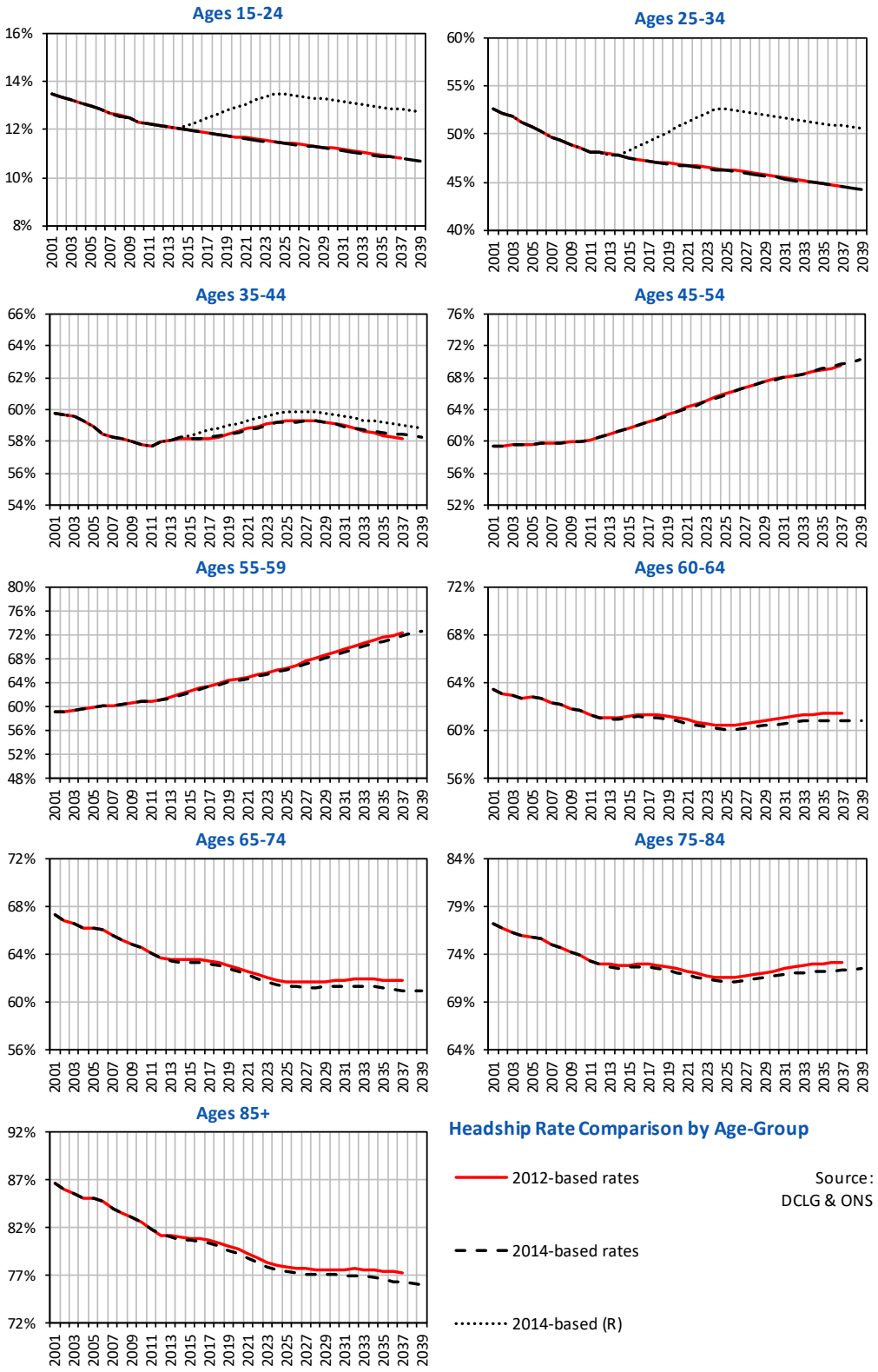


Figure 16: Southend-on-Sea HH-12, HH-14 and HH-14 Return headship rates

Thurrock

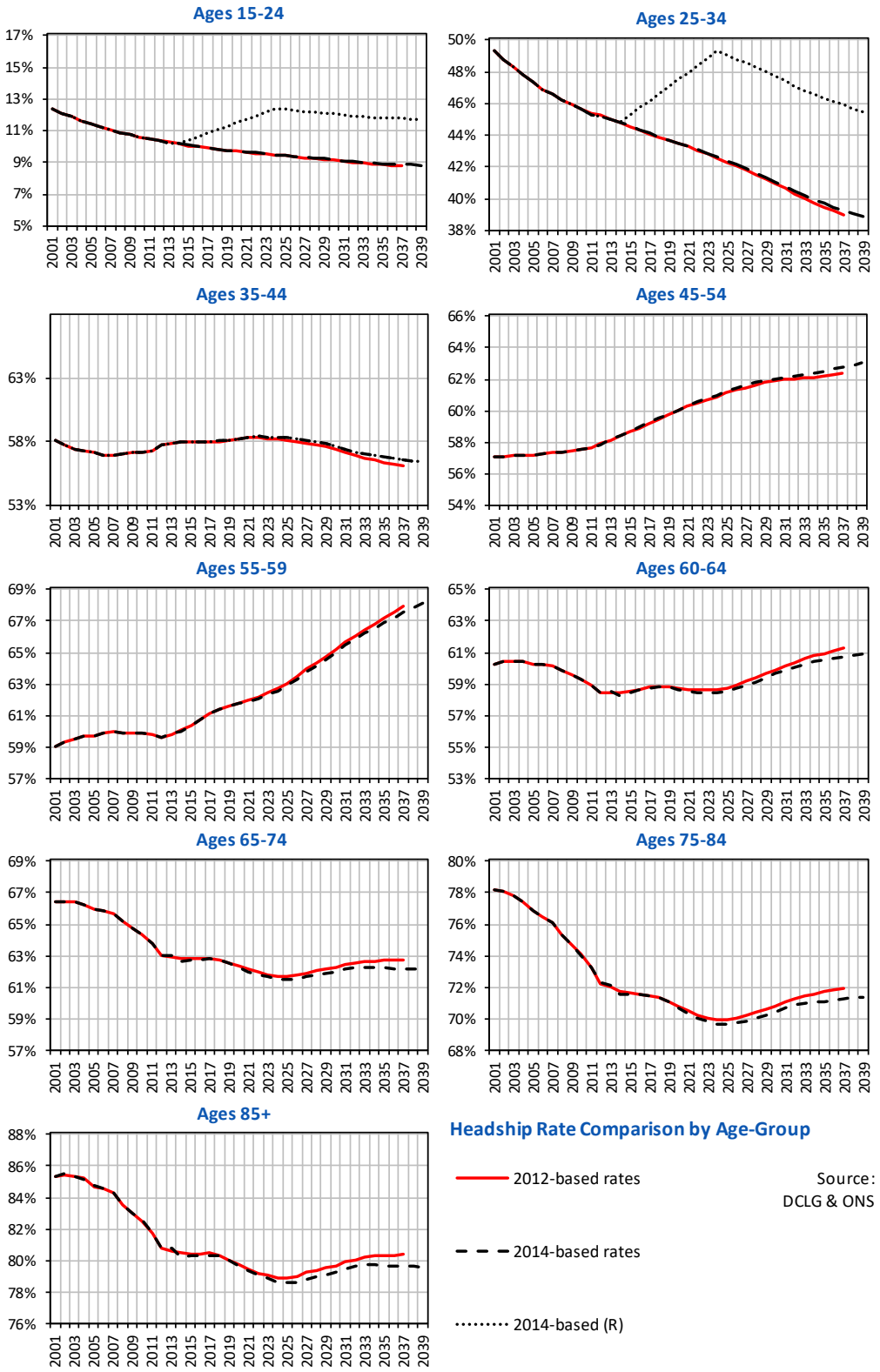


Figure 17: Thurrock HH-12, HH-14 and HH-14 Return headship rates

Appendix 2: Updating the SNPP London Scenario

In updating the OAN for South Essex, section 2 of this addendum concludes that it is not appropriate to apply a distinct and quantifiable adjustment to the 'starting point' to estimate the possible implications of a future increase in the net flow of migrants from London. It is instead recommended that the South Essex authorities continue to engage with the Greater London Authority (GLA) as it develops its evidence base to inform the new London Plan, and consider the likely conclusions for South Essex as and when this evidence emerges. The anticipated future production of variant demographic projections for all local authorities in England, for example, will provide a clear and robust position on the implications of the GLA's assumptions on all local authorities, including those in South Essex.

For illustrative purposes, however, the implications of the latest 2015 round Long Term projection produced by the GLA – expected to inform the production of its revised SHMA – can be estimated. This assumes that the stronger net outflow from London to other parts of the UK projected by the GLA will increase the net inflow in those areas which share the strongest migration relationship with London. This could result in a higher level of population growth than implied by the official ONS projections, but should be treated with caution given this overriding assumption which has not been verified. **The outputs of this illustrative scenario are not considered sufficiently robust to inform the concluded OAN for South Essex.**

The SNPP London scenario developed for South Essex in the 2016 SHMA was based on detailed migration flow statistics made available by the GLA which underpinned the Central scenario. Similarly detailed statistics are not available for the new 2015 Long-Term projection, inhibiting any robust assessment of the implications for South Essex until the expanded demographic modelling outputs are released by the GLA. However, an illustrative exercise by Edge Analytics has sought to update the more detailed migration assumptions which underpinned the SNPP London scenario to allow for the higher net inflow implied by the 2015 Long-Term projection produced by the GLA. The outputs of this illustrative modelling are summarised in the following table.

Table 2.1 Modelling Outputs – SNPP with London Demographic Adjustment

	Change 2014 – 2037				Average per year	
	Population	%	Households	%	Net migration	Dwellings
Basildon	32,741	18.1%	16,690	22.1%	524	739
Castle Point	12,248	13.8%	6,737	18.2%	778	303
Rochford	11,993	14.1%	6,443	18.8%	542	287
Southend-on-Sea	35,877	20.2%	20,384	26.5%	1,089	933
Thurrock	42,540	26.1%	20,210	31.3%	639	900
South Essex	**135,399**	**19.5%**	**70,464**	**24.4%**	**3,573**	**3,162**

Source: Edge Analytics

Appendix 3: Updating the Affordable Housing Need Calculation

Section 6 of the SHMA follows the PPG methodology in calculating the need for affordable housing in South Essex, based on current and projected future needs and taking account of supply.

This addendum has not fully reviewed the affordable housing need calculation in full, given that the inputs remain up-to-date and sufficiently representative of needs for the purposes of this addendum. However, a minor update can be made at Stage 4 of the calculation – presented at Figure 6.10 of the SHMA – to reflect the increased number of newly forming households[127] anticipated under the updated demographic projection (Step 4.1).

The following table summarises how this updated projection of household formation impacts upon the number of households estimated to require affordable housing, based on the proportion of households unable to afford entry-level rent calculated and presented at Figure 6.9 of the SHMA.

Table 3.1 Updated Estimate of Newly Forming Households in Need of Affordable Housing

	Updated gross annual household formation rate (SNPP 2014) Step 4.1	Proportion of households unable to afford entry-level rent Step 4.2	Households unable to afford entry-level rent Step 4.2
Basildon	1,814	39%	708
Castle Point	722	40%	288
Rochford	676	36%	245
Southend-on-Sea	1,736	34%	587
Thurrock	1,705	40%	684
South Essex	**6,653**		**2,512**

Source: Edge Analytics; DCLG; Turley

The updated projection of gross household formation increases the number of households assumed to form over the assessment period, and subsequently elevates the number of households unable to access entry-level rented accommodation and requiring affordable housing. Step 4.2 previously suggested that 2,151 newly forming households would need affordable housing annually in South Essex, which is evidently lower than the updated calculation presented above (2,512). This uplift is seen across each local authority.

This updated position can be input into the previous calculation of affordable housing need to illustratively establish the broader implications of accommodating this increased newly arising

[127] As in the SHMA, this stage of the calculation is based on gross change in the number of households aged 15 – 44, and therefore cannot be directly compared with the net change figures presented elsewhere in this addendum

need for affordable housing. This is summarised – but not replicated in full – in the following table, and should be read alongside the full calculation presented at section 6 of the SHMA.

Table 3.2 Partially Updating the Affordable Housing Need Calculation

		Basildon	Castle Point	Rochford	Southend-on-Sea	Thurrock	South Essex
1.3	Total current housing need (gross)	920	562	555	1,122	701	3,860
2.5	Total affordable housing stock available	406	250	261	736	1,655	3,308
3.1	**Shortfall to meet current backlog (5 years)**	**103**	**62**	**59**	**77**	**-191**	**110**
4.2	Newly forming households in need (annual)	708	288	245	587	684	2,512
4.3	Existing households falling into need	353	103	125	500	612	1,691
4.4	**Total newly arising need (gross annual)**	**1,061**	**391**	**370**	**1,086**	**1,296**	**4,204**
5.3	Annual supply of affordable housing	773	101	132	438	632	2,075
6.1	**Annual net new need**	**288**	**291**	**238**	**649**	**663**	**2,128**
7.3	**Net annual affordable housing need** (3.1 + 6.1)	**391**	**353**	**296**	**726**	**472**	**2,239**

Source: Turley, 2017

The SHMA also estimated the size of affordable housing required to meet needs at Figure 6.15 and Appendix 7. While this is again not replicated in full, for completeness the table overleaf confirms the size of affordable housing needed based on the discrete updates applied above, replicating the proportionate mix of sizes needed to meet the net annual affordable housing need over five years (Step 7.3). With only minor changes applied, this largely aligns with the conclusions reached in the SHMA.

It is recommended the outputs of this calculation are used only for guidance, particularly given the need for assumptions when estimating the size of affordable housing needed in future. In order to maintain an up-to-date understanding of current needs in particular, it is recommended that the Councils continue to monitor the number of bedrooms required by households in priority need on respective Housing Registers. Identified trends relating to affordable housing need and supply – resulting from welfare reforms, for example – should be taken into account on an ongoing basis.

Table 3.3 Estimated Need for Affordable Housing by Size

	1 bed	2 beds	3 beds	4+ beds
Basildon	8%	39%	47%	6%
Castle Point	46%	24%	28%	3%
Rochford	52%	27%	19%	2%
Southend-on-Sea	45%	26%	25%	4%
Thurrock	44%	22%	36%	-1%
South Essex	39%	27%	31%	3%

Source: Turley, 2017

Appendix 4: Comparing Market Signals Relative to Eastleigh and Canterbury

Although the market signals analysis has not been updated in full within this addendum, understanding change in South Essex relative to these authorities provides valuable further context on the local scale of market pressure, and the scale of adjustment required in response. This remains based on the indicators considered at Figure 5.25 of the SHMA – and the data analysed in its section 5 – with the table overleaf summarising this data and benchmarking South Essex against the change implied in Eastleigh and Canterbury over the same period and based on the same data sources.

This suggests a comparatively mixed picture when comparing market signals in South Essex with Eastleigh and Canterbury. The majority of South Essex authorities have seen a stronger growth in house prices relative to these comparator areas, albeit in absolute terms, mean house prices in South Essex – with the exception of Rochford – are lower than Eastleigh and Canterbury[128]. There has been a more limited growth in rents compared with Eastleigh and Canterbury, although the proportionate increase in the number of concealed families in each South Essex authority exceeded these areas. A more mixed position is evident for overcrowding – based on the room standard – and affordability, with entry-level housing in Thurrock, Basildon and Southend-on-Sea more affordable than Eastleigh and Canterbury relative to earnings but seeing a greater worsening since 2001.

[128] Based on Land Registry data for 2014, the average price paid for housing in Eastleigh (£244,335) and Canterbury (£248,820) exceeded the average price paid in all South Essex authorities with the exception of Rochford (£262,904), based on the data presented at Figure 5.4 of the SHMA

Table 4.1 Comparing Market Signals in South Essex with Eastleigh and Canterbury

◄ Limited worsening							Greatest worsening ►
Change in house prices 2001 – 2014							
Mean	**Eastleigh**	Rochford	**Canterbury**	Castle Point	Thurrock	Basildon	Southend-on-Sea
Lower quartile	**Eastleigh**	Rochford	**Canterbury**	Castle Point	Basildon	Thurrock	Southend-on-Sea
Change in rents (2 beds) 2011 – 2014							
Mean	Castle Point	Southend-on-Sea	Basildon	Rochford	Thurrock	**Eastleigh**	**Canterbury**
Lower quartile	Basildon	Castle Point	Rochford	Southend-on-Sea	**Canterbury**	**Eastleigh**	Thurrock
Lower quartile affordability ratio							
2013	Thurrock	Basildon	Southend-on-Sea	**Eastleigh**	**Canterbury**	Rochford	Castle Point
Change 01 – 13	**Eastleigh**	Rochford	**Canterbury**	Southend-on-Sea	Castle Point	Thurrock	Basildon
Overcrowding							
Change 01 – 11	Castle Point	Rochford	Basildon	**Canterbury**	Southend-on-Sea	**Eastleigh**	Thurrock
Concealed families							
Change 01 – 11	**Eastleigh**	**Canterbury**	Thurrock	Castle Point	Basildon	Southend-on-Sea	Rochford

Source: Turley analysis of data underpinning Figure 5.25 of SHMA

Appendix 5: Additional Modelling Outputs

Change in Population and Households

The following table summarises the current and projected future population under the scenarios which form the OAN range concluded within this addendum.

Table 5.1 Projected Change in Population 2014 – 2037

		Adjusted Demographic Projection		Supporting Likely Job Growth	
	2014	2037	Change	2037	Change
Basildon	180,521	214,718	34,197	220,286	39,765
Castle Point	88,907	98,630	9,723	96,964	8,057
Rochford	84,776	95,240	10,464	98,532	13,756
Southend-on-Sea	177,931	211,290	33,359	212,614	34,683
Thurrock	163,270	204,332	41,062	228,217	64,947
South Essex	**695,405**	**824,210**	**128,805**	**856,613**	**161,208**

Source: ONS; Edge Analytics

The following table provides comparable analysis for the number of households in South Essex, based on the headship rate adjustment applied to each population growth scenario.

Table 5.2 Projected Change in Households 2014 – 2037

		Adjusted Demographic Projection		Supporting Likely Job Growth	
	2014	2037	Change	2037	Change
Basildon	75,557	95,525	19,968	97,840	22,283
Castle Point	37,005	43,300	6,295	42,709	5,704
Rochford	34,307	41,047	6,740	42,395	8,088
Southend-on-Sea	76,880	98,172	21,292	98,771	21,891
Thurrock	64,528	86,450	21,922	95,535	31,007
South Essex	**288,278**	**364,494**	**76,216**	**377,250**	**88,972**

Source: DCLG; Edge Analytics

Phasing of Housing Need

Edge Analytics' modelling presented in this addendum is based on annual change, and can therefore be broken down to understand the phasing of housing need over the period to 2037. The following table provides a breakdown by five year period and local authority at the lower end of the concluded OAN range (2014-based SNPP with adjustment to headship rates and 10% market signals uplift) and the upper end of the range (jobs-led with headship rate adjustment).

Table 5.1 Phasing of Housing Need 2014 – 2037

	2014 – 19	2019 – 24	2024 – 29	2029 – 34	2034 – 37	**2014 – 37**
Adjusted Demographic Projection – with 10% market signals uplift						
Basildon	5,802	5,682	4,126	4,199	2,543	**22,352**
Castle Point	1,690	1,781	1,426	1,370	895	**7,161**
Rochford	1,970	1,997	1,397	1,429	814	**7,608**
Southend-on-Sea	6,021	6,009	4,853	4,857	2,912	**24,652**
Thurrock	6,036	6,044	4,787	4,885	2,949	**24,700**
South Essex	**21,520**	**21,512**	**16,589**	**16,740**	**10,113**	**86,474**
Supporting Likely Job Growth – with adjustment to headship rates						
Basildon	5,594	6,161	4,490	4,102	2,329	**22,677**
Castle Point	1,844	1,904	1,107	723	320	**5,899**
Rochford	2,297	2,318	1,511	1,439	735	**8,300**
Southend-on-Sea	5,328	5,828	4,624	4,525	2,737	**23,041**
Thurrock	6,195	7,510	6,656	7,069	4,330	**31,761**
South Essex	**21,258**	**23,721**	**18,389**	**17,858**	**10,452**	**91,678**

Source: Turley; Edge Analytics

Appendix 6: Monitoring

The SHMA noted the importance of continuing to monitor the availability of newly published evidence as individual Local Plans are prepared. The preparation of this addendum itself recognises that the objectively assessed need (OAN) for housing in South Essex is influenced by the release of new 2014-based sub-national population and household projections (SNPP/SNHP) and production of updated economic evidence.

While housing needs assessments are not automatically rendered out of date by the ongoing publication of new evidence, the Planning Inspectorate in practice typically require local authorities to demonstrate an awareness and appreciation of updated evidence released through Local Plan preparation, particularly where a '*meaningful change in the housing situation*' is implied[129].

The conclusions presented in this addendum are based on the evidence available at the current point in time. This appendix has been produced to assist the South Essex authorities in identifying data and guidance expected to be published in the future, in order to inform their monitoring.

Methodology

As noted throughout this addendum, the Government has announced its intention to shortly consult on a new standardised methodology for calculating objectively assessed housing needs[130] (OAN). This methodology is intended to apply as '*the baseline for assessing five year housing land supply and housing delivery*' from April 2018[131]. The Government has suggested that '*in specific circumstances where authorities are collaborating on ambitious proposals for new homes*', additional time could be given by the Secretary of State before this new baseline is applied. Equally, although the Government intends to incentivise authorities to use the new approach in producing Local Plans, it has acknowledged that this may not be universally adopted by stating that:

"We will expect Councils that decide not to use the new approach to explain why not and to justify the methodology they have adopted in their area. We will consult on what constitutes a reasonable justification for deviating from the standard methodology, and make this explicit in the National Planning Policy Framework"[132]

In the absence of any guidance on a preferred alternative methodology at this time – with the Housing White Paper silent on the standardised approach proposed by the Local Plans Expert Group (LPEG), for example – this addendum has followed the methodology currently set out in Planning Practice Guidance (PPG), as of May 2017. This is considered a reasonable, consistent and appropriate basis through which an updated position can be established.

It will, however, be important for the South Essex authorities to monitor announcements relating to the methodological changes planned, and consider the implications of any changes once

[129] PPG Reference ID 2a-016-20150227
[130] DCLG (2017) Fixing our Broken Housing Market (para 1.13)
[131] Ibid (para 1.15)
[132] Ibid (para A.23)

introduced. It is recommended that clarity is sought on the status of evidence robustly produced in line with the existing methodology.

Datasets and Information

Many of the datasets presented in this addendum are regularly updated, often annually. The ongoing release of data enables an understanding of change, which should be reviewed and taken into account where relevant to understand how housing needs are changing. This includes:

- Official sub-national **population projections** (SNPP) produced by the Office for National Statistics (ONS). At the time of publication, the 2016-based SNPP are provisionally scheduled for publication in May to June 2018. This dataset will be based on the 2016-based national population projection (NPP), provisionally scheduled for publication in October to November 2017. This will incorporate updated national assumptions on international migration, which will be the first produced following the UK's decision to leave the European Union;

- Official sub-national **household projections** (SNHP), now the responsibility of the ONS[133]. It is understood that the next set of projections will be published in 2018;

- Projections produced to inform the ongoing development of the new **London Plan**, which is likely to involve the release of projections for all local authorities in England to illustrate the wider implications of bespoke projections developed by the Greater London Authority[134] (GLA). It is recommended that the South Essex authorities continue to partake and engage with the development of this evidence where required;

- **Mid-year population estimates** (MYE) produced annually by the ONS. While the ongoing estimation of the population does not necessitate an annual review of housing needs, it is recommended that the components of population change are monitored to identify any significant and sustained divergence from that allowed for within this addendum;

- The ongoing release of indicators relating to the health of the national and local **economy**, where considered of relevance to the conclusions of the South Essex Economic Development Needs Assessment (EDNA). Any review of this assessment may necessitate an updating of the scenarios presented in this addendum, given that its conclusions on likely job growth form the basis of the upper end of the OAN range presented;

- Datasets relating to the **market signals** presented in the SHMA and referenced in this addendum, noting that they are regularly updated. It is recommended that affordability, house prices and rents in particular are monitored to understand the relative balance between the supply of and demand for housing; and

[133] ONS (2017) Transfer of household projections to ONS
[134] Wider South East Summit (December 2015) Annex 2 – Towards a common understanding of the evidence

- Available evidence on the need for **affordable housing**, including the number of households registered in priority need on Councils' waiting lists – and the number of bedrooms required – and the existing and future supply of affordable homes in South Essex. The implications of ongoing welfare reforms should also continue to be monitored[135]. The calculation presented in the SHMA is based on evidence available at a fixed point in time, and it is recommended that identified trends relating to affordable housing need and supply are taken into account on an ongoing basis.

[135] This includes changes outlined in the 2016 SHMA (p159 – 162)

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