Report for:

Peterborough Housing Market Area and Boston Borough Council

Strategic Housing Market Assessment Update

Final Report

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Summary

Introduction

1. This report provides an update to previous Strategic Housing Market Assessments (SHMA) for the Peterborough sub-region (Peterborough, Rutland, South Holland and South Kesteven) and Boston. In particular, the report considers the objectively assessed housing need (OAN) updating previous assessments to take account of new demographic and economic data. To be consistent with previous research, the report provides an assessment of need in the 2011-36 period.

2. National planning policies require the study to define the *'full, objectively assessed need for market and affordable housing in the housing market area'* (National Planning Policy Framework (NPPF), paragraph 47). This provides a starting point for considering policies for housing provision. The assessment must 'leave aside' constraint factors (including land availability and Green Belt) however these are relevant in drawing together evidence and testing options in the development of local plans. The HNS does not set targets for housing provision.

3. Government's Planning Practice Guidance (PPG) sets out how the objectively assessed need for housing should be defined. It sets out that the starting point should be the latest official household projections (from the Department for Communities and Local Government (CLG)) – any changes to these projections *'need to be clearly explained and justified on the basis of established sources of robust evidence'* (2a-017). Consideration then needs to be given to economic growth, market signals and affordable housing need. The SHMA update follows this approach to identifying OAN.

4. On the 7th February 2017, the Government published a new Housing White Paper *'Fixing our broken housing market'*. Whilst the White Paper makes reference to standardising methodologies for assessing housing need; at the time of writing it is not considered that there is anything substantial within the document (and supporting documents) that means an assessment set against the current PPG is inappropriate at the time of writing. The White Paper also broadens the definition of affordable housing (although the definition of affordable housing need, (which is important for this report) remains unchanged).

5. An important part of the assessment of need is to identify the Housing Market Area (HMA) over which needs should be met. A HMA is an important geographical building block as set out in the National Planning Policy Framework (NPPF). This study has not sought to redefine HMAs but has drawn on existing evidence from previous SHMAs. This identifies a Peterborough HMA which includes Peterborough, Rutland, South Holland and South Kesteven and a separate Boston HMA covering just the local authority area. Strong links were also established between Boston and South Holland, as well as with Fenland in the case of the Peterborough HMA.

6. Core outputs are provided for the two HMAs and local authorities within the Peterborough HMA (noting that Boston is a single authority HMA). Additionally, Boston and South Holland are currently working towards a Joint Local Plan and so key outputs are also provided for this combined area.

Trend-based Demographic Projections

7. The start point for assessing housing need in line with the PPG is the most recent official household projections; these are the 2014-based CLG projections which suggest a need for around 2,128 dwellings per annum to be provided (2011-36) – including an allowance for vacant homes drawn from Council Tax data. These projections were underpinned by the most recent ONS subnational population projections (SNPP – also 2014-based).

Figure 1: Annual housing need (2011-36) – CLG household projections (2014-based)	
	Official household projections
Peterborough	851
Rutland	102
South Holland	345
South Kesteven	601
Peterborough HMA	1,899
Boston	229
Study area	2,128
Boston & South Holland	574

8. The SNPP is based on short-term trends (migration trends over the previous 5/6 years); analysis of the components of population change suggested that migration in both HMAs has been slightly weaker in the short term. Therefore, an alternative projection based on 10-year migration trends was developed (and this includes more up-to-date information from ONS mid-year population estimates to 2015) – the use of 10-year trends has typically become an industry standard for this type of work. This projection suggests a slightly higher level of future population growth and a need for 2,382 dwellings per annum to be provided.

9. A further sensitivity was developed taking account of Unattributable Population Change (UPC) – this is an adjustment made by ONS to reflect population growth as informed by the Census and may be related to the mis-recording of migration. The UPC adjusted projection showed a lower level of need (for 2,292 dwellings per annum).

Figure 2: Annual housing need (2011-36) – alternative scenarios		
	10-year trends	10-year trends (+UPC)
Peterborough	948	938
Rutland	151	132
South Holland	433	414
South Kesteven	569	549
Peterborough HMA	2,101	2,033
Boston	281	259
Study area	2,382	2,292
Boston & South Holland	714	673

10. When looking at the data about household representative rates (HRRs) underpinning the 2014-based CLG household projections it was observed that the 25-34 age group had reduced slightly in the 2001-11 period, although this trend was not projected to continue into the future. When considering changes to the population structure in this age group (growth in BME communities) and other age groups within the projections (e.g. projected increases in headship for those aged 35-44) there was no evidence of any suppression of household formation and hence the 2014-based CLG projections can readily be used as published to translate population figures into household growth and housing need.

11. The one exception to this was in the case of Rutland; the 25-34 age group is projected to continue to see falling HRRs and the 35-44 age group shows little change (against a background where most areas are projected to see modest increases). An adjustment was therefore made to HRRs for Rutland (in these two age groups) to track regional changes moving forward from 2014 – this added about 5%-6% to the housing need (about 8 additional dwellings per annum).

12. Overall, the analysis identifies a demographic based need for between 2,128 and 2,390 dwellings per annum (these figures being the range of the latest (2014-based) official projections and a 10-year trend based projection with an uplift to HRRs in Rutland).

Figure 3: Annual housing need (2011-36) – range of demographic scenarios

	Official household projections	10-year trends (+ Rutland uplift)
Peterborough	851	948
Rutland	102	159
South Holland	345	433
South Kesteven	601	569
Peterborough HMA	1,899	2,109
Boston	229	281
Study area	2,128	2,390
Boston & South Holland	574	714

Future Employment and the Link to Housing

13. Analysis has sought to estimate the likely level of housing needed to be delivered if the resident workforce is to increase sufficiently to meet both job-growth forecasts and an analysis of past trends. The main purpose of the analysis was to establish if there was an imbalance between where population growth is projected to occur and where the jobs might be provided. The PPG is clear that such an analysis is to consider the locations of housing rather than housing numbers per se.

14. The analysis took account of both commuting patterns and 'double jobbing'. Existing (2011) commuting patterns were used in the analysis, although it is recognised that commuting dynamics could change in the future – this is a particularly important consideration in South Holland where future job growth is forecast to be relatively strong.

15. Data about job growth was taken from the East of England Forecasting Model (EEFM); this source does not contain figures for Boston and so a separate 'sectoral' analysis was carried out comparing growth in other areas (the whole study area, regionally and nationally) with employment sectors in the Borough. For the purposes of modelling, the highest reasonable estimate of job growth was used for Boston (this is based on forecasts for the rest of the study area (i.e. Peterborough, Rutland, South Holland and South Kesteven)).

16. The analysis also made a series of assumptions about how economic activity rates might change in the future; this is a key difficulty in matching job-growth to population growth. The approach used has drawn on economic activity rate projections published by the Office for Budget Responsibility (OBR); these have been modified from the data as published to take account of local activity rates (from 2011 Census data) and also to deal with some anomalies (this is where rates are projected to go down when in reality all trend data suggests that rates for specific age/sex groups are more likely to stay stable or increase).

17. The analysis has also been mindful of comments made in the PAS Technical Advice Note with regard to integrating demographic projections and economic forecasts. The data available for this study did not allow for such integration to be undertaken; in any case, there is some doubt about the robustness of such an approach, particularly when considering which variables are inputs and outputs to such models. Overall, due to the assumptions made, all outputs should be treated as indicative.

18. In running the modelling, it is estimated that to meet the job growth forecast there would need to be provision of about 2,215 dwellings per annum across the study area (2011-36). This figure is below the highest of the demographic projections developed (linked to 10-year migration trends – a need for 2,390 dwellings per annum) but above the 'start point' (drawn from official projections). The demographic projections were higher than the economic based figures in both HMAs.

19. On balance this does not suggest that there will be any labour-force shortage in the area. However, it is notable in South Kesteven that the housing need when set against job forecasts is higher than the demographic based projections. South Kesteven is therefore the only area with a potential mismatch between jobs and population growth and in looking at housing need, consideration should be given to an economic-driven approach to OAN in this location.

Figure 4: Annual housing need (2011-36) – economic-led projections

	Job growth forecast
Peterborough	805
Rutland	140
South Holland	433
South Kesteven	616
Peterborough HMA	1,994
Boston	220
Study area	2,215
Boston & South Holland	653

Affordable Housing Need

20. An assessment of affordable housing need has been undertaken which is compliant with Government guidance to identify whether there is a shortfall or surplus of affordable housing in the Peterborough and Boston HMAs. The analysis is an update to previous assessments of need and in particular focusses on changes to housing costs, incomes, newly forming households and the supply of relets.

21. Because the affordable needs analysis takes a 2016 base date, the needs shown cover a 20-year period to 2036 (figures which are annualised for convention). Overall, in the period from 2016 to 2036 a net deficit of 1,383 affordable homes per annum is identified (1,120 in the Peterborough HMA and 263 in Boston). These figures are generally slightly lower than those assessed in previous SHMA research and this is largely due to the updating of income data to reflect more recent sources. Notionally, the need represents around 58% of the estimated overall need (from demographic projections). There is thus a requirement for new affordable housing and the Councils are justified in seeking to secure additional affordable housing.

Figure 5: Estimated Annual Need for Affordable Housing – by location (2016-36)

	Current need	Newly forming households	Existing households falling into need	Total Need	Supply from existing stock	Net Need
Peterborough	136	724	598	1,457	898	559
Rutland	10	90	60	160	120	41
South Holland	50	332	121	502	220	282
South Kesteven	45	385	265	695	457	238
Peterborough HMA	240	1,532	1,043	2,814	1,694	1,120
Boston	54	302	170	525	263	263
Study area	293	1,833	1,213	3,340	1,957	1,383
Boston & South Holland	103	634	290	1,028	483	545

22. How affordable housing need sits with the overall need for housing must be properly understood; it is important to bear in mind that the affordable housing needs model includes existing households who require a different size or tenure of accommodation rather than new accommodation per se. Additionally, the modelling includes newly forming households, who are already part of the demographic projections (i.e. they are already included within the need). Furthermore, many households secure suitable housing within the Private Rented Sector, supported by housing benefit.

23. Once account is taken of the range of outputs within the modelling and the fact that many of the households in need are already living in accommodation (existing households) or already within the projections (newly forming households), the analysis does not suggest that there is any strong evidence of a need to consider additional housing (over and above the figures from demographic/economic-based projections) to help meet the affordable need. There are however a number of concealed households within the modelling who are not picked up by demographic projections (and are without housing). There is merit in considering these households as an additional need (additional to the overall need for housing, not additional to the affordable need) and this is addressed in the analysis of market signals.

24. On the basis of the analysis and subsequent discussion, it needs to be clear that this report does not provide an affordable housing target; the amount of affordable housing delivered will be limited to the amount that can viably be provided. The evidence does however suggest that affordable housing delivery in all areas should be maximised where opportunities arise.

25. A final analysis looked at the potential role for Starter Homes. This suggested that there is potentially sufficient demand for 10% of homes to be provided in this tenure (or other affordable home ownership products such as discounted market sales housing). Shared Ownership housing, which is an already established and more financially flexible affordable home ownership product, is also included within the 10% target for affordable home ownership proposed within the White Paper published in February 2017. However, questions do remain about the extent to which the new affordable home ownership products (Starter Homes and discounted market sales) is genuinely affordable as the income levels required to access such housing are above those typically required to access market housing as currently available.

26. It should be noted that the analysis of affordable housing need (and Starter Homes) was undertaken prior to the publication of the Housing White Paper in February 2017. The White Paper does not change the broad definition of affordable housing need but does include additional tenures/products within the definition of affordable housing (as well as a bit more information about the potential direction of travel with regard to Starter Homes). The analysis therefore remains appropriate, although it may be necessary (as the White Paper works through into a revised NPPF) to consider the wider definitions set out in any future research.

Market Signals

27. Analysis of a range of market signals has been undertaken to consider if any adjustments should be made to the demographic-based assessment of housing need. The market signals studied are consistent with those in the PPG and included; house prices, rents, affordability ratios, land values, rates of development and overcrowding/concealed households.

28. The analysis did not identify any particular issue to suggest that provision in the Peterborough HMA or Boston should be increased. The exception to this was in the case of Rutland, where various indicators pointed to stronger affordability pressures. However, with demographic projections (linked to 10-year migration trends) already substantially increasing the need from the official 'start point' there is no strong case for a further uplift.

29. Even if the market signals were to suggest an uplift in provision, then any adjustments would need to be carefully considered. For example, if additional provision were to simply increase migration and population growth then this would be a Duty-to-Cooperate issue impact on other areas (where population growth and housing need would therefore be lower). If, however, an uplift is reasonable due to particularly suppressed household formation, then this could be done without impacting on other locations. In the study area, the evidence did not point to any particular suppression within the CLG 2014-based household projections (other than in Rutland with adjustments having already been made).

30. The market signals did however identify an increase in the number of concealed households in the study area. These households are not captured by demographic projections and do not currently have housing. It is therefore reasonable to increase the level of need by the increase in concealed households seen in the 2001-11 period – this increases need by some 1,700 dwellings (about 68 per annum over the 2011-36 period. On the basis of 10-year migration trends (the highest of the demographic projections developed) this would mean that the objectively assessed housing need in the study area is for 2,458 dwellings per annum; with the uplift applied to the jobs forecast the need would be 2,283 dwellings per annum.

Figure 6: Annual housing need (2011-36) – including uplift for concealed households (and HRR uplift for Rutland)

	10-year migration	EEFM/job forecast
Peterborough	981	839
Rutland	159	141
South Holland	445	444
South Kesteven	577	624
Peterborough HMA	2,163	2,048
Boston	295	234
Study area	2,458	2,283
Boston & South Holland	740	678

31. The figure of 2,458 represents a 16% uplift from the start point of analysis (as identified in the PPG) – a need for 2,128 dwellings per annum.

Overall Conclusion

32. The main overall conclusion is around the objective assessment of housing need (OAN). On the basis of the analysis carried out, this is concluded (annually over the 2011-36 period) to be for 2,504 dwellings per annum across the study area. This figure is based on taking the highest of the needs for each local authority (i.e. either demographic or economic-led); this approach is consistent with the previous SHMA update in the Peterborough HMA (2015). Annual need figures for other geographies are set out below:

- Peterborough – 981
- Rutland – 159
- South Holland – 445
- South Kesteven – 624
- Peterborough HMA – 2,209
- Boston – 295
- Study area – 2,504
- Boston & South Holland – 740

33. It is arguable that the HMA (and study area) need figures could be presented as being slightly lower (given that the needs are not based on the same projection in each local authority (being based on an economic-led projection in South Kesteven)). However, given the Government's desire to boost housing supply; a pragmatic approach is considered to be to take the highest figure in each area. This would ensure that all locations are meeting both their demographic and economic needs.

34. The table below provides a summary of how the OAN for each HMA and local authority has been derived. In interpreting this it must be remembered that the final OAN is presented as the sum of the figures for individual local authorities, and that this is based on 10-year migration trend-based demographic projections in all areas other than South Kesteven (which is linked to an economic-based projection).

Figure 7: Summary of derivation of OAN – Peterborough HMA and Boston (figures are dwellings per annum – 2011-36)

	Peter-borough	Rutland	South Holland	South Kesteven	Peter-borough HMA	Boston	Study area	Boston & South Holland
Start point	851	102	345	601	1,899	229	2,128	574
Taking account of supressed household formation	+0	+6	+0	+0	+6	+0	+6	+0
Taking account of 10-year migration trends	+97	+51	+88	-32	+204	+52	+256	+140
Taking account of economic growth	+0	+0	+0	+47	+47	+0	+47	+0
Taking account of concealed households	+33	+1	+12	+8	+54	+14	+68	+26
Final OAN	981	159	445	624	2,209	295	2,504	740
Uplift from start point	15%	56%	29%	4%	16%	29%	18%	29%

35. The final analysis below compares the findings of this study with the conclusions of previous assessments of OAN across the study area (which were carried out in 2015). Overall, there is very little difference in the OAN calculations in this study compared with previous research. Across the whole study area, the OAN is reduced by 39 dwellings per annum (a 1.5% reduction) with all areas other than South Holland seeing modest reductions (the figure for South Holland increases by 17 dwellings per annum).

Figure 8: Difference between OAN in this assessment and previous SHMA research

	This study	Previous SHMA	Difference
Peterborough	981	1,006	-25
Rutland	159	171	-12
South Holland	445	428	+17
South Kesteven	624	636	-12
Peterborough HMA	2,209	2,241	-32
Boston	295	302	-7
Study area	2,504	2,543	-39
Boston & South Holland	740	730	+10

1. Introduction

Introduction

1.1 Justin Gardner Consulting (JGC), working in association with GL Hearn have been commissioned by Peterborough, Rutland, South Holland, South Kesteven and Boston Councils to develop a Strategic Housing Market Assessment (SHMA) Update. The purpose of the update is to develop a robust understanding of housing market dynamics, and to provide an assessment of future needs for both market and affordable housing.

1.2 The timing of the update has been driven by publication of new data from the Office for National Statistics (ONS) and the Department for Communities and Local Government (CLG). In particular, this includes new (2014-based) population and household projections and mid-year population estimates (MYE) up to 2015. The most recent previous studies are an October 2015 SHMA update report for the Peterborough HMA (covering Peterborough, Rutland, South Holland and South Kesteven) by GL Hearn and a July 2015 SHMA for Boston by JGC; both reports used 2012-based data as the most recent population/household projections.

1.3 The SHMA does not set housing targets. It provides an assessment of the need for housing, making no judgements regarding future policy decisions which the Councils may take. Housing targets will be set in local plans. The SHMA update provides an important input into setting targets for housing provision, but the housing targets as set out in local plans will also take into account factors such as the supply of land for new development, Green Belt and other nationally and internationally significant landscapes and environmental designations, local infrastructure capacity and environmental constraints. These factors may limit the amount of development which can be sustainably accommodated and may mean that Local Plans will need to accommodate distribution across the HMA through the Duty-to-Cooperate (i.e. if anyone couldn't meet their need how this would be redistributed across the wider HMA).

1.4 In setting housing requirements there are other considerations which are relevant, an example of this can be seen in the Gallagher Estates v Solihull MBC judgment (2014) which states in paragraph. 37iii) that *'it might be decided, as a matter of policy, to encourage or discourage a particular migration reflected in demographic trends'*. Therefore, any changes to migration trends (up or down) would be a policy consideration that gets decided as part of the housing requirement.

1.5 The SHMA update responds to and is compliant with the requirements of the National Planning Policy Framework (the NPPF). It is informed by Planning Practice Guidance (PPG). It provides an assessment of the future need for housing, with the intention that this will inform future development of planning policies. According to the PPG, housing need:

"refers to the scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period – and should cater for the housing demand of the area and identify the scale of housing supply necessary to meet that demand."

1.6 This report, in discussing housing need, is thus referring to both the need for market and affordable housing, taking account of both local need and that associated with net migration. This is required by national policy.

National Planning Policy Framework and Guidance

1.7 The former Coalition Government reformed the policy framework for planning for housing. Regional strategies were revoked and responsibility for planning on cross-boundary issues was returned to local authorities.

1.8 The primary legislation to support this is the 2011 Localism Act which now imposes a 'duty to cooperate' on local authorities, requiring them to "engage constructively, actively and on an on-going basis" with the other authorities and relevant bodies. The Duty to Cooperate is applied as both a legal and soundness test to which development plans must comply. Housing provision is an issue of cross-boundary relevance which local authorities both within and beyond a Housing Market Area (HMA) will need to engage with each other on.

1.9 National policies for plan-making are set out within the National Planning Policy Framework. This sets out key policies against which development plans will be assessed at examination and to which they must comply.

National Planning Policy Framework (NPPF)

1.10 The National Planning Policy Framework (NPPF) was published in March 2012. The Framework sets a presumption in favour of sustainable development whereby Local Plans should meet objectively assessed development needs, with sufficient flexibility to respond to rapid change, unless the adverse impacts of doing so would significantly or demonstrably outweigh the benefits or policies within the Framework (including policies relating to Green Belt and other nationally and internationally significant landscapes and environmental designations) indicate that development should be restricted.

1.11 The NPPF highlights a Strategic Housing Market Assessment (SHMA) as a key piece of evidence in determining housing needs. Paragraph 159 in the Framework outlines that this should identify the scale and mix of housing and the range of tenures which the local population is likely to need over the plan period which:

- Meets household and population projections, taking account of migration and demographic change;
- Addresses the need for all types of housing, including affordable housing and the needs of different groups in the community; and
- Caters for housing demand and the scale of housing supply necessary to meet this demand.

1.12 This is reaffirmed in the NPPF in Paragraph 50. The SHMA is intended to be prepared for the housing market area, and include work and dialogue with neighbouring authorities where the HMA crosses administrative boundaries.

1.13 Paragraph 181 sets out that Local Planning Authorities (LPAs) will be expected to demonstrate evidence of having effectively cooperated to plan for issues with cross-boundary impacts when their Local Plans are submitted for examining. This highlights the importance of collaborative working and engaging constructively with neighbouring authorities, as required by Section 33A of the 2004 Planning and Compulsory Purchase Act, and ensuring that there is a robust audit trail showing joint working to meet the requirements of paragraph 181 of the NPPF.

1.14 Paragraph 158 of the NPPF also emphasises the alignment of the housing and economic evidence base and policy. Paragraph 17 in the NPPF reaffirms this, and outlines that planning should also take account of market signals, such as land prices and housing affordability.

1.15 In regard to housing mix, the NPPF sets out that authorities should plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community. Planning authorities should identify the size, type, tenure and range of housing that is required in particular locations reflecting local demand. Where a need for affordable housing is identified, authorities should set policies for meeting this need on site.

1.16 The NPPF states that to ensure a Local Plan is deliverable, the sites and the scale of development identified in the plan should not be subject to a scale of obligations and policy burdens such that their ability to be developed is threatened and should support development throughout the economic cycle. The costs of requirements likely to be applied to development, including affordable housing requirements, contributions to infrastructure and other policies in the Plan, should not compromise the viability of development schemes. To address this, affordable housing policies would need to be considered alongside other factors including infrastructure contributions – a 'whole plan' approach to viability. Where possible the NPPF encourages local authorities to work up Community Infrastructure Levy (CIL) charges alongside their local plan.

Planning Practice Guidance

1.17 Planning Practice Guidance (PPG) was issued by Government in March 2014 on 'Assessment of Housing and Economic Development Needs' and is maintained online and updated periodically. The PPG is relevant to this HNS in that it provides clarity on how key elements of the NPPF should be interpreted, including the approach to deriving an objective assessment of the need for housing. The approach in this report takes account of this Guidance.

1.18 The Guidance defines "need" as referring to 'the scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period – and should cater for the housing demand of the area and identify the scale of housing supply necessary to meet this need'. It sets out that the assessment of need should be realistic in taking account of the particular nature of that area (for example the nature of the market area), and should be based on future scenarios that could be reasonably expected to occur. It should not take account of supply-side factors or development constraints. Specifically, the Guidance sets out that:

"plan makers should not apply constraints to the overall assessment of need, such as limitations imposed by the supply of land for new development, historical under performance, infrastructure or environmental constraints. However, these considerations will need to be addressed when bringing evidence bases together to identify specific policies within development plans."

1.19 The Guidance outlines that estimating future need is not an exact science and that there is no one methodological approach or dataset which will provide a definitive assessment of need. However, the starting point for establishing the need for housing should be the latest household projections published by the Department for Communities and Local Government (CLG). At the time of preparation of this report the latest projections are the 2014-based Household Projections. It also outlines that the latest population projections and mid-year population estimates should be considered. The latest projections are the 2014 Sub-National Population Projections published by ONS in May 2016 and 2015 mid-year population estimates (published in June 2016).

1.20 It sets out that there may be instances where these national projections require adjustment to take account of factors affecting local demography or household formation rates, in particular where there is evidence that household formation rates are or have been constrained by supply. This is considered in the subsequent chapters. Guidance indicates that proportional adjustments should be made (increasing the assessed housing need relative to demographic led projections) where the market signals point to supply being constrained relative to long-term trends or to other areas in order to improve affordability.

1.21 Evidence of affordable housing needs is also relevant, with the Guidance suggesting that the total affordable housing need should be considered in the context of its likely delivery as a proportion of mixed market and affordable housing. It indicates that this may provide a case for increasing the level of overall housing provision – in order to increase the delivery of affordable housing.

1.22 In regard to employment trends, the Guidance indicates that job growth trends and/or economic forecasts should be considered having regard to the growth in working-age population in the housing market area. It sets out that where the supply of working age population that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns (depending on public transport accessibility and other sustainable options such as walking and cycling) and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing and infrastructure development could help to address these problems.

Planning Advisory Service (PAS) – technical advice note

1.23 In June 2014 PAS published a technical advice note *'Objectively Assessed Need and Housing Targets'*. The advice has no official status but has been developed based on existing good practice and the recommendations of Planning Inspectors. This advice note was updated in July 2015 (Second edition). Where relevant, key parts of the PAS guidance have been quoted within this report – this is particularly in relation to affordable housing need.

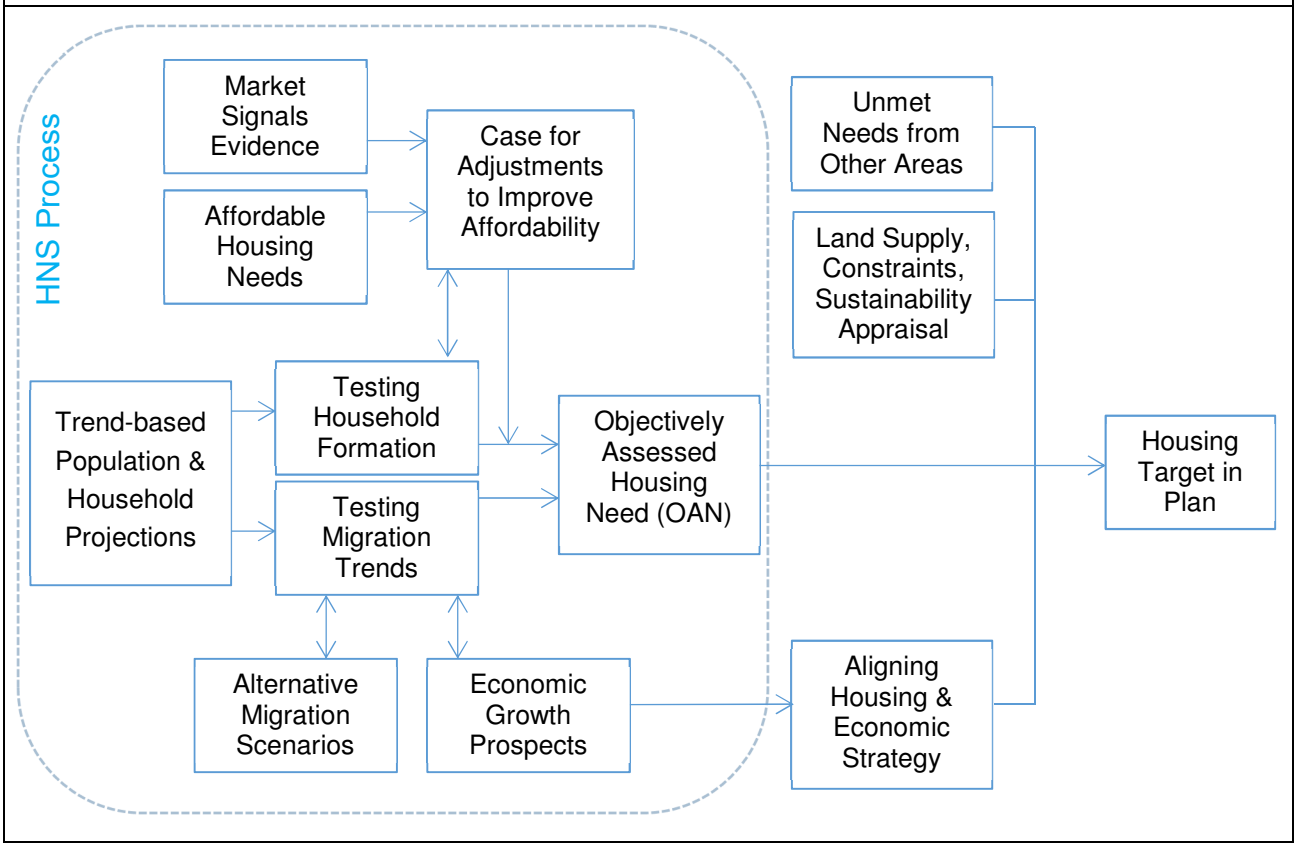
Housing White Paper

1.24 On the 7th February 2017, the Government published a new Housing White Paper *'Fixing our broken housing market'*. Whilst the White Paper makes reference to standardising methodologies for assessing housing need; at the time of writing it is not considered that there is anything substantial within the document (and supporting documents) that means an assessment set against the current PPG is inappropriate at the time of writing. The White Paper also broadens the definition of affordable housing (although the definition of affordable housing need (which is important for this report) remains unchanged).

Overview of the Approach to Deriving Objectively Assessed Need (OAN)

1.25 Based on the above, the diagram below summarises the approach used to derive conclusions regarding the Objectively-Assessed Need (OAN) for Housing. This is driven by the approach in the Planning Practice Guidance (PPG).

Figure 1.1: Overview of Approach to Generating a Housing Target



Housing Market Geographies

1.26 The SHMA update does not seek to provide a detailed assessment of Housing Market Areas (HMA) although there is merit in briefly analysing data and past research to test the extent to which the five local authorities form HMAs and the other areas with which there are particularly strong links. The PPG says that:

'A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work'.

1.27 Housing market areas can be broadly defined by using three different sources of information as follows:

- House prices and rates of change in house prices
- Household migration and search patterns
- Data about travel to work area boundaries, retail and school catchment areas

1.28 The majority of studies looking at HMA boundaries focus on migration and travel to work data and it is generally considered that a self-containment rate of around 70% provides evidence for defining a HMA. Self-containment in the context of this means that 70% of people both live and work in an area (i.e. less than 30% commute out or less than 30% of local workers commute in) or in the case of migration an area where 70% of movers remain (excluding long distance moves such as due to a change of lifestyle or retirement), reflecting the fact that most people move relatively short distances due to connections to families, friends, jobs, and schools.

1.29 The 2014 Peterborough Sub-Regional SHMA included a detailed analysis of HMAs; including consideration of existing national research (from CLG and DTZ) before undertaking a localised analysis of house prices, migration patterns and travel-to-work (commuting) areas. In conclusion, it defined a Peterborough Sub-Regional Housing Market as including the following, on the basis of the best fit to local authority boundaries:

- Peterborough;
- Rutland;
- South Holland; and
- South Kesteven.

1.30 It also identified localised interactions with adjoining areas around the boundaries of the housing market, including links from South Holland to Boston, from Peterborough to Yaxley in Huntingdonshire, Whittlesey in Fenland, and towards Wisbech; and between Rutland and Corby.

1.31 The Boston SHMA (2015) also considered national research about HMAs (from CLG) and noted that this places Boston with South Holland as part of a 'strategic' HMA as well as being alone as part of a 'single tier' HMA. Overall from the CLG research it was concluded that Boston is a fairly self-contained Housing Market Area, but with links predominantly with South Holland and East Lindsey.

1.32 Additional analysis was undertaken (using 2011 Census data) to look at migration and commuting patterns. This confirmed the national research as still being relevant, with the overall conclusion being that Boston can be considered as a HMA (but still recognising the links with South Holland and East Lindsey.

1.33 For the purposes of this study, it is considered reasonable to continue with analysis covering the two HMAs separately (i.e. Peterborough HMA and Boston). However, there is merit in looking at all five authorities making up this commission, not least because Boston and South Holland are currently moving forward with a joint Local Plan – whilst the two local authorities are technically in different HMAs, the analysis consistently shows a strong link between these locations.

Current Housing Need Evidence

1.34 The latest full assessment of housing need can be found in the 2015 Peterborough Sub-Regional SHMA update report (for Peterborough, Rutland, South Holland and South Kesteven) and the 2015 SHMA in the case of Boston. Both of these documents run through the various stages of the PPG in terms of assessing housing need:

- Trend-based Demographic Projections;
- Economic-led Projections;
- Affordable Housing Need; and
- Market Signals

1.35 The 2015 analysis concludes a need for 2,240 dwellings per annum in the Peterborough HMA (2011-36), with an equivalent figure of around 300 (actually 302) in Boston (over the same 25-year period). For the whole study area, the need assessed in the most recent assessment if therefore for 2,540 dwellings per annum. The table below shows this broken down by local authority (and also includes the total need for the 2011-36 period).

Figure 1.2: Overall housing need derived in 2015 SHMA (update) for Peterborough HMA and 2015 Boston SHMA

	Per annum	2011-36
Peterborough	1,005	25,125
Rutland	170	4,250
South Holland	430	10,750
South Kesteven	635	15,875
Peterborough HMA	2,240	56,000
Boston	300	7,500
Study area	2,540	63,500
Boston & South Holland	730	18,250

Source: Peterborough HMA SHMA update (2015) and Boston SHMA (2015)

Plans to Develop a University in Peterborough

1.36 Part of the Cambridgeshire and Peterborough Devolution Deal is a proposal for a new Peterborough University with degree-awarding powers. The Greater Cambridge Greater Peterborough (GCGP) Local Enterprise Partnership (LEP) bid document of July 2016 notes that *'by 2035, Peterborough will have a thriving, independent, campus-based university with an undergraduate population of 12,500 students. The university will be a powerhouse for economic and intellectual growth, outward-looking but rooted in the ingenuity and diversity of its people'*.

1.37 If a new University is developed, it is possible that there will be an impact on housing need (noting that the need figures set out in this report look forward to 2036). The impact will be dependent on a number of factors, such as the characteristics of students (e.g. local people or those moving into the area) and also the availability of student accommodation (such as halls of residence)

1.38 The University proposal is still at a very early stage. Work is ongoing to consider the potential impact of the University on housing numbers and a separate document will in due course sit (as an appendix) alongside this SHMA update. Any additional needs arising as a result of the University will need to be considered separately to the main conclusions of the SHMA update (for example through the Local plan process).

Rounding

1.39 Figures presented in the analytical text and tables of this report have been rounded and discrepancies may occur between the sums of the component items and totals. Percentages are calculated prior to rounding and therefore discrepancies may also exist between these percentages and those calculated from the rounded figures.

Introduction: Key Messages

- National planning policies require a SHMA to define the 'full objectively assessed need for market and affordable housing.' This provides a starting point for considering policies for housing provision. The assessment must 'leave aside' constraint factors (including land availability and Green Belt), however these are relevant in drawing together evidence and testing options in the development of local plans. The SHMA does not set targets for housing provision.

- Government's Planning Practice Guidance sets out how the objectively assessed need for housing should be defined. It sets out that the starting point should be demographic projections, with appropriate assumptions regarding household formation rates. Consideration then needs to be given to economic growth, market signals and affordable housing need. The SHMA update follows this approach to identifying objectively assessed housing need (OAN).

- An important part of the assessment of need is to identify the Housing Market Area (HMA) over which needs should be met. A HMA is an important geographical building block as set out in the National Planning Policy Framework (NPPF). This study has not sought to redefine HMAs but has drawn on existing evidence from previous SHMAs. This identifies a Peterborough HMA which includes Peterborough, Rutland, South Holland and South Kesteven and a separate Boston HMA covering just the local authority area. Strong links were also established between Boston and South Holland, as well as with Fenland in the case of the Peterborough HMA.

- The latest SHMA updated for the Peterborough HMA (in 2015) identifies an objectively assessed housing need (OAN) for 2,240 dwellings per annum (Peterborough – 1,005, Rutland – 170, South Holland – 430, South Kesteven – 635). The OAN in the 2015 update was shown to be slightly lower than in an earlier (2014) SHMA; the difference largely being driven by lower projections of population growth. The latest SHMA for Boston (also 2015) identifies an OAN of around 300 dwellings per annum. The remainder of this report updates these figures using a comparable methodology, applied to more up-to-date information.

2. Trend-based Demographic Projections

Introduction

2.1 In this section consideration is given to demographic evidence of housing need and trend-based projections. Such projections are critical to the SHMA process and this is emphasised in the NPPF (para 158) which states that local planning authorities should prepare a SHMA to identify the scale of housing which *'meets household and population projections, taking account of migration and demographic change'*.

2.2 The importance of such projections can also be seen in the PPG which states [2a-015] that *'household projections published by [CLG] should provide the starting point estimate of overall housing need'*. The CLG projections are directly linked to ONS subnational population projections (SNPP). Further emphasis is put on the CLG projections in 2a-017 where it is noted that *'the household projections… are statistically robust and are based on nationally consistent assumptions'*.

2.3 However, the PPG also identifies [2a-014] that *'establishing future need for housing is not an exact science. No single approach will provide a definitive answer'* and in 2a-017 notes that *'plan makers may consider sensitivity testing, specific to their local circumstances'* – this is particularly related to evidence that there have been particular events which may have impacted on migration or the profile of the local population. Furthermore, the PPG notes [2a-016] that *'where possible, local needs assessments should be informed by the latest available data'* – this is relevant in this area due to new population estimates having been published since the release of the last SNPP.

2.4 The PAS technical advice note provides some additional detail about sensitivity testing and in particular advises (para 6.24) that using a longer (10- to 15-year) past trend analysis should provide a more robust projection than the SNPP (which uses data from the previous 5-6 years). The PAS technical advice note also highlights the issue of Unattributable Population Change (UPC) – UPC is an adjustment made by ONS for discrepancies between Census data and annual monitoring. PAS states (para 6.35) that *'plan makers may take a view that the UPC, or part of it, should be included in the base period as past migration'*.

2.5 On the basis of the wording in both the PPG and the PAS technical advice note a number of observations can be made which are relevant to the assessment of trend-based demographic projections:

- CLG household projections (which link to ONS population projections) are robust and should be used as the 'start point' for assessing housing need
- These projections can be sensitivity tested where there is evidence of changes over time (e.g. short-term changes to migration patterns) or where UPC may be related to recorded migration levels
- Up-to-date information should be used where possible and this will include later releases of ONS mid-year population estimates (MYE)

2.6 It is considered in looking at sensitivities to demographic projections that the suggested level of need can go down as well as up. This is on the basis of a 'common sense' approach whereby any increase in migration in one area will come with a commensurate decrease in other locations. It is also recognised that levels of population growth for individual local authorities (nationally) will need to sum to the total level of growth projected nationally (through ONS national population projections).

2.7 In considering whether or not projections can be increased or decreased from ONS figures some general trends should also be understood. In particular, it has been evident since about 2008 (the start of recession) that population growth has been relatively strong in many urban areas – this looks to be driven by a reduced trend of out-migration from such locations (which is likely to be linked to factors such as mortgage finance constraints). This has meant that more rural locations have typically seen lower levels of population growth than previously. These trends have not been observed universally across different types of locations but can give an insight into whether or not it is reasonable to move away from official projections.

2.8 In understanding what a reasonable projection is a number of factors can be considered. In particular, this would include overlaying past and projected population growth (to see if there is a correlation) and also to compare past and projected levels of migration – this needs to recognise that migration may well be expected to change over time as the age structure of the population changes.

2.9 There is clearly no set method for looking at demographic-based need with different consultants and interested parties taking different views. For example, the Home Builders Federation tend to be supportive of an approach to need which focuses on official projections (these are short-term based projections looking at migration trends over the previous 5/6 years); Barton Willmore (one of the main objectors to the analysis of need) tend to suggest the use of a projection linked to 10-year migration trends (excluding any adjustment for Unattributable Population Change (UPC)) – UPC is discussed later in this section); whereas Opinion Research Services (ORS) (who seem to only work for the public sector) typically suggest using 10-year trends including an adjustment for UPC – ORS also tend to use trends in the 2001-11 period rather than the most recent data available.

2.10 It is therefore clear that a range of approaches and views have been taken. In this report, no fixed view on a pre-prepared methodology is offered. It is considered that the best method is to consider the evidence and then form a view following interrogation of a range of data.

2.11 Overall, it is clear that developing the most reasonable and realistic projections for housing need is far from straightforward and will involve a degree of professional judgement. The need for judgment can clearly be seen in a recent High Court case in Kings Lynn (CO/914/2015) where it is noted that *'this is a statistical exercise involving a range of relevant data for which there is no one set methodology, but which will involve elements of judgment about trends and the interpretation and application of the empirical material available'*.

2.12 In the remainder of this section, a range of demographic information is considered to look at housing need when set against population and household projections. The analysis focuses on key information and does not repeat the full range of data presented in previous SHMA research. The analysis is presented under a number of headings. These are:

- Components of past population change
- Demographic Evidence of Housing Need – Start Point
- 2014-based Subnational Population Projections (SNPP)
- Alternative Demographic Scenarios
- Household Growth (Household Representative Rates (HRR))
- Critical Review of Household Representative Rates
- Housing Need
- The impact of Brexit for population and household projections

Components of past population change

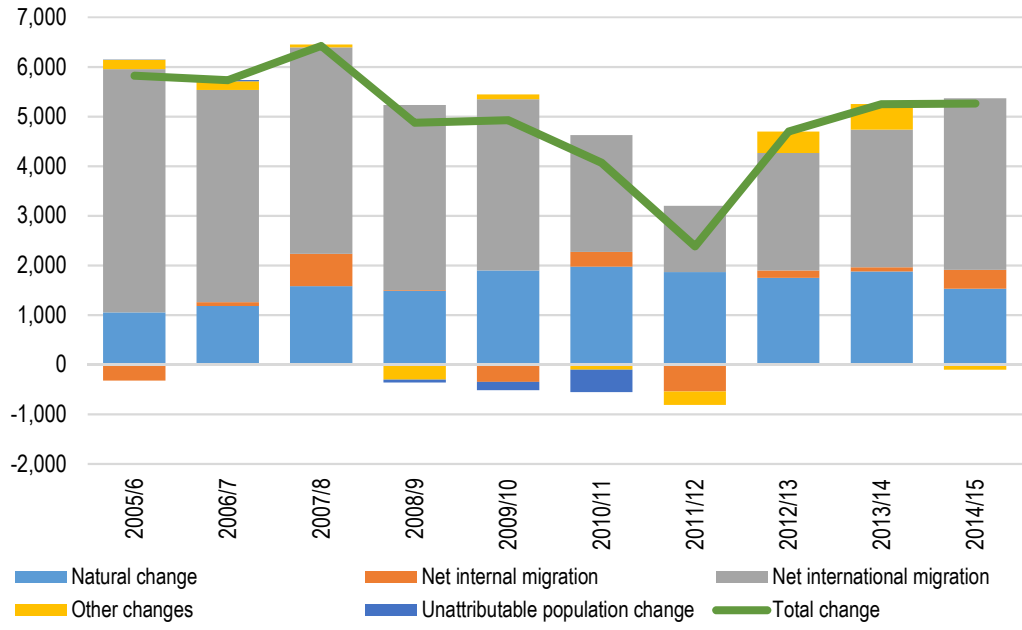
2.13 The figure and table below consider the drivers of population change in the Peterborough HMA and Boston from 2005 to 2015 (information for the local authorities making up the Peterborough HMA can be found in Appendix 1). Population change is largely driven by natural change (births minus deaths) and migration although within ONS data there is also a small other changes category (mainly related to armed forces and prison populations) and an unattributable population change (UPC) – this is an adjustment made by ONS to mid-year population estimates where Census data has suggested that population growth had either been over- or under-estimated in the inter-Census years. Because UPC links back to Census data a figure is only provided for years up to 2011.

2.14 The figure shows that net migration, and in particular, international migration has been the key driver of population change in both areas. Natural change (an excess of births over deaths) has generally been increasing over time, although the more recent evidence suggests that this trend may now be reversing (with slightly more deaths than births recorded in 2014/15). Over the full 2005-15 period, the number of births was (on average) 1,620 higher than the number of deaths each year in the Peterborough HMA, with an average of 120 in Boston.

2.15 When looking at migration, the data for the Peterborough HMA shows an average level of net migration of about 3,300 people per annum (with virtually all of this being international migration and a net in-migration of only 40 people per annum on average from other parts of the country). In Boston, migration has averaged around 800 people per annum (net) – this figure includes net international in-migration of 1,270 people and moves to other parts of the country averaging about 480 per annum. In both areas, levels of migration have generally been lower in the most recent past; over the last five years (2010-15) net migration to the Peterborough HMA averaged 2,500 people per annum, compared with the 10-year trend of 3,300; in Boston, these figures are 340 and 790 respectively.

2.16 Other changes are quite small and the data also shows a small negative level of UPC. This latter finding would suggest that ONS may have previously over-estimated migration and population growth in the two areas – this could potentially have an impact on forward projections. The implication of UPC for housing need is discussed later in this section.

Figure 2.1: Components of population change, mid-2005 to mid-2015 – Peterborough HMA



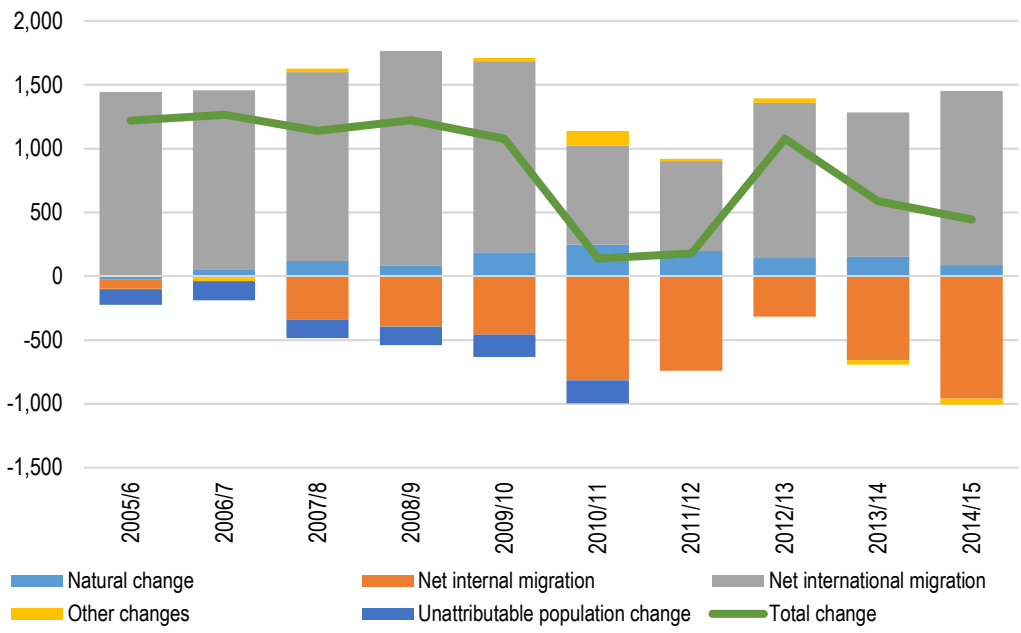
Source: ONS

Figure 2.2: Components of population change, mid-2005 to mid-2015 – Peterborough HMA

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2005/6	1,051	-321	4,902	188	5	5,825
2006/7	1,183	76	4,274	173	28	5,734
2007/8	1,581	652	4,158	58	-24	6,425
2008/9	1,493	12	3,728	-304	-54	4,875
2009/10	1,897	-351	3,454	92	-166	4,926
2010/11	1,977	294	2,353	-100	-452	4,072
2011/12	1,866	-541	1,332	-272	0	2,385
2012/13	1,751	147	2,369	428	0	4,695
2013/14	1,876	88	2,771	515	0	5,250
2014/15	1,531	379	3,458	-102	0	5,266

Source: ONS

Figure 2.3: Components of population change, mid-2005 to mid-2015 – Boston



Source: ONS

Figure 2.4: Components of population change, mid-2005 to mid-2015 – Boston

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2005/6	-25	-74	1,443	-3	-122	1,219
2006/7	54	-4	1,401	-35	-150	1,266
2007/8	120	-340	1,480	27	-147	1,140
2008/9	81	-393	1,684	-3	-146	1,223
2009/10	187	-457	1,498	25	-177	1,076
2010/11	248	-818	774	116	-180	140
2011/12	196	-741	706	17	0	178
2012/13	141	-317	1,217	36	0	1,077
2013/14	151	-660	1,132	-35	0	588
2014/15	87	-960	1,364	-47	0	444

Source: ONS

Demographic Evidence of Housing Need – Start Point

2.17 The PPG [2a-015] states that *'household projections published by the Department for Communities and Local* Government *should provide the starting point estimate of overall housing need. The household projections are produced by applying projected household representative rates to the population projections published by the Office for National Statistics. Projected household representative rates are based on trends observed in Census and Labour Force Survey data'.*

2.18 The most up-to-date projections are the 2014-based CLG household projections published in July 2016. These projections were underpinned by ONS (2014-based) subnational population projections (SNPP) – published in May 2016. The table below sets out levels of household growth expected by the CLG household projections in the 2011-36 period. Data is also provided for relevant regions and England for comparative purposes.

2.19 Across the whole study area, the CLG household projections show household growth of about 52,200 – this is a 25% increase; below the equivalent figure for the East of England region (27%) but above both the East Midlands (21%) and England (24%). Growth is projected to be highest in the Peterborough HMA and particularly within the City of Peterborough.

Figure 2.5: Household change 2011 to 2036 (2014-based CLG household projections)

Area	Households 2011	Households 2036	Change in households	% change
Peterborough	74,356	95,283	20,927	28.1%
Rutland	15,159	17,621	2,462	16.2%
South Holland	37,320	45,787	8,467	22.7%
South Kesteven	57,521	72,191	14,670	25.5%
Peterborough HMA	184,356	230,882	46,526	25.2%
Boston	27,276	32,912	5,636	20.7%
Study area	211,632	263,794	52,162	24.6%
East (region)	2,429,904	3,092,239	662,335	27.3%
East Midlands	1,897,445	2,304,844	407,399	21.5%
England	22,103,878	27,462,793	5,358,915	24.2%

Source: CLG household projections

2.20 Data from the 2014-based projections can be compared with equivalent information from the previous release (2012-based CLG household projections) – this is shown in the table below. Overall, it is clear that the more recent projections show a lower level of household growth across the two HMAs (although figures are higher in South Kesteven and to a lesser extent Rutland). Across the study area, the 2012-based projections show household growth some 5% above the figures from the more recent release.

Figure 2.6: Household change 2011 to 2036 (comparing 2012- and 2014-based CLG household projections)

Area	2012-based	2014-based	Difference (2014-based – 2012-based)
Peterborough	22,304	20,927	-1,377
Rutland	2,376	2,462	86
South Holland	10,122	8,467	-1,655
South Kesteven	13,295	14,670	1,375
Peterborough HMA	48,097	46,526	-1,571
Boston	6,579	5,636	-943
Study area	54,676	52,162	-2,514

Source: CLG household projections

2.21 Whilst the 2014-based data is the latest 'official' population projection and therefore forms the start point for analysis in line with the PPG, it is worth testing the assumptions underpinning the projection to see if it is broadly reasonable in the local context – this involves considering both the population projections (the SNPP from ONS) and also the way CLG have converted this data into households. The analysis below initially considers the official population projections, before moving on to consider past trend data in more detail, and also data released since the population projections were published (in particular, ONS has subsequently published new mid-year population estimates for 2015).

2014-based Subnational Population Projections (SNPP)

2.22 The latest SNPP were published by ONS on the 25th May 2016. They replaced the 2012-based projections. Subnational population projections provide estimates of the future population of local authorities, assuming a continuation of recent local trends in fertility, mortality and migration which are constrained to the assumptions made for the 2014-based national population projections. The new SNPP are largely based on trends in the 2009-14 period (2008-14 for international migration trends).

2.23 They are not forecasts and do not attempt to predict the impact that future government or local policies, changing economic circumstances or other factors might have on demographic behaviour. The primary purpose of the subnational projections is to provide an estimate of the future size and age structure of the population of local authorities in England. These are used as a common framework for informing local-level policy and planning in a number of different fields as they are produced in a consistent way.

Overall Population Growth

2.24 The table below shows projected population growth from 2011 to 2036 in each of the two HMAs, local authorities and a range of comparator areas. The data shows that the population of the study area is projected to grow by around 98,900 people; this is a 19% increase –above that projected across England as a whole (18%) and between the figures for the two relevant regions. Population growth is projected to be strongest in Peterborough and weaker in Rutland.

Figure 2.7: Projected population growth (2011-2036) – 2014-based SNPP				
Area	Population 2011	Population 2036	Change in population	% change
Peterborough	184,457	226,360	41,903	22.7%
Rutland	37,581	40,884	3,303	8.8%
South Holland	88,390	104,591	16,201	18.3%
South Kesteven	134,125	160,293	26,168	19.5%
Peterborough HMA	444,553	532,128	87,575	19.7%
Boston	64,615	75,978	11,363	17.6%
Study area	509,168	608,106	98,938	19.4%
East (region)	5,862,418	7,113,096	1,250,678	21.3%
East Midlands	4,537,448	5,270,957	733,509	16.2%
England	53,107,169	62,403,948	9,296,779	17.5%

Source: ONS and demographic projections

Alternative Demographic Scenarios

2.25 The SNPP is based on short term migration trends (2009-14 for internal migration and 2008-14 for international migration) with figures being constrained to national totals in the ONS national population projections. However, it is noted that levels of migration and population growth have been variable over time, and typically lower in more recent years. On this basis it would be reasonable to consider alternative (sensitivity) scenarios – such an approach is set out in para 2a-017 of the PPG which states *'plan makers may consider sensitivity testing, specific to their local circumstances, based on alternative assumptions in relation to the underlying demographic projections…'.*

2.26 The sensitivity scenarios take account of longer-term migration trends and also the 'unattributable' component of population change within ONS population data for the 2005-11 period. Additionally, data from the ONS 2015 mid-year population estimates (MYE) is considered. The analysis below therefore considers three potential sensitivities to the figures. These can be described as:

- Implications 2015 mid-year population data – 2014-based SNPP (+MYE)
- Implications of 10-year migration trends – 10-year migration
- Implications of Unattributable Population Change (UPC) and 10-year migration trends – 10-year migration (+UPC)

2014-based SNPP (+MYE)

2.27 This projection takes assumptions from the 2014-based SNPP, but overwrites the population projection figures for 2015 by those in the ONS MYE (by age and sex). Moving forward from 2015, this sensitivity uses the same birth and death rates as contained in the 2014-based SNPP and the actual projected migration figures (by age and sex). Due to age structure differences in the MYE compared to the projection, this does mean that population growth from 2015 onwards does not exactly match that in the actual projections as published.

10-year migration

2.28 This projection uses information about migration levels in the 10-year period (2005-15); the scenario therefore includes the most up-to-date MYE figures (for 2015). The projection does not just look at the migration figures and roll these forward but recognises that migration can be variable over time as the age structure changes. With international migration, this projection also takes account of the fact that ONS are projecting for international net migration to decrease in the longer-term.

2.29 To overcome the issue of variable migration, the methodology employed looks at the share of migration in each local authority compared to the share in the period feeding into the 2014-based SNPP (which is 2009-14 for internal migration and 2008-14 for international migration). Where the share of migration is higher in the 10-year period, the projection applies an upward adjustment to migration, and vice versa.

2.30 Whilst looking at migration trends over the past 10-years has emerged as an 'industry standard' when assessing demographic needs, it does need to be remembered that any change to the internal migration assumptions would have implications for population and household projections elsewhere – it would mean that any increase would mean that there needs to be a corresponding decrease to the assumptions applied by other local authorities. Given that there is internal migration (both in- and out-) to/from the HMA from all parts of the UK, undertaking a full analysis of the implications for other areas would be technically and practically impossible to achieve.

2.31 Hence whilst it is considered that an analysis of needs set against 10-year trends is a reasonable approach to take; it does come with some caution in terms of the impact on other areas; this is particularly crucial where the 10-year trends show substantially different outputs to the SNPP and CLG household projections.

10-year migration (+UPC)

2.32 As noted earlier there is a modest level of Unattributable Population Change (UPC) in the ONS data for the two HMAs. In this instance UPC is negative, this suggests that the components of change feeding into the SNPP may over-estimate migration and population growth.

2.33 Whilst making an adjustment for UPC could be an alternative scenario, it is not considered, on its own, to be a robust alternative to the SNPP. The main reasons for this are that it is unclear if UPC is related to migration and more importantly, due to changes in the methods used by ONS to measure migration it is most probable that any errors are focused on earlier periods (notably 2001-6) and therefore a UPC adjustment for more recent data would not be appropriate. On this basis, whilst it is not considered that UPC should be included on its own as a projection to take forward into the modelling of objectively assessed need it is considered that there is merit in looking at UPC when also considering longer-term trends.

2.34 Hence, this sensitivity projection takes the outputs from the long-term (10-year) migration scenario and makes a further additional adjustment for UPC. For the purposes of analysis, it has been assumed that UPC is a one-off adjustment and takes account of the age structure as shown by ONS.

Outputs from different demographic projections

2.35 The table below shows the estimated level of population growth in the SNPP and the alternative projections developed. Taking the Peterborough HMA, the SNPP shows population growth (2011-36) of 19.7% - this figure increases slightly when more recent population and migration data is included in the modelling (i.e. to include 2015 MYE data). When looking at 10-year trends the projected population growth increases to 22.7% and with an adjustment for UPC the figure comes down very slightly, to show population growth of 22.6%. In Boston, the SNPP shows population growth (2011-36) of 17.6% - this figure decreases when more recent population and migration data is included in the modelling. When looking at 10-year trends the projected population growth increases to 22.6% and with an adjustment for UPC the figure comes down, to show population growth of 20.4%.

Figure 2.8: Projected population growth (2011-2036) – alternative scenarios – Peterborough HMA				
	Population 2011	Population 2036	Change in population	% change
2014-based SNPP	444,553	532,127	87,574	19.7%
2014-based SNPP (+MYE)	444,553	533,330	88,777	20.0%
10-year migration	444,553	545,552	100,999	22.7%
10-year migration (+UPC)	444,553	544,831	100,278	22.6%

Source: Demographic projections

Figure 2.9: Projected population growth (2011-2036) – alternative scenarios – Boston				
	Population 2011	Population 2036	Change in population	% change
2014-based SNPP	64,615	75,978	11,363	17.6%
2014-based SNPP (+MYE)	64,615	75,420	10,805	16.7%
10-year migration	64,615	79,235	14,620	22.6%
10-year migration (+UPC)	64,615	77,767	13,152	20.4%

Source: Demographic projections

2.36 The tables below show the same range of scenarios for each of the local authorities. It is notable that the highest level of population growth in most areas is as shown in a 10-year migration based scenario; the only exception to this is in South Kesteven where the latest official projections are slightly higher.

Figure 2.10: Projected population growth (2011-2036) – alternative scenarios – Peterborough				
	Population 2011	Population 2036	Change in population	% change
2014-based SNPP	184,457	226,360	41,903	22.7%
2014-based SNPP (+MYE)	184,457	227,603	43,146	23.4%
10-year migration	184,457	232,249	47,792	25.9%
10-year migration (+UPC)	184,457	234,396	49,939	27.1%

Source: Demographic projections

Figure 2.11: Projected population growth (2011-2036) – alternative scenarios – Rutland				
	Population 2011	Population 2036	Change in population	% change
2014-based SNPP	37,581	40,884	3,303	8.8%
2014-based SNPP (+MYE)	37,581	41,195	3,614	9.6%
10-year migration	37,581	44,811	7,230	19.2%
10-year migration (+UPC)	37,581	43,958	6,377	17.0%

Source: Demographic projections

Figure 2.12: Projected population growth (2011-2036) – alternative scenarios – South Holland				
	Population 2011	Population 2036	Change in population	% change
2014-based SNPP	88,390	104,591	16,201	18.3%
2014-based SNPP (+MYE)	88,390	104,633	16,243	18.4%
10-year migration	88,390	110,259	21,869	24.7%
10-year migration (+UPC)	88,390	109,395	21,005	23.8%

Source: Demographic projections

Figure 2.13: Projected population growth (2011-2036) – alternative scenarios – South Kesteven				
	Population 2011	Population 2036	Change in population	% change
2014-based SNPP	134,125	160,293	26,168	19.5%
2014-based SNPP (+MYE)	134,125	159,899	25,774	19.2%
10-year migration	134,125	158,233	24,108	18.0%
10-year migration (+UPC)	134,125	157,082	22,957	17.1%

Source: Demographic projections

Appropriateness of alternative scenarios

2.37 Having developed a range of scenarios, it is worth briefly considering which are the most appropriate to use when taking the data forward into estimates of housing need. The 2014-based SNPP is the only projection that is directly linked to official projections and should therefore be given some credence. It is also the projection which is identified in the PPG as the start point for the analysis of housing need.

2.38 The projection linked to 10-year migration trends should be given some weight. As the analysis of housing need has developed over time, it has become common practice to consider 10-year trends as well as the most recent official projections. Given that in both the Peterborough and Boston HMAs there does appear to have been some short-term reduction in migration it is considered that this projection is a useful scenario to use when looking at housing need. This longer period might be described as being more 'stable'.

2.39 Adding in a UPC adjustment to the 10-year trends shows a slightly lower projected level of population growth (particularly in Boston) and is arguably also a projection that should be given consideration. However, it is noted that including UPC within projections is not an approach universally supported by planning inspectors. It is the case that any errors due to UPC may now be quite historic (and potentially associated with data prior to 2006). If the 'errors' are indeed historic, then they would only have a small impact on the 10-year migration trend projection, given that this looks at data in the 2005-15 period. Hence, on balance, it is not recommended that the UPC adjustment is fed into conclusions about OAN.

2.40 Overall, the modelling to follow continues to look at the four scenarios developed. However, in drawing conclusions about a reasonable level of population growth to plan for, the official projections and those linked to 10-year trends (without a UPC adjustment) should be the main ones used to understand potential housing need. These two projections essentially set out a range of population growth (and hence housing need), in terms of the PPG, the latest official projections set the 'start point' for analysis.

Household Growth (Household Representative Rates (HRR))

2.41 Having studied the population size and the age/sex profile of the population the next step in the process is to convert this information into estimates of the number of households in the area. To do this the concept of Household Representative Rates (HRR) is used. HRRs can be described in their most simple terms as the number of people who are counted as heads of households (or in this case the more widely used Household Reference Person (HRP)).

2.42 On the 12th June 2016, CLG published a new set of (2014-based) household projections – the projections contain two core analyses. The Stage 1 household projections project HRRs based on data from the 1971, 1981, 1991, 2001 and 2011 Censuses with outputs for age, sex and marital status. For younger age groups greater weight was given in the CLG projections methodology to the dampened logistical trend than the simple logistics trend; the effect of which is to give greater weight to the shorter-term trends.

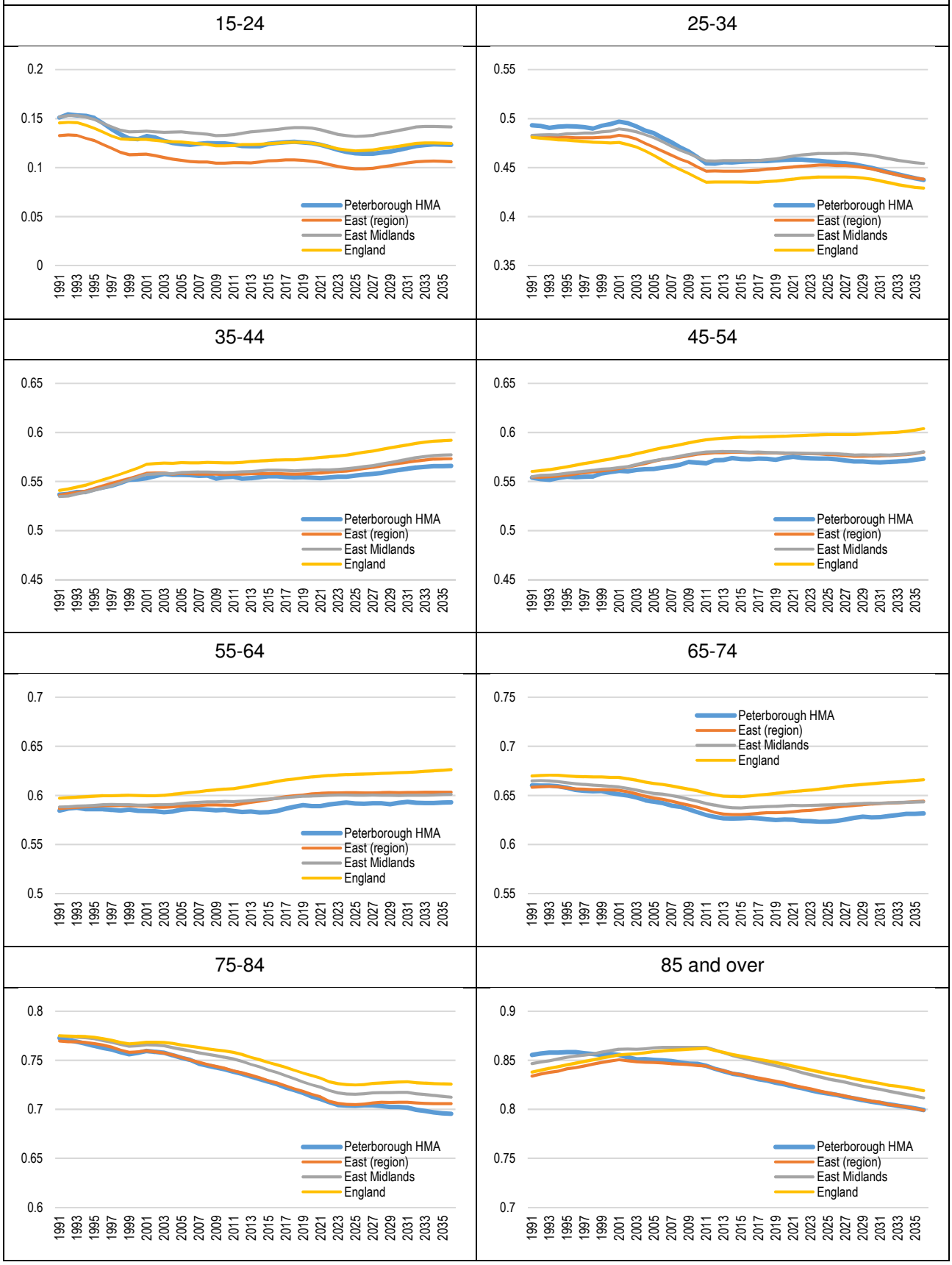
2.43 The Stage 2 household projections consider household types and the methodology report accompanying the projections is clear that these projections are based on just two data points – from the 2001 and 2011 Census. Overall outputs on total household growth are constrained to the totals from the Stage 1 Projections. This means that both sets of projections show the same level of overall household growth (when set against the last set of SNPP) but some of the age specific assumptions differ. Differences can however occur between the Stage 1 and 2 headship rates when modelled against different population projections (due to differences in the age structure).

2.44 Overall, it is considered that the Stage 1 projections should be favoured over the Stage 2 figures for the purposes of considering overall household growth; this is for two key reasons: a) the Stage 1 figures are based on a long-term time series (dating back to 1971 and using 5 Census data points) whereas the Stage 2 figures only look at two data points (2001 and 2011) and b) the Stage 2 figures are constrained back to Stage 1 values, essentially meaning that it is the Stage 1 figures that drive overall estimates of household growth in the CLG household projections themselves. The analysis to follow therefore focuses on Stage 1 figures.

2.45 The figures below shows how Stage 1 figures differ for different age groups. It is evident from the analysis that household formation amongst households in their late 20s and early 30s fell slightly over the 2001-11 decade. The projections are however showing that there will not be any notable further reduction (with any reduction only apparent after about 2021). The 2014-based household projections also expect household formation rates amongst older age groups to fall over time. Given improving life expectancy this 'trend' looks to be reasonable (as it would be expected that more people would remain living as couples).

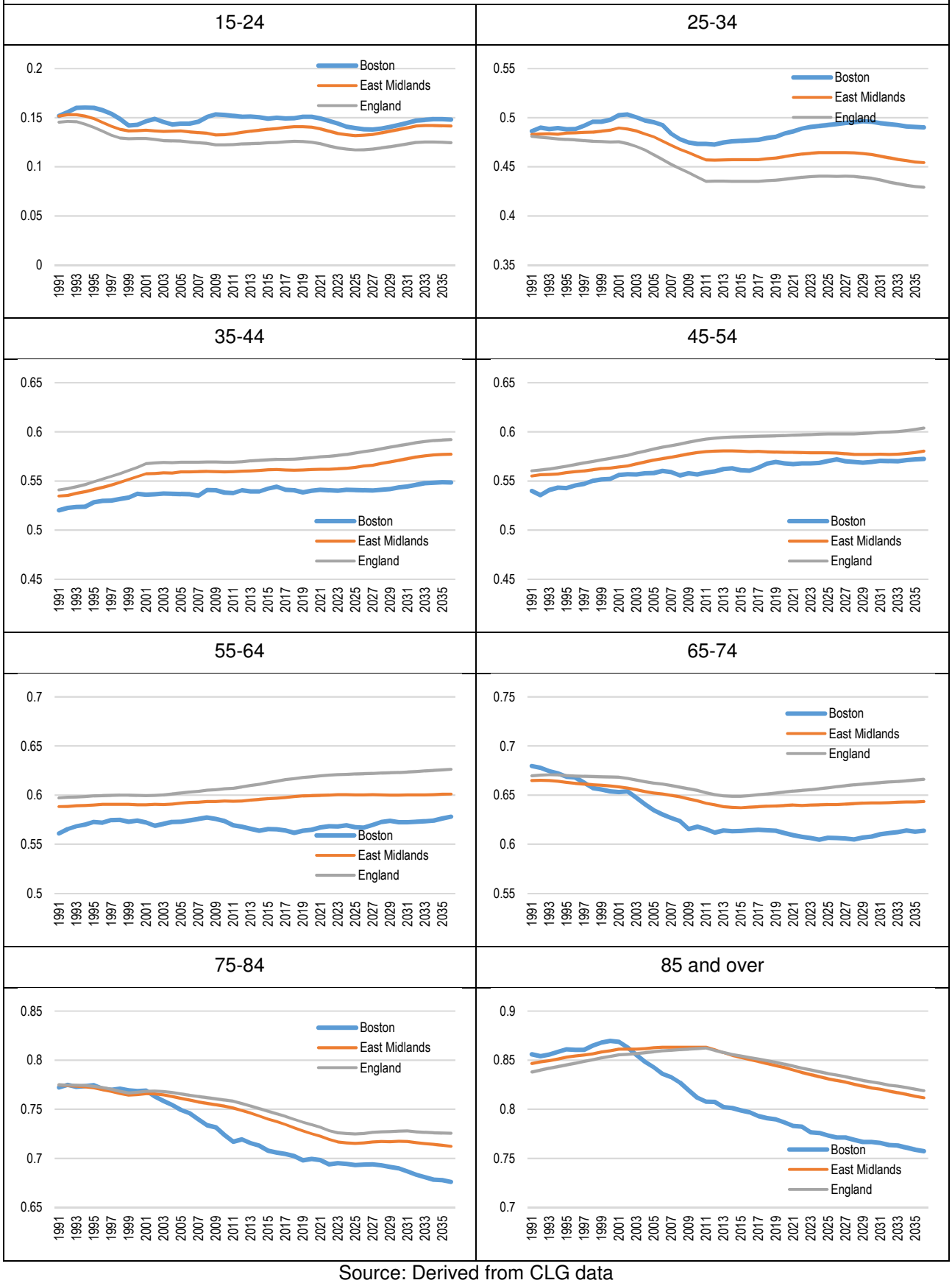
2.46 Data for individual local authorities is presented in Appendix 1. This generally shows similar patterns in different areas, although for Rutland a continued reduction in the HRR for people aged 25-34 is notable in comparison with other locations. This point is discussed further later in this section.

Figure 2.14: Projected household formation rates by age of head of household – Peterborough HMA



Source: Derived from CLG data

Figure 2.15: Projected household formation rates by age of head of household – Boston



Source: Derived from CLG data

Critical Review of Household Representative Rates

2.47 The headship rates in the 2014-based CLG household projections should not be used uncritically. Paragraph 2a-015 of the PPG is clear that the *'household projection-based estimate of housing need may require adjustment to reflect factors affecting local demography and household formation rates which are not captured in past trends'*. Essentially this is suggesting, where the projections include a suppression of household formation that some sort of adjustment should be made.

2.48 It is not straightforward to determine if the projections contain any level of suppression (either in the past or projected forward) given that household formation rates can be influenced by a range of factors. One person to recognise this was the late Alan Holmans in the September 2013 Town and Country Planning Association (TCPA) publication *'new estimates of housing demand and need in england, 2011 to 2031'* where he stated:

'The working assumption in this study is that a considerable part but not all of the 375,000 shortfall of households relative to trend was due to the state of the economy and the housing market. 200,000 is attributed to over-projection of households due to the much larger proportion of recent immigrants in the population, whose household formation rates are lower than for the population as a whole. This effect will not be reversed. The other 175,000 is attributed to the economy and the state of the housing market and is assumed to gradually reverse'.

2.49 Broadly what Mr Holmans was saying is that about half of changes to household formation are due to market factors and about half due to international migration. Whilst the international migration impact is not expected to change (in terms of household structures), any suppression as a result of the economy and housing market could improve in the future.

2.50 When looking specifically at data for the two HMAs, it is clear that the only age group where suppression can potentially be identified is for people aged 25-34. There is a downward trend in the headship rates of this group from 2001-11 although moving forward from 2011, the rate remains fairly flat (at least until 2021 in the case of the Peterborough HMA). However, it is not clear if the changes in the rates is due to market factors or international migration.

2.51 The analysis below seeks to understand the impact of international migration. At a local level it is difficult to use international migration figures because of the way such migration works – typically most international migrants start in a major city (e.g. London) and then filter out into other areas (and hence are registered by ONS as an internal migrant). Hence one way at looking at international migration is to consider changes to the Black and Minority Ethnic (BME) population. BME populations tend to have different household structures (typically larger households) and so this picks up on the point made by Mr Holmans.

2.52 The tables below show changes to the BME population in each of the age groups for which headship rate data is provided above (data for the White (British/Irish) population is also provided).

2.53 In the Peterborough HMA, this analysis shows an increase in the BME population of 32,700 people aged 15 and over in the 10-year period – a 164% increase. Some 38% (12,400 people) of this increase was in the age group 25-34. In contrast, the White (British/Irish) population aged 25-34 fell by around 9,100 people.

Figure 2.16: Changes to Black and Minority Ethnic and White (British/Irish) Population by age (2001-11) – Peterborough HMA						
	Black and Minority Ethnic			White (British/Irish)		
	Population 2001	Population 2011	Change	Population 2001	Population 2011	Change
15-24	4,306	10,653	6,347	40,085	41,807	1,722
25-34	4,791	17,169	12,378	48,106	39,002	-9,104
35-44	3,946	10,895	6,949	53,295	50,166	-3,129
45-54	2,853	7,018	4,165	51,210	54,486	3,276
55-64	1,770	3,605	1,835	41,536	50,941	9,405
65-74	1,467	1,732	265	33,614	39,210	5,596
75-84	667	1,198	531	22,081	25,237	3,156
85+	116	338	222	7,021	10,235	3,214
TOTAL	19,916	52,608	32,692	296,948	311,084	14,136

Source: Census (2001 and 2011)

2.54 In Boston, the analysis shows an increase in the BME population of 7,000 people aged 15 and over in the 10-year period – a 600%+ increase. Some 39% (2,800 people) of this increase was in the age group 25-34. In contrast, the White (British/Irish) population aged 25-34 fell by around 1,300 people.

Figure 2.17: Changes to Black and Minority Ethnic and White (British/Irish) Population by age (2001-11) – Boston						
	Black and Minority Ethnic			White (British/Irish)		
	Population 2001	Population 2011	Change	Population 2001	Population 2011	Change
15-24	287	1,818	1,531	5,558	5,809	251
25-34	249	3,002	2,753	6,528	5,220	-1,308
35-44	265	1,572	1,307	7,382	6,667	-715
45-54	142	1,123	981	7,673	7,624	-49
55-64	85	405	320	6,908	8,064	1,156
65-74	68	125	57	5,773	6,648	875
75-84	43	61	18	3,694	4,283	589
85+	9	23	14	1,312	1,602	290
TOTAL	1,148	8,129	6,981	44,828	45,917	1,089

Source: Census (2001 and 2011)

2.55 From this it is clear that a major part of the changes in the headship rates of the 25-34 age group is likely to be due to international migration and growth in BME communities. Given that moving forward from 2011 the projections are expecting headship rates in this age group to stabilise; there is no suggestion of any suppression being built into the projections.

2.56 Data about changes to BME communities for individual local authorities (within the Peterborough HMA) can be found in Appendix 1. This tends to show the same sort of patterns; the exception is arguably Rutland, where the growth in the BME population has been more modest and the number of people from a BME background is relatively low. Rutland also shows a reduction moving forward in the HRRs of people aged 25-34 (and little change in the 35-44 age group where most other areas see an increase). On balance, whilst the data does not point to any particular suppression of household formation moving forward, it is considered that there is a case to look at the HRRs in Rutland, with a suggested response provided below.

2.57 In looking at potential suppression amongst the 25-34 age group it is also useful to look at the 35-44 age group (noting that, for example, people aged 25-34 in 2011 will be aged 35-44 by 2021). The 35-44 age group shows little change in headship rates in the past and continuing in the future (slightly upwards in the future). On this basis there is no significant evidence of suppression in this age group either in the past or projected forward. This analysis therefore suggests that the extent to which there is a suppression in the 25-34 age group, it is expected that this will not remain as a suppressed household formation – the analysis would suggest that all of the households who might be expected to form will do so, it's just that some of this formation might be delayed (i.e. households who might historically been expected to form when aged 25-34 will now form when aged 35-44). Overall, therefore, levels of household growth will over a period of time fully reflect the needs of the local population with no suppression being evident in the long-term.

2.58 Since Holmans work was published there have been further articles on the topic of household formation rates. One of note is *new estimates of housing requirements in england, 2012 to 2037* (Neil McDonald and Christine Whitehead – TCPA – November 2015). In this it is stated that:

'The 2012-based projections, which use the 2011 Census and up-to-date population figures, are more immediately relevant and more strongly based than earlier estimates. The latest projections can therefore be taken as a reasonable indication of what is likely to happen to household formation rates if recent trends continue. This is because, although economic growth might be expected to increase the household formation rate, there are both longer-term structural changes and other factors still in the pipeline (such as welfare reforms) that could offset any such increase'

2.59 Whilst this refers to the 2012-based projections, it is the case that the household formation rates in the 2014-based figures are almost identical. Overall, on the basis of the evidence available, it seems unlikely that the 2014-based household formation rates include any degree of suppression and can therefore realistically be used to assess levels of household growth when set against population projections.

2.60 Returning to Rutland, the data presented in Appendix 1 shows some future reduction in the HRRs of the 25-34 age group and little change for those aged 35-44. Additional data suggests that this may reflect some degree of supressed household formation in this area. To deal with this, a new set of HRRs has been developed (just for Rutland) where moving forward from 2014 (the base date of official projections), the rates track regional trends. This has a modest upward impact on household growth and ensures that the projections do not build in any future suppression of household formation.

Housing Need

2.61 The series of tables below bring together outputs in terms of household growth and housing need using the 2014-based headship rates (with an uplift for Rutland) and the full range of scenarios developed. To convert households into dwellings the data includes an uplift to take account of vacant homes. This has been based on 2016 Council Tax Register (CTR) data with a summary of the key statistics shown below. This shows that the total number of dwellings is between 1.6% and 3.2% higher than the number of occupied homes (which is taken as a proxy for households) and hence household growth figures are uplifted by these figures to provide an estimate of housing need (figures are applied on a local authority basis). It is assumed that such a level of vacant homes will allow for movement within the housing stock and includes an allowance for second homes.

Figure 2.18: Vacant homes (Council Tax data)

	Peterborough	Rutland	South Holland	South Kesteven	Boston
Dwellings	82,709	16,903	39,940	62,766	29,189
Second Homes	162	161	155	281	78
Other vacant homes	1,151	364	587	1,182	394
Total vacant	1,313	525	742	1,463	472
Total occupied	81,396	16,378	39,198	61,303	28,717
Vacancy allowance	1.6%	3.2%	1.9%	2.4%	1.6%

Source: CLG

2.62 It is notable that vacancy rates (excluding second homes) in Rutland are above the national average (Rutland – 2.2%, England – 1.9%). Arguably, it could be assumed that vacancy might reduce over time (e.g. to return to the national average), and this would reduce assessed levels of need. This report does not model any improvement to vacancy rates although this point should be noted when interpreting the figures.

2.63 The approach (i.e. to use CTR data) differs from previous assessments of need in both HMAs (which were largely based on Census data (along with some adjustments in Rutland to take account of MoD properties)). Whilst the CTR data shows lower levels of vacancy (and therefore has a small downside impact on housing need) it is considered to be the most appropriate source as it is up-to-date and will reflect changes seen over the past few years. Additionally, as the measurement of housing need has developed over time, the CTR has become the main source for looking at a vacancy allowance.

2.64 In the Peterborough HMA, the analysis shows an overall housing need for 1,905 dwellings per annum when using the 2014-based SNPP as the underlying population projection. This figure is largely unchanged when the assumptions include MYE data for 2015. With long-term (10-year) migration assumptions the housing need is shown to be for some 2,109, and with a UPC adjustment this figure is reduced to 2,040 dwellings per annum.

2.65 On the basis of the information below it is concluded that the demographic need for housing falls in the range of 1,905-2,109 dwellings per annum. The bottom end of the range being based on official projections and the upper end being informed by 10-year trend data (excluding any adjustment for UPC).

2.66 Although not presented in the tables below, the uplift to HRRs for Rutland does slightly inflate the 'start point' need from the official projections (2014-based SNPP in the tables below). For the whole of the Peterborough HMA, excluding this uplift would reduce this projection by 6 dwellings per annum. Whilst this is a negligible difference it should be noted for the purposes of completeness.

Figure 2.19: Projected housing need – range of demographic based scenarios and 2014-based headship rates (uplift for Rutland) – Peterborough HMA

	Households 2011	Households 2036	Change in households	Per annum	Dwellings (per annum)
2014-based SNPP	184,346	231,039	46,693	1,868	1,905
2014-based SNPP (+MYE)	184,346	231,444	47,098	1,884	1,921
10-year migration	184,346	236,031	51,685	2,067	2,109
10-year migration (+UPC)	184,346	234,360	50,015	2,001	2,040

Source: Demographic projections

2.67 In Boston, the analysis shows an overall housing need for 229 dwellings per annum when using the 2014-based SNPP as the underlying population projection. This figure is largely unchanged when the assumptions include MYE data for 2015. With long-term (10-year) migration assumptions the housing need is shown to be for some 281, and with a UPC adjustment this figure is reduced to 259 dwellings per annum.

2.68 On the basis of the information below it is concluded that the demographic need for housing falls in the range of 229-281 dwellings per annum. The bottom end of the range being based on official projections and the upper end being informed by 10-year trend data (excluding any adjustment for UPC).

Figure 2.20: Projected housing need – range of demographic based scenarios and 2014-based headship rates – Boston

	Households 2011	Households 2036	Change in households	Per annum	Dwellings (per annum)
2014-based SNPP	27,275	32,906	5,631	225	229
2014-based SNPP (+MYE)	27,275	32,749	5,474	219	223
10-year migration	27,275	34,190	6,915	277	281
10-year migration (+UPC)	27,275	33,650	6,375	255	259

Source: Demographic projections

2.69 The tables below show the same information for individual local authorities. In all areas other than South Kesteven, the highest projection is that linked to 10-year migration trends. On the basis of the analysis and a view about the most robust projection it is concluded that the annual housing need linked to 2014-based CLG household formation rates (plus an uplift for Rutland) in each local authority is:

- Peterborough – 948
- Rutland – 159
- South Holland – 433
- South Kesteven – 601
- Peterborough HMA – 2,141
- Boston – 281
- Study area – 2,422

2.70 In drawing these conclusions, the highest of the projections has been used in each local authority (and these have been summed to arrive at HMA and study area totals). Arguably this approach is not correct, given that it is a 'mix and match' of different scenarios; however, given a general Government push to 'boost' the supply of housing, it is considered to be a reasonable response to the data outputs.

2.71 The use of a different scenario only impacts on the figures for the Peterborough HMA (where the SNPP 'start point' is higher than 10-year trends in South Kesteven). Adding the highest of the local authority totals increases the HMA need by 32 dwellings per annum (a 1.5% increase). This is a fairly minor difference, but one which will not be underestimating need at the HMA level, or for any individual local authority.

2.72 Although not presented in the tables below, the uplift to HRRs applied to Rutland data sees the assessment of need increase by around 5%-6% when compared with using the 2014-based HRRs as published. The start point (2014-based SNPP) from official projections is actually 102 dwellings per annum rather than the 108 figure presented below.

Figure 2.21: Projected housing need – range of demographic based scenarios and 2014-based headship rates – Peterborough

	Households 2011	Households 2036	Change in households	Per annum	Dwellings (per annum)
2014-based SNPP	74,354	95,290	20,936	837	851
2014-based SNPP (+MYE)	74,354	95,819	21,465	859	872
10-year migration	74,354	97,667	23,313	933	948
10-year migration (+UPC)	74,354	97,434	23,081	923	938

Source: Demographic projections

Figure 2.22: Projected housing need – range of demographic based scenarios and 2014-based headship rates (with uplift) – Rutland					
	Households 2011	Households 2036	Change in households	Per annum	Dwellings (per annum)
2014-based SNPP	15,155	17,772	2,617	105	108
2014-based SNPP (+MYE)	15,155	17,747	2,592	104	107
10-year migration	15,155	19,001	3,846	154	159
10-year migration (+UPC)	15,155	18,539	3,384	135	140

Source: Demographic projections

Figure 2.23: Projected housing need – range of demographic based scenarios and 2014-based headship rates – South Holland					
	Households 2011	Households 2036	Change in households	Per annum	Dwellings (per annum)
2014-based SNPP	37,316	45,782	8,466	339	345
2014-based SNPP (+MYE)	37,316	45,792	8,476	339	345
10-year migration	37,316	47,948	10,632	425	433
10-year migration (+UPC)	37,316	47,472	10,156	406	414

Source: Demographic projections

Figure 2.24: Projected housing need – range of demographic based scenarios and 2014-based headship rates – South Kesteven					
	Households 2011	Households 2036	Change in households	Per annum	Dwellings (per annum)
2014-based SNPP	57,521	72,194	14,673	587	601
2014-based SNPP (+MYE)	57,521	72,087	14,566	583	597
10-year migration	57,521	71,415	13,894	556	569
10-year migration (+UPC)	57,521	70,915	13,394	536	549

Source: Demographic projections

The impact of Brexit for population and household projections

2.73 One key question for this assessment is whether or not the United Kingdom leaving the European Union ('Brexit') will have any impact on future migration and population growth, and hence housing need, over the period to 2036. As a preamble, it should be stressed that the impact of Brexit is clearly unknown and so the analysis to follow is mainly discursive, highlighting a series of issues.

2.74 Initially, it is observed that one of the key parts of the Brexit 'pledge' is to reduce levels of immigration to the UK. Given that Brexit will impact on EU migration, an initial analysis considers trends in migration from EU countries. The table below shows net migration to the UK from 2010 to 2015 (figures are all for the year to December). This shows an average net migration of about 250,000 people, with this figure having been on the rise since 2012; the data also shows that an average of 40% of net migrants are from EU countries, and the remaining 60% from the rest of the World – the proportion of migrants from the EU has however been steadily rising over time.

2.75 This analysis would suggest that any reductions to EU migration will only impact on about two-fifths of the migrants seen to the UK in a typical year.

Figure 2.25: Net migration to the United Kingdom by broad location (2010-2015)					
	British	EU (not-British)	All other	Total *	% EU (excluding British)
2010	-43,000	77,000	217,000	256,000	26%
2011	-70,000	82,000	204,000	205,000	29%
2012	-63,000	82,000	157,000	177,000	34%
2013	-57,000	123,000	142,000	209,000	46%
2014	-55,000	174,000	194,000	313,000	47%
2015	-40,000	184,000	189,000	334,000	49%
Average	-55,000	120,000	184,000	249,000	40%

Source: ONS (* totals do not exactly match the sum of the figures due to adjustments made by ONS as a result of 2011 Census data)

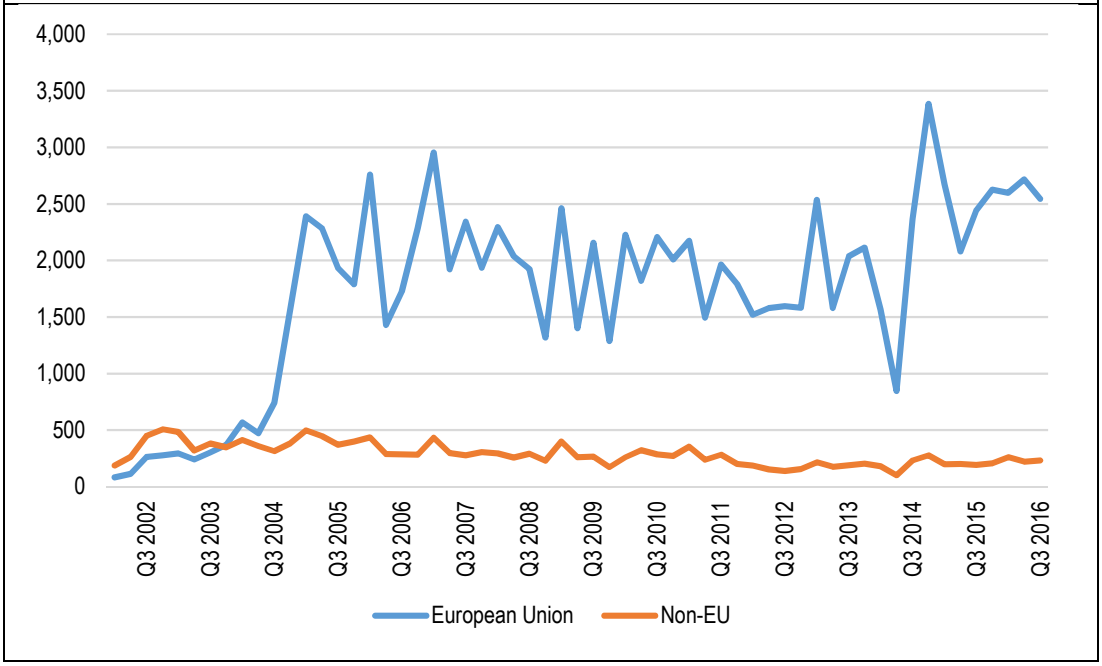
2.76 Data at a local authority level is difficult to obtain and below is data taken from the Census about migrants in the year to 2011 – these figures only cover in-migration and not net flows (as in the table above). This shows that relative to other areas, the study area sees a substantially higher proportion of EU in-migrants, totalling 73% compared with 42% nationally. This would suggest that the migration impact of Brexit might be greater in the study area than other locations (although it should be remembered that this data is only based on one year of information, and should therefore be treated with some caution).

Figure 2.26: International in-migration (2011) – Census data				
		EU in-migration	Non-EU in-migration	Total in-migration
Peterborough	Population	1,974	767	2,741
	% of population	72%	28%	100%
Rutland	Population	148	197	345
	% of population	43%	57%	100%
South Holland	Population	721	147	868
	% of population	83%	17%	100%
South Kesteven	Population	511	364	875
	% of population	58%	42%	100%
Peterborough HMA	Population	3,354	1,475	4,829
	% of population	69%	31%	100%
Boston	Population	924	141	1,065
	% of population	87%	13%	100%
Study area	Population	4,278	1,616	5,894
	% of population	73%	27%	100%
East (region)	% of population	44%	56%	100%
East Midlands	% of population	46%	54%	100%
England	% of population	42%	58%	100%

Source: Census 2011

2.77 The level of EU migration can to some extent be monitored through National Insurance Number registration (NINo), although this is not a complete picture of migration (as it will only capture those registering). The figure below shows quarterly changes in registrations (across the whole study area) back to 2002 and up to Q3 2016. This shows that people from the EU make up the majority of registrations, with the main change starting about 2004/5. It is recommended that the Councils monitor this data to see if there are any substantial changes moving forward.

Figure 2.27: NINo Registrations to Adult Overseas Nationals Entering The UK – Peterborough HMA and Boston



Source: Department of Work and Pensions

2.78 The analysis above has only considered people coming to the UK; and not outflows, which are crucial in understanding net migration (which will ultimately be the driver of population growth). It is unclear how Brexit might impact outflows (e.g. whether or not there will be a reduction in British Nationals moving abroad (possibly in retirement)). For all of these reasons, caution should be exercised when interpreting the data.

2.79 The final issue to consider are the assumptions relating to international migration underpinning the latest (2014-based) ONS projections; this is important as this source drives assessments of need at a local level. The table below shows that ONS were projecting net international migration to be around 329,000 in 2014/15 (a figure close to the actual estimated level in MYE); moving forward they assume that net in-migration will reduce to 185,000 by 2020/21 (this figure is projected moving forward from that date); the 185,000 represents a 45% reduction on the 2015 net level and is 26% down on the 2010-15 average shown above.

Figure 2.28: Projected net migration – United Kingdom	
Period	Projected net migration
2014/15	329,000
2015/16	256,000
2016/17	232,000
2017/18	226,000
2018/19	206,000
2019/20	196,000
2020/21	185,000

Source: 2014-based ONS national population projections

2.80 On the basis of this analysis (i.e. reflecting the fact that not all of the international migration is EU related and the fact that ONS are already projecting a reduction in international migration) it is difficult to confidently say what impact Brexit will have on migration levels, population growth and housing need. At the present time it is considered that using the latest official projections (including with adjustments such as 10-year migration trends) will provide the best estimates of future need. However, the figures should be kept under review, should there be any notable changes as a result of the UK leaving the EU. The next set of ONS projections to be produced (2016-based) will need to reflect a view about the impact of Brexit. These projections are expected in Spring 2018, and at that time the Councils should consider the implications of Brexit on housing numbers. Clearly there are other issues at play; including how long it takes to actually leave the EU, and what deal is struck in terms of the movement of labour.

Trend-Based Demographic Projections: Key Messages

- The start point for assessing housing need in line with the PPG is the most recent official household projections; these are the 2014-based CLG projections which suggest a need for around 2,128 dwellings per annum to be provided (2011-36) – Peterborough HMA – 1,899, Boston – 229. These projections were underpinned by the most recent ONS subnational population projections (SNPP – also 2014-based).

- Alternative projections based on long-term (10-year) trends were developed (including more up-to-date information from ONS mid-year population estimates to 2015). The housing need linked to 10-year migration trends is for 2,390 dwellings per annum (2011-36) – Peterborough HMA – 2,109, Boston – 281. Whilst this projection is considered sound (in technical terms), it should be noted that there are potential implications for needs in other areas. The 10-year projection assumes a higher level of net in-migration and population growth; this higher level means that the HMAs would be drawing population from other areas, which would then have lower needs (lower than projected by ONS/CLG). This point should be noted when interpreting alternative demographic scenarios.

- When looking at the data about household representative rates (HRRs) underpinning the 2014-based CLG household projections it was observed that the 25-34 age group had reduced slightly in the 2001-11 period, although this trend was not projected to continue into the future. When considering changes to the population structure in this age group (growth in BME communities) and other age groups within the projections (e.g. projected increases in headship for those aged 35-44) there was no evidence of any suppression of household formation and hence the 2014-based CLG projections can readily be used as published to translate population figures into household growth and housing need. The one exception was in the case of Rutland, an alternative view of future HRRs was modelled; tracking regional trends post 2014 for the 25-34 and 35-44 age groups (this uplift is included in the 10-year migration figures discussed above).

- Overall, the analysis identifies a demographic based need for 2,422 dwellings per annum across the study area (2,141 in the Peterborough HMA and 281 in Boston). This is based on summing the highest projection in each local authority, and is an approach which will not under-estimate the demographic-based need for housing.

3. Future Employment and the Link to Housing

Introduction

3.1 The PPG sets out that consideration should be given to future economic performance in drawing conclusions on the overall need for housing. Where the evidence suggests that a different level of migration might be needed than seen in past trends in order to support economic growth, consideration should be given to adjusting the spatial distribution of housing. Specifically, the Guidance [2a-018] outlines that:

'Plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population in the housing market area. Any cross-boundary migration assumptions, particularly where one area decides to assume a lower internal migration figure than the housing market area figures suggest, will need to be agreed with the other relevant local planning authority under the duty to cooperate. Failure to do so will mean that there would be an increase in unmet housing need.'

And that:

'Where the supply of working age population that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns (depending on public transport accessibility or other sustainable options such as walking or cycling) and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing or infrastructure development could help address these problems.'

3.2 The actual wording of the PPG needs to be carefully considered. It is clear that understanding the link between jobs and population/housing is an important part of looking at the OAN, however, the PPG is clear that this issue is one in relation to the location of housing rather than overall housing numbers per se. Indeed, the wording of the PPG shows a notable departure from the wording in the draft PPG (of August 2013) where it was stated that *'in such circumstances [a shortfall in labour supply], plan makers will need to consider increasing their housing numbers to address these problems'*.

3.3 This is a clear, conscious and logical change to the PPG between draft and final version. Clearly it would be illogical for an area to increase population growth above the levels shown in trend-based projections (and hence increase housing need) without consideration of the impact this would have on other locations – i.e. given that there is a finite level of population growth projected nationally (as informed by national population projections) any increase in one area would need to come with a commensurate decrease in other locations.

3.4 Despite the entirely logical wording in the PPG it is the case that a number of areas have sought to show a higher need linked to job growth than in trend-based projections; and this has often been done without consideration of the impact in other locations. Such an approach has been accepted by inspectors in some instances with the PAS technical advice note (para 8.2) noting for example that *'planning inspectors have interpreted this [the PPG] to mean that demographic projections should be tested against future jobs, to see if housing supply in line with the projections would be enough to support those future jobs. If that is not the case, the demographically projected need should be adjusted upwards accordingly.'*

3.5 To be clear, it appears from the PPG that the jobs/housing link is very much in relation to the locations of housing rather than the overall OAN. This position has support in the NPPF which in para 159 (bullet 1) states that the SHMA should *'identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which: - meets household and population projections, taking account of migration and demographic change'* [emphasis added].

3.6 Hence it is considered that any upward (or indeed downward) adjustment to the OAN as a result of job growth will need to be undertaken alongside a consideration of where the additional population will come from (or go to) and therefore may need to include proportionate adjustments to the need in other locations. This will particularly be the case where substantial mismatches between the locations of jobs and labour supply growth are identified.

3.7 It is however recognised that the NPPF seeks to *'boost significantly the supply of housing'* (para 47) and this is often used to support the 'need' for an uplift to housing numbers (often expressed as the OAN). This point does not seem right; the NPPF is clear of the need to boost housing supply, and such a boost is in relation to the low levels of delivery seen in the recent past – over the past 10-years (to 2015) the number of completions (in England) averaged about 130,000 per annum. This figure can be compared in light of the most recent (2014-based) CLG household projections which show household growth of about 210,000 per annum (2014-39) which once account is taken of vacant homes would arguably rise to approaching 220,000. Hence the 'boost' sought in the NPPF (and PPG) is to increase delivery to the sort of levels required by the growing population.

3.8 If every local authority planned (and delivered) on the basis of official projections, then the national OAN would be met; regardless of any consideration of the jobs/homes balance. It would still be the case that a number of authorities would be unable to meet their OAN (due to constraints); however, this is an issue to be dealt with through the Duty-to-Cooperate and not one of OAN.

3.9 Regardless of the discussion above, it is still considered that an understanding of the jobs/homes link is important. This will particularly be in areas where the evidence shows strong demographic growth (and weaker job growth) in one location and weak demographic growth (but strong job growth) in another. In such circumstances, 2a-018 of the PPG is logically used to consider the location of new housing, although this will to some extent be an issue for the plan making process; ensuring that the OAN is met across all areas but providing a spatial distribution that better fits the locations where job growth is forecast to occur.

3.10 It is also considered that there are some circumstances where an individual authority might consider a higher OAN due to job growth. A couple of examples are provided below:

a) In an area with low future population growth and potentially a minimal change in the economically active population (due to an ageing population). In such circumstances it may be sensible to suggest an above trend level of housing delivery to encourage a slightly younger age structure and to support economic growth.
b) In an area with a known 'shock' to the employment base such as a major new employment site which will generate many more jobs above a baseline forecast position. In such a case it may be reasonable to consider that more homes will be needed to accommodate the growing workforce (although recognising commuting patterns and the 'draw' of workers will also be important along with an understanding of the displacement impacts of sizeable development)

3.11 In such circumstances an 'economic-based' approach to looking at housing need may be appropriate. However, it would still be the case that any uplift would need to be considered in the light of the impact in other areas; for example, if an economic-based approach suggests an increase in population (and related housing need) of say 2,000 people (over and above the levels in trend-based demographic projections) then some consideration of where the additional population will come from will be necessary, and assumptions about growth will need to be agreed with the relevant authorities through the plan making process.

3.12 Of course, it is arguable that an opposite set of scenarios might point towards the lowering of housing need (i.e. strong population growth relative to likely job increases or known future job losses). This is again something that should be considered when looking at housing need in the round.

3.13 There is also an issue of scale to be considered when looking at moving away from trend-based demographic projections. For example, a 20% uplift to housing need may be realistic and potentially deliverable (depending on local circumstances) but increases of say 50%+ may not be. To some extent this will be a matter of judgement, although the PPG is clear [2a-003] that *'Assessing development needs should be proportionate and does not require local councils to consider purely hypothetical future scenarios, only future scenarios that could be reasonably expected to occur'.*

3.14 Finally, the general issue of the link between jobs and population/housing is complicated by the number of assumptions that need to be made to understand this link. This will include the assumptions to be made about commuting and double jobbing (the proportion of people with more than one job). However, this biggest issue is about assumptions with regard to how employment or economic activity rates might change in the future. A range of different assumptions are available and these can show radically different outputs (these approaches are discussed in more detail later in this section).

3.15 Overall, whilst it is possible to use job growth as a way of considering the OAN, this should be treated with extreme caution. If an increase in housing need is suggested, then this will need to be supported by an understanding of the impact in other areas; any increase will need to be based on robust and locally specific assumptions (so far as this is possible) and the outputs of modelling should be proportionate and reflect a scenario that could reasonably be expected to occur. The link between jobs and homes is really rather complex and therefore to some extent any modelled outputs can only be considered as indicative.

PAS Technical Advice Note

3.16 The PAS Technical Advice Note (referred to briefly above) provides some relevant commentary about looking at the link between jobs and homes (in Section 8). This highlights that a standard approach where jobs are translated into housing by making assumptions (e.g. about commuting and changes to economic activity rates) *'will often produce invalid results'* [para 8.6]. The reason for this is highlighted as being due to the fact that *'economic forecasters already incorporate a view of the factors that link workplace jobs to resident population'* [para 8.7].

3.17 The PAS guide goes on to demonstrate why linking jobs and homes can be a *'self-defeating prophecy'* – essentially because population growth will be both an input and an output of the modelling, and it is inconsistent if these two figures are different. PAS then suggest that for an approach to make sense, it is necessary to integrate demographic projections and economic forecasting.

3.18 Whilst in principle this seems like a good idea, the reality means that it is not readily possible to undertake such analysis. A key reason for this is that the economic models typically used do not allow for such integration with all of the main forecasting houses (Experian, Oxford Economics (OE) and Cambridge Econometrics (CE)) using different methods when considering job growth. The main issue with looking at the link between homes and jobs is about assumptions as to how economic activity or employment rates might change in the future, and this has often been a hotly disputed topic at Local Plan and Section 78 inquiries.

3.19 Taking OE for example, they do provide a full set of information about employment rates, however, these are not an input to the model but an output (e.g. they will look at how a range of factors might change, such as jobs, full and part-time employment, commuting etc. and calculate the employment rate by dividing the estimated change in the number of residents in employment by the population aged 16 and over). The employment rate, as included in the modelling is therefore an output rather than an input and is not a view about how employment rates might change (it is more a view about how the rate would need to change for other assumptions to hold true).

3.20 With CE, whilst some economic activity data is provided, this in no way drives the forecasts which are entirely demand driven. Experian is more complicated, with the population being a stronger input to the modelling. Experian do provide a view about how economic activity rates might change (at a national level) but in local area projections this rate is 'flexed' depending on other variables (and is essentially also an output to the modelling).

3.21 Therefore, whilst the PAS suggestion of an integrated approach is laudable, the reality is that currently it is not possible for such an approach to be taken forward. Hence, it is necessary within this assessment to make some assumptions about how economic activity/employment rates might change and apply these to indicate what level of population growth and housing need might arise. Assumptions also need to be made regarding issues such as commuting patterns and double jobbing (i.e. the proportion of people with more than one job). All of these issues are discussed later in this section, but the number of assumptions, and the difficulty in making these does further emphasize the need for projections linking jobs to homes to be treated with a significant degree of caution.

Economic Forecasts and Trends

3.22 Information about the future forecast level of jobs growth in each of the authorities has been undertaken. For the authorities of Peterborough, Rutland, South Holland, and South Kesteven, the East of England Forecasting Model (EEFM) published by Cambridge Econometrics dated August 2016 has been accessed;. the EEFM does not publish forecasts for Boston. The latest EEFM appears to have a 2014 base and within the modelling to follow, job growth post-2015 is the main measure used (using data from 2015 onwards is consistent with the demographic modelling where there is already a 'fixed' level of population growth in the 2011-15 period, as informed by ONS mid-year population estimates). The table below shows job growth in the EEFM for the Peterborough HMA authorities over the 2015-36 period. Growth is forecast to be particularly strong in South Holland and weaker in Rutland.

Figure 3.1: EEFM Forecast, 2015-36

	Jobs Growth	Annual Growth Rate
Peterborough	17,600	0.7%
Rutland	1,200	0.3%
South Holland	8,400	0.9%
South Kesteven	6,400	0.5%

Source: Cambridge Econometrics, 2016

3.23 To provide a forecast of job growth in Boston, a sectoral analysis has been undertaken (i.e. to consider the current profile of jobs in Boston and look at how different sectors are forecast to perform in different locations). For Boston, a base (2013) sector breakdown has been used as a starting point; this data is available from a 2013 based Experian forecast as considered in the previous SHMA.

3.24 To look at a range of outputs, sectoral growth rates from the EEFM have been applied, looking at each of the local authorities in the Peterborough sub-region (i.e. The rest of the study area), the sub-region as a whole, the East and East Midlands regions, and for the UK. This approach ensures a level of consistency with the EEFM forecasts used in the other authorities as well as with the previous SHMA. This results in a range of jobs growth scenarios for Boston, shown in the table below.

Figure 3.2: Boston Jobs Growth Based on Growth Rates in Comparator Areas, 2015-36		
Comparator Area	Jobs Growth for Boston	Annual Growth Rate for Boston
Peterborough	3,300	0.4%
Rutland	3,500	0.5%
South Holland	9,500	1.1%
South Kesteven	4,100	0.5%
Peterborough sub-region	4,700	0.6%
East	3,400	0.4%
East Midlands	2,900	0.4%
UK	2,400	0.3%

3.25 This results in a range of jobs growth scenarios for Boston. Seven of the eight scenarios show jobs growth within the range of 2,400 (using the UK growth rate) to 4,700 (Peterborough sub-region growth rate) over the period 2015-36. This is equivalent to an annual growth rate in Boston of between 0.3% and 0.6% per annum. This compares to a growth rate across the East region of 0.5%, the East Midlands of 0.3%, and the UK of 0.4%. Accordingly, it is reasonable to consider a jobs growth for Boston falling within this range.

3.26 The exception to this is the scenario based on the South Holland growth rates which shows a growth of 9,500 jobs over the 2015-36 period. This is equivalent to an annual growth rate of 1.1% and is clearly an outlier. This very high figure is a result of a large percentage growth rate in the administrative and support services sector in South Holland being applied to an already large representation in this sector in Boston.

3.27 The analysis suggests that a reasonable forecast jobs growth for Boston over the 2015-36 period would be in the range of 2,400-4,700 jobs. For the purposes of analysis to follow, job growth of 4,700 has been used in the modelling; this is at the upper end of what might be considered reasonable and hence will not supress the likely population growth and housing need when set against economic data.

Linking Job Growth and Changes to Resident Labour Force

3.28 The analysis above has set out a scenario for changes in the number of jobs in the two HMAs and individual local authorities. However, for the purposes of analysis linked to demographic data it is necessary to convert this into estimates of the required change to the economically active population. The number of jobs and resident workers required to support these jobs will differ depending on two main factors:

- Commuting patterns – where an area sees more people out-commute for work than in-commute it may be the case that a higher level of increase in the economically active population would be required to provide a sufficient workforce for a given number of jobs (and vice versa where there is net in-commuting);
- Double jobbing – some people hold down more than one job and therefore the number of workers required will be slightly lower than the number of jobs.

3.29 The analysis should arguably also consider potential changes to unemployment; however, with the modelling being taken from 2015 onwards, it has been assumed that there will be no further changes to unemployment beyond 2015.

Commuting patterns

3.30 The table below shows summary data about commuting to and from each local authority from the 2011 Census. Overall the data shows net in-commuting to Peterborough (and to a much lesser extent Rutland and Boston) and net out-commuting for work in South Holland and South Kesteven. The balance between in- and out-commuting is shown as the commuting ratio in the final row of the table and is calculated as the number of people living in an area (and working) divided by the number of people working in the area (regardless of where they live).

Figure 3.3: Commuting patterns by local authority (2011)

	Peter-borough	Rutland	South Holland	South Kesteven	Boston
Live and work in LA	55,300	7,378	21,813	30,494	18,205
Home workers	7,250	3,076	5,066	8,118	2,892
No fixed workplace	6,476	1,225	3,336	4,841	2,679
In-commute	32,606	6,794	8,962	14,205	7,501
Out-commute	19,388	6,516	11,586	23,518	7,202
Total working in LA	101,632	18,473	39,177	57,658	31,277
Total living in LA (and working)	88,414	18,195	41,801	66,971	30,978
Commuting ratio	0.87	0.98	1.07	1.16	0.99

Source: 2011 Census

3.31 In translating the commuting pattern data into growth in the labour-force, a core assumption is that the commuting ratio remains at the same level as shown by the 2011 Census. However, it does need to be recognised that the locations of new jobs will have an influence on where workers live and hence commuting patterns. It is not really possible to undertake a full analysis of this issue, but the potential for changes to commuting dynamics should be recognised. This is likely to particularly impact those areas with particularly high (South Holland) or low (Rutland) forecasts of job growth, logically, in-commuting might increase in areas where jobs are being created, with the opposite outcome where job growth is less strong. Hence, whilst commuting ratios are held constant for the purposes of this analysis, the reality is that some changes might be expected (and hence figures should be treated with some degree of caution).

3.32 The table below shows an estimate of how many local jobs would be expected to be filled by local residents on the basis of the above commuting ratios. Across the Peterborough HMA, a slightly lower figure than the number of jobs would be required (although higher in South Holland and South Kesteven). In Boston, the two are virtually the same (4,744 jobs expected to be filled by 4,699 local residents).

Figure 3.4: Estimate of number of additional jobs to be filled by local residents – past trend analysis			
	Number of jobs (2015-36)	Commuting ratio	Number of jobs filled by local residents
Peterborough	17,627	0.87	15,335
Rutland	1,224	0.98	1,206
South Holland	8,446	1.07	9,012
South Kesteven	6,356	1.16	7,382
Peterborough HMA	33,653		32,934
Boston	4,744	0.99	4,699
Study-area	38,397		37,633

Source: Derived from a range of data as presented

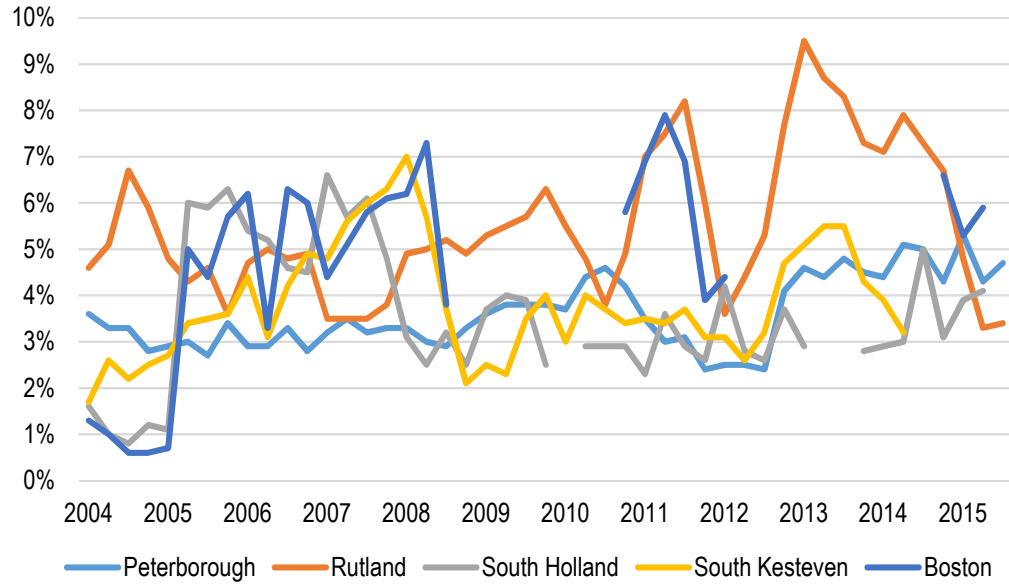
Double jobbing

3.33 As well as commuting patterns, the analysis also considers that a number of people may have more than one job (double jobbing). This can be calculated as the number of people working in the local authority divided by the number of jobs. The figure below shows the proportion of people with a second job back to 2004. In interpreting this information it should be noted that the data does have relatively high error margins associated with data for individual years (due to it being based on a sample survey); this also accounts for missing data in some time periods.

3.34 Overall, data from the Annual Population Survey (available on the NOMIS website) suggests across the study area that between 3.6% and 5.5% of workers have more than one job and there really are no discernible trends to suggest if these figures are going up or down. Hence a double jobbing ratio is taken as the average over the period from 2004, and is held constant moving forward. Double jobbing assumptions for each local authority are therefore as follows:

- Peterborough – 3.6%
- Rutland – 5.5%
- South Holland – 3.6%
- South Kesteven – 3.8%
- Boston – 4.8%

Figure 3.5: Percentage of all people in employment who have a second job (2004-2016)



Source: Annual Population Survey (from NOMIS)

Labour-force growth

3.35 To work out the change in the resident workforce required to match the forecast number of jobs, the number of jobs to be filled by local residents is multiplied by the amount of double jobbing – this is shown in the table below.

Figure 3.6: Forecast job growth and change in resident workforce with double jobbing allowance

	Number of jobs filled by local residents	Double jobbing allowance	Change in resident workforce (2015-36)
Peterborough	15,335	0.96	14,782
Rutland	1,206	0.94	1,139
South Holland	9,012	0.96	8,690
South Kesteven	7,382	0.96	7,099
Peterborough HMA	32,934	-	31,710
Boston	4,699	0.95	4,475
Study-area	37,633	-	36,185

Source: Derived from a range of data as presented

Linking resident workforce change to demographic projections

3.36 Having estimated the likely required change to the workforce under a range of scenarios, the next stage is to estimate how much growth is implied by demographic projections (to allow for a comparison between jobs and workforce growth). Making the link between population and the resident workforce is a very thorny issue with no set methodology and a range of different methods and views being used. It is considered, having studied this for many years, that it is impossible to robustly project how economic activity or employment rates will change in the future and hence any approach must be treated with extreme caution.

3.37 The approach taken in this report is to derive a series of age and sex specific economic activity rates and use these to estimate how many people in the population will be economically active as projections develop. This is a fairly typical approach although there are no set figures to be used when looking at how activity rates might change over time. Of the main forecasting houses (Experian, OE and CE) only Experian publish age and sex specific data about how economic activity rates might change (this data is available directly from Experian and underpins the document *'Comparison between Experian and OBR Participation Rate Projections'* (February 2016)).

3.38 Some consultancies (both for public and private sector clients) have looked for other sources of employment or economic activity rate data; the most commonly used being a set of figures published by the Office for Budget Responsibility (OBR). These figures as published are not of any great use for this analysis as they bear no relationship to economic forecasts developed at a local level. For example, the growth in the population who are economically active (from 2016 to 2032) by applying OBR rates is around 1.5 million people, this compares with a figure of about 3.1 million with the Experian rates. Whilst the other main forecasting houses (OE and CE) do not publish detailed rates in the same way as Experian it is notable over the same (2016-32) period that each are forecasting between 2.4 million (CE) and 2.7 million (OE) additional jobs (the Experian job figure is around 3.3 million). Hence, whilst Experian may be at the top of the range, it is clear that OBR is a significant outlier. This means that the OBR employment/activity rate figures cannot realistically be used when testing job growth levels from forecasts, as they relate to a completely different set of national assumptions (additionally, OBR do not produce local level forecasts, unlike the three forecasting houses already mentioned).

3.39 However, when looking in more detail at the OBR rates, it can be observed that much of the reason for showing low levels of growth in the economically active population is that there are forecast to be some notable declines in activity rates of some age groups (particularly) males aged about 25 to 50. Whilst such declines are possible, they do appear unlikely, and if occurring would be a reversal of trends seen over the decade or more.

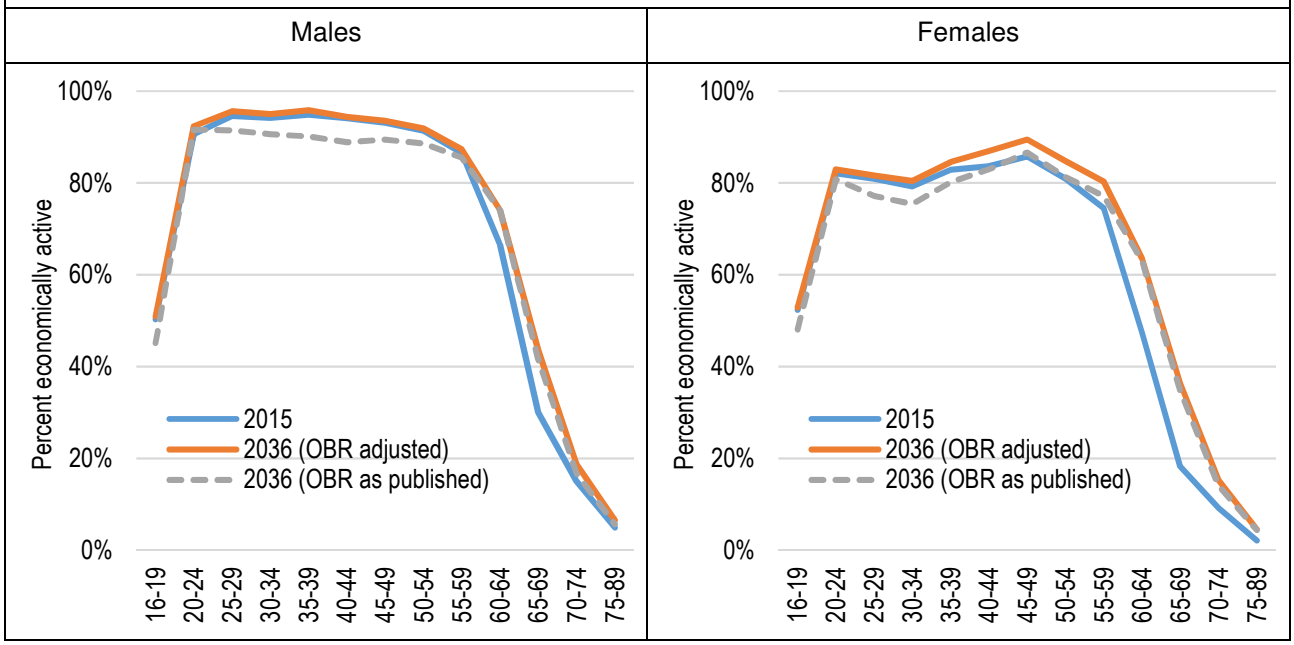
3.40 The analysis in this report has therefore taken the OBR rates, and adjusted these where an age group is projected to see a decline (in these instances figures are held constant on a year-by-year basis). This is considered to provide a realistic series of rate changes (by age and sex) which are consistent with overall views about economic growth as set out by OE, CE and Experian – the adjusted OBR rates show changes to economic activity that are below those suggested by Experian in their published figures.

3.41 The rates are then adjusted to be consistent with local data for economic activity from the 2011 Census. Whilst the rate levels and projected changes are considered to be realistic, based on available data, it should still be stressed that these are a best estimate which is ultimately derived from national level figures.

3.42 The analysis is further complicated because it is based on economic activity rates rather than employment rates (and jobs would reflect people working rather than those working or seeking employment). For the purposes of analysis, it is essentially assumed that unemployment remains at 2015 levels. On this basis, it should once again be stressed that the level of assumption needing to be made does mean that outputs should be treated as indicative.

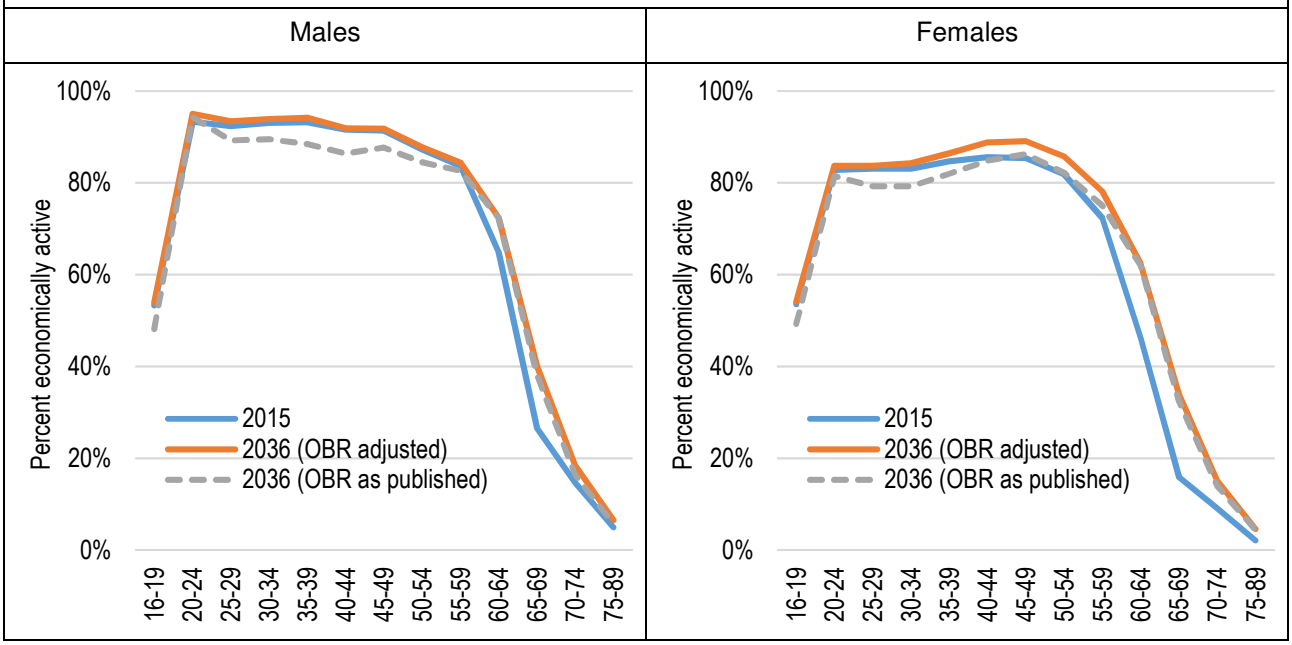
3.43 The analysis shows that the main changes to economic activity rates are projected to be in the 60-69 age groups – this will to a considerable degree link to changes to pensionable age, as well as general trends in the number of older people working for longer (which in itself is linked to general reductions in pension provision). Intuitively the figures look to be reasonable. The figures below show estimates (by age and sex) for the two HMAs with the assumptions used on a local authority basis being provided in Appendix 1.

Figure 3.7: Projected changes to economic activity rates (2015-36) – Peterborough HMA



Source: Based on OBR and Census (2011) data

Figure 3.8: Projected changes to economic activity rates (2015-36) – Boston



Source: Based on OBR and Census (2011) data

What is the change to the economically-active population?

3.44 Working through an analysis of age and sex specific economic activity rates, it is possible to estimate the overall change in the number of economically active people in the two HMAs – this is set out in the tables below.

3.45 In the Peterborough HMA, the analysis shows that linked to the 2014-based SNPP there would be an increase in the economically active population of about 28,600 people. The highest of the demographic projections (linked to 10-year migration trends) would provide a workforce growth of about 36,300; above the figure suggested as being needed to meet the EEFM forecast.

Figure 3.9: Estimated change to the economically active population (2015-36) – Peterborough HMA

	Economically active (2015)	Economically active (2036)	Total change in economically active	Per annum change
2014-based SNPP	240,645	269,252	28,607	1,362
2014-based SNPP (+MYE)	240,695	269,717	29,021	1,382
10-year migration	240,695	276,947	36,252	1,726
10-year migration (+UPC)	240,695	274,834	34,139	1,626

Source: Derived from demographic projections

3.46 In Boston, the analysis shows that linked to the 2014-based SNPP there would be an increase in the economically active population of about 4,600 people. The highest of the demographic projections (linked to 10-year migration trends) would provide a workforce growth of about 6,700; again above the figure suggested as being needed to meet the EEFM forecast.

Figure 3.10: Estimated change to the economically active population (2015-36) – Boston				
	Economically active (2015)	Economically active (2036)	Total change in economically active	Per annum change
2014-based SNPP	34,741	39,331	4,590	219
2014-based SNPP (+MYE)	34,497	39,058	4,560	217
10-year migration	34,497	41,212	6,715	320
10-year migration (+UPC)	34,497	40,691	6,193	295

Source: Derived from demographic projections

3.47 A similar analysis has been provided below for each of the individual local authorities in the Peterborough HMA. In Peterborough, all of the scenarios provide sufficient labour-supply to meet the EEFM forecast, in Rutland the two SNPP based scenarios show a reduction in the economically active population, although the 10-year migration scenario does have labour-supply growth above that required by the EEFM. In South Holland, the required labour-supply growth is similar to that seen with 10-year trends and the SNPP does not have sufficient growth in the economically active population. Finally, for South Kesteven, none of the demographic based scenarios show sufficient labour-supply growth to meet the EEFM. This initial analysis suggests that there may need to be the consideration of an uplift to population growth (and housing need) in South Kesteven to ensure alignment between jobs and the resident labour supply.

Figure 3.11: Estimated change to the economically active population (2015-36) – Peterborough				
	Economically active (2015)	Economically active (2036)	Total change in economically active	Per annum change
2014-based SNPP	101,200	118,215	17,015	810
2014-based SNPP (+MYE)	101,619	118,945	17,325	825
10-year migration	101,619	121,871	20,252	964
10-year migration (+UPC)	101,619	121,371	19,751	941

Source: Derived from demographic projections

Figure 3.12: Estimated change to the economically active population (2015-36) – Rutland				
	Economically active (2015)	Economically active (2036)	Total change in economically active	Per annum change
2014-based SNPP	19,385	19,169	-217	-10
2014-based SNPP (+MYE)	19,361	19,194	-167	-8
10-year migration	19,361	21,190	1,830	87
10-year migration (+UPC)	19,361	20,663	1,302	62

Source: Derived from demographic projections

Figure 3.13: Estimated change to the economically active population (2015-36) – South Holland				
	Economically active (2015)	Economically active (2036)	Total change in economically active	Per annum change
2014-based SNPP	46,460	51,949	5,489	261
2014-based SNPP (+MYE)	46,444	51,940	5,496	262
10-year migration	46,444	55,204	8,760	417
10-year migration (+UPC)	46,444	54,770	8,326	396

Source: Derived from demographic projections

Figure 3.14: Estimated change to the economically active population (2015-36) – South Kesteven				
	Economically active (2015)	Economically active (2036)	Total change in economically active	Per annum change
2014-based SNPP	73,600	79,919	6,320	301
2014-based SNPP (+MYE)	73,271	79,639	6,367	303
10-year migration	73,271	78,682	5,411	258
10-year migration (+UPC)	73,271	78,031	4,760	227

Source: Derived from demographic projections

Housing Need linked to job-growth forecasts

3.48 As well as looking at the growth in the economically active population linked to a range of demographic projections, it is of use to consider what level of housing might be required for forecasts to be met. This analysis is predominantly designed to see if there are any areas where there is either a clear workforce shortage or a workforce surplus. In line with the PPG this analysis could provide an indication of where the locations of housing might need to be amended when compared with the outputs of the demographic projections. Within the modelling, migration assumptions have been changed so that across each local authority the increase in the economically active population matches the increase in the resident workforce required.

3.49 The changes to migration have been applied on a proportionate basis; the methodology assumes that the age/sex profile of both in- and out-migrants is the same as underpins the SNPP with adjustments being consistently applied to both internal (domestic) and international migration. Adjustments are made to both in- and out-migration (e.g. if in-migration is increased by 1% then out-migration is reduced by 1%).Once the level of economically active population matches the job growth trend/forecast the population (and its age structure) is modelled against CLG headship rates to see what level of housing provision that might imply (including an uplift to the rates in the case of Rutland).

3.50 The table below shows estimates of housing need set against each of the job growth scenarios. The analysis shows a housing need of 2,215 dwellings per annum when linking the data to the EEFM (and a job estimate for Boston). This figure is below the highest of the demographic projections developed (linked to 10-year migration trends) but above the start point need 2,128 dwellings per annum. Taking all of this evidence together suggests that across the study area (and for each HMA) there is a good match between potential job growth and the likely growth in the resident workforce).

Figure 3.15: Projected housing need – job-led scenario and 2014-based headship rates (uplift for Rutland)					
	Households 2011	Households 2036	Change in households	Per annum	Dwellings (per annum)
Peterborough	74,354	94,159	19,806	792	805
Rutland	15,155	18,553	3,398	136	140
South Holland	37,316	47,929	10,613	425	433
South Kesteven	57,521	72,574	15,052	602	616
Peterborough HMA	184,346	233,215	48,869	1,955	1,994
Boston	27,275	32,692	5,417	217	220
Study-area	211,620	265,907	54,287	2,171	2,215

Source: Demographic projections

3.51 The only area where the housing need set against the job growth forecast is higher than demographic trend-based projections is South Kesteven. A higher level of need (than shown by demographics) should therefore be considered in this area when drawing conclusions at a local authority level.

Future Employment and the Link to Housing: Key Messages

- Analysis has sought to estimate the likely level of housing needed to be delivered if the resident workforce is to increase sufficiently to meet job-growth forecasts (derived from the EEFM). The main purpose of the analysis was to establish if there are any clear spatial imbalances between where population growth is projected to occur and where the jobs might be provided.

- The analysis took account of both commuting patterns and double jobbing, as well as making a series of assumptions about how economic activity rates might change in the future. This latter point is a key difficulty in matching job-growth to population growth – a range of potential sources are available to undertake this step, but many cannot be considered as robust given that they do not relate to economic forecasts.

- The approach used has drawn on economic activity rate projections published by the Office for Budget Responsibility (OBR); these have been modified from the data as published to take account of local activity rates (from 2011 Census data) and also to deal with some anomalies (this is where rates are projected to go down when in reality all trend data suggests that rates for specific age/sex groups are more likely to stay stable or increase). This is not however without problems, as the data is at a national level and the economy locally could potentially develop differently. Due to the assumptions made, all outputs should be treated as indicative.

- In running the modelling, it is estimated that to meet the job growth forecast there would need to be provision of about 2,215 dwellings per annum across the study area (2011-36). This figure sits comfortably with the demographic projection linked to 10-year migration trends (a need for 2,390 dwellings per annum) and across the study area there can be expected to be a good balance between jobs and the population to take up employment opportunities.

- Looking at individual local authorities, the analysis suggested a potential labour force shortage in South Kesteven relative to the demographic trend-based outputs (i.e. labour supply growth would be insufficient to provide enough workforce for the forecast level of job growth). An uplift to the need in this area (relative to demographic needs) should therefore be considered when developing an assessment of OAN for individual local authorities.

4. Affordable Housing Need

Introduction

4.1 The PPG (2a-022) describes the calculation of affordable housing need as relating to *'the number of households and projected households who lack their own housing or live in unsuitable housing and who cannot afford to meet their housing needs in the market. This calculation involves adding together the current unmet housing need and the projected future housing need and then subtracting this from the current supply of affordable housing stock'*.

4.2 The PPG sets out a model for assessing affordable housing need – this model largely replicates the model set out in previous SHMA guidance (of 2007). It draws on a number of sources of information including Census data, demographic projections, house prices/rents and income information. Paragraph 14 of the PPG (2a-014) sets out that:

"Plan makers should avoid expending significant resources on primary research ... They should instead look to rely predominantly on secondary data (e.g. Census, national surveys) to inform their assessment which are identified within the guidance".

4.3 The affordable housing needs model is based largely on housing market conditions (and particularly the relationship of housing costs and incomes) at a particular point in time – the time of the assessment – as well as the existing supply of affordable housing (through relets of current stock) which can be used to meet affordable housing need. Given the range of data available, a base date of 2016 is used. For the purposes of consistency with the end date of demographic projections, data is presented as per annum data for the period 2016-36.

4.4 The analysis does not seek to fully recalculate levels of affordable need from previous SHMA research and is provided as a selective update. The analysis has however been expanded to recognise the introduction of Starter Homes, additional analysis has been provided to look at the potential role of such housing (which could also be taken to include other forms of discounted market sales housing, as set out in the Housing White Paper – see below).

4.5 On the 7th February 2017, the Government published a new Housing White Paper; this included proposals to change the definition of affordable housing. The main change is to include a series of ownership options (including Starter Homes) within the definition of affordable housing. However, the overarching definition of affordable housing does not appear to have changed. The White Paper saying that affordable housing is *'housing that is provided for sale or rent to those whose needs are not met by the market'*, whereas the current NPPF definition is *'Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market'*.

4.6 In both cases, the test is whether or not households' needs are met by the market. This has generally meant understanding which households can or cannot afford to access market housing (typically on the basis of their income); this position does not appear to have changed and is the approach used in the analysis to follow. It should be noted that the analysis was drafted prior to publication of the White Paper.

Updating

4.7 Full assessments of affordable housing need have recently been carried out in both the Peterborough HMA (October 2015) and Boston (July 2015) and so this report provides just a selected update to key variables where new information is available. The methodologies used in the previous assessments are broadly similar and full methodology can be found in the relevant documents for those studies. Specifically, this assessment seeks to update the following variables:

- Housing costs (private sector rent levels) – drawing on the latest Valuation Office Agency data covering a 12-month period to September 2016
- Income data – taking account of new data about local incomes (including information from the Annual Survey of Hours and Earnings (2016) and small area income estimates from ONS (published in October 2015)
- Estimates of the number of newly forming households – this is a direct output of the demographic modelling; and
- Estimates of the supply of affordable housing from relets – taken from Continuous Recording of Lettings data (CoRe) up to 2016

4.8 Other more minor changes have been made; for example estimates of the current need for affordable housing have been updated but this does not substantially change the figures. The text below therefore discusses the main updating undertaken in the assessment.

Rent levels

4.9 An important part of the study is to establish the entry-level costs of housing. In previous assessments, it has been established that the private rented sector typically requires lower incomes to access than owner-occupation and so the focus is on costs in this sector. The affordable housing needs assessment compares rents with the incomes of households to establish what proportion of households can meet their needs in the market, and what proportion require support and are thus defined as having an 'affordable housing need.'

4.10 The entry-level costs of housing have been established from Valuation Office Agency (VOA) data. For the purposes of analysis (and to be consistent with Paragraph 25 of the PPG (2a-025)), lower quartile (LQ) rents have been taken to reflect the entry-level point into the market – the data covers a 12-month period to September 2016. The analysis below shows LQ rents by size of dwelling in each area; across all dwelling sizes, LQ rents vary from £475 per month in South Kesteven, up to £550 in Rutland.

Figure 4.1: Lower quartile private rents by size and location (year to September 2016) – per month					
	Peterborough	Rutland	South Holland	South Kesteven	Boston
Room only	£316	-	£347	£340	£325
Studio	£375	-	£280	£318	£347
1 bedroom	£425	£435	£398	£340	£400
2 bedrooms	£550	£525	£525	£465	£525
3 bedrooms	£595	£625	£590	£550	£595
4+ bedrooms	£778	£900	£695	£750	£703
All dwellings	£495	£550	£495	£475	£500

Source: Valuation Office Agency (2016)

4.11 The figures present above can be compared with equivalent data from the previous assessments of affordable housing need (carried out as part of the 2015 SHMA update in the Peterborough HMA and the 2015 SHMA for Boston). This analysis (shown below) identifies that there has been very little change in the overall lower quartile rent over the period since the last affordable needs assessment was carried out. It should be noted that the data for the Peterborough HMA authorities was based on the year to March 2015, with data for Boston covering the year to September 2014

Figure 4.2: Change in lower quartile private rents (all dwellings) since previous (2015) SHMA research				
	Previous assessment	Updated position	Change in monthly rent	% change
Peterborough	£490	£495	+£5	1%
Rutland	£550	£550	£0	0%
South Holland	£477	£495	+£22	5%
South Kesteven	£475	£475	£0	0%
Boston	£495	£500	+£5	1%

Source: Valuation Office Agency

4.12 A household is considered able to afford market rented housing in cases where the rent payable would constitute no more than a particular percentage of gross income. The choice of an appropriate threshold is an important aspect of the analysis, CLG guidance (of 2007) suggested that 25% of income is a reasonable start point but also notes that a different figure could be used. Analysis of current letting practice suggests that letting agents typically work on a multiple of 40%. Government policy (through Housing Benefit payment thresholds) would also suggest a figure of 40%+ (depending on household characteristics).

4.13 The threshold of income to be spent on housing should be set by asking the question *'what level of income is expected to be required for a household to be able to access market housing without the need for a subsidy (e.g. through Housing Benefit)?'* The choice of an appropriate threshold will to some degree be arbitrary and will be linked to the cost of housing rather than income. Income levels are only relevant in determining the number (or proportion) of households who fail to meet the threshold. It would be feasible to find an area with very low incomes and therefore conclude that no households can afford housing, alternatively an area with very high incomes might show the opposite output. The key here is that local income levels are not setting the threshold, but are simply being used to assess how many can or can't afford market housing.

4.14 Rent levels in the study area are similar to those seen nationally (a lower quartile rent of £500 per month across England) and are some way higher than seen in a number of areas (the lowest lower quartile rents nationally are around £350 per month). If the cheapest areas were to be considered as '25%' areas then it is clear that a higher threshold would be reasonable where rents are higher. In taking a consideration of rent levels in the study area and levels of residual income it is considered that for the purposes of affordability, a threshold of between 28% and 30% would be reasonable (this is the midpoint of 25% and the figure derived for each local authority if the same residual income were used). The range of 28%-30% is similar to the figure (of 30%) used in the most recent previous assessments of affordable need in the study area.

Incomes

4.15 Following on from the assessment of local housing costs it is important to understand local income levels as these (along with the price/rent data) will determine levels of affordability (i.e. the ability of a household to afford to buy or rent housing in the market without the need for some sort of subsidy); the analysis also provides an indication of the potential for intermediate housing to meet needs. Data about total household income has been modelled on the basis of a number of different sources of information to provide both an overall average income and the likely distribution of incomes in each area. The key sources of data include:

- ONS modelled income estimates (published in October 2015 with a 2011/12 base) – this information is provided for middle layer super output areas (MSOA) and is therefore used to build up to local authority areas;
- English Housing Survey (EHS) – to provide information about the distribution of incomes;
- Annual Survey of Hours and Earnings (ASHE) – to assist in looking at how incomes have changed since the ONS base date and to provide an alternative source about how incomes in different areas vary.

4.16 Drawing all of this data together, an income distribution for each local authority for 2016 has been constructed. The table below shows average (mean) incomes in each local authority and also a comparison with figures in previous assessments (which have a 2014 base). It can be seen that the incomes assumed in this report are somewhat higher than previous assessments (up to 21% higher in the case of South Kesteven). This difference does not reflect any change in methodology since the previous needs assessments, but reflects a higher estimate of income from the new ONS source, and may not be reflecting a real change over the two year period (i.e. previous income estimates may have been too low).

Figure 4.3: Average (mean) income estimates – households			
	2014 estimate	2016 estimate	% change
Peterborough	£32,786	£39,325	20%
Rutland	£40,699	£44,146	8%
South Holland	£29,286	£35,108	20%
South Kesteven	£33,194	£40,185	21%
Boston	£27,131	£31,340	16%

Source: Derived from a range of data as discussed

4.17 To assess affordability, a household's ability to afford private rented housing without financial support has been studied. The distribution of household incomes is then used to estimate the likely proportion of households who are unable to afford to meet their needs in the private sector without support, on the basis of existing incomes. This analysis brings together the data on household incomes with the estimated incomes required to access private sector housing.

4.18 Different affordability tests are applied to different parts of the analysis depending on the group being studied (e.g. recognising that newly forming households are likely on average to have lower incomes than existing households (this has consistently been shown to be the case in the English Housing Survey and the Survey of English Housing). Assumptions about income levels for specific elements of the modelling are the same as in previous assessments of affordable need.

Newly forming households

4.19 The number of newly-forming households has been estimated through the demographic modelling with an affordability test also being applied. This has been undertaken by considering the changes in households in specific 5-year age bands relative to numbers in the age band below 5 years previously to provide an estimate of gross household formation (e.g. the analysis considers the number of households aged under 45 in a particular year and subtracts the number aged under 40 five-years previously – this provides an indication of the number of new household (i.e. that didn't exist five years earlier). This differs from numbers presented in the demographic projections which are for net household growth.

4.20 The numbers of newly-forming households are limited to households forming who are aged under 45 – this is consistent with CLG guidance (from 2007 – see Annex B) which notes after age 45 that headship (household formation) rates 'plateau'. The PPG does not provide any specific guidance on how to calculate the number of newly forming households. There may be a small number of household formations beyond age 45 (e.g. due to relationship breakdown) although the number is expected to be fairly small when compared with formation of younger households.

4.21 The table below shows estimates of the annual number of newly forming households from the updated demographic modelling and compares figure with those in previous assessments of affordable need. Generally, the figures do not change significantly, with all areas (other than South Kesteven) seeing a modest increase in estimates of newly forming households compared with previous assessments of need.

Figure 4.4: Estimated number of newly forming households (per annum)		
	Previous assessment(s) estimate	This study
Peterborough	1,711	1,768
Rutland	209	226
South Holland	685	718
South Kesteven	1,005	992
Boston	562	577

Source: Demographic projections

Supply of affordable housing from relets

4.22 The final area of updating is around the supply of affordable housing from relets of current stock. For this analysis, information has been taken from CoRe for the 2013-16 period – previous assessments looked at data for a two year period from 2012 to 2014. The table below compares estimates of the supply of social and affordable rented housing in each area. Generally, the supply figures in this assessment are similar to those in previous analysis, although where there are differences they are typically in an downward direction (i.e. this study has estimated a lower potential future supply of relets). The figures include a small number of relets of intermediate housing (e.g. shared ownership).

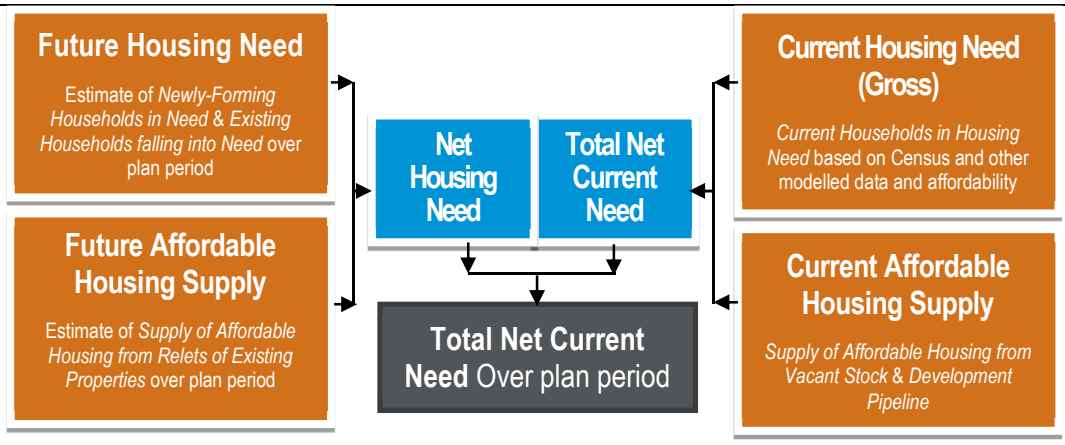
Figure 4.5: Estimated future supply of relets/sales of social/affordable/intermediate housing		
	Previous assessment(s) estimate	This study
Peterborough	953	898
Rutland	113	120
South Holland	233	220
South Kesteven	477	457
Boston	281	263

Source: CoRe

Affordable Housing Needs Assessment

4.23 Affordable housing need has been assessed using the methodology set out in the PPG. This model is summarised in the figure below.

Figure 4.6: Overview of Affordable Housing Needs Assessment Model



4.24 The table below shows the overall calculation of affordable housing need. This excludes supply arising from sites with planning permission (the 'development pipeline') to allow for a comparison with the demographic projections set out in the report. The analysis has been based on meeting affordable housing need over the 20-year period from 2016 to 2036. Whilst most of the data in the model are annual figures the current need has been divided by 20 to make an equivalent annual figure.

4.25 As the table sets out, the analysis calculates an overall need for affordable housing of 1,120 units per annum over the 20-years to 2036 in the Peterborough HMA and 263 in Boston. The net need is calculated as follows:

Net Need = Current Need + Need from Newly-Forming Households + Existing Households falling into Need – Supply of Affordable Housing

Figure 4.7: Estimated level of Affordable Housing Need per annum – by HMA and local authority

	Current need	Newly forming households	Existing households falling into need	Total Need	Supply from existing stock	Net Need
Peterborough	136	724	598	1,457	898	559
Rutland	10	90	60	160	120	41
South Holland	50	332	121	502	220	282
South Kesteven	45	385	265	695	457	238
Peterborough HMA	240	1,532	1,043	2,814	1,694	1,120
Boston	54	302	170	525	263	263
Study area	293	1,833	1,213	3,340	1,957	1,383

Source: 2011 Census/CoRe/Projection Modelling and affordability analysis

Comparison with previous assessments of affordable housing need

4.26 The table below shows estimates of the annual affordable need in this assessment and previous studies. This assessment is typically showing a lower level of need, this is particularly the case in Peterborough and South Kesteven and is largely driven by increased estimates local income levels.

Figure 4.8: Comparing assessments of affordable housing need			
	Previous assessment	This study	Difference
Peterborough	620	559	-61
Rutland	35	41	6
South Holland	284	282	-2
South Kesteven	279	238	-41
Peterborough HMA	1,218	1,120	-98
Boston	250	263	13

Source: This study and previous (2014-based) assessments

4.27 Whilst overall, the levels of affordable housing need appear to have dropped, it needs to be remembered that all of the outputs are based on information available at the time of the assessment (and this can vary; as is seen with the income estimates). However, it remains the case that there is a substantial need for affordable housing in both HMAs (and individual local authorities); Councils should therefore seek to maximise the delivery of affordable housing where opportunities arise.

Relating Affordable Need and OAN

4.28 The relationship between affordable housing need and overall housing need is complex. This is recognised in the Planning Advisory Service (PAS) Technical Advice Note of July 2015. PAS conclude that there is no arithmetical way of combining the OAN (calculated through demographic projections) and the affordable need. There are a number of reasons why the two cannot be 'arithmetically' linked.

4.29 Firstly, the modelling contains a category in the projection of *'existing households falling into need'*; these households already have accommodation and hence if they were to move to alternative accommodation, they would release a dwelling for use by another household – there is no net need to provide additional homes. The modelling also contains *'newly forming households'*; these households are a direct output from the demographic modelling and are therefore already included in the overall housing need figures.

4.30 This just leaves the *'current need'*; much of this group will be similar to the existing households already described (in that they are already living in accommodation) although it is possible that a number will be households without housing (mainly concealed households) – these households are not included in the demographic modelling and so are arguably an additional need; this is discussed in the next section of this report.

4.31 The analysis above does however indicate a clear need for affordable housing. The Planning Practice Guidance sets out how it expects the affordable housing need to be considered as part of the plan-making process. It outlines in Paragraph 029 that:

"The total affordable housing 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. An increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes."

4.32 This 'consideration' is difficult to quantify – as noted most of the affordable need is not a need for additional dwellings over and above the overall need identified through demographic modelling. If the Councils were to consider an uplift, then this would mean additional provision of market homes – the demographic modelling itself does not demonstrate a market demand for these additional dwellings. Additionally, if the Councils were to increase planned housing figures, then this would generate increased migration and population growth, which would mean a lower level in other areas (and hence other locations would logically be expected to plan for fewer dwellings).

4.33 Overall, it is difficult to see a situation where a Council should provide additional homes due to the affordable need, unless this is agreed under the Duty-to-Cooperate, which would then become a policy decision. Given the level of affordable housing need, the Councils should however seek to maximise delivery where possible and it should be borne in mind that besides delivery of affordable housing on mixed-tenure development schemes, there are a number of other mechanisms which deliver affordable housing. These include:

- National Affordable Housing Programme – this (administered by the HCA) provides funding to support Registered Providers in delivering new housing including on sites owned by RPs;
- Building Council Homes – following reform of the HRA funding system, Councils can bring forward affordable housing themselves;
- Empty Homes Programmes – where local authorities can bring properties back into use as affordable housing. These are existing properties, and thus represent a change in tenure within the current housing stock;
- Rural Exception Site Development – where the emphasis is on delivering affordable housing to meet local needs.

4.34 Funding for specialist forms of affordable housing, such as extra care provision, may also be available from other sources; whilst other niche agents, such as Community Land Trusts, may deliver new affordable housing. Net changes in affordable housing stock may also be influenced by estate regeneration schemes, as well as potentially by factors such as the proposed extension of the Right-to-Buy to housing association properties. Affordable housing can be met by changes in the ownership of existing housing stock, not just by new-build development.

4.35 The discussion above has already noted that the need for affordable housing does not generally lead to a need to increase overall provision (with the exception of potentially providing housing for concealed households). It is however worth briefly thinking about how affordable need works in practice and the housing available to those unable to access market housing without Housing Benefit. In particular, the increasing role played by the Private Rented Sector (PRS) in providing housing for households who require financial support in meeting their housing needs should be recognised.

4.36 Whilst the Private Rented Sector (PRS) does not fall within the types of affordable housing set out in the NPPF 'for planning purposes', it has evidently been playing a role in meeting the needs of households who require financial support in meeting their housing need. Government recognises this, and indeed legislated through the 2011 Localism Act to allow Councils to discharge their "homelessness duty" through providing an offer of a suitable property in the PRS.

4.37 It is also worth reflecting on the NPPF (Annex 2) definition of affordable housing. This says: *'Affordable housing: Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market'* [emphasis added]. Clearly where a household is able to access suitable housing in the private rented sector (with or without Housing Benefit) it is the case that these needs are being met by the market (as within the NPPF definition). As such the role played by the private rented sector should be recognised – it is evidently part of the functioning housing market.

4.38 Data from the Department of Work and Pensions (DWP) has been used to look at the number of Housing Benefit supported private rented homes. As of May 2016 it is estimated that there were over 11,000 benefit claimants in the private rented sector in the study area (5,193 – Peterborough, 391 – Rutland, 1,670 – South Holland, 2,365 – South Kesteven and 1,489 – Boston) – this serves to illustrate that there is some flexibility within the wider housing market.

4.39 However, national planning policy does not specifically seek to meet the needs identified through the Needs Assessment Model in the Private Rented Sector. Government's benefit caps may reduce the contribution which this sector plays in providing a housing supply which meets the needs of households identified in the affordable housing needs model. In particular future growth in households living within the PRS and claiming LHA cannot be guaranteed.

The Role of Starter Homes

Introduction

4.40 In October 2015, the Government published the Housing and Planning Bill 2015-16 (this received Royal Ascent as the Housing and Planning Act 2016 on the 12th May 2016). The Act sets out a number of government initiatives which are likely to directly influence the supply and demand for housing and affordable housing. Of particular note is the introduction of a statutory requirement for local authorities to promote the supply of Starter Homes in England. Starter Homes are defined as:

- a new dwelling;
- available for purchase by qualifying first-time buyers only;
    - First Time Buyer, aged 23 or over and under 40,
- is to be sold at a discount of at least 20% of the market value;
- is to be sold for less than the price cap;
    - £250,000 outside London, and
- is subject to any restrictions on sale or letting specified in regulations made by the Secretary of State.

4.41 The Act includes powers to allow the Secretary of State to make regulations which prevent the granting of planning permission unless a minimum number of Starter Homes are included (or a financial contribution paid). In March 2016, the Government published its proposed approach to the Starter Homes regulations, these can be summarised as:

- Starter Homes required on developments of 10 or more units (or on sites of 0.5 hectares or above);
- 20% of all homes should be delivered as Starter Homes;
- Sale of a Starter Home for full market value is prevented in the first 5-years from initial sale, with a tapered approach for up to 8-years (i.e. the owner (and occupier) will get an increasing proportion of market value after the initial 5-year period);
- The property is not to be rented out during the restricted period (i.e. in the first 8-years from purchase); and
- Exemptions are possible when provision is unviable and also potentially for particular types of housing (such as residential care, estate regeneration and student housing)

4.42 These regulations are not finalised and have been subject to consultation (which finished on the 30th June 2016). Since then, the Housing White Paper (7th February 2017) has provided some significant amendments to the initial approach. This includes increasing the period for which some of the discount would need to be repaid (to 15 years – see para 4.15 of the White Paper) – this may well make Starter Homes a less attractive option for many households.

4.43 The White Paper also provides some clarity on the proportion of homes to be provided as Starter Homes; with the 20% figure no longer being promoted (this being reduced to a figure of 10%; which includes other forms of affordable home ownership). The key passages of the White Paper are:

Para 4.16: *We have listened to concerns that our original plans for a mandatory requirement of 20% starter homes on all developments over a certain size will impact on other affordable homes. We want local authorities to deliver starter homes as part of a mixed package of affordable housing that can respond to local needs and local markets. We will commence the general duty on councils to promote the supply of starter homes.*

Para 4.17: *However, in keeping with our approach to deliver a range of affordable homes to buy, rather than a mandatory requirement for starter homes, we intend to amend the NPPF to introduce a clear policy expectation that housing sites deliver a minimum of 10% affordable home ownership units. It will be for local areas to work with developers to agree an appropriate level of delivery of starter homes, alongside other affordable home ownership and rented tenures.*

4.44 The White Paper (see para 4.14 for example) also introduces an upper income limit for households to be eligible for Starter Homes (this being set at £80,000 outside London). It should be noted that the analysis to follow was drafted prior to the White Paper and does not include any upper end income threshold; however, it is considered unlikely that this would have a significant impact on the outputs as relatively few of those households in the target group for such housing as likely to have incomes above this threshold.

4.45 Starter Homes are to be included within the definition of affordable housing, although it is difficult to see how such accommodation will be 'affordable' in the traditional meaning of the word – this is simply because the sort of income levels likely to be required to access a Starter Home will be above the levels needed to access market housing generally (e.g. in the private rented sector). The issue of income levels is discussed later in this section.

4.46 Whilst Starter Homes will not meet affordable need in a traditional sense (and the inclusion of Starter Homes within the definition of affordable housing looks to be quite a radical change), there is some consistency with the current NPPF which seeks in para 50 to *'widen opportunities for home ownership'*. Starter Homes can therefore be seen to be meeting an aspiration rather than a need and the analysis in this section is therefore primarily aimed at establishing the scope for households (within a defined target group) to access Starter Homes.

4.47 The analysis to follow seeks to establish the potential market for Starter Homes in the Peterborough HMA and Boston (defined for simplicity as the potential 'need'). Whilst there is no published methodology for assessing this (unlike for affordable housing need as currently defined in the PPG) it does seem logical that the 'need' can be considered in a similar way (i.e. that there is a "current need" and will be a "future need" as the population age structure changes and cohorts move through time). Hence the analysis seeks to consider likely need (on an annual basis) taking account of both current and projected need.

4.48 The analysis undertaken looks at a gross need with no reduction for estimated supply; this makes sense given that at present Starter Homes are not available as a product. It also makes the analysis slightly more straight forward although it should be recognised that as Starter Homes become available, it is likely that there will be a supply of resales (although the quantity is difficult to accurately predict). It should also be recognised that in reality there is a degree of overlap between the potential market for shared ownership homes, homes sold under the Government's Help-to-Buy Scheme and Starter Homes.

4.49 Additionally, the White Paper is proposing to introduce an additional tenure of affordable housing: *'discounted market sales housing'*; this is described as housing being sold at a discount of at least 20% below market value. In affordability terms, both Starter Homes and discounted market sales housing are therefore likely to be a similar product; hence, whilst the analysis below refers to the term 'Starter Home', this can more properly be read to include other forms of equity-based 'affordable' housing. Conclusions should be drawn on this basis.

Starter Homes – target group

4.50 As a precursor it is perhaps of interest to understand why the Starter Home initiative has been introduced. One of the key reasons is the fall in the number of younger owner-occupiers across the Country over the past 15-years or so (and certainly since 2001). Using Census data, it is possible to look at this in some detail with the table below showing that the number of households living in private rented accommodation has increased by around 17,500, whilst the number of owners with a mortgage has dropped by around 4,300. The trend over the decade has been of a falling number of young households able to move into homeownership, and increases in those renting.

Figure 4.9: Change in Tenure 2001-11 (all households) – Peterborough HMA and Boston

Tenure	2001	2011	Change	% change
Outright owner	56,740	68,147	11,407	20.1%
Owned with mortgage	76,710	72,401	-4,309	-5.6%
Social rented	32,928	33,513	585	1.8%
Private rented	16,445	33,895	17,450	106.1%
Other	4,249	2,968	-1,281	-30.1%
TOTAL	187,072	210,924	23,852	12.8%

Source: Census (2001 and 2011)

4.51 A similar pattern can be seen in each of the individual local authorities with both seeing a notable increase in the number of households who are privately renting and a decrease in owners with a mortgage.

Figure 4.10: Change in Tenure 2001-11 (all households) – by local authority					
Tenure	Peterborough	Rutland	South Holland	South Kesteven	Boston
Outright owner	19.0%	24.7%	16.9%	25.5%	14.2%
Owned with mortgage	-7.0%	-4.9%	-0.7%	-7.5%	-3.9%
Social rented	1.7%	5.1%	1.7%	0.2%	3.2%
Private rented	121.8%	39.3%	123.3%	86.4%	142.3%
Other	-37.7%	-30.2%	-28.0%	-22.0%	-32.1%
TOTAL	13.2%	11.5%	13.8%	11.4%	13.8%

Source: Census (2001 and 2011)

4.52 If the proportion of households in each tenure group had stayed the same in 2011 as it was in 2001 then it would have been expected that there would be 18,500 households living in the private rented sector. The actual number is about 15,400 higher than this and therefore it is arguable that this is the number of households who might be considered as 'would be owner-occupiers' and therefore a potential target group for Starter Homes. For some young households, renting may have however been a lifestyle choice or desired because of its flexibility.

4.53 The data above shows information for all households and it needs to be recognised that the Starter Home Initiative is to be targeted at non-owners aged 23 or over and under 40. Interrogating changes for this age group is difficult as the two Census (2001 and 2011) use different age bandings and do not typically include an 'up to 40' band in the data, nor any differentiation at age 23. It is however possible to provide an indication of the change in tenure by looking at households aged under 35 and this is shown in the table below. It should be noted that to provide consistent analysis, both groups of owners have been merged, whilst the private rented category also includes the 'other' category as shown in the table above.

4.54 For the Under 35 age group the analysis again shows a sharp increase in the number of households living in private rented accommodation. The analysis also highlights a very significant decrease in the number of owner occupiers (decreasing by a third in just 10-years). This analysis does provide some support for widening access to owner-occupation for younger people.

Figure 4.11: Change in tenure 2001-11 (all households aged under 35) – Peterborough HMA and Boston				
Tenure	2001	2011	Change	% change
Owned	20,558	12,968	-7,590	-36.9%
Social rented	7,251	7,152	-99	-1.4%
Private rented	7,601	14,945	7,344	96.6%
TOTAL	35,410	35,065	-345	-1.0%

Source: Census (2001 and 2011)

4.55 For each of the individual local authorities the same pattern is again shown with a notable increase in the number of households aged Under 35 in the private rented sector and large decreases in the number of owners with a mortgage. The growth of younger households in the private rented sector is particularly notable in Peterborough, although highest in percentage terms in South Holland and Boston.

Figure 4.12: Change in tenure 2001-11 (all households aged under 35) – Peterborough				
Tenure	2001	2011	Change	% change
Owned	8,495	5,620	-2,875	-33.8%
Social rented	3,903	3,734	-169	-4.3%
Private rented	3,525	6,907	3,382	95.9%
TOTAL	15,923	16,261	338	2.1%

Source: Census (2001 and 2011)

Figure 4.13: Change in tenure 2001-11 (all households aged under 35) – Rutland				
Tenure	2001	2011	Change	% change
Owned	910	538	-372	-40.9%
Social rented	311	310	-1	-0.3%
Private rented	631	781	150	23.8%
TOTAL	1,852	1,629	-223	-12.0%

Source: Census (2001 and 2011)

Figure 4.14: Change in tenure 2001-11 (all households aged under 35) – South Holland				
Tenure	2001	2011	Change	% change
Owned	3,257	2,039	-1,218	-37.4%
Social rented	784	738	-46	-5.9%
Private rented	786	1,947	1,161	147.7%
TOTAL	4,827	4,724	-103	-2.1%

Source: Census (2001 and 2011)

Figure 4.15: Change in tenure 2001-11 (all households aged under 35) – South Kesteven				
Tenure	2001	2011	Change	% change
Owned	5,547	3,145	-2,402	-43.3%
Social rented	1,308	1,407	99	7.6%
Private rented	1,834	3,273	1,439	78.5%
TOTAL	8,689	7,825	-864	-9.9%

Source: Census (2001 and 2011)

Figure 4.16: Change in tenure 2001-11 (all households aged under 35) – Boston				
Tenure	2001	2011	Change	% change
Owned	2,349	1,626	-723	-30.8%
Social rented	945	963	18	1.9%
Private rented	825	2,037	1,212	146.9%
TOTAL	4,119	4,626	507	12.3%

Source: Census (2001 and 2011)

Estimates of the number of households in the target group

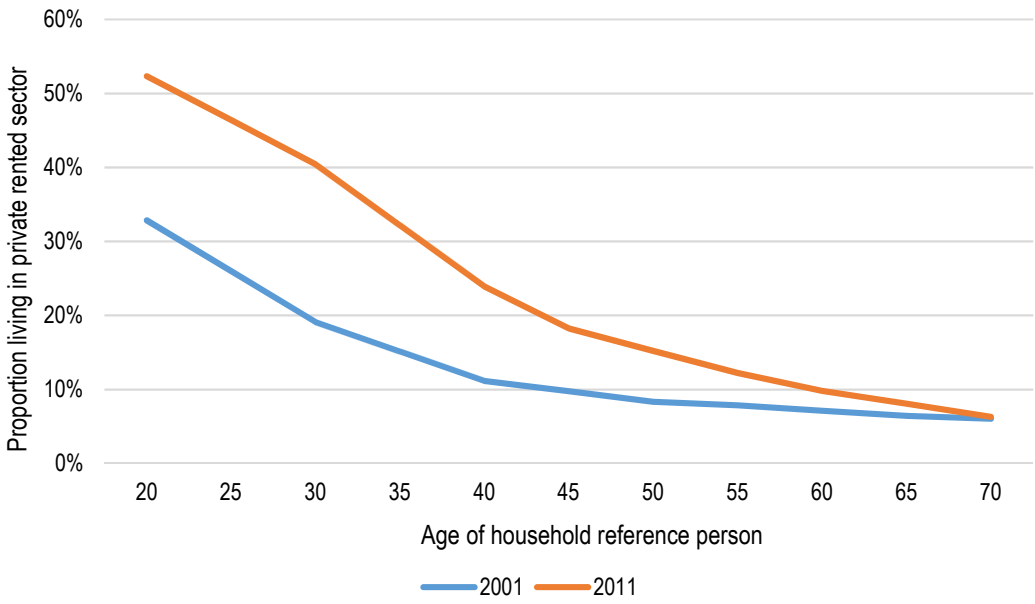
4.56 To look at the current need for Starter Homes an analysis has been undertaken to estimate the size of the target group for such housing. This has been assumed to be the difference between the number of households living in the private rented sector in 2011 with the number that might have been expected if there were no changes in the proportion of households in this sector from 2001 (the analysis then being limited to households who are aged Under 40 (where the household reference person is aged under 40 and aged 23 or over).

4.57 Arguably there will be other households who might be in this target group, particularly those currently living with parents; however, these are not included in the current need as it is assumed that they will be picked up as part of the projection of need (i.e. at the time at which they might be expected to form an independent household). Additionally, there could be some households living in social rented housing who might be part of this target group; however, in this case it is not considered that many (if any) would have sufficient levels of income to afford a Starter Home (and even if they did, they might well wish to remain in their current subsidised housing).

4.58 The first part of the analysis looks at the proportion of people (by age) who live in private rented accommodation. As noted above this analysis is slightly imperfect as the Census source used does not allow for a split to be made at age 40. Additionally, data from each of the 2001 and 2011 Census use slightly different age bandings within published analysis. The available data has therefore been plotted and a trend line between the available data points added to establish what proportion of different age bands live in the private rented sector – this analysis includes the 'other' tenure category due to this not being able to be separated out within the 2001 Census data.

4.59 The figure below shows this analysis, this clearly identifies high levels of private renting amongst younger age groups, the analysis also shows an increase in the proportion of households privately renting in 2011 compared with 2001 – the biggest increase looks to be for households aged about 30 with the proportion privately renting in 2011 estimated to be 40%, compared with about 19% in 2001.

Figure 4.17: Change in proportion of households living in private rented housing (2001-11) by age – Peterborough HMA and Boston



Source: Census (2001 and 2011)

4.60 The table below summarises the information from the figure above to make an estimate of the changes in the proportions living in the private rented sector for various age bands up to age 40 – whilst Starter Homes are not available for people aged under 23 a band from age 20 is included due to data availability issues. The analysis clearly identifies an increase in the proportion in the private rented sector for all age groups.

Figure 4.18: Change in proportion of households living in private rented housing (2001-11) by age – Peterborough HMA and Boston

	2001	2011	Change
20-24	29.4%	49.4%	19.9%
25-29	22.5%	43.4%	20.9%
30-34	17.1%	36.3%	19.2%
35-39	13.1%	28.0%	14.9%

Source: Census (2001 and 2011)

4.61 To work out the current size of the target group of households for Starter Homes, the change in the proportion of households in the private rented sector is multiplied by the number of households in each age band. This analysis is shown in the table below and identifies around 9,400 households as currently being a potential target for Starter Homes (note that the percentages do not quite add up – this is due to the figures being built up from local authority data).

Figure 4.19: Estimated Current Target Group for Starter Homes – Peterborough HMA and Boston			
	Number of households (2016)	% in target group	Number in target group (2016)
23-24	2,576	19.9%	515
25-29	13,868	20.9%	2,914
30-34	17,146	19.2%	3,326
35-39	17,838	14.9%	2,684
TOTAL	51,428	-	9,439

Source: Census (2001 and 2011) and demographic projections

4.62 When applying the data for individual local authorities the target group is as shown in the table below; this shows a particularly large group in Peterborough and a lower number in Rutland – these findings are substantially influenced by both the overall population in each area and the age structure.

Figure 4.20: Estimated Current Target Group for Starter Homes – by local authority					
	Peterborough	Rutland	South Holland	South Kesteven	Boston
23-24	242	10	88	99	76
25-29	1,260	79	529	597	450
30-34	1,448	99	556	677	545
35-39	1,246	100	383	596	359
TOTAL	4,196	288	1,556	1,969	1,430

Source: Census (2001 and 2011) and demographic projections

4.63 The analysis above has considered the current target group for Starter Homes. It is also necessary to understand how many new households will be expected to join this group moving forward. To study this, a similar analysis is carried out to that in the main affordable needs modelling; this seeks to estimate the number of new households in each of the age bands up to age 40. The new households are calculated as the number of household reference persons (HRP) in an age band who were not an HRP five years previously. The analysis shows that each year an additional 629 households are expected to fall into the target group for Starter Homes.

Figure 4.21: Estimated Projected Target Group for Starter Homes (per annum) – Peterborough HMA and Boston			
	Number of newly forming households	% in target group	Number in target group
23-24	470	19.9%	95
25-29	1,481	20.9%	311
30-34	758	19.2%	150
35-39	509	14.9%	73
TOTAL	3,219	-	629

Source: Census (2001 and 2011) and demographic projections

4.64 Again, this information can be provided for each local authority – this is shown in the table below.

Figure 4.22: Estimated Projected Target Group for Starter Homes (per annum) – by local authority					
	Peterborough	Rutland	South Holland	South Kesteven	Boston
23-24	46	1	17	17	15
25-29	122	11	65	69	44
30-34	49	5	36	26	34
35-39	38	7	8	23	-2
TOTAL	255	24	126	134	90

Source: Census (2001 and 2011) and demographic projections

Affordability of Starter Homes

4.65 To understand the likely affordability of Starter Homes in the HMA a similar analysis to that for the affordable housing needs modelling has been undertaken. This essentially seeks to estimate the income levels likely to be required to access housing and the income profile of the target group (i.e. non-owners aged 23 to 39). Income estimates are then compared with the estimated level of income required to access such housing.

Access level for Starter Homes

4.66 As previously discussed; in looking at the cost of housing it needs to be recognised that Starter Homes will be a newbuild product (and therefore may have a small premium) and that discounts on open market value (OMV) of at least 20% will be available. To establish the likely OMV the analysis has looked at Land Registry data for newbuild properties in the year to September 2016 and taken a lower quartile value to equate to a typical cost; the use of a lower quartile is trying to recognise that Starter Homes are likely to be towards the bottom end (in price terms) of the newbuild market. In the 12-month period studied, the lower quartile newbuild price in the whole study are was £150,000.

4.67 To convert the property price into an income level it has been assumed that there will be a 20% discount and it has also been assumed that a household will have a 10% deposit, and the job security necessary to successfully secure a mortgage product. Whilst a deposit may potentially be an issue for a number of households, it is possible that Starter Homes will be able to be bought in conjunction with other incentives (such as Help-to-Buy ISAs). Finally, it is assumed that a mortgage could be secured for four times the household income.

4.68 The table below therefore works through the calculations to determine what level of income might be required to be able to buy a Starter Home. The analysis shows that an income of about £27,000 would be needed (with a 20% discount, 10% deposit and 4 times income mortgage multiple). The analysis shows that the highest incomes are likely to be needed in Rutland and the lowest in Boston.

Figure 4.23: Estimated income levels required to access Starter Homes (20% discount on OMV)				
	Open Market Value	With discount	Minus deposit (amount of mortgage)	Income required
Peterborough	£148,245	£118,596	£106,736	£26,684
Rutland	£191,249	£152,999	£137,699	£34,425
South Holland	£130,000	£104,000	£93,600	£23,400
South Kesteven	£175,498	£140,398	£126,359	£31,590
Boston	£118,625	£94,900	£85,410	£21,353
Study area	£150,000	£120,000	£108,000	£27,000

Source: Derived from Land Registry data

4.69 It is worth briefly reflecting on the estimated level of income required to afford a Starter Home. The latest Valuation Office Agency data for private rental costs suggests in the year to September 2016 that the 'average' lower quartile property cost £475-£550 per month to rent across the study area; on the basis of a 25% affordability threshold (i.e. the proportion of income to be spent on housing costs) this would equate to an annual income of £22,800-£26,400 (note: that 25% is at the very bottom end of what might be a reasonable range to use). This compares with the figure of £27,000 for Starter Homes derived above (and a range from £23,400 to £34,400). This shows that Starter Homes are not 'affordable' in the traditional sense of the definition as those households able to afford a Starter Home will also be able to afford private rented housing.

4.70 Additionally, many households able to afford a Starter Home will also be able to afford open market purchase. Across the whole study area (again taking data for the year to September 2016), Land Registry suggests that the lower quartile purchase price is £128,000 – this is only slightly above the £120,000 figure shown above. This is a difference of £8,000 (or about £2,000 in income terms using a 4-times multiple). It is clear therefore that only a proportion of households will fit in the gap between affording a Starter Home and current open market purchase. However, Starter Homes are not proposed to be limited to those unable to buy, and hence a household able to buy in the market would also be eligible to buy a Starter Homes (subject to other eligibility criteria such as age); buying a Starter Home may be a more attractive proposition given the potential level of discount from OMV.

4.71 Hence the analysis proceeds by looking at non-owning households able to afford a Starter Home (regardless of whether or not they can afford to buy already). In interpreting the findings, it should however be remembered that many of the households highlighted as being able to afford, will in reality have an element of choice – not only will they be able to afford private rented housing, but in many cases, they will also be able to afford open market purchase.

Income levels

4.72 The next step in the process is to consider income levels. The difficulty here is that the analysis ideally focusses on a very particular group of households (non-owners aged 23-39) about which specific data does not readily exist. However, it is considered that the majority of the target group will be households living in private rented accommodation and so some consideration of income levels in this sector will help to get an idea of the target group. Additionally, it is possible to look at HMRC data about the incomes of people in different age bands. The analysis of the incomes of the target group of households therefore essentially has two stages:

- How do income levels of each age group compare with the overall average?
- How do income levels of those living in the private rented sector vary from other households?

4.73 The table below shows average (median) income before tax for people aged both under and over 40 (the data is from the Survey of Personal Incomes 2013-14) for the whole of the Country but only includes taxpayers. This indicates that the income levels of people aged under 30 are lower than those of people aged over 40 but that people aged 30-39 typically have slightly higher incomes.

4.74 It should however be remembered that this is an imperfect analysis and in reality it is probable that income levels amongst older people are relatively higher (if for example there are other non-tax incomes such as from dividends). Additionally, the figures are for individual taxpayers rather than households (which is the category used for the affordability analysis); hence the figures in the last column should be given some weight although the actual income levels shown are of limited use.

Figure 4.24: Estimated income levels by age (United Kingdom)

Age group	Median income (before tax)	% of all taxpayers
20-24	£15,200	69.4%
25-29	£20,200	92.2%
30-34	£24,000	109.6%
35-39	£26,100	119.2%
All ages (including 40 and over)	£21,900	-

Source: National Statistics -Distribution of median and mean income and tax by age range and gender

4.75 When looking specifically at households in the private rented sector, data from the English Housing Survey has been considered. In 2013-14 (the latest year for which data is available) this source shows an average (mean) income of £580 per week in the private rented sector, compared with £672 for all households – the private rented sector is therefore at about 86% of the overall average.

4.76 On the basis of this analysis, it is concluded for the purposes of modelling the incomes of the target group by age can be calculated by multiplying age specific differences in incomes by the typical proportion of all household income seen in the private rented sector. The table below shows estimated median incomes in the study area for the target group for Starter Homes by age; the figure shown are calculated as a proportion of the overall median income in the study area which has been estimated to be £28,900 per annum.

4.77 The analysis suggests that younger households in the target group will have relatively low incomes, however by the time a household reaches their mid-30s, income levels are similar to those seen across the whole study area.

Figure 4.25: Estimated income levels by age for Starter Homes target group – Peterborough HMA and Boston		
Age group	Multiplier from all household income	Estimated median income
23-24	0.60	£17,301
25-29	0.80	£22,992
30-34	0.95	£27,317
35-39	1.03	£29,707

Source: Derived from a range of analysis (as described)

4.78 The analysis above is indicative for the whole study area with the actual data used being assessed on a local authority basis. The table below therefore provides equivalent data (just for incomes) in each area.

Figure 4.26: Estimated (median) income levels by age for Starter Homes target group – by local authority					
Age group	Peterborough	Rutland	South Holland	South Kesteven	Boston
23-24	£17,917	£20,114	£15,996	£18,309	£14,279
25-29	£23,811	£26,730	£21,258	£24,332	£18,977
30-34	£28,291	£31,759	£25,257	£28,909	£22,546
35-39	£30,766	£34,538	£27,467	£31,439	£24,519

Source: Derived from a range of analysis (as described)

Affordability

4.79 In taking this information forward an income distribution has been constructed for each age group based on the distribution for all households. This is then applied to the income thresholds already derived to estimate the likely proportion of households in each age group who might be able to afford a Starter Home. This is shown in the table below and shows that about 28% of households aged 23-24 would be expected to be able to afford a Starter Home; this figure rises to 55% when considering the 35-39 age group. This would suggest that only the best-off minority of households age Under 40 will be able to afford Starter Homes in the study area.

4.80 These figures essentially include anyone with an income above the thresholds derived and analysis based on these figures should be considered as indicative; for example, some of the higher earners in this category would have the choice between Starter Homes and other owner-occupied products and may not choose the discounted new build option.

Figure 4.27: Affordability of Starter Homes by age band						
Age group	% able to afford Starter Home					
	Peter-borough	Rutland	South Holland	South Kesteven	Boston	Study-area
23-24	30.7%	24.0%	31.7%	23.8%	30.6%	28.5%
25-29	44.1%	37.7%	45.1%	37.5%	44.0%	42.0%
30-34	52.9%	45.7%	53.9%	45.4%	52.8%	50.5%
35-39	56.9%	50.1%	57.8%	49.8%	56.8%	54.6%

Source: Derived from a range of analysis (as described)

Bringing the analysis together – the potential need for Starter Homes

4.81 The analysis below brings together the analysis of the number of households in a target group for Starter Homes along with the affordability estimates. Analysis is provided separately for the current and future need and then brought together into a single annual estimate of the potential need for Starter Homes. To be consistent with the analysis of affordable housing need, the figures are presented as an annual figure for the whole of the projection period (i.e. the 20-years from 2016 to 2036).

4.82 The table below shows the estimated current need for Starter Homes; this is 4,584 households. Annualised, this represents 229 homes per annum over the period to 2036.

Figure 4.28: Estimated Current Need for Starter Homes – Peterborough HMA and Boston			
	Size of target group	% able to afford	Number able to afford
23-24	515	28.5%	151
25-29	2,914	42.0%	1,245
30-34	3,326	50.5%	1,707
35-39	2,684	54.6%	1,481
TOTAL	9,439	-	4,584
Annualised	-	-	229

Source: Derived from a range of analysis (as described)

4.83 The table below shows a similar analysis for future newly forming households; this analysis indicates a potential need for around 277 Starter Homes each year.

Figure 4.29: Estimated Future Need for Starter Homes (per annum)			
	Size of target group	% able to afford	Number able to afford
23-24	95	28.5%	28
25-29	311	42.0%	132
30-34	150	50.5%	77
35-39	73	54.6%	40
TOTAL	629	-	277

Source: Derived from a range of analysis (as described)

4.84 The analysis can also be brought together (i.e. adding the current and future need) to provide an annual estimate of the likely need for Starter Homes. This is shown in the table below and indicates a potential need for 507 dwellings per annum. This figure should be treated as a maximum and it should be remembered that this will also cover other forms of discounted home ownership (as per the White Paper). The figures are a maximum because in some cases households will not be eligible (e.g. due to income caps) whilst it also needs to be recognised that the households with an income sufficient to support a Starter Home will also have an element of choice within both the private rented and sales markets.

Figure 4.30: Estimated annual need for Starter Homes – by local authority (per annum 2016-36)

	Current need	Future need	Total need
Peterborough	105	115	221
Rutland	6	10	16
South Holland	39	59	98
South Kesteven	43	53	95
Boston	36	40	76
Study area	229	277	507

Source: Derived from a range of analysis (as described)

4.85 The annual estimated need for Starter Homes can be compared with the overall need for housing as assessed through demographic projections – this suggested a need for up to 2,390 dwellings per annum (excluding any further uplift to take account of economic growth in South Kesteven); the Starter Home need represents about 21% of the household projections.

4.86 This analysis would suggest that there is likely to be sufficient demand for 10% of all housing to be provided as Starter Homes or other discounted sales products. Whilst it could be argued that a figure of up to 21% is reasonable, this would fail to recognise that households will have a choice of other products in the open market, and in many cases would not choose an affordable home ownership option (particularly where the discount is held in perpetuity (in the case of discounted market sales housing) or for a fairly long period of time (15-years, as is likely to be the case with Starter Homes).

4.87 To be clear, whilst the analysis identifies a potential 'need' for affordable home ownership units of up to 21%, there is no strong evidence to suggest that the Councils should plan for more than the 10% which seems likely to be included in any amendment to the NPPF. This is simply because the 21% is a maximum, and all of those captured as able to afford such products are also able to afford other forms of market housing. Hence any flexibility in terms of the 10% figure, should be in a downward direction; this would help to deliver more 'traditional' forms of affordable housing, which can be accessed by households unable to exercise choice in the open market.

The Role of Starter Homes: Discussion

4.88 Analysis of the 'need' for Starter Homes from both current and newly forming households identifies a potential need for 507 homes to be provided each year to 2036. This figure represents about 21% of the total need for housing identified by the analysis (an upper end need for 2,390 dwellings each year).

4.89 This 'need' should arguably be understood as a potential demand; the analysis indicates that Starter Homes will not be affordable in the 'traditional' sense. If a household is able to access the open market (whether to buy or rent), they do not need a Starter Home (although they may want one because the 20% discount is a good investment opportunity). That said, the 15-year repayment period suggested in the White Paper may act as a disincentive to many households.

4.90 Evidently not all households who could potentially afford a Starter Home will choose to buy one – some may choose to continue renting; whilst others may choose to purchase properties within the second hand market. It seems likely that in a number of instances there will be properties available at a comparable price in the second hand market to levels at a 20% discount to new-build values. Including a cap on income levels in modelling would reduce the potential need for Starter Homes.

4.91 The analysis has been based on a 20% discount to Open Market Value (OMV). There is little merit in seeking discounts on Open Market Value (OMV) which are higher than the minimum position (of 20%) suggested by the Housing and Planning Act. With a 20% discount (rather than higher discounts) it is possible that additional affordable housing (e.g. social/affordable rent) will be able to be viably provided to help meet the needs of lower income households in the study area.

4.92 Additionally, it should be noted that the need for Starter Homes derived in this assessment should not be seen as a need for additional homes over and above the numbers suggested in the main analysis of objectively assessed need. As can clearly be seen from the analysis, it is considered that the provision of Starter Homes will enable some households in the private rented sector to move into owner-occupation. In doing so a dwelling would be released for use by another household and hence there is no net additional need for housing as a result of including Starter Homes within the mix of housing to be delivered.

4.93 Overall, it is concluded that a 'target' for up to 10% of new homes to be Starter Homes (or other forms of affordable home ownership units) is realistic and that these should be provided at a 20% discount to OMV. Questions do remain about the extent to which such housing is genuinely affordable as the income levels required to access such housing are above those typically required to access market housing as currently available. If there is flexibility of the proportion of homes to be provided as Starter Homes, then the Councils will need to consider the balance between Starter Homes and other forms of affordable housing carefully (particularly noting that those able to afford a Starter Home will already be able to afford market housing within the private rented sector, and in many cases will be able to afford to buy in the open market).

Housing and Planning Act and Welfare Reform

4.94 The reforms introduced over recent years – alongside future planned reforms – could continue to impact upon the calculated need for affordable housing presented in this SHMA. This includes from announcements made in the Summer Budget of 2015 and the Housing and Planning Act.

4.95 In October 2015, the Government published the Housing and Planning Bill 2015-16 (this received Royal Ascent as the Housing and Planning Act 2016 on the 12th May 2016). This set out a number of government initiatives which are likely to directly influence the supply and demand for housing and affordable housing. The key change looks likely to be the introduction of Starter Homes and analysis of this topic has been provided in this section.

4.96 There are also a number of other initiatives (from both the Act and previous announcements) which may impact on the supply and demand for general and affordable homes, although the full impact is yet to be understood. These include:

- **A requirement for social/affordable rents to be reduced by 1% for four years from April 2016.** The likely impact of this will be to reduce income for both the local authorities (which have housing stock) and housing associations. This in turn may reduce the LA or RP reinvestment funding/borrowing power and may subsequently reduce the development of new affordable homes.

- **The extension of the Right-to-Buy to RP tenants**. Although not enforceable this could reduce affordable housing stock and reduce thus the number of re-lets. Research by Joseph Rowntree Foundation predicts that nationally 8.3% of housing association tenants will be eligible for and could afford the RTB, and that 71% of those will purchase their home over the first five years. This may be mitigated slightly by the removal of life time tenancies.

- **Local authorities to sell high value social housing stock as it becomes vacant**. Whilst the detail of this has yet to be confirmed this is will reduce the number of available properties which are available for re-lets each year. Higher value areas will be impacted most although it may provide additional funding for smaller affordable properties.

- **Increasing rent to market rates for social housing tenants earning over £30,000**. This "pay to stay" initiative will ensure those who can afford to pay market rates will do so. However, it may mean that people are more likely to exercise their right to buy thus reducing the stock level of affordable housing. The Government has now decided against making this compulsory.

- **Capping social housing rents at Local Housing Allowance.** For some Registered Providers this will limit their income to a multiple of the Local Housing Allowance. In the long term this is likely to influence the type of homes they build with more smaller homes being likely. The proposal will see any single claimants under 35 only being eligible for the LHA Shared Accommodation Rate which at present is much lower than the LHA for one bedroom flats. This could result in reduced demand for RP properties with a shift toward the PRS.

- **The introduction of 3% higher stamp duty on buy-to-let properties and second homes.** This may result in the number of Buy-to-let landlords being reduced; through both sales of their existing properties and new landlords seeing the market as unviable. The Bank of England expressed their concerns that the proliferation of Buy-to-let landlords could result in a housing crash if they flood the market with their unwanted property. While the introduction of the new rules may not result in a flood of sales it may well reduce the supply of PRS properties.

- **The household benefit cap** will be lowered so that an out of work family outside London can claim no more than £20,000 in benefits although those who find a job will continue to be exempt from the cap. Pensioners also will not be subject to this limit. This means that more people will see their total benefits limited. This change reduces the ceiling from the previous weekly £500 to £385 for those with children or couples without children and from £350 to £258 for single people without children. The benefit cap changes will start to be implemented from the 7th November 2016.

- **Automatic housing support entitlement will be withdrawn** for new Universal Credit claims **from 18-21 year olds** who are out of work, with a new Youth Obligation support regime introduced to encourage people of this age into sustainable employment.

- **Housing Benefit for social sector tenancies limited to private sector levels.** The private sector limit on Housing Benefit called Local Housing Allowance, will be applied on 1 April 2018 to social sector housing where a new tenancy is taken out or a tenancy is renewed after 1 April 2016 (it is April 2017 for those in supported accommodation). Local Housing Allowance is a limit on the amount of rent that is eligible for Housing Benefit depending on family make up and location.

- **Working-age benefits** – including local housing allowance (LHA) – will be **frozen for 4 years** from 2016/17.

- **Reduced help with mortgage interest for benefit claimants**. From April 2018, new payments will be turned into loans – secured against the claimant's property.

4.97 It is too early to fully quantify the impact these changes will have on the supply and demand for affordable homes. However, the local authorities should monitor the situation; any reduction in the supply would need to be offset with increasing the need within the affordable housing calculations.

Affordable Housing Need: Key Messages

- An assessment of affordable housing need has been undertaken which is compliant with Government guidance to identify whether there is a shortfall or surplus of affordable housing in the Peterborough HMA and Boston. Overall, in the period from 2016 to 2036 a net deficit of 1,076 affordable homes per annum is identified (847 in Peterborough HMA 229 in Boston). There is thus a requirement for new affordable housing and the Councils are justified in seeking to secure additional affordable housing.

- How affordable housing need sits with the overall need for housing needs to be properly understood, it is important to bear in mind that the affordable housing needs model includes existing households who require a different size or tenure of accommodation rather than new accommodation per se. Additionally, the modelling includes newly forming households, who are already part of the demographic projections (i.e. they are already included within the need). Furthermore, many households secure suitable housing within the Private Rented Sector, supported by housing benefit.

- Once account is taken of the range of outputs with the modelling and the fact that many of the households in need are already living in accommodation (existing households) and the role played by the private rented sector, the analysis does not suggest that there is any strong evidence of a need to consider additional housing to help meet the affordable need. There are however a number of concealed households within the modelling who are not picked up by demographic projections (and are without housing). There is merit in considering these households as an additional need and this is addressed in the market signals section of the report.

- A final analysis looked at the potential role for Starter Homes. This suggested that there is potentially sufficient demand for 10% of homes to be provided in this tenure (or other affordable home ownership products such as discounted market sales housing). Shared Ownership housing, which is an already established and more financially flexible affordable home ownership product, is also included within the 10% target for affordable home ownership proposed within the White Paper published in February 2017. However, questions do remain about the extent to which the new affordable home ownership products (Starter Homes and discounted market sales) is genuinely affordable as the income levels required to access such housing are above those typically required to access market housing as currently available

- A number of proposals were introduced in the Housing and Planning Act which may impact on the future supply of and demand for affordable housing. The impact of these proposals should be monitored by the local authorities to understand the likely impact these are having on levels of affordable housing need.

5. Market Signals

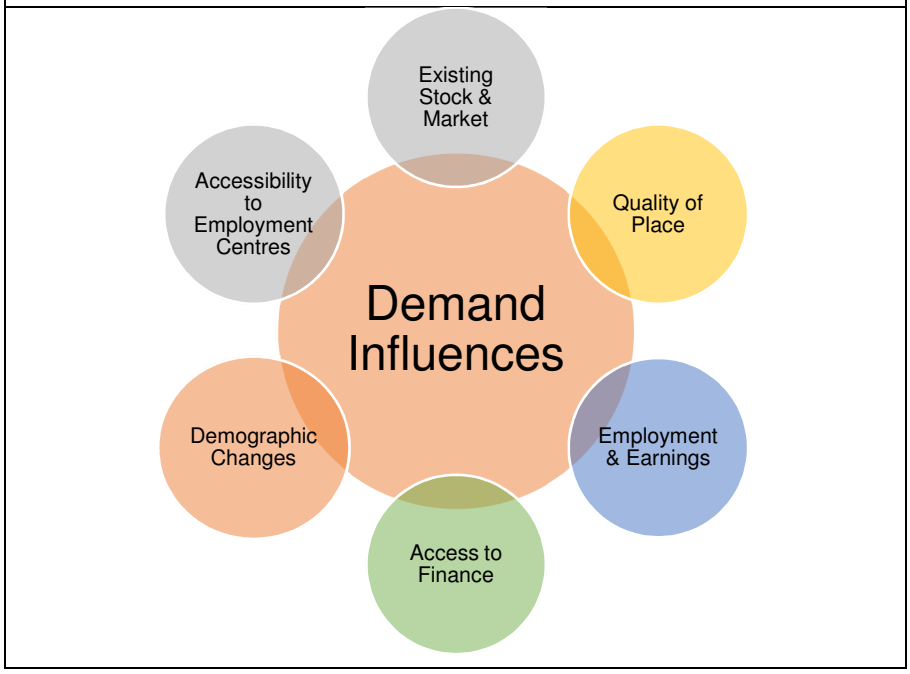
Introduction

5.1 In line with the PPG, this section has sought to analyse in detail the housing market dynamics. This section, initially reviews housing market dynamics including national and macro- economic drivers. This is then developed at a more local level with quantitative analysis of local prices, sales volumes and affordability.

Conceptual Framework

5.2 It is important to understand that the housing market is influenced by macro-economic factors, as well as the housing market conditions at a regional and local level. There are a number of key influences on housing demand, which are set out in the diagram below:

Figure 5.1: Understanding Housing Demand Drivers



5.3 At the macro-level, the market is particularly influenced by interest rates and mortgage availability, as well as market sentiment (which is influenced by economic performance and prospects at the macro-level). Economic uncertainty resulting from the Brexit vote appears to be impacting on confidence within the housing market at the time of writing.

5.4 The market is also influenced by the economy at both regional and local levels, recognising that employment trends will influence migration patterns (as people move to and from areas to access jobs) and that the nature of employment growth and labour demand will influence changes in earnings and wealth (which influences affordability).

5.5 Housing demand over the longer-term is particularly influenced by population and economic trends: changes in the size and structure of the population directly influence housing need and demand, and the nature of demand for different housing products. There are then a number of factors which play out at a more local level, within a functional housing market and influence demand in different locations. Local factors include:

- quality of place and neighbourhood character;
- school performance and the catchments of good schools;
- the accessibility of areas including to employment centres (with transport links being an important component of this); and
- the existing housing market and local market conditions.

5.6 The influence of these factors can be particularly local and thus there is a limit to the extent that they can be covered in a strategic study.

5.7 These factors influence the demand profile and pricing within the market. At a local level, this often means that the housing market (in terms of the profile of buyers) tends to be influenced and consequently reinforce to some degree the existing stock profile. However, regenerative investment or delivery of new transport infrastructure can influence the profile of housing demand in a location, by affecting its attractiveness to different households.

5.8 Local housing markets or sub-markets are also influenced by dynamics in surrounding areas, in regard to the relative balance between supply and demand in different markets; and the relative pricing of housing within them. Understanding relative pricing and price trends is thus important.

Local Demand Indicators and Market Signals

5.9 The PPG outlines that the housing need suggested by household projections should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between supply and demand for housing. Prices or rents rising faster than the national/ local average may well indicate market undersupply.

5.10 In assessing market signals, the PPG outlines that as individual indicators can be volatile, consideration should be given to longer-term trends (in terms of absolute and relative changes), as well as to similar demographic/ economic areas and nationally.

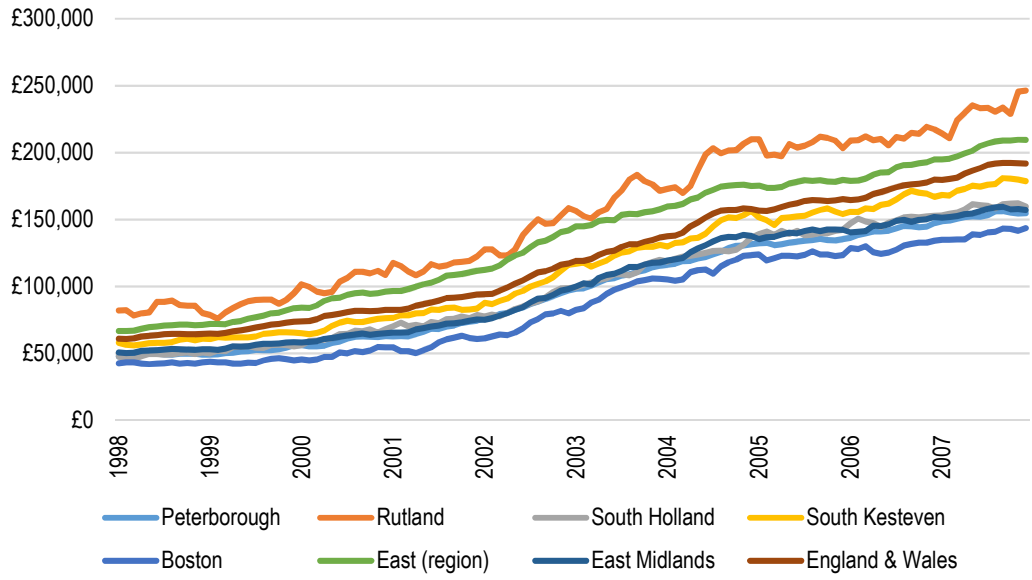
5.11 It is also considered important to understand how trends relate to different market cycles and thus consider trends over the period to 2007/8; post-2007/8 in the analysis. The analysis considers dynamics within each local authority and compares these to regional and national trends.

House Prices

5.12 The figure below shows the growth in average house prices over the pre-recession decade 1998 - 2007. Strong, sustained house price growth was seen at both a national and regional level over this period, prices typically increasing by around 200%. As the figure shows, a similar trend was seen across all areas studied although the higher average prices in Rutland are notable.

5.13 The analysis particularly points to national, macro-economic factors as driving house price growth, rather than a particular acute lack of supply in any of the local authorities. However, it does highlight a general supply/demand imbalance over this period which contributed to strong house price growth. The availability of mortgage finance and buy-to-let investment, coupled with the inelasticity of housing supply, contributed to house price growth over this period.

Figure 5.2: Average House Price Change, 1998-2007



Source: Land Registry

5.14 In absolute terms, house price growth in all areas apart from Rutland was below that seen nationally, although South Holland and South Kesteven were also both above the regional average.

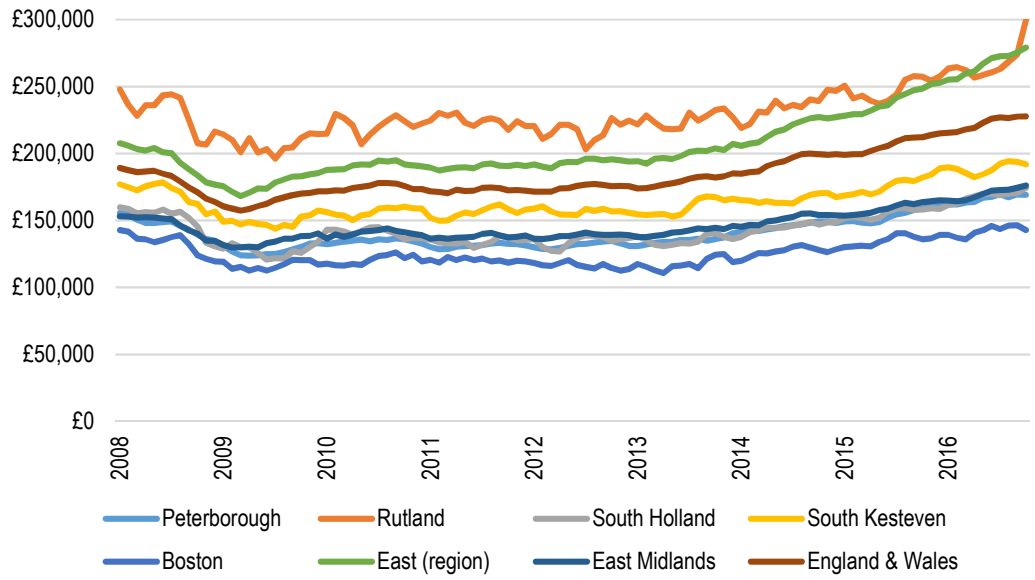
Figure 5.3: Absolute and Relative House Price Changes, 1998-2007

	1998 (Q1)	2007 (Q4)	Price Change	Price Change (%)
Peterborough	£48,206	£154,885	£106,679	221%
Rutland	£80,890	£240,180	£159,290	197%
South Holland	£46,614	£161,207	£114,593	246%
South Kesteven	£56,855	£179,617	£122,762	216%
Boston	£43,144	£142,773	£99,629	231%
East (region)	£66,876	£209,320	£142,444	213%
East Midlands	£50,566	£157,589	£107,024	212%
England and Wales	£61,051	£191,998	£130,948	214%

Source: Land Registry

5.15 Housing market conditions in the last economic cycle, since 2008, have been notably different. This period has seen more subdued market demand, associated with weaker economic conditions – particularly in the earlier part of the period – coupled with enhanced mortgage market regulation and more prudent lending attitudes. Using a consistent scale to the previous figure, the different trend seen in house prices is self-evident.

Figure 5.4: Average House Price Change, 2008-2016



Source: Land Registry

5.16 Over the market cycle since 2008, only a modest increase in house prices has been seen in the study area (prices increases of between 4% in Boston and 13% in Rutland). These figures fall below inflation and indicates that the value of housing in real terms has fallen over the past 7 years. In proportional and absolute terms, house price growth over this period has fallen below that seen at a regional and national level (with the exception of Rutland).

Figure 5.5: Absolute and Relative House Price Changes, 2008-2016

	2008 (Q1)	2016 (Q3)	Price Change	Price Change (%)
Peterborough	£153,533	£168,738	£15,205	10%
Rutland	£237,432	£268,645	£31,213	13%
South Holland	£157,996	£169,896	£11,901	8%
South Kesteven	£174,835	£193,447	£18,612	11%
Boston	£140,333	£145,440	£5,107	4%
East (region)	£205,647	£273,692	£68,046	33%
East Midlands	£152,780	£173,363	£20,583	13%
England and Wales	£187,624	£227,100	£39,476	21%

Source: Land Registry

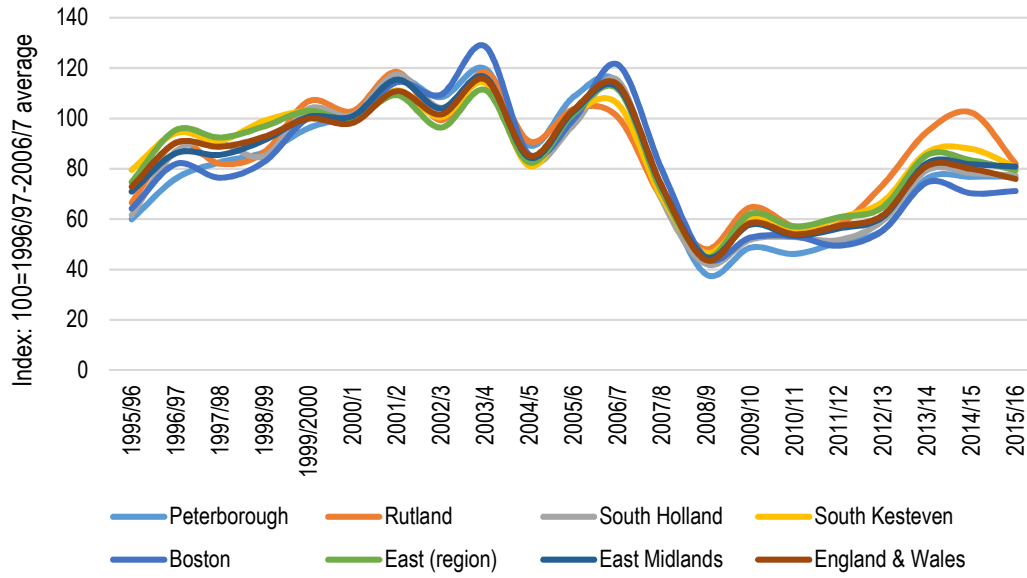
Sales Volumes and Effective Demand

5.17 Sales are an important indicator of effective demand for market housing. Analysis below has benchmarked sales performance against long-term trends to assess relative demand. The figure below benchmarks annual sales over the period of 1995/6 to 2015/16. It uses an index where 100 is the average annual sales over the 1996/7-2006/7 pre- recession decade.

5.18 The analysis points to a significant and sustained impact of the 2008-9 economic recession on the housing market, with a reduction in sales of around 60%. Sales volumes (and thus effectively demand) remained low through the 2010-13 period. Sales volume were improving significantly year-on-year between 2013-15. During 2016 this momentum has been lost. What is notable however is that sales volumes in 2015 remained generally around 20% down on the averages seen in the pre-recession decade.

5.19 Trends in sales at a local authority level have largely mirrored those seen at a regional and national level, highlighting the influence of macro-economic factors on the market. Relative to the pre-recession trend, sales volumes in 2015/16 had recovered to a lesser extent in Boston than in other areas.

Figure 5.6: Indexed Analysis of Sales Trends (1995-2016)



Source: Land Registry

Rental Costs

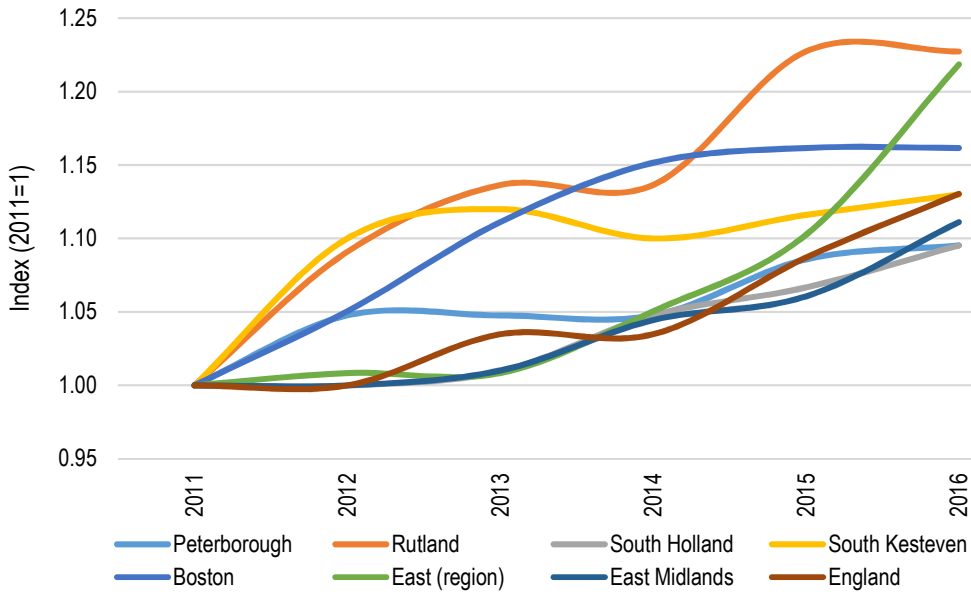
5.20 Median rental costs in each of the five authorities other than Rutland are below the national average, although the four areas in the East Midlands all show a median rent that is above the regional average.

Figure 5.7: Median Private Rents, Year to September 2016		
	Median Rent, Year to September 2016	% Difference to England
Peterborough	£575	-12%
Rutland	£675	4%
South Holland	£575	-12%
South Kesteven	£565	-13%
Boston	£575	-12%
East (region)	£725	12%
East Midlands	£550	-15%
England and Wales	£650	-

Source: Analysis of VOA Private Rental Market Statistics

5.21 The figure below shows trends in rents over the period since 2011 (the longest period consistently available from VOA data). Overall, rental growth has been in-line with the national position although Rutland (and to a lesser extent Boston) have seen more notable rises. In Boston, there has however been no notable increase over the past three years, whilst for Rutland the figures are quite variable; in both locations there is a relatively low volume of lettings within the VOA data. It should be noted that all data in the chart below is for the year to September.

Figure 5.8: Benchmarked trend in median private rental values (2011 – 2016)



Source: VOA Private Rental Data

Affordability of Market Housing

5.22 Evidence of affordability has been studied by looking specifically at the relationship between lower quartile house prices and lower quartile earnings, as published by CLG. CLG has discontinued its previous dataset, and therefore two time periods are considered: 1997-2013; and 2013-15. These are some minor differences between the two datasets.

5.23 The latest data points to lower quartile house price-to-income ratios in all areas other than Peterborough which are above the national average, although differences (other than in Rutland) are not substantially different from the national position. Other than in Rutland, this data does not point to particularly strong affordability pressures for younger would-be first-time buyers. Price to income ratios in all areas other than Rutland have over the period studied increased at a faster rate than observed nationally, although it does need to be borne in mind that this data is only covering three data points (and there will be associated error margins with the income part of the ratio – this being drawn from the Annual Survey of Hours and Earnings).

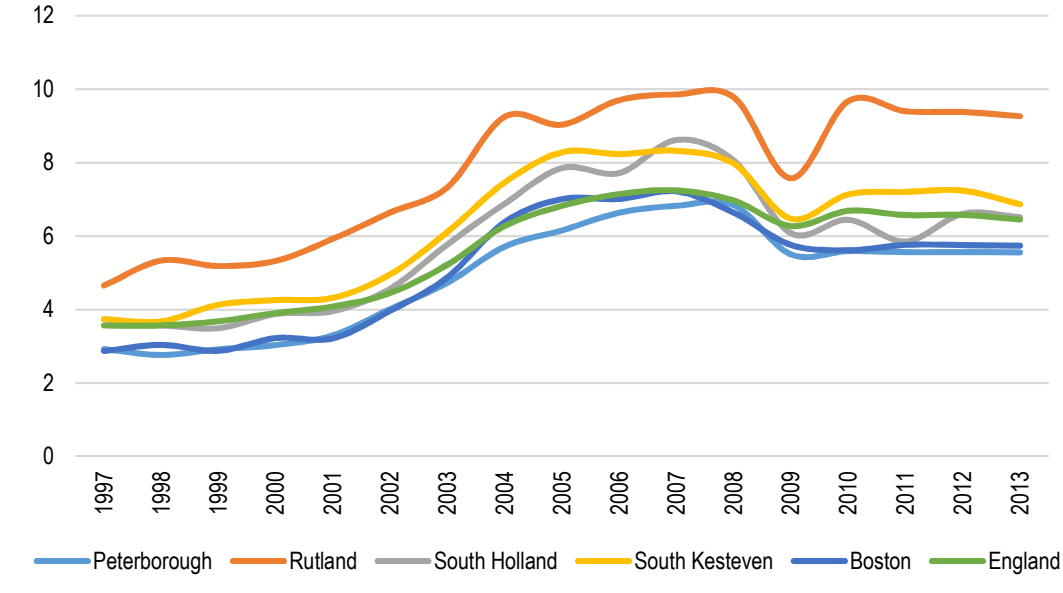
Figure 5.9: Lower Quartile House Price-to-Income Ratio, 2013-15

	2013	2014	2015	Change
Peterborough	5.61	6.09	6.32	0.71
Rutland	9.26	8.55	9.34	0.08
South Holland	6.61	6.73	7.23	0.61
South Kesteven	7.17	7.87	7.83	0.66
Boston	5.92	6.45	7.20	1.28
England	6.66	6.95	7.02	0.36

Source: CLG Table 576

5.24 There has been some deterioration of the house price to income ratio over the 2013-15 period, however this is a relatively short period and follows a period in which affordability had improved since about 2008 in all areas other than Rutland, as the figure below shows. The affordability ratio in all areas other than Rutland is close to (or below) the national position throughout the period studied.

Figure 5.10: Lower Quartile Affordability Trend (1997-2013)



Source: CLG Live Tables: Land Registry Data

Land Values

5.25 As the PPG sets out, residential land values can provide direct information on the shortage of land in any locality for a particular use. Data published by CLG indicates residential land values in all locations which fall below national averages (although in Rutland the difference is relatively small). This does not particularly point to a shortage of residential land.

Figure 5.11: Residential Land Values, 2015

	Residential Land Value per Ha	% Difference to national average
Peterborough	£1,190,000	-43%
Rutland	£1,865,000	-11%
South Holland	£555,000	-74%
South Kesteven	£640,000	-70%
Boston	£895,000	-57%
East (region)	£2,600,000	24%
East Midlands	£1,100,000	-48%
England (excl. London)	£2,100,000	-

Source: CLG Land Value Estimates for Policy Appraisal, December 2015

Overcrowding and wider indicators

5.26 The PPG sets out that consideration should be given to long-term increases in overcrowded, concealed and shared households, as well as those in homelessness and temporary accommodation. Long-term increases may point to a need to increase housing provision.

5.27 The analysis below firstly looks at levels of overcrowding in the study area compared with other locations (based on the bedroom standard) before moving on to consider how overcrowding has change over time (in this case using the room standard as historical bedroom standard data is not available from the Census source used).

5.28 The table below shows in 2011 that between 1.2% (Rutland) and 5.1% (Peterborough) of households were overcrowded. With the exception of Peterborough, all areas show levels of overcrowding below the national average. Given earlier analysis of house prices, rents and affordability ratios, it does not however seem likely that the higher level of overcrowding in Peterborough is linked to affordability issues.

Figure 5.12: Overcrowding (2011) – bedroom standard		
	Overcrowded (no.)	Overcrowded (%)
Peterborough	3,807	5.1%
Rutland	185	1.2%
South Holland	1,138	3.1%
South Kesteven	850	1.5%
Boston	1,097	4.0%
East (region)	82,582	3.4%
East Midlands	59,298	3.1%
England	1,024,473	4.6%

Source: Census (2011)

5.29 The table below shows overcrowding (as measured through the room standard) in 2001 and 2011. The data confirms that levels of overcrowding are lower than national figures (with Peterborough also being below the national average). Changes to the number and proportion of households who are overcrowded on this measure has been variable and notably has been higher in Peterborough and Boston than other locations.

Figure 5.13: Change in Overcrowded Households 2001-11						
	Overcrowded, 2001		Overcrowded, 2011		Change: Nos	Change: %
	No.	%	No.	%		
Peterborough	3,639	5.6%	6,180	8.3%	2,541	2.8%
Rutland	354	2.6%	371	2.5%	17	-0.2%
South Holland	852	2.6%	1,531	4.1%	679	1.5%
South Kesteven	1,470	2.9%	1,757	3.1%	287	0.2%
Boston	1,011	4.2%	1,865	6.8%	854	2.6%
East (region)	115,338	5.2%	156,437	6.5%	41,099	1.3%
East Midlands	77,146	4.5%	104,764	5.5%	27,618	1.1%
England	1,457,512	7.1%	1,928,596	8.7%	471,084	1.6%

Source: Census data

5.30 As well as studying overcrowding the table below looks at the number of Houses in Multiple Occupation (HMOs). For the purposes of this analysis, data has been taken from the Census about the number of households in the 'Other' household composition category – this category is largely made up of multi-adult households where residents are unrelated. This therefore provides an indication of the number of sharing households.

5.31 The table below shows that the proportion of households sharing accommodation is generally below the national average (higher in Peterborough and the same for Boston). The level of sharing households has increased slightly over the decade to 2011 – with particularly notable increases in Peterborough, South Holland and Boston).

Figure 5.14: Changes in sharing households (2001-2011)			
	2001	2011	Change
Peterborough	3.3%	5.2%	1.8%
Rutland	2.2%	2.0%	-0.1%
South Holland	2.5%	4.1%	1.7%
South Kesteven	2.4%	2.8%	0.5%
Boston	2.3%	4.5%	2.3%
East (region)	2.9%	3.7%	0.8%
East Midlands	2.7%	3.5%	0.8%
England	3.7%	4.5%	0.8%

Source: Census (2001 and 2011)

5.32 The final analysis in this section concerns the number of concealed households. A concealed household is defined in the Census as *'a family living in a multi-family household in addition to the primary family, such as a young couple living with parents'*. The concept of concealed households is important in studying objectively assessed need as such households will not be included within demographic projections (as the projections work on the basis of one family per household).

5.33 The table below shows in 2011 that there were 2,857 concealed families in the study area; generally, the proportion of concealed families in the area is low when compared with national data (the exceptions being Peterborough and Boston). However, the number of concealed households has increased over time and in 2011 there were 1,700 more such households in the area than were recorded in 2001; notable increases being seen in all areas apart from Rutland.

Figure 5.15: Concealed households and changes (2001-2011)				
	Concealed families (2001)	Concealed families (2011)	% of all families in 2011	Change from 2001
Peterborough	532	1,379	2.7%	847
Rutland	51	64	0.6%	13
South Holland	199	487	1.8%	288
South Kesteven	235	435	1.1%	200
Boston	140	492	2.5%	352
East (region)	13,354	24,999	1.5%	11,645
East Midlands	11,708	20,403	1.6%	8,695
England	161,254	275,954	1.9%	114,700

Source: Census (2001 and 2011)

Drawing the analysis together

5.34 Drawing the analysis together, conclusions can be made on whether an adjustment to overall housing provision should be made for market signals. Planning Practice Guidance outlines where the evidence points to a worsening trend, an adjustment should be made to planned housing provision relative to the *'starting point'* demographic projections (2a-019).

5.35 Overall the analysis of market signals points towards limited affordability pressures, although the analysis suggests this is not dissimilar to that seen in other locations and therefore there is no strong evidence that housing provision should be increased. The exception is in Rutland where house prices, rents and the affordability ratio does suggest particular pressures; it should be noted that the demographic analysis in this report has already included an uplift in Rutland to take account of supressed household formation. Looking generally across the study area (and noting initially that Rutland only makes up a small part of the population and households), the only topic where some increase might be merited is in relation to concealed households – as noted in the affordable housing section, these households do not form part of the demographic assessment of need.

5.36 The analysis above identifies that the number of concealed households in the study area increased by 1,700 from 2001 to 2011 to reach a total of 2,857. It is not considered that all of this 2,857 should be added to the need as it would be expected at any point in time that there will be a number of concealed households and some of this will be through choice. However, the increase in the number of such households is likely to reflect some difficulties in the housing market; it is therefore suggested that the housing need figure should be increased by 1,700 dwellings (68 per annum) to reflect the change in the number of concealed households.

5.37 On the basis of the various analysis carried out (in relation to demographic trends, the economy, affordable housing and market signals) it is concluded that the objectively assessed need for housing in study area is 61,446 dwellings (2011-36) – 2,458 per annum (2,163 in the Peterborough HMA and 295 in Boston). This conclusion does not make any additional allowance for the potential shortfall in labour supply in South Kesteven (which, as can be seen in the summary, potentially increases the final OAN conclusion). All of the tables below include the uplift to HRRs in Rutland.

Figure 5.16: Estimated housing need including uplift for concealed households (uplift to 2014-based SNPP)

	Housing need (2011-36)	Additional concealed households	Total need (2011-36)	Per annum
Peterborough	21,274	847	22,121	885
Rutland	2,701	13	2,714	109
South Holland	8,626	288	8,914	357
South Kesteven	15,023	200	15,223	609
Peterborough HMA	47,625	1,348	48,973	1,959
Boston	5,724	352	6,076	243
Study area	53,349	1,700	55,049	2,202

Source: Demographic projections and Census (2001 and 2011)

Figure 5.17: Estimated housing need including uplift for concealed households (uplift to projection based on 10-year migration trends)				
	Housing need (2011-36)	Additional concealed households	Total need (2011-36)	Per annum
Peterborough	23,690	847	24,537	981
Rutland	3,969	13	3,982	159
South Holland	10,833	288	11,121	445
South Kesteven	14,225	200	14,425	577
Peterborough HMA	52,717	1,348	54,065	2,163
Boston	7,028	352	7,380	295
Study area	59,746	1,700	61,446	2,458

Source: Demographic projections and Census (2001 and 2011)

Figure 5.18: Estimated housing need including uplift for concealed households (uplift to job-led forecast)				
	Housing need (2011-36)	Additional concealed households	Total need (2011-36)	Per annum
Peterborough	20,125	847	20,972	839
Rutland	3,507	13	3,520	141
South Holland	10,814	288	11,102	444
South Kesteven	15,411	200	15,611	624
Peterborough HMA	49,858	1,348	51,206	2,048
Boston	5,506	352	5,858	234
Study area	55,364	1,700	57,064	2,283

Source: Demographic projections and Census (2001 and 2011)

5.38 It should be remembered that the PPG states that any uplift for market signals should be set against the start point projection. If the Councils were to use the higher of the figures above as the OAN (i.e. the 10-year migration trends with an uplift for concealed households) then this would represent an uplift of 16% across the study area; linked to the job-led projection would show a 7% uplift. Figures for individual authorities are also shown in the table below. If the OAN is determined to be based on the longer-term migration trend scenario (10-year migration), no additional adjustment would be required to take account of market signals (over and above the adjustment made for concealed households) – in Rutland (the one area where a market signals adjustment would be justified) the uplift from the start point is 57%; this is a substantial increase.

Figure 5.19: Potential uplift to demographic start point of using 10-year migration trends and an adjustment for concealed households				
	Start point (dwellings per annum)	Upper end OAN (dwellings per annum)	Uplift	% uplift
Peterborough	851	981	131	15%
Rutland	102	159	58	57%
South Holland	345	445	100	29%
South Kesteven	601	577	-24	-4%
Peterborough HMA	1,899	2,163	264	14%
Boston	229	295	66	29%
Study area	2,128	2,458	330	16%

Source: Demographic projections and Census (2001 and 2011)

Figure 5.20: Potential uplift to demographic start point of using job-led projection and an adjustment for concealed households				
	Start point (dwellings per annum)	Upper end OAN (dwellings per annum)	Uplift	% uplift
Peterborough	851	839	-12	-1%
Rutland	102	141	39	39%
South Holland	345	444	99	29%
South Kesteven	601	624	24	4%
Peterborough HMA	1,899	2,048	150	8%
Boston	229	234	5	2%
Study area	2,128	2,283	155	7%

Source: Demographic projections and Census (2001 and 2011)

Market Signals: Key Messages

- Analysis of a range of market signals has been undertaken to consider if any adjustments should be made to the demographic-based assessment of housing need. The market signals studied are consistent with those in the PPG and included; house prices, rents, affordability ratios, land values, rates of development and overcrowding/concealed households.

- The analysis did not identify any particular issue to suggest that provision in the Peterborough HMA or Boston should be increased. The exception to this was in the case of Rutland, where various indicators pointed to stronger affordability pressures. However, with demographic projections (linked to 10-year migration trends) already substantially increasing the need from the official 'start point' there is no strong case for a further uplift.

- Even if the market signals were to suggest an uplift in provision, then any adjustments would need to be carefully considered. For example, if additional provision were to simply increase migration and population growth then this would be a Duty-to-Cooperate issue impact on other areas (where population growth and housing need would therefore be lower). If, however, an uplift is reasonable due to particularly suppressed household formation, then this could be done without impacting on other locations. In the HMA, the evidence did not point to any particular suppression within the CLG 2014-based household projections (other than in Rutland with adjustments having already been made).

- The market signals did however identify an increase in the number of concealed households in the study area. These households are not captured by demographic projections and do not currently have housing. It is therefore reasonable to increase the level of need by the increase in concealed households seen in the 2001-11 period – this increases need by some 1,700 dwellings (about 68 per annum over the 2011-36 period. On the basis of 10-year migration trends (the highest of the demographic projections developed), this would mean that the objectively assessed housing need in the study area is for 2,458 dwellings per annum (2,163 in the Peterborough HMA and 295 in Boston). These conclusions do not take account of any specific local authority adjustments that might need to be considered (i.e. the potential to increase housing need in South Kesteven to ensure alignment between jobs and labour supply growth). This is dealt with in the conclusions section of the summary at the start of this report.

6. Self- and Custom-build

Introduction

6.1 Paragraph 50 of the NPPF sets out that that local planning authorities should plan for people wishing to build their own homes (bullet point 1), and this is further emphasised in the PPG (paragraph 2a-021): *'The Government wants to enable more people to build their own home and wants to make this form of housing a mainstream housing option. There is strong industry evidence of significant demand for such housing, as supported by successive surveys. Local planning authorities should, therefore, plan to meet the strong latent demand for such housing'*.

6.2 There is also a separate PPG dealing with Self-build and custom housebuilding registers (ID: 57) and this section considers what value a SHMA can add to this subject given that the local authority must maintain a register of those interested in pursuing this route in its administrative area. The brief for the SHMA update requests the following:

'A consideration of the demand for custom-build serviced plots in each LPA, with particular reference to the number of applicants on the statutory registers held by the LPAs of those wanting plots (including whether or not they have a local connection and the likely level of real demand taking into account their resources and applications made in more than one area). The additional register questions asked by some LPAs will assist with this. There is no expectation that register applicants be surveyed'.

6.3 The following statement was obtained from the NaCSBA portal: http://customandselfbuildtoolkit.org.uk/briefing-notes/registers-and-assessing-demand/#

'To avoid double counting, SHMAs should not attempt to replicate or re-run a Register. Instead councils should consider using the SHMA to build on and qualify the information captured by Registers by drawing on secondary data sources and inviting qualitative feedback. They can do this through opinion polls, surveys of local residents and community organisations, focus groups and feedback from estate agents and developers. This layered approach will help build a strong local evidence base that can guide informed local planning and investment decisions'.

6.4 The study method has been guided by the above advice but in addition, much can be learned from individual planning applications published on local authority planning portals. The analysis in this document therefore draws evidence from:

- estate letting and land agents;
- the local authority self-build register;
- planning applications;
- supply and demand information from portals run by BuildStore.

6.5 The term 'self and custom build' (and building) is abbreviated to SCB (build) or SCBs (builders) below.

Information from estate agents and land agents

6.6 A telephone survey of estate agents in the major towns in each local authority was undertaken – eight interviews were achieved. Where known, the agents selected were those that acted as land agents. The survey did not yield consistent results. Some estate agents told us that they rarely offered land for sale and had relatively few enquiries. Others attracted more supply and demand as they had established a reputation for gaining expertise in the area. One described his agency as the 'go to' agency for SCBs. The two 'go to' agencies that we talked to tend to operate in a wider area. For example, one agent based in Peterborough provided insights across the study area. He told us that he received on average 10 enquiries a day for people seeking plots. Another independent agent with branches in Rutland and South Kesteven told us that they employed a specialist agent and had amassed a mailing list of over 1,000 people all keen to find suitable plots across the two local authority areas.

6.7 We asked agents about demand for self-build and custom build plots. In summary, demand for custom building was high in the market towns and surrounding villages but was less apparent in the major towns. That said, a Grantham based agent said the last 3 completed sales were all within the town itself.

6.8 The specialist agents made four main points to us:

- farmers and landowners seeking to release plots rarely used sales agents. There was always an 'insider' local network of people that agreed terms without the help of an agent;
- SCB portals and support groups were a major source of information for potential SCBs;
- the role of the local authority was to assess demand for the right to build and assist people seeking plots. Agents told us that the local authorities should do more to make the public aware of their role; and
- local authorities should do more to negotiate with developers to release serviced plots on large sites.

6.9 We have interviewed a great many estate agents outside the study area on this subject over several years. The evidence points to the conclusion that significant demand exists for self and custom build projects and the biggest barrier to success is the lack of available land. To date, most projects rely upon potential self and custom builders investigating potential plots, many of which were not actively being offered for sale. This confirms the view of local agents that many transactions proceed without estate or land agents being involved in the public marketing of sites. We have also been told by many agents that local builders are the most pro-active group in identifying plots. The local housebuilder may choose to build for the speculative market but is exposed to less risk if it is working - and eventually building - for a custom build client. We always ask agents about the customer for self and custom build. We are always told that the true self builder is rare. The custom builder may be building with retirement in view or through a desire not to compromise on location and design. However, many agents have drawn our attention to the needs of the self-employed or those running small businesses who need to incorporate storage and small offices into their project and have outgrown their present accommodation.

Self and custom build portals

6.10 We looked only in detail at BuildStore as this is the major portal and the assessment of further portals may have resulted in double counting. As at January 2017 the portal stated that it had 35,477 plot search subscribers, of which 401 people had registered in the last month.

6.11 The portal listed 116 available plots within a 30-mile radius of Postcode PE1. We looked in detail at plots available identified as being at or near the main towns in the study area. The area with the most number of plots advertised were:

- Spalding – 11, mostly un-serviced priced between £90,000 and £150,000; and
- Sleaford – 8 priced at around £120,000.
- Single plots were listed at Boston, Bourne and Peterborough.

6.12 However, in addition to BuildStore information, we have been made aware that at Hempstead, there is a site for 10 custom build units through Urban self-build Ltd and we understand that to date only 2 have been sold.

6.13 We looked at the character of some of the plots and would suggest that their availability is a reflection of their quality and location. Higher quality sites would, based on the evidence from agents, be sold quickly or would not be publicly advertised in the first place. However, BuildStore is significant to the sector. It stimulates interest in the sector by means of events, seminars and trade fayres. BuildStore runs exhibitions across the country at regular intervals that in our experience are well attended.

Information from planning applications

6.14 Project resource constraints did not enable us to undertake a detailed analysis of planning applications over an extended period of time. However, we undertook a snapshot analysis of the latest 20 planning applications for single dwellings on each Council's planning application portal.

6.15 We searched on the word 'dwelling' and counted only single dwelling applications. We recorded basic information regardless of the stage reached in the application process i.e. this was a chronological search regardless of whether applications were validated, outline or full, consideration of reserved matters, consent or refusal. The applications for either change of use and conversion of an existing building or erection of a new single dwelling were as follows.

Figure 6.1: Single dwelling planning applications (last 20 in each local authority)

Local authority	New dwelling	Demolish and rebuild	Conversion	Total	Earliest date
Boston	9	5	6	20	May 2016
Peterborough	10	6	4	20	July 2016
Rutland	6	4	10	20	May 2016
South Holland	14	3	3	20	June 2016
South Kesteven	9	3	8	20	September 2016

Source: local authority planning lists

6.16 We did not look at any supporting documents for any of the above applications so we have no way of knowing if these dwellings were SCB projects or destined for the open market, if indeed the information was collected at all. All we can say is that it is possible that some of these applications would be SCB projects. It is clear from the table that South Holland has a higher proportion of single dwelling applications than the other local authorities. Rutland followed by South Kesteven have the highest proportions of applications for converted dwellings. It would appear that South Kesteven has highest frequency of applications as the 20 applications analysed were collected over a much shorter period than the other local authorities.

6.17 Our conclusion is that potentially, planning applications could represent useful data for monitoring self and custom build activity.

6.18 This evidence suggests that the scale of self and custom build is much larger than evidence from the local authority register. Taking all of the evidence into account it seems that the majority of SCBs applicants engage with landowners directly. They have no need of the local authority register. However, the register is regarded as a significant evidence base to support planning policy to assist SCBs.

Information from the local authority register

6.19 The local authorities provided us with anonymous details of people who had applied to join their local authority registers. Since each register records different information, it is difficult to summarise the findings of our analysis so we summarise our findings for each local authority. The numbers on the register were as at December 2017. It is difficult to draw conclusions about the characteristics about development proposals as many questions invited a range of possibilities rather than preferences. The information is discussed below.

Boston

- We were informed that although enquiries had been received about the local authority register no one had applied to join the register to date.

Peterborough

- 6 people had registered.
- 1 was currently resident in central Peterborough. All others were resident in other Peterborough postcode areas approximately within a 10-mile radius.
- All were individual rather than association applicants, although one indicated a possible association application without further detail.
- 2 were also registered with other local authorities.
- Regarding project details:
  - 1 applicant was seeking 2-bedroom housing;
  - 2 applicants were seeking 3-bedroom housing;
  - 2 applicants were seeking 4-bedroom housing;
  - 1 applicant was seeking 3 or 4 bedroom housing; and
  - 1 applicant was seeking 5+ bedroom housing.

Rutland

- 21 people had registered.
- 8 applicants could be described as currently having an address local to Rutland, (LE15 PE9 postcodes); the remainder were based across England with 1 in Scotland.
- 11 were registered with other local authorities.
- 2 indicated that that they were either individual or association SCB.
- Regarding project details:
  - 1 applicant was seeking 2-bedroom housing;
  - 6 applicants were seeking 3-bedroom housing;
  - 11 applicants were seeking 4-bedroom housing; and
  - 3 applicants were undecided.
- 9 applications stated they were interested in plots anywhere in Rutland, others mostly indicated their desired location as within a local service centre.

South Holland

- There were 26 people registered.
- 18 lived within the district (PE6,8,11,12,13).
- 7 applicants were also registered with another local authority.
- Only 1 applicant indicated that they would prefer to be part of an association SCB scheme.
- Regarding project details:
  - 1 applicant was seeking 2-bedroom housing;
  - 14 applicants were seeking 3-bedroom housing;
  - 3 applicants were seeking 4-bedroom housing;
  - 3 applicants were seeking 5+ bedroom housing;
  - 5 applicants did not specify.
- South Holland collected further information from applicants which offered insights into their requirements that can inform planning policy.
- Crucially, 3 people indicated that they owned a plot, one of which considers it is not in their preferred location.
- 12 indicated that they were solely seeking a serviced plot; 6 a non-serviced plot; others were considering a number of options.
- A question regarding preferred location for the plot revealed a miscellany of locations across the district. The largest group of responses to the question was 'undecided' at just under 22% of choices. Applicants could express multiple choices and there were 41 responses. However, a description of the location revealed that edge of town (18%), edge of village (33%) and open countryside (31%) were the most popular choices.
- 84% of respondents said they wanted to build a detached house. In terms of size of the plot, 23% of respondents said that they were seeking small to medium; 27% said medium and 19% medium to large. In terms of the dwelling size most indicated between 80 and 100 sqm. with 80-95 sqm. – 42% and 96-100 sqm. – 30%.
- Other information collected related to intentions and aspirations as follows.
- All but 1 respondent indicated that they intended to own the property with 3 declining to answer. This is significant because currently 5 respondents were private rented sector tenants and 6 were living with family or friends.

- The 4 main reasons cited for seeking to SCB were:
  - to own at a lower cost than I can buy on the market;
  - because the quality of home I want is not currently offered on the market;
  - to stay in the same area; and
  - to have a home tailored to my requirements or future needs.
- 30% of respondents said they would completely self-build; 46% said they would part/custom build.

South Kesteven

- There were 22 people registered.
- 20 lived within the district and 21 people had a connection to the district.
- All were seeking individual custom or self-build.
- Regarding project details:
  - 2 applicants were seeking 2-bedroom housing;
  - 6 applicants were seeking 3-bedroom housing;
  - 10 applicants were seeking 4-bedroom housing;
  - 2 applicants were seeking 5+ bedroom housing; and
  - 2 applicants were undecided.

6.20 The table below summarises the information from each register.

Figure 6.2: Summary of basic information from each Register

	Boston	Peter-borough	Rutland	South Holland	South Kesteven	Totals
Number registered	Nil return	6	21	26	22	75
Number within the district		6	8	18	20	52
Registered with another local authority		2	11	7	n/a	20
If group project		1 (possible)	2 (possible)	1	0	Up to 4
2-bedroom		1	1	1	2	5
3-bedroom		2	6	14	6	28
4-bedroom		1	11	3	10	25
5 or 5+-bedroom		1	0	3	2	6
Undecided		1	3	5	2	11

Source: local authority register

6.21 It is noteworthy that significantly more detailed information has been collected by South Holland than the other local authorities. We are advised that South Holland has been proactive in its approach to self and custom building.

Further information from NaCSBA

6.22 It is clear that the local authority registers do not reflect the level of demand for SCB plots. The NaCSBA portal referred to above underlines the views expressed by 'go to' estate and land agents and urges local authorities to:

- (note that) assessment of demand is the first and most important step to determine a council's approach to supporting local people to build their own homes, and the best tool for this is a local demand Register;
- Be aware that failure to robustly assess demand risks Plans being found unsound or housing supply policies in the Local Plan not being up to date which could trigger the 'presumption in favour of sustainable development'.

6.23 NaCSBA concludes that local authorities should:

- Ensure the Register includes a set of core questions needed to establish a robust assessment of current and potential future demand; and
- Engage with in-house press and public relations teams to launch a targeted marketing and promotion campaign to draw local people's attention to the Register.

Chapter Summary

6.24 The Government's self and custom build initiative and the 'right to build' is likely to raise the profile of a sector that has existed and successfully provided additional bespoke housing for decades if not centuries. The sector has made a significant contribution to the character of neighbourhoods, innovations in energy efficiency, new methods of construction and design. A review of the work of BuildStore and 'go to' estate and land agents suggests that demand is significantly greater than local authority registers would suggest

6.25 A snapshot of planning applications that are potentially custom build projects revealed that the local authority pro forma planning application does not readily enable a distinction between custom and speculative building to be made – this is key to assessing the level of activity from the self or custom build applicant. Where Councils have implemented CIL (e.g. Rutland), this is likely to be contained within the CIL documentation held by the Council.

6.26 The analysis suggests that there are two groups of potential self or custom builder: the 'planning savvy' custom builder that already owns land or has identified land for custom building and the aspirational self or custom builder that has joined the local authority register, many of whom have been unable to find appropriate land for their project.

6.27 It would appear that most local authorities manage their registers passively. Generally, it is not promoted other than by the self and custom build sector which, in its widest definition, accounts for a significant amount of investment in additional housing.South Holland District Council has however been proactive in marketing the register with, for example, articles in the local press, social media updates, promotion through local councillors, a promotional leaflet and an awareness-raising event for local estate agents, architects and land agents – this may in part explain why the Council has the highest number of people registered.

6.28 The council's registers reveal that few people had registered up to December 2016. Those that had were mostly people seeking to build 3 or 4 bedroom homes within places where they had strong local connections, suggesting that the self or custom build route is a significant route for them to achieve their aspirations. Our review of planning applications suggests that potentially, many more were able to be 'getting on with it' because they had land in their ownership or had secured it.

Self and Custom-Build: Key Messages

- The Government's self and custom build initiative including the right to build is likely to raise the profile of a sector that has existed and successfully provided additional bespoke housing for many years, contributes to the distinctiveness of neighbourhoods and advances building technology.
- This is evidenced by a snapshot of planning applications that are potentially custom build projects;
- Local authority planning application pro forma and planning lists do not readily enable us to distinguish between custom and speculative building, which is key to assessing the level of activity from the self or custom build applicant;
- We also conclude that two types of self or custom builder exist; one that already owns land or has sourced land for building often using local knowledge; and the aspirational self or custom builder that is seeking land through the local authority register or SCB portals;
- Most local authorities tend to manage their register passively. Generally, it is not promoted other than by the self and custom build sector (the exception arguably being South Holland). It is evident that the local authority needs to do this if it is to have a robust understanding of demand.
- An overview of the registers reveals that few people had registered with the local authority and in one area none at all. Those that had were mostly people seeking 3 and 4 bedroom homes mostly in rural settings.

Appendix 1: Demographic Projections – Additional Data

Figure A1.1: Components of population change, mid-2005 to mid-2015 – Peterborough						
Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2005/6	1,067	-2,042	3,258	130	254	2,667
2006/7	1,255	-1,886	2,846	55	286	2,556
2007/8	1,493	-982	2,756	46	271	3,584
2008/9	1,526	-980	2,220	-54	224	2,936
2009/10	1,694	-1,348	2,279	-8	182	2,799
2010/11	1,715	-704	1,740	-8	-48	2,695
2011/12	1,793	-1,002	1,115	9	0	1,915
2012/13	1,758	-1,357	1,709	-83	0	2,027
2013/14	1,779	-1,642	1,843	82	0	2,062
2014/15	1,609	-709	2,449	170	0	3,519

Source: ONS

Figure A1.2: Components of population change, mid-2005 to mid-2015 – Rutland						
Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2005/6	84	285	35	66	-75	395
2006/7	47	452	46	134	-79	600
2007/8	22	385	41	9	-89	368
2008/9	2	199	63	-246	-79	-61
2009/10	21	209	12	114	-103	253
2010/11	13	115	25	-149	-93	-89
2011/12	-64	-147	-91	-264	0	-566
2012/13	22	207	-96	458	0	591
2013/14	17	33	40	326	0	416
2014/15	-42	362	25	-321	0	24

Source: ONS

Figure A1.3: Components of population change, mid-2005 to mid-2015 – South Holland						
Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2005/6	-143	585	1,110	-7	-83	1,462
2006/7	-216	736	911	-14	-69	1,348
2007/8	-118	736	927	-5	-89	1,451
2008/9	-176	318	956	1	-69	1,030
2009/10	-31	287	781	-10	-109	918
2010/11	-32	171	476	8	-138	485
2011/12	-8	-185	327	-6	0	128
2012/13	-95	177	657	-14	0	725
2013/14	-71	534	678	35	0	1,176
2014/15	-146	152	778	11	0	795

Source: ONS

Figure A1.4: Components of population change, mid-2005 to mid-2015 – South Kesteven						
Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2005/6	43	851	499	-1	-91	1,301
2006/7	97	774	471	-2	-110	1,230
2007/8	184	513	434	8	-117	1,022
2008/9	141	475	489	-5	-130	970
2009/10	213	501	382	-4	-136	956
2010/11	281	712	112	49	-173	981
2011/12	145	793	-19	-11	0	908
2012/13	66	1,120	99	67	0	1,352
2013/14	151	1,163	210	72	0	1,596
2014/15	110	574	206	38	0	928

Source: ONS

Figure A1.5: Projected household representative rates by age of head of household – Peterborough

Source: Derived from CLG data

Figure A1.6: Projected household representative rates by age of head of household – Rutland

Source: Derived from CLG data

Figure A1.7: Projected household representative rates by age of head of household – South Holland

Source: Derived from CLG data

Figure A1.8: Projected household representative rates by age of head of household – South Kesteven

Source: Derived from CLG data

Figure A1.9: Changes to Black and Minority Ethnic and White (British/Irish) Population by age (2001-11) – Peterborough						
	Black and Minority Ethnic			White (British/Irish)		
	Population 2001	Population 2011	Change	Population 2001	Population 2011	Change
15-24	3,261	7,923	4,662	16,341	16,077	-264
25-34	3,790	12,378	8,588	20,336	16,780	-3,556
35-44	2,911	7,951	5,040	19,985	18,252	-1,733
45-54	2,008	4,872	2,864	18,318	18,819	501
55-64	1,228	2,478	1,250	13,592	16,546	2,954
65-74	1,126	1,217	91	10,917	11,484	567
75-84	450	927	477	7,248	7,902	654
85+	75	223	148	2,310	3,125	815
TOTAL	14,849	37,969	23,120	109,047	108,985	-62

Source: Census (2001 and 2011)

Figure A1.10: Changes to Black and Minority Ethnic and White (British/Irish) Population by age (2001-11) – Rutland						
	Black and Minority Ethnic			White (British/Irish)		
	Population 2001	Population 2011	Change	Population 2001	Population 2011	Change
15-24	299	388	89	3,994	4,247	253
25-34	239	424	185	4,022	3,338	-684
35-44	170	296	126	4,781	4,535	-246
45-54	119	195	76	4,820	4,964	144
55-64	93	119	26	4,187	4,958	771
65-74	32	83	51	3,062	4,135	1,073
75-84	25	28	3	1,903	2,502	599
85+	6	18	12	721	1,083	362
TOTAL	983	1,551	568	27,490	29,762	2,272

Source: Census (2001 and 2011)

Figure A1.11: Changes to Black and Minority Ethnic and White (British/Irish) Population by age (2001-11) – South Holland						
	Black and Minority Ethnic			White (British/Irish)		
	Population 2001	Population 2011	Change	Population 2001	Population 2011	Change
15-24	242	1,329	1,087	6,831	8,122	1,291
25-34	263	2,512	2,249	8,629	6,861	-1,768
35-44	274	1,281	1,007	10,064	10,172	108
45-54	231	947	716	10,568	11,491	923
55-64	170	438	268	9,855	11,689	1,834
65-74	137	203	66	9,083	10,026	943
75-84	80	99	19	5,519	6,754	1,235
85+	10	34	24	1,728	2,547	819
TOTAL	1,407	6,843	5,436	62,277	67,662	5,385

Source: Census (2001 and 2011)

Figure A1.12: Changes to Black and Minority Ethnic and White (British/Irish) Population by age (2001-11) – South Kesteven						
	Black and Minority Ethnic			White (British/Irish)		
	Population 2001	Population 2011	Change	Population 2001	Population 2011	Change
15-24	504	1,013	509	12,919	13,361	442
25-34	499	1,855	1,356	15,119	12,023	-3,096
35-44	591	1,367	776	18,465	17,207	-1,258
45-54	495	1,004	509	17,504	19,212	1,708
55-64	279	570	291	13,902	17,748	3,846
65-74	172	229	57	10,552	13,565	3,013
75-84	112	144	32	7,411	8,079	668
85+	25	63	38	2,262	3,480	1,218
TOTAL	2,677	6,245	3,568	98,134	104,675	6,541

Source: Census (2001 and 2011)

Figure A1.13: Projected changes to economic activity rates (2015-36) – Peterborough and Rutland								
	Peterborough				Rutland			
	Male		Female		Male		Female	
	2015	2036	2015	2036	2015	2036	2015	2036
16-19	50.6%	51.2%	51.5%	52.1%	34.4%	35.1%	38.3%	38.8%
20-24	89.3%	91.1%	78.3%	79.2%	84.0%	85.8%	88.3%	89.2%
25-29	94.5%	95.5%	77.6%	78.3%	86.9%	87.9%	84.2%	84.9%
30-34	93.9%	94.7%	76.2%	77.4%	87.3%	88.1%	81.8%	82.9%
35-39	93.8%	94.7%	78.7%	80.5%	93.4%	94.4%	85.6%	87.3%
40-44	92.8%	93.1%	80.0%	83.2%	94.5%	94.8%	87.5%	90.7%
45-49	91.1%	91.5%	83.2%	86.9%	94.4%	94.8%	89.6%	93.3%
50-54	89.6%	90.1%	78.2%	82.1%	93.0%	93.5%	84.7%	88.6%
55-59	85.3%	86.1%	72.2%	78.0%	87.6%	88.4%	79.4%	85.2%
60-64	64.0%	71.6%	46.8%	62.9%	71.3%	78.9%	54.0%	70.2%
65-69	26.3%	39.9%	16.9%	35.0%	39.4%	52.9%	21.5%	39.6%
70-74	12.6%	16.3%	8.4%	14.4%	22.7%	26.4%	11.5%	17.5%
75-89	4.9%	6.5%	2.1%	4.6%	4.9%	6.5%	2.1%	4.6%

Source: Based on OBR and Census (2011) data

Figure A1.14: Projected changes to economic activity rates (2015-36) – South Holland and South Kesteven								
	South Holland				South Kesteven			
	Male		Female		Male		Female	
	2015	2036	2015	2036	2015	2036	2015	2036
16-19	53.8%	54.5%	53.5%	54.0%	53.9%	54.5%	57.8%	58.3%
20-24	94.1%	95.8%	86.0%	86.9%	93.0%	94.7%	85.3%	86.2%
25-29	96.2%	97.3%	83.9%	84.6%	96.3%	97.3%	85.5%	86.2%
30-34	95.9%	96.7%	81.8%	82.9%	95.7%	96.6%	82.8%	84.0%
35-39	96.2%	97.2%	86.1%	87.8%	96.3%	97.3%	86.2%	87.9%
40-44	93.9%	94.2%	84.3%	87.5%	95.8%	96.2%	86.9%	90.2%
45-49	93.1%	93.6%	84.8%	88.5%	95.2%	95.6%	88.5%	92.2%
50-54	91.3%	91.8%	81.0%	84.9%	93.1%	93.5%	82.9%	86.8%
55-59	86.2%	87.0%	73.8%	79.6%	88.0%	88.7%	76.2%	82.0%
60-64	66.3%	73.8%	44.2%	60.3%	67.7%	75.3%	48.2%	64.3%
65-69	29.5%	43.1%	16.4%	34.6%	30.9%	44.5%	19.7%	37.8%
70-74	13.3%	17.1%	8.4%	14.4%	16.1%	19.9%	9.9%	15.9%
75-89	4.9%	6.5%	2.1%	4.6%	4.9%	6.5%	2.1%	4.6%

Source: Based on OBR and Census (2011) data

Figure A1.15: Projected changes to economic activity rates (2015-36) – Housing Market Areas								
	Peterborough HMA				Boston			
	Male		Female		Male		Female	
	2015	2036	2015	2036	2015	2036	2015	2036
16-19	50.3%	51.0%	52.4%	52.9%	53.3%	54.0%	53.5%	54.1%
20-24	90.6%	92.4%	82.1%	83.0%	93.3%	95.0%	82.8%	83.7%
25-29	94.6%	95.6%	81.0%	81.6%	92.3%	93.4%	83.1%	83.7%
30-34	94.2%	95.0%	79.3%	80.4%	93.0%	93.9%	83.1%	84.2%
35-39	94.9%	95.9%	82.9%	84.6%	93.2%	94.1%	84.7%	86.4%
40-44	94.1%	94.4%	83.6%	86.9%	91.6%	91.9%	85.6%	88.8%
45-49	93.1%	93.5%	85.8%	89.5%	91.4%	91.8%	85.4%	89.1%
50-54	91.4%	91.8%	80.9%	84.8%	87.3%	87.8%	81.9%	85.7%
55-59	86.6%	87.4%	74.5%	80.3%	83.6%	84.4%	72.4%	78.2%
60-64	66.5%	74.0%	47.4%	63.5%	64.9%	72.4%	46.2%	62.4%
65-69	30.1%	43.6%	18.2%	36.4%	26.6%	40.1%	15.9%	34.0%
70-74	15.0%	18.7%	9.2%	15.2%	14.7%	18.5%	9.1%	15.1%
75-89	4.9%	6.5%	2.1%	4.6%	4.9%	6.5%	2.1%	4.6%

Source: Based on OBR and Census (2011) data

Figure A1.16: Projected housing need – Start Point projection (2014-based CLG household projections) – excluding HRR uplift for Rutland						
	Peter-borough	Rutland	South Holland	South Kesteven	Peter-borough HMA	Boston
2011/12	830	-201	113	550	1,291	117
2012/13	890	333	277	671	2,170	352
2013/14	892	340	440	801	2,474	256
2014/15	1,127	82	399	675	2,283	335
2015/16	1,088	90	379	690	2,247	303
2016/17	965	87	368	703	2,123	247
2017/18	951	110	377	663	2,101	256
2018/19	922	121	355	693	2,090	247
2019/20	881	86	376	664	2,008	246
2020/21	866	94	350	638	1,948	217
2021/22	809	92	349	630	1,880	212
2022/23	780	95	334	598	1,807	203
2023/24	806	105	352	599	1,862	211
2024/25	766	94	339	574	1,773	218
2025/26	796	99	361	580	1,836	212
2026/27	811	98	365	579	1,853	211
2027/28	794	98	365	561	1,819	227
2028/29	806	101	338	560	1,806	227
2029/30	804	93	359	562	1,818	217
2030/31	809	95	344	537	1,785	214
2031/32	821	92	344	520	1,777	209
2032/33	807	87	350	520	1,764	206
2033/34	787	85	338	505	1,714	203
2034/35	735	85	328	481	1,630	192
2035/36	732	79	326	471	1,608	188

Figure A1.17: Projected housing need – 10-year migration based (with 2014-based headship rates) – including HRR uplift for Rutland						
	Peter-borough	Rutland	South Holland	South Kesteven	Peter-borough HMA	Boston
2011/12	830	-201	113	550	1,291	117
2012/13	890	333	277	671	2,170	352
2013/14	892	340	440	801	2,474	256
2014/15	1,544	-14	392	600	2,522	184
2015/16	1,173	169	479	689	2,510	349
2016/17	1,024	130	456	653	2,263	306
2017/18	1,017	160	457	608	2,241	308
2018/19	1,002	172	443	651	2,268	309
2019/20	975	182	474	616	2,246	303
2020/21	951	197	469	636	2,253	276
2021/22	889	149	446	585	2,068	282
2022/23	864	146	424	553	1,988	262
2023/24	895	157	450	565	2,067	284
2024/25	862	172	442	536	2,012	283
2025/26	882	208	483	556	2,128	283
2026/27	896	162	474	546	2,079	286
2027/28	893	155	462	518	2,028	300
2028/29	911	168	444	526	2,049	308
2029/30	922	173	471	524	2,091	283
2030/31	902	195	463	516	2,075	290
2031/32	932	168	459	482	2,040	292
2032/33	921	160	464	479	2,023	280
2033/34	906	161	452	468	1,988	293
2034/35	886	158	450	469	1,963	277
2035/36	834	168	448	428	1,878	266

Figure A1.18: Projected housing need – job-led projection (with 2014-based headship rates) – including HRR uplift for Rutland						
	Peter-borough	Rutland	South Holland	South Kesteven	Peter-borough HMA	Boston
2011/12	830	-201	113	550	1,291	117
2012/13	890	333	277	671	2,170	352
2013/14	892	340	440	801	2,474	256
2014/15	1,544	-14	392	600	2,522	184
2015/16	1,034	152	477	731	2,395	289
2016/17	883	113	455	699	2,150	244
2017/18	870	142	456	655	2,123	245
2018/19	853	154	441	702	2,150	244
2019/20	823	162	472	668	2,126	237
2020/21	796	177	468	690	2,132	209
2021/22	731	129	445	640	1,945	214
2022/23	703	126	424	609	1,861	193
2023/24	730	136	449	621	1,937	213
2024/25	695	151	441	592	1,879	211
2025/26	711	186	482	613	1,992	210
2026/27	723	140	474	604	1,940	212
2027/28	716	132	462	577	1,887	225
2028/29	732	145	443	585	1,905	232
2029/30	740	149	471	584	1,943	206
2030/31	717	170	462	577	1,926	212
2031/32	744	142	458	544	1,888	213
2032/33	730	134	463	542	1,869	200
2033/34	713	135	452	532	1,832	212
2034/35	691	132	449	533	1,805	194
2035/36	636	141	447	493	1,718	182

Appendix 2: Impact of LPEG Proposals on Housing Need

Introduction

A2.1 The Communities Secretary, Greg Clark MP, and the Minister for Housing and Planning, Brandon Lewis MP, established a "Local Plan Expert Group" in September 2015, with a remit to consider how plan-making could be made more efficient and effective. The Local Plan Expert Group (LPEG) reported back to Ministers on 16th March 2016 with recommendations.

A2.2 The LPEG Report to Government proposed some significant changes to the process of plan-making, including the approach and guidance for assessing housing needs, through the adoption of a simplified and standard methodology. This, together with the LPEG's wider proposals, was subject to consultation by Government between 16th March and 27th April 2016. They are now in effect "with Government to consider."

A2.3 The LPEG Report identified that agreeing housing needs and difficulties with the Duty to Cooperate, particularly in respect of housing, are key difficulties affecting plan-making. It was critical of the lack of definitive guidance on how to prepare a Strategic Housing Market Assessment as a key issue, resulting in these studies becoming "*one of the most burdensome, complex and controversial elements of plan making*."

A2.4 The likelihood of a change to the methodology for assessing housing need was set out in the Housing White Paper (of 7th February 2017), although at the time of writing no specific detail had been set out. Indeed, the *Government response to the Communities and Local Government Select Committee inquiry into the report of the Local Plans Expert Group* published alongside the White Paper notes that questions had been raised about *'the technicalities of the methodology proposed by LPEG'*. The analysis to follow needs to be understood in light of potential technical difficulties (which is likely to include the general objection (made by a number of respondents) that the LPEG methodology double counts need).

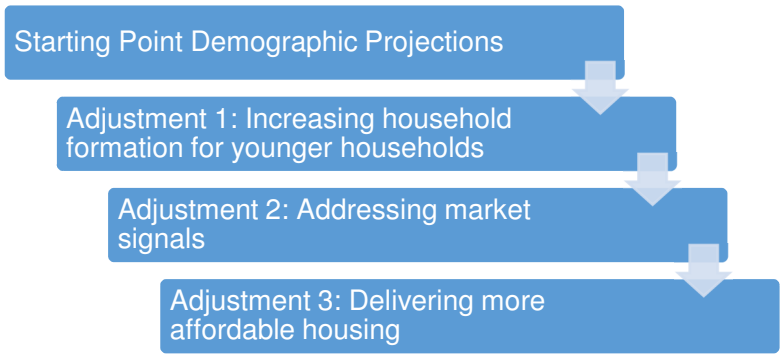
The LPEG Approach to Calculating Objectively-Assessed Housing Need (OAN)

A2.5 The report recommended that Government commissions an updated assessment of housing market area geographies nationally (updating the 2010 'CURDS' research), which identifies contiguous 'best fit' HMAs based on administrative boundaries. However, recognising that in many areas HMA boundaries and joint working arrangements are well-established, it is suggested that these may continue to be used unless there was "compelling evidence" that they no longer remain fit-for-purpose. In longer-term it recommends that Government gives thought to coordinating economic and housing planning boundaries.

A2.6 The Expert Group clearly recognise that with the current system there is significant uncertainty regarding what an objectively-assessed housing need (OAN) figure for an area actually is. It sought instead to provide a simplified, standard common methodology through proposed revisions to Planning Practice Guidance text (set out in Appendix 6 to the LPEG Report), with a clear stipulation that (if accepted) this is the approach which Government expects to be followed.

A2.7 The proposed amendments in Appendix 6 to the LPEG Report effectively show a process of identifying the appropriate population projection (at HMA level) and then testing the basis for three adjustments:

Figure A2.1: LPEG Process of Identifying Housing Need



A2.8 The Guidance suggests a process for each of these steps which seeks to removes many of the uncertainties and judgements in how these kinds of assessments, and the associated scope for debate. The proposed approach is set out in the table below.

Figure A2.2: LPEG Proposed Approach to Setting OAN	
OAN Steps	Tasks Envisaged
A. Demographic Starting Point	➢ Compare the latest official projections and test against a 10 year migration projection. Take the higher at HMA level. ➢ Apply the household formation rates from the latest official projection, and test against 2008-based rates for those aged 25-44. Where the latter are higher, adjust to recover ½ of the difference by 2033 and project forward the rate of change thereafter. ➢ Apply the local rate for vacant and second homes based on CLG Live Table data for the most recent year. Where vacancy levels are above the national average, assume this reduces to it.
B. Market Signals	➢ Assess median/ lower quartile[1] house price-to-income ratio (HPR) and lower quartile rental affordability ratio (RAR). ➢ Apply upward adjustment to the demographic starting point as follows: ➢ HPR less than 5.3 and RAR less than 25%: No Uplift ➢ HPR between 5.3 – 7.0 and/or RAR 25-30%: 10% Uplift ➢ HPR between 7.0 – 8.7 and/or RAR 30-35%: 20% Uplift ➢ HPR at/above 8.7 and/or RAR at/above 35%: 25% Uplift
C. Affordable Housing Need	➢ Assess the affordable housing need (detailed text to be updated) ➢ Assess total housing provision necessary to deliver affordable housing need (based on likely delivery as % total housing derived from the target in the current/ proposed plan)
D. Full Objectively Assessed Housing Need	➢ Assess output of C against B. If C points to higher provision being necessary to meet the affordable need, include a further adjustment B equivalent to the lower of either meeting output C or an amount equivalent to 10% of Output A

A2.9 A key major change in approach is the proposed removal of the requirement to consider the alignment of housing need and economic forecasts in deriving conclusions on housing need, on the basis that this has been one of "*the single most difficult and disputed steps in the current methodology*" and that employment growth pressure is also likely to be manifest in local affordability issues.

[1] A median ratio is suggested in Paragraph 19, but the overview chart in Paragraph 14 refers to the lower quartile ratio

A2.10 The report instead proposes that adjustments to support employment growth would not form part of the OAN assessment, but provides flexibility such that authorities could choose to justify a higher housing requirement to align with policy aspirations. It outlines that:

"…estimates of future employment growth should not be used as part of the calculation of housing need, because other adjustments, such as market signals, are likely to respond proportionally to housing pressures arising from local economic growth across the housing market area. Plan makers may choose to use estimates of future employment growth to justify a plan adopting a housing requirement in excess of the FOAHN for housing but this is a policy matter for plan makers in setting the housing requirement. An estimate of FOAHN arrived at through application of this guidance will not be considered unsound because estimates of employment growth informing other parts of the Plan might imply a higher level of housing at the existing commuting ratio."

A2.11 It goes on to outline that "*where plan makers choose to set a 'policy on' housing requirement in excess of FOAHN, based on employment growth, this should be based on applying the changes in economic activity rates that are projected in estimates produced annually by the Office for Budget Responsibility, applied to the local baseline rates of economic activity. The existing commuting ratio should be applied, based on comparison of economically active residents drawn from the Annual Population Survey and the number of jobs drawn from BRES*."

A2.12 OAN figures would be expected to be defined at HMA and local authority level, with authorities working together to meet the HMA's needs. However, in view of the potential for HMA boundaries to be 'gamed,' the report recommends that clarity is provided through the PPG that where the full OAN cannot be met in one HMA, it should be in a contiguous HMA through the Duty to Cooperate (subject to evidence of functional and infrastructure links).

A2.13 It is proposed that the OAN evidence would be "locked down" for a period of two years from the point of submission of a plan, limiting the prospect of evidence being found unsound simply as new data had been issued.

A2.14 At the time of writing, the LPEG Report's status is simply a set of proposals: it is not Government policy. A number of strongly worded consultation responses which were highly critical of the LPEG Report, including in respect of the potential removal of the requirement to align housing and economic evidence; and in the potential for double-counting and overlap between a number of the adjustments. A number of consultees have for instance pointed out that adjustments to headship rates and for market signals could overlap, and that there are not necessarily additional households there to support adjustments for market signals. Moreover, adoption of the LPEG proposals could significantly increase OAN figures in a range of areas in London and the Greater South East in particular, which would almost inevitably put further pressure on the development of Green Belt land. This has inevitable political implications which Government will need to think through.

A2.15 Whilst it therefore cannot be guaranteed that future revisions to the PPG will take forward, either in full or in part, the LPEG proposals; it does seem reasonably likely that some changes to the process of the calculation of OAN are likely against a context of seeking to speed-up the plan-making process.

OAN Figures Using the LPEG Approach

A2.16 Having set out the context to the LPEG Report and proposals for amendments to the PPG on *Housing and Economic Development Needs Assessment*, the analysis to follow considers what the implications might be for the calculation of OAN for both the Peterborough HMA and Boston.

Uncertainties and Caveats

A2.17 Whilst the LPEG Methodology is intended to be "definitive" the reality however is that there are several areas in which it contracts itself, or where there is a lack of detail provided on the specific approach which is expected. The particular uncertainties or contradictions include:

- The approach to modelling a 10 Year Migration Projection – it is not specified whether this should be simply a linear projection of average net migration moving forwards, or whether it should be modelled as an adjustment to the official projections based on differences between trends over the input period and past 10 years. The latter is a more advanced approach as it takes into account potential age structure changes and how this might impact on in- and out-migration. We have modelled 10-year migration trends on this basis;
- Modelling changes to vacancy rates – the LPEG report suggests that where the vacancy level is above 3% it should be assumed that this will reduce to the national average. It is not clear whether this is expected to apply to second homes, or only to those which are vacant. It seems logical to assume the latter;
- Median or lower quartile house price ratio – there is a contradiction within the document with the main text referring to use of a median house price-to-income ratio but the methodology diagram in Paragraph 14 referring to use of the lower quartile ratio. The latter has been more commonly used, and is the indicator used in the PPG currently. We have therefore assumed that this is the appropriate measure;
- Adjustment for affordable housing need – there is a potential contradiction or lack of clarity within the LPEG Appendix 6 proposed amendments as to whether an additional adjustment for affordable housing of 10% where appropriate should be applied to the output relating to demographic need (Output A) as indicated in the methodology diagram in Paragraph 14 or to Output B (which includes an adjustment for market signals). We have assumed that it is the diagram which should be followed, and thus an adjustment quantified using Output A, but added to Output B.

A2.18 There is also some uncertainty over what time period OAN should be considered (in particular in regard to the starting point) and whether official projections should be re-based to take account of the latest Mid-Year Population Estimates. These issues could have implications on precise OAN numbers using the LPEG approach. The precision associated with the individual figures should be viewed with this in mind.

Step A: Demographic Starting Point

A2.19 Establishing the "demographic starting point" is the first step in calculating the OAN. The first step is to compare the latest official household projections against a 10-year migration scenario.

The Latest Official Projections

A2.20 The latest official demographic projections are 2014-based. 2014-based Sub-National Population Projections (SNPP) were published in February 2016, with associated Household Projections published by DCLG in July 2016.

A2.21 The LPEG methodology sets out that that "*the base date for the assessment should be consistent with the base date for the plan period, and should use the latest ONS Mid-Year Estimates*." There in inherently a potential contradiction within this: the latest Mid-Year Estimates are for mid-2015. This doesn't necessarily align with time periods for plans (for example both South Holland and Boston are currently looking at a 2011-36 plan period; consistent with analysis in this report).

A2.22 For the purposes of this exercise a 2011-36 period has been used to provide consistency and read-across against the OAN figures already derived in this report. The official 2014-based projections (as published) have been taken for the core modelling, along with showing what impact the latest MYEs might have.

A2.23 The 2014-based Household Projections as published result in household growth of 2,087 per annum across the study area. This provides the starting point for the assessment. If these were rebased to take account of 2015 Mid-Year Population Estimates, the average annual household growth would rise slightly (to 2,097) – increasing in the Peterborough HMA and reducing slightly in Boston. The difference essentially takes account of the difference between projected and estimated population growth between 2014 and 2015.

Figure A2.3: Household Growth arising from 2014-based Projections, 2011-36 (per annum

	2014-based Projections as Published	Rebased Projections to take account of 2015 MYEs
Peterborough	837	859
Rutland	99	97
South Holland	339	339
South Kesteven	587	583
Peterborough HMA	1,862	1,878
Boston	225	219
Study area	2,087	2,097

Official Projections or 10-year migration trends?

A2.24 The LPEG methodology recommends running a sensitivity test of a ten year migration trend. It sets out that the higher of the official projections or 10 year trends at a housing market area level should be taken forward, setting out:

"..in some locations recent trends in migration may be influenced by short term factors that may mean future needs are not captured in by the official projections. Plan makers should apply a sensitivity test based on a longer term, ten year migration trend working back from latest Mid-Year Estimates, and using the migration data set out in the Components of Change in the Mid-Year Estimates. For the period prior to 2011, the Revised Mid-Year Estimates following the 2011 Census should be used. Where the ten year migration trend projects a higher level of population and household growth across the housing market area as a whole, this should be used as the demographic starting point, replacing the DCLG household projections. Where the ten year migration trend is lower, the official projections should always be used. A consistent set of projections (either the latest official projections or the ten year trend, whichever is higher) should be used across the whole housing market area."

A2.25 As part of the main analysis in this report, a 10-year migration trend projection has already been developed and this tends to show a higher level of household growth (as set out in the table below and compared with the official projections). The 10-year projection is therefore taken forward, and it should be noted that LPEG is clear that it is the higher of the projections at a Housing Market Area level that should be used (hence a figure lower than official projections is taken forward in South Kesteven).

Figure A2.4: Ten-year migration trend annual household growth (2011-36)

	2014-based Projection	10-year migration
Peterborough	837	933
Rutland	99	147
South Holland	339	425
South Kesteven	587	556
Peterborough HMA	1,862	2,060
Boston	225	277
Study area	2,087	2,337

Adjustments to Household Formation

A2.26 The LPEG methodology sets out that the household projections should be adjusted as in many areas household formation rates will have been suppressed historically by under-supply and worsening affordability of housing. It outlines that:

"This adjustment should take the form of a comparison between the household representative rates set out in the 2008- and 2012-based projections. Where the rates for those in the 25-44 year age cohorts are lower in the 2012-based projections than was estimated in the 2008-based figures, the assessment should make adjustments to the rate for these cohorts to recover half of the difference in rates between these two projections by 2033, and thereafter from that point trend forward the rate of change for that year from the 2012-based projections. Where the rates for these age cohorts in the 2012-based projections are higher than the 2008-based projections, no adjustment should be made."

A2.27 Whilst the paragraph refers to 2012-based projections, 2014-based Household Projections have since been published. There is a minimal difference between the household formation rates in the 2012-based and 2014-based Household Projections, and therefore the 2014-based Projections as the latest available have been used as the starting point herein.

A2.28 The LPEG methodology suggests that there should be adjustments to the household rates for those aged 25-44 if the 2008-based rates are higher than the 2012-based (or in this case the 2014-based) ones. This is the case in all five of the local authorities, as it will be in many areas. An adjustment is therefore made as set out above. The table below presents the impact of this: the headship rate adjustment increases household growth by approximately 7%, with a particularly large impact on Peterborough.

Figure A2.5: Household Formation Rate 25-44 age group adjustment

	10-year migration trends	Household growth uplift from 25-44 formation rate	% Upward Adjustment
Peterborough	933	1,043	12%
Rutland	147	150	2%
South Holland	425	440	3%
South Kesteven	556	568	2%
Peterborough HMA	2,060	2,200	7%
Boston	277	292	6%
Study area	2,337	2,492	7%

Applying a Vacancy Allowance

A2.29 Finally, in order to calculate the Output A Demographic Need the LPEG Methodology states that:

".. an allowance should be added for the local rates of vacancy and second homes. This data is recorded by the Council Tax Base and presented in DCLG Live Tables, using data from the most recent year. The current rates should apply, except where the vacancy rate is above the national average, in which case plan makers should assume a reduction in that vacancy rate down to the national average to reflect the impact of measures to encourage bringing empty homes back into use."

A2.30 Where the current vacancy rate is above the national average it should be assumed that the rate will return to the national average. The LPEG methodology isn't entirely clear about whether the level of second homes should be assumed to change and for the purposes of this analysis it is assumed that the proportion of second homes is kept constant.

A2.31 Analysis of 2016 Council Tax records reveals that the proportion of vacant homes in Rutland and South Kesteven (negligible difference) is higher than the national average and therefore a reduction should be applied over the projection period. The vacancy rates that have been applied are presented in the table below.

Figure A2.6: Vacancy Rates

	Peter-borough	Rutland	South Holland	South Kesteven	Boston	England
Number of occupied dwellings	81,396	16,378	39,198	61,303	28,717	23,173,449
Second homes	162	161	155	281	78	246,540
Other vacant	1,151	364	587	1,182	394	442,846
% second homes	0.2%	1.0%	0.4%	0.5%	0.3%	1.1%
% other vacant	1.4%	2.2%	1.5%	1.9%	1.4%	1.9%
Current vacancy rate	1.6%	3.2%	1.9%	2.4%	1.6%	3.0%
Vacancy rate at end of projection period	1.6%	2.9%	1.9%	2.4%	1.6%	-

Source: Council Tax 2016

A2.32 As a result, the demographic starting point (LPEG Output A) is of a need for 2,538 dwellings per annum (2,241 in the Peterborough HMA and 297 in Boston).

Figure A2.7: Output A – The demographic Starting Point	
	Output A – Dwellings per Annum, 2011-36
Peterborough	1,059
Rutland	153
South Holland	448
South Kesteven	581
Peterborough HMA	2,241
Boston	297
Study area	2,538

Step B: Market Signals

A2.33 The LPEG methodology outlines that adjustments should be made for market signals. The scale of adjustment proposed are intended to be based on a transparent and consistent methodology, and higher than has been 'standard practice' on the basis that the adjustments are intended to compensate in part for the removal of adjustments to support economic growth from the methodology.

A2.34 Appendix 6 to the LPEG Report outlines that:

"The National Planning Policy Framework states that plans should take account of market signals, and this is given practical effect in estimating FOAHN by means of an upward adjustment to the demographic starting point to reflect market signals and other indicators of the balance between the demand and supply of dwellings. Significant problems with affordability and other adverse consequences of housing under-supply are indicators of market undersupply relative to demand – a market imbalance."

A2.35 The methodology suggests that the two following market signals should be considered:

- The lower quartile[2] house price to income ratio (HPR); and
- The lower quartile private rent to income ratio (RAR)

A2.36 The LPEG report suggests that data for the most recent past three years should be used *"to allow for any anomalies and volatility which may occur from one year to the next".* Moreover, it is stated that CLG published data will provide this indicators as standard, however at the time of writing this report CLG have published data for HPR but is yet to undertake a similar assessment for the RAR indicator. Therefore, the analysis below only considers the house price to income ratio.

[2] As discussed above, whilst the text refers to the median quartile house price to median earnings; the methodology diagram refers to a lower quartile ratio. We have assumed that the latter is the correct measure to use, in line with current practice.

Figure A2.8: Market Signals – house price to income ratio				
	2013	2014	2015	Average
Peterborough	5.61	6.09	6.32	6.01
Rutland	9.26	8.55	9.34	9.05
South Holland	6.61	6.73	7.23	6.86
South Kesteven	7.17	7.87	7.83	7.62
Boston	5.92	6.45	7.20	6.52

Source: CLG Live Table 576

A2.37 The LPEG Methodology suggest the following adjustments to the Output A Demographic Starting Point:

- No Uplift, if the HPR is less than 5.3 and RAR less than 25%;
- 10% Uplift, if HPR is between 5.3 - 7.0 and/or RAR 25-30%;
- 20% Uplift, if HPR is between 7.0 - 8.7 and/or RAR 30-35%; and
- 25% Uplift, if HPR at/above 8.7 and/or RAR at/above 35%.

A2.38 On this basis, a 25% upward adjustment is required for Rutland, 20% in South Kesteven and a 10% adjustment in all other areas. The table below therefore presents Output B, based on applying the market signals uplift to the Output A Demographic Starting Point.

Figure A2.9: Output B – Need with Market Signals Uplift			
Dwellings per Annum, 2011-36	Output A: Demographic Need	Market Signals Uplift	Output B: Need with Market Signals Uplift
Peterborough	1,059	10%	1,165
Rutland	153	25%	191
South Holland	448	10%	493
South Kesteven	581	20%	697
Peterborough HMA	2,241	-	2,546
Boston	297	10%	327
Study area	2,538	-	2,873

Step C: Affordable Housing Need

A2.39 The affordable housing need calculation represents the final potential adjustment to the housing need using the LPEG Methodology. Appendix 6 to the LPEG Report sets out that:

"The affordable housing need figure should be expressed as both the total number of affordable homes needed and the total number of homes that would be necessary to meet this need, based on 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, derived from the current proposed percentage of affordable housing in the last adopted or latest emerging plan. The total need for affordable housing should be converted into annual flows by calculating the total net need (subtract total available stock from total gross need) and converting total net need into an annual flow. The result of this calculation is Output C."

A2.40 This study has not sought to work out the likely delivery of affordable housing from market led developments and would note that this will depend on a number of factors (notably viability issues, but also the type of sites that might come forward in the future). The table below however compares the estimated level of affordable housing need (as derived earlier in this report) with the Output B figures shown above. This analysis shows that the affordable need represents between 21% (Rutland) and 80% (Boston) of the overall Output B figures.

A2.41 It should be noted when interpreting the data below that the affordable need and the overall housing need are calculated for different time periods (2011-36 for overall need and 2016-36 for affordable housing); although both figures are annualised. This means that the annualised overall housing figure for 2016-36 is likely to be different to that shown in the table below; the figure will vary depending on the actual supply achieved in the 2011-16 period. This is unlikely to change the conclusions, but should be noted when considering this analysis.

Figure A2.10: Affordable housing need and LPEG Output B

	Outputs B housing need	Affordable need (per annum)	Affordable need as % of Output B
Peterborough	1,165	559	48%
Rutland	191	41	21%
South Holland	493	282	57%
South Kesteven	697	238	34%
Peterborough HMA	2,546	1,120	44%
Boston	327	263	80%
Study area	2,873	1,383	48%

A2.42 In taking this forward, the analysis (below) is presented as a range. However, on the basis of the analysis it seems likely that a further 10% uplift would be required in South Holland, Boston and Peterborough, and also potentially in South Kesteven. The affordable need (at 21%) in Rutland may not require any further uplift.

Step D: Full Objectively Assessed Housing Need (FOAHN)

A2.43 According to the Diagram in Appendix 6 of LPEG report, the final step of the FOAHN estimation is:

"If Output C (affordable housing need) is greater than B, then FOAHN for each local area is reached by a further upward adjustment equivalent to the lower of either meeting Output C in total or adding an amount to 10% of Output A."

A2.44 As discussed there is some ambiguity as to whether a 10% adjustment where appropriate should be applied to the Output A or Output B figure. It has been assumed that the 10% is applied to the Output B figure. The table below summarises the Output A – C figures calculated in this report. It should be noted that the Output C figures may not be appropriate in all areas.

Figure A2.11: Outputs A to C for Peterborough HMA and Boston

	Output A	Output B	Output C
Peterborough	1,059	1,165	1,282
Rutland	153	191	210
South Holland	448	493	542
South Kesteven	581	697	767
Peterborough HMA	2,241	2,546	2,801
Boston	297	327	360
Study area	2,538	2,873	3,160

A2.45 The FOAHN is therefore in the range of 2,873 and 3,160 dwellings per annum across the study area. The whole of this range is substantially above the conclusions of this report (which put the housing need at up to 2,458 (excluding any further adjustment for economic growth in South Kesteven). The LPEG need is therefore some 17% to 29% above the need assessed in this report and up to 48% above the 'start point' as currently set out in Planning Practice Guidance.