Hart, Rushmoor & Surrey Heath
Strategic Housing Market Assessment
November 2016

APPENDICES

Contents

Appendix A: The Housing Market Area

1. This section brings together the evidence on the geography of the housing market that relates to Hart, Rushmoor and Surrey Heath. This appendix is based on the research undertaken by Wessex Economics for each of the three Councils in advance of the Strategic Housing Market Assessment being commissioned. This Appendix summarises the findings of these studies.

2. Subsequently additional analysis has been undertaken that is relevant to the definition of the market area using the 2011 Census data on travel to work patterns and household movements in the year prior to Census Day 2011. This additional analysis is included in Section 2 of the SHMA, with further detail in Appendices 3 and 4. Separate studies have also been undertaken by Hart and Surrey Heath Councils to define their functional economic area.

3. Identifying the geography of the housing market is the first step in undertaking a strategic housing market assessment for the following reasons:

   - It is critical if housing and economic policies are to be effective since it is only possible to start to address housing demands and needs if measures are taken across the meaningful geographies of housing and labour markets.
   - There is a policy requirement to identify needs and demands in the housing market area. There is also a *'duty to cooperate'* in strategic planning.
   - To identify any implications for the rest of the analysis in the SHMA – particularly in terms of demographic and economic changes which are reflected in migration and travel to work patterns.

4. The rationale for developing an evidence base for a housing market area and then developing policies which apply to this area is that these policies are likely to be more effective because they take account of economic and social realities.

5. The importance of these functional relationships is now reflected in policy. The National Planning Policy Framework (NPPF)[1] states *'local planning authorities should have a clear understanding of housing needs in their area. They should (first of 2 bullet points) prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries' (Para 159).*

6. The NPPF also states that local authorities should meet '*the full, objectively assessed needs for market and affordable housing in* ***the housing market area'*** (para 47) (Wessex Economics emphasis). Implicitly this indicates that, if a housing market area covers more than one authority, the planning authorities for that area have collectively to agree how the full, objectively assessed needs for housing will be distributed across that area.

7. This emphasis on the need to work together in planning how to meet housing demand and need is reinforced by Section 110 of the Localism Act. This places on all local authorities, and a number of other public bodies, a *'Duty to Co-operate'*. A brief summary of what the Duty to Co-operate means for

[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Councils is presented in Figure 1. This shows that the Duty to Co-operate particularly applies to strategic plan making.

8. It is evident in examinations of Core Strategies and Local Plans that the Planning Inspectorate are scrutinising whether the evidence base used in plan making is up-to-date and robust; and whether local authorities have fulfilled the Duty to Co-operate. In many cases, Inspectors are also expecting authorities to show how any planned shortfall in housing requirements in one authority will be met within the market area by other authorities.

Figure 1: The Duty to Co-operate

What does the new duty to co-operate mean for Councils?

The new duty:

- relates to sustainable development or use of land that would have a significant impact on at least two local planning areas or on a planning matter that falls within the remit of a county council
- requires that councils set out planning policies to address such issues
- requires that councils and public bodies *'engage constructively, actively and on an on-going basis'* to develop strategic policies
- requires councils to consider joint approaches to plan making.

Paragraph 156 of the NPPF sets out the strategic issues where co-operation might be appropriate (summarised under Q2).

Paragraphs 178-181 of the NPPF give further guidance on *'planning strategically across local boundaries'*, and highlight the importance of joint working to meet development requirements that cannot be wholly met within a single local planning area, through either joint planning policies or informal strategies such as infrastructure and investment plans.

From: A Simple Guide to Strategic Planning and the Duty to Co-operate

http://www.pas.gov.uk/pas/core/page.do?pageId=2133454#contents-5

9. The guidance is clear that local authorities should work together to undertake combined SHMAs for well-defined housing market areas. Across much of the country it is relatively easy to define sub-regional housing market areas, based on the pattern of major cities and rural hinterlands. But it is recognised that in London, housing markets overlap to the extent that it is not possible to define clearly distinct geographic sub-markets. Sub-markets in these areas overlap and merge.

10. Much the same issues arise in the London commuter belt, the area outside the administrative boundaries of London that form part of the London Travel to Work Area[2]. The London commuter belt consists of an area with high levels of connectivity not just radially into/out of London, but also laterally between with the adjacent areas that encircle London. This means that housing markets have a

[2] The report *London in its Regional Setting*, London Assembly, 2004, discusses the relationship of London to the commuter belt outside London's administrative boundaries

tendency to overlap. Defining housing market areas in the commuter belt is less easy than elsewhere in the country. This applies to much of the West Surrey and part of North Hampshire.

11. There also needs to be an element of pragmatism. The complexity of completing a SHMA on time to a standard that meets all clients' expectations increases as the number of authorities participating in an SHMA increases. When determining the area for which a SHMA should be undertaken it is important to seek to distil which of the authorities in an area it is most important to work with; and which are of less importance to work with because they are less tightly tied into the relevant market area.

12. This Appendix sets out the evidence on the geography of the housing market that relates to the three authorities and the implications this has for the SHMA and for the key task of identifying objectively assessed need. It considers:

- evidence from the existing research on the housing and labour markets that relate to the three authority areas
- evidence on housing markets based on migration patterns to and from each of the local authorities
- evidence on housing and labour markets based on travel to work patterns relating to each of the three authorities.

The Geography of Hart, Rushmoor and Surrey Heath

13. Rushmoor has a population of 94,900 people[3], virtually all of whom live in two large urban areas, Aldershot and Farnborough. These two towns, however, form part of a larger functional urban area often referred to as the Blackwater Valley (see Annex 1).

14. Hart has a population of 92,200 people. Hart is a predominately rural district within North Hampshire although around half the population live within the two largest towns - Fleet (population of around 32,000) and Yateley (population around 21,000). The district as a whole is bisected by the M3 motorway.

15. Surrey Heath has a population of 86,600. The largest town is Camberley, with a population of around 31,000, followed by Frimley with around 13,000 people.

16. With the exception of Hook in Hart District, the majority of the population of the three authorities live within the urban area commonly referred to as the Blackwater Valley (see Annex 1).

17. The Blackwater Valley is a rather wider area than the Farnborough-Aldershot urban area defined by the Office for National Statistics (see Annex 2). The Farnborough-Aldershot urban area has a population of over a quarter of a million people (252,000), which makes it the 29th largest urban area in England and Wales. Fleet, which is not included in the Farnborough-Aldershot urban area, has a population of 32,000 people.

[3] ONS 2012 Mid Year Population Estimates

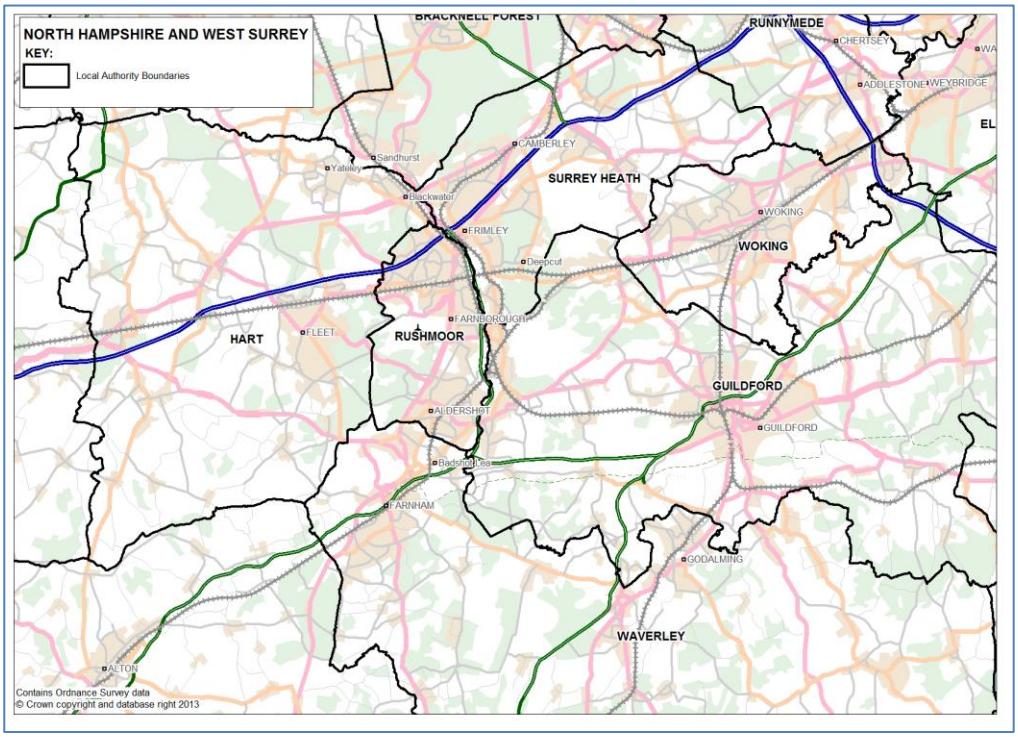
18. The Blackwater Valley area includes the following settlements (local authority in brackets):

- Aldershot (Rushmoor)
- Farnborough (Rushmoor)
- Camberley (Surrey Heath)
- Frimley (Surrey Heath)
- Fleet (Hart)
- Church Crookham (Hart)
- Blackwater (Hart)
- Yateley (Hart)
- Sandhurst (Bracknell Forest)
- Badshot Lea (Waverley)
- Farnham (Waverley)

19. The smaller settlements of Ash, Ash Valley and Tongham (Guildford Borough), Frimley Green, Mytchett and Deepcut (Surrey Heath), Frogmore (Hart) and Hale (Waverley) are included in the area. The town of Fleet is recognised to be part of the Blackwater Valley urban area, but is not included in the ONS defined Farnborough-Aldershot urban area, because of the strategic gap that the planning authorities have maintained between the settlements. (The ONS define urban areas as areas of continuous and contiguous urban development).

20. Figure 2 shows the general context of the area in terms of settlements and key road networks. Essentially the M3 runs through the northern part of the area, and the A31 through the south of the area, the two being connected by the dual A331 route. Rail routes run through the area along the M3 corridor (Southampton to London Waterloo), from Farnham to London Waterloo, with rail connections through the area on the Reading to Guildford and Gatwick line.

Figure 2: The Geography of the Blackwater Valley Conurbation



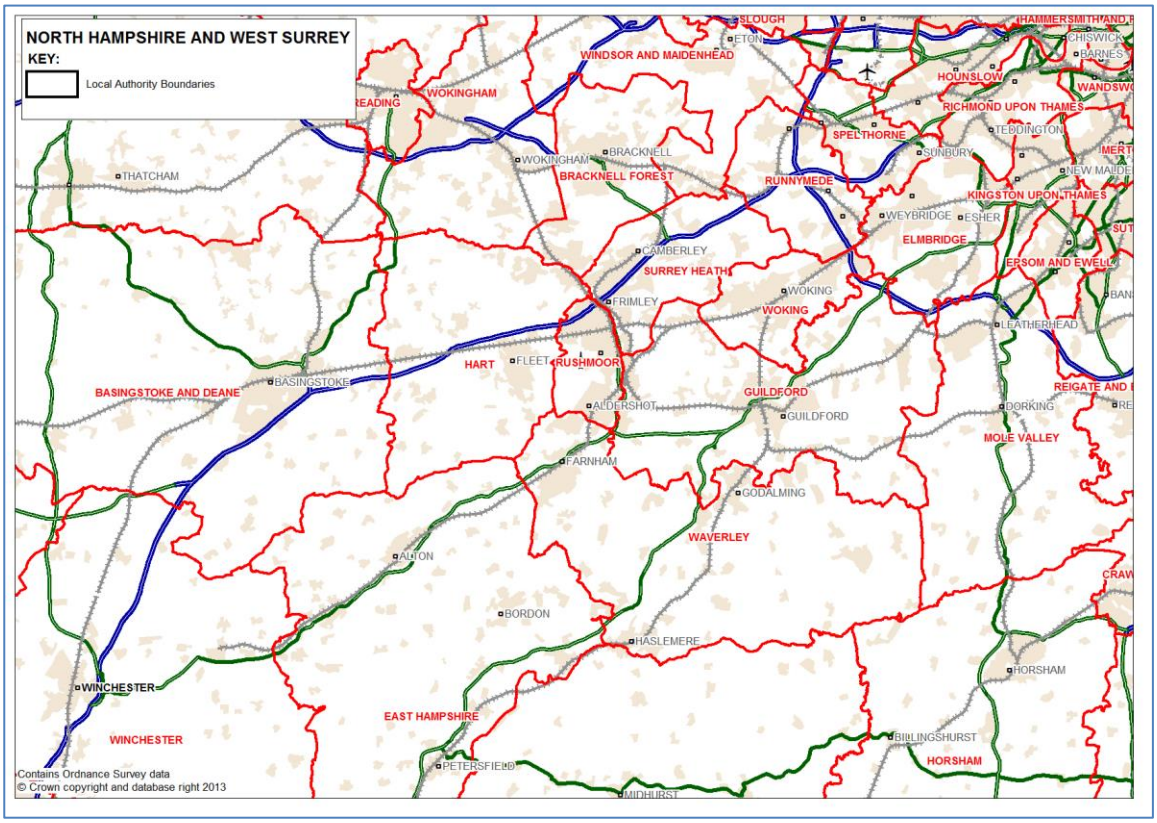
Source: Wessex Economics

21. The administrative areas of the local authorities in the area do not conform in any logical way to the urban area of the Blackwater Valley (see Figure 3). Rushmoor is wholly within the Blackwater Valley area but only accounts for somewhat over a third of the population. The largest population settlements in Surrey Heath, Camberley and Frimley, are part of the Blackwater Valley area. If taken together Fleet, Yateley and Blackwater account for over half of the population of Hart District. **Each of these three authorities, Rushmoor, Surrey Heath and Hart have a strong interest in working together since more than half of their resident population lives in the Blackwater Valley.**

22. In contrast, those parts of the Blackwater Valley area that are within Guildford Borough and Bracknell Forest account for a very small part of the total population of the respective local authority areas. Thus, Guildford and Bracknell Forest Councils can be expected to have relatively less interest in the overall planning of the Blackwater Valley, than Rushmoor, Surrey Heath and Hart. Just under a third (32%) of the population of Waverley Borough live in Farnham and the immediately adjoining settlements. So whilst over two thirds of the population of the Borough live outside of the Blackwater Valley, Waverley Council is likely to take a key interest in the planning of the Blackwater Valley.

23. The geography of each local authority needs to be borne in mind throughout this Appendix, particularly in the interpretation of migration and travel to work statistics because these are presented for the local authority as a whole. For example, though Ash Vale (in Guildford Borough) is very much part of the Blackwater Valley housing and labour market, there is likely to be less connection in terms of household migration between Guildford town, the main centre of population in Guildford Borough, and the Blackwater Valley.

Figure 3: Local Authority Boundaries in the Study Area



Source: Wessex Economics

Housing Market Areas Identified in Previous Research

24. In 2004 the South East Regional Assembly commissioned DTZ Pieda Consulting to prepare a report on *Identifying the Local Housing Markets of South East England* (DTZ Pieda Consulting, 2004).

25. The DTZ study undertook detailed analysis of household migration and travel to work data from the 2001 Census. The patterns that emerged from mapping these data clearly identified the foci of migration movements and employment hubs. These were used to identify housing markets; these were sense checked through a process of consultation with local authorities and other interested parties.

26. Having identified housing markets, the report then identified which local authorities should work together on SHMAs. It is important to note that there was a degree of pragmatism in the recommendations made regarding which authorities should work together.

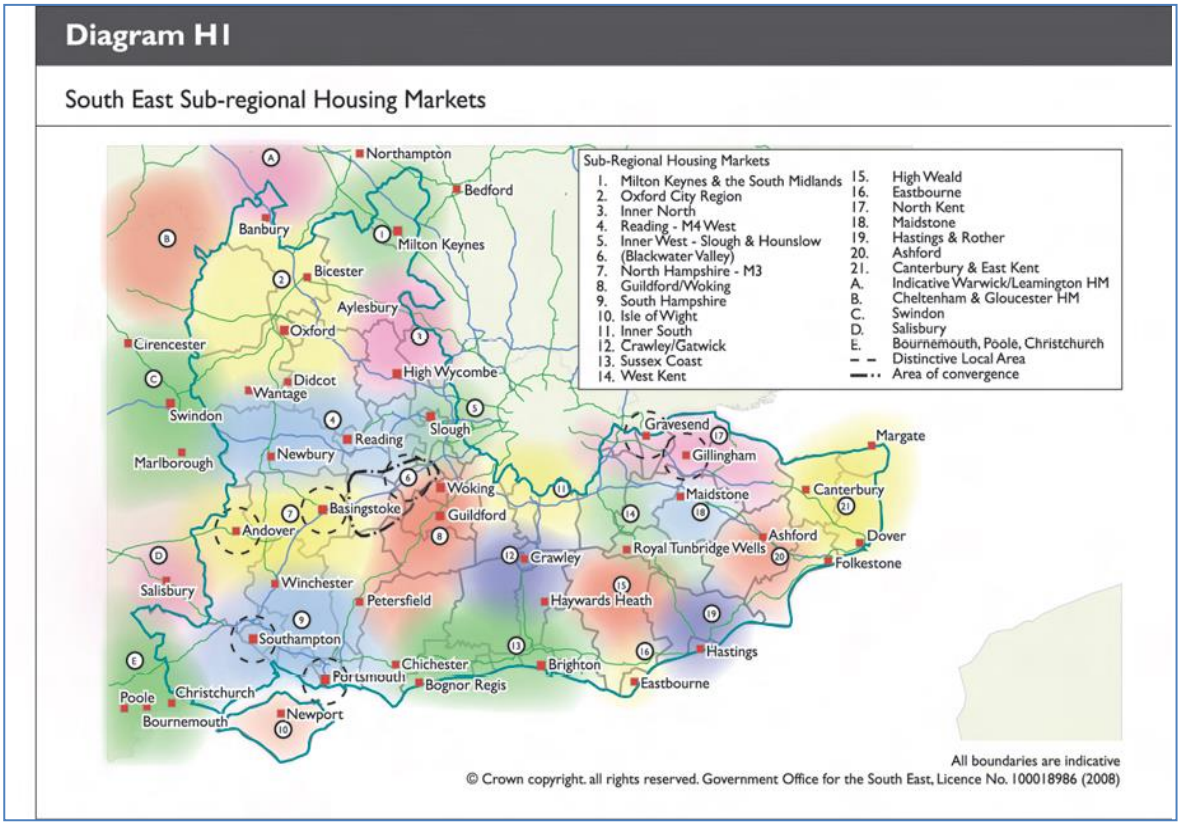
27. Figure 4 shows the pattern of housing markets identified in the 2004 study. Across much of the South East the commissioning of SHMAs has broadly followed the pattern identified in the report. The pattern of housing markets identified played an important part in the development of strategic planning policy across the South East of England and was subsequently incorporated into the South East Plan (GOSE/South East Regional Assembly, 2009). The South East Plan highlighted the importance of joint working in the production of joint strategic housing market assessments.

28. The 2004 study made it clear that the Blackwater Valley did not fit the pattern across the South East of fairly clearly defined sub-regional markets. Instead the Blackwater Valley was identified as an *'area of*

convergence'. This term was used to identify a distinct area where a number of housing markets overlapped, notably the Guildford/Woking, North Hampshire/M3, and Reading/M4 West markets.

29. **Thus, the 2004 analysis identified the Blackwater Valley and the immediately surrounding areas as the part of the South East with the most complex housing market geography. It was recommended that it would be appropriate to undertake a SHMA for this area in its own right because of its distinct characteristics, and the fact that it would not be easily incorporated into a SHMA undertaken for any one of the surrounding areas which have better defined market areas.**

Figure 4: Sub-Regional Housing Markets DTZ Pieda Study and South East Plan

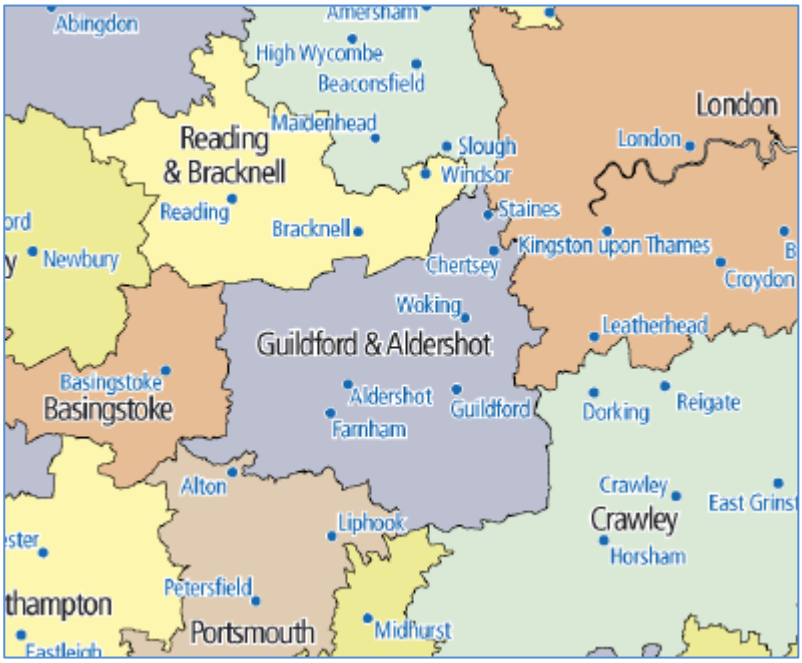


Source: South East Plan

30. Since the 2004 report was produced, ONS have published Travel to Work Area maps based on analysis of 2001 Census data. To some degree the boundaries of TTWA and Strategic Market Areas can be expected to be similar, in that TTWAs are defined as being the smallest areas within which two thirds of the working population both live and work (66.7% self-containment).

31. Figure 5 puts the Blackwater Valley at the geographic centre of a very large Guildford and Aldershot travel to work area covering North Hampshire and West Surrey, but with most of Elmbridge and much of Spelthorne falling within the London TTWA. Broadly those areas within the M25 fall into the London TTWA rather than the Guildford and Aldershot TTWA. Logically the closer a settlement is to London the greater will be the bias in travel to work patterns to be orientated to London.

Figure 5: Travel to Work Areas, 2001



Source: ONS

The National Housing and Planning Advice Unit (NHPAU) Studies

32. In November 2010, the Department for Communities and Local Government (CLG) published a suite of research documents on housing markets in Great Britain commissioned by the former National Housing and Planning Advisory Unit (NHPAU)[4]. The report *The Geography of Housing Markets, Executive Summary*[5], is a helpful summary of the extensive array of work undertaken by a combined university team, and a discussion of the challenge of defining housing market areas. This section of the Appendix summarises the work and identifies the market areas identified in the study covering the local authorities of Rushmoor, Hart and Surrey Heath.

33. It is worth bearing in mind that the research was commissioned and substantially completed before the abolition of Regional Assemblies and the Regional Spatial Strategies. There were therefore regional organisations and plans through which co-operation between authorities was encouraged and co-ordinated; and organisations that could monitor outcomes. No such structure exists now, and some of the recommendations in the NHPAU reports seem to assume that such a structure exists. This does not, of course, change the validity of the analysis.

34. In defining market areas the research states that housing demand (and need) is determined primarily by household incomes, and incomes are largely a function of employment patterns and the labour market. Thus, housing market areas are likely to be closely related to Travel to Work Areas (TTWA). However, the research team regarded TTWAs as too tight a definition of self-containment to properly provide the basis of areas to be used for strategic planning and to reflect the dynamics of housing market.

[4] https://www.gov.uk/government/publications/housing-market-areas
[5] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6347/1775478.pdf

35. In particular the research team states that *'we expect longer distance commuters to define the boundaries of housing market areas……longer distance commuters determine the area within which houses are substitutable for each other, whilst providing access to the same employment opportunities.'* The research team also investigated patterns of self-containment based on migration patterns; and how house price data might be used to inform the selection of housing market areas. However, the research team concluded that while price patterns should reflect market geographies, the data required for such an analysis this made the approach impractical.

36. The report concludes *'there are no easy answers to the definition of housing market areas given both theoretical and practical challenges. Indeed it is not possible to have a uniquely 'right' answer – rather it is important to go for the most appropriate self-contained set of areas. The key task is to generate a widely acceptable geography in a transparent way, using consistent criteria.'*

37. The report suggests that conceptually the best way to think about housing markets is as a nested geography comprising three tiers, as follows:

- framework housing market areas, defined by a high level of commuting closure (77.5 per cent self-containment)
- local housing market areas, defined by migration patterns (50 per cent self-containment)
- sub-markets, defined by neighbourhood or house type

Mapping the NHPAU HMAs in North Hampshire and West Surrey

38. The maps published in the suite of reports on the CLG website are not at a scale that can show precisely where the boundaries of the different tiers and types of housing market fall at local level. Wessex Economics has therefore accessed the ward level data made available on the University of Newcastle's website[6] and mapped these using GIS. These are shown below in Figures 6, 7 and 8.

39. To avoid the rather confusing terminology used in the NHPAU report, this Appendix refers to the three different market areas that have been mapped as follows:

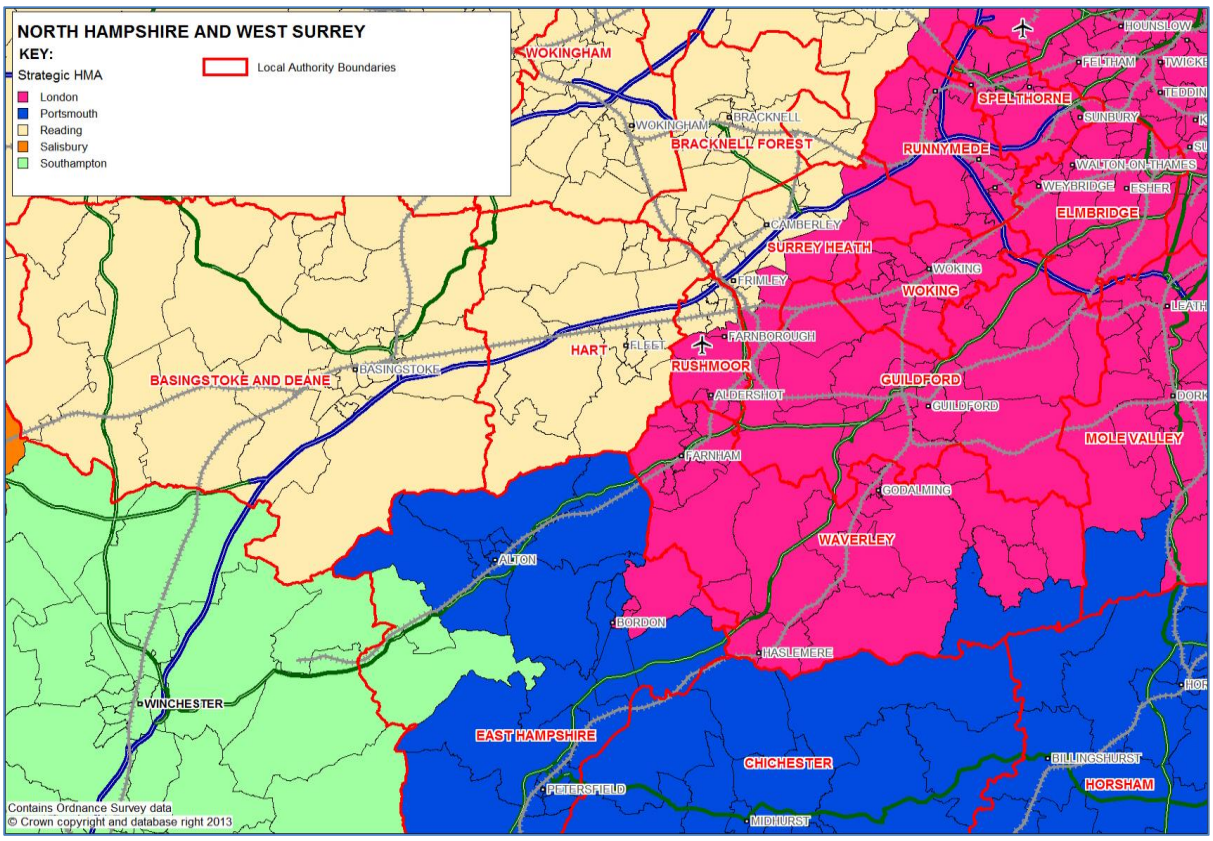
- Strategic Housing Market Areas (these being the framework housing market areas, defined by a high level of commuting closure (77.5 per cent self-containment))
- Local Housing Market Areas (these being the areas that nest within the Strategic Housing Market Areas, and by definition cover a smaller geography)
- Sub-Regional Housing Market Areas (being the single tier housing market areas identified in the NHPAU reports).

40. Figure 7 shows how the Strategic HMA maps onto the geography of the area covered by Hart, Rushmoor and Surrey Heath councils. This indicates that all of the West Surrey authorities fall into the huge London Strategic Housing Market Area. Rushmoor is divided, with Aldershot defined as being part of the London Strategic HMA, and Farnborough as part of the extensive Strategic Reading HMA. Hart falls in the Strategic Reading HMA, as does Basingstoke and Deane. Where Strategic HMA boundaries cut

[6] http://www.ncl.ac.uk/curds/research/defining/NHPAU.htm

across an individual local authority's boundary the NHPAU research team allocated each authority to a particular Strategic HMA. Rushmoor is allocated to the London HMA, while Hart, Surrey Heath and Basingstoke and Deane (along with Wokingham, Bracknell Forest and many others) are allocated to the Reading Strategic HMA.

Figure 6: Strategic Housing Market Areas (NHPAU) in North Hampshire and West Surrey

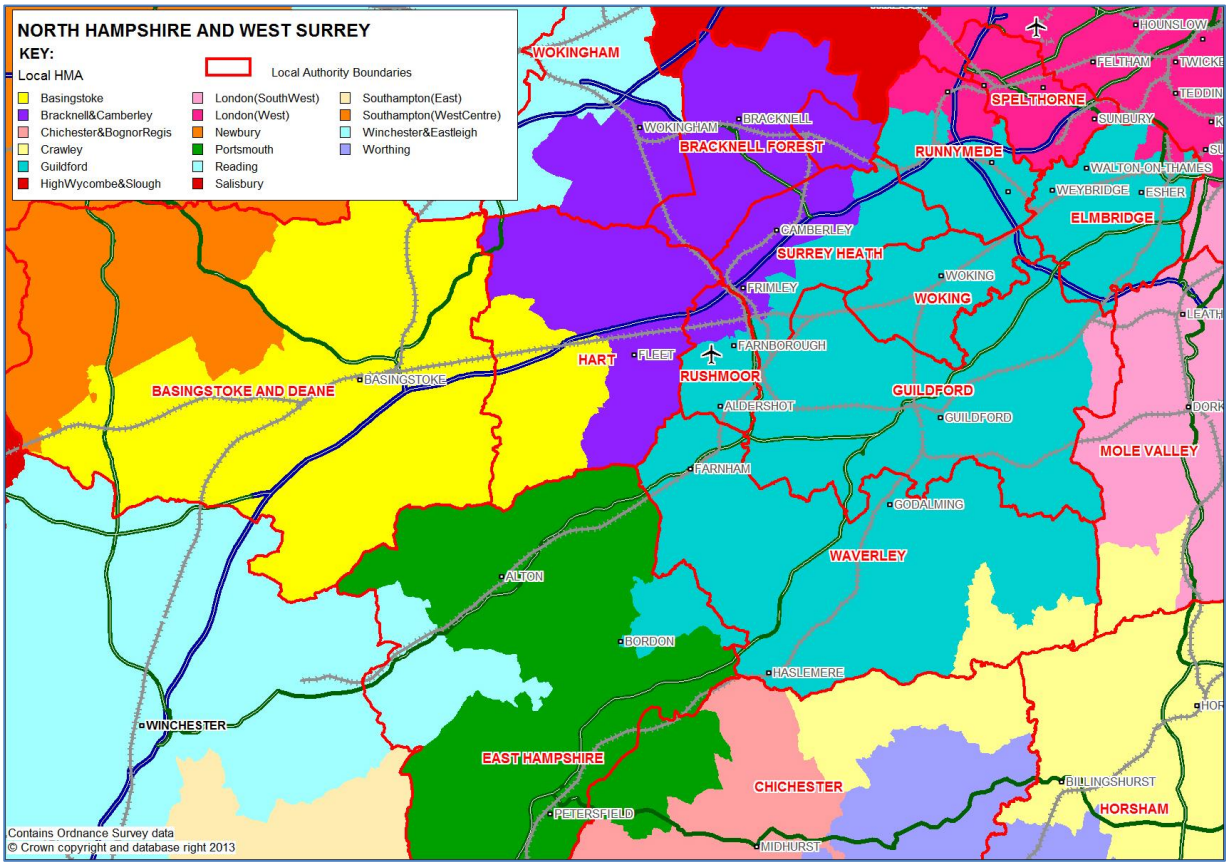


Source: Newcastle University (CURDS), Wessex Economics

41. Figure 7 maps the Local HMAs which nest within the Strategic HMAs shown in Figure 6. This shows that the three authorities considered in this study are all split between two Local HMAs.

- The main urban settlements of Hart are part of the Bracknell Local Market, which forms part of the Reading Strategic HMA. The more rural part of Hart is included in the Basingstoke Local HMA, which is also part of Reading Strategic HMA.
- The northern part of Rushmoor is placed in the Bracknell local market which forms part of the Reading Strategic HMA, with the south of Rushmoor Borough in the Guildford Local HMA, which is part of the London Strategic HMA.
- The northern half of Surrey Heath is also placed into the Bracknell Local HMA, with the southern part in Guildford Local HMA, which is part of the London Strategic HMA.
- The Guildford Local HMA includes all or the great majority of 5 authorities (Guildford, Woking, Waverley, Elmbridge and Runnymede), plus parts of three more (Rushmoor, Surrey Heath and East Hampshire).

Figure 7: Local Housing Markets (NHPAU) in North Hampshire and West Surrey



Source: Newcastle University (CURDS), Wessex Economics

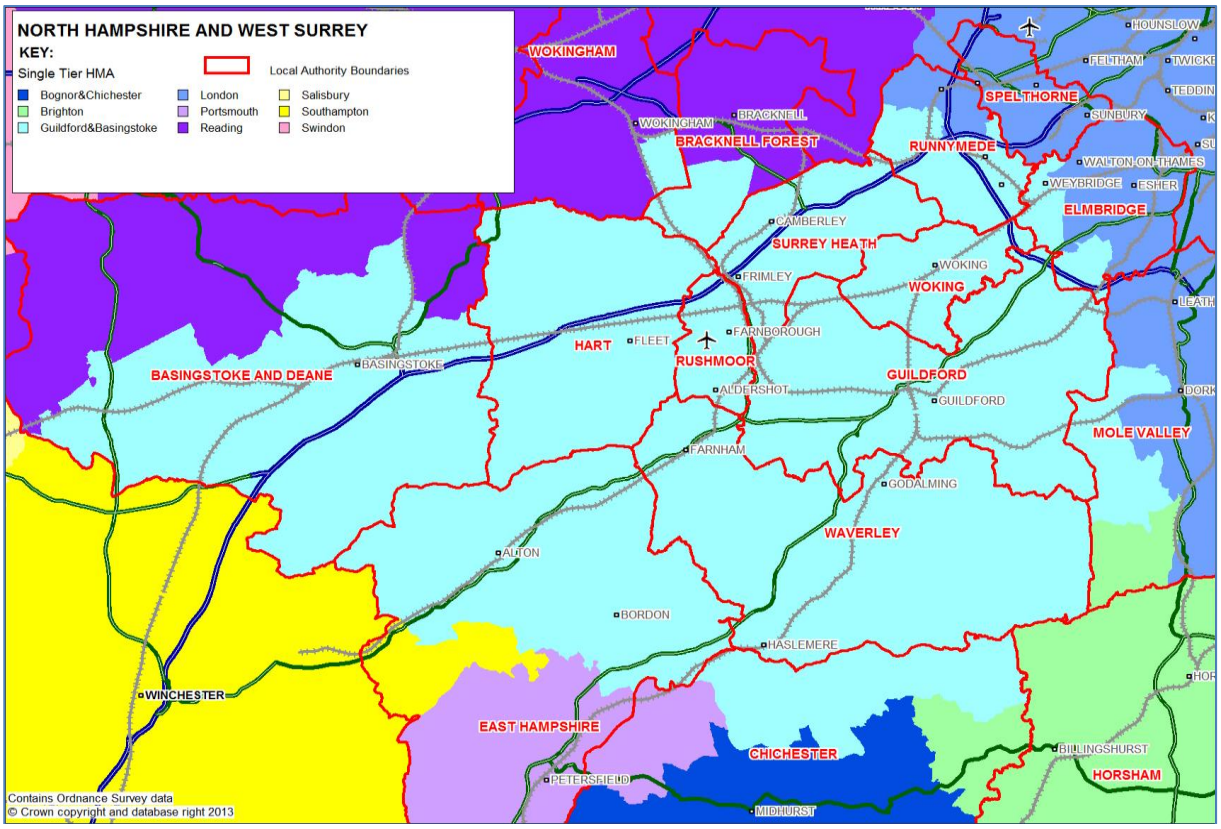
42. Figure 8 shows the boundaries of the Sub-Regional HMA (the 'unitary' HMA structure developed by the NHPAU team). A single Guildford/Basingstoke Sub-Regional HMA covers the great majority of West Surrey and North Hampshire. Virtually all of the authorities in West Surrey except Spelthorne and Elmbridge fall into this area, along with Hart, Rushmoor, Surrey Health, much of Basingstoke and Deane (including Basingstoke itself) and the northern part of East Hampshire. The parts of the area that fall into Chichester District and Mole Valley are not material considerations since they do not contain the majority of the population of those Districts. Small but populated parts of Bracknell Forest and Wokingham fall within this market area.

43. In the allocation of local authorities to this Sub-Regional HMA, the NHPAU team places the following authorities in the single tier North Hampshire and West Surrey HMA:

- Basingstoke and Deane
- East Hampshire
- Hart
- Rushmoor
- Guildford
- Runnymede
- Surrey Heath

- Waverley
- Woking

Figure 8: Sub-Regional HMAs in North Hampshire and West Surrey



Source: Newcastle University (CURDS), Wessex Economics

The Implications for Hart, Rushmoor and Surrey Heath

44. In commenting on the NHPAU reports it is worth noting that the analysis undertaken is based on 2001 Census data. The mapping confirms the conclusion reached by the 2004 DTZ Study that shows that Rushmoor sits at a point of intersection between housing markets – with the two tier structure of HMAs putting Farnborough and Aldershot in different market areas. Similarly Hart and Surrey Heath are divided between two different Strategic HMAs. This highlights the problem of hard and fast boundaries, and is why the 2004 DTZ study deliberately used fuzzy boundaries.

45. The Strategic, Local and Sub-Regional HMAs give different conclusions – which is itself evidence of the degree to which housing markets overlap and merge into each other.

- Hart – in the Strategic Reading HMA, but in the Sub-Regional North Hampshire - West Surrey HMA (rather than the Sub-Regional Reading HMA)
- Surrey Heath – in the Strategic Reading HMA, but in the Sub-Regional North Hampshire - West Surrey HMA
- Basingstoke and Deane – in the Strategic Reading HMA, but included in the Sub-Regional North Hampshire - West Surrey HMA

- East Hampshire – in the Strategic Portsmouth HMA but in the Sub-Regional North Hampshire - West Surrey HMA
- Elmbridge – in the Local Guildford HMA, but not in the Sub-Regional North Hampshire - West Surrey HMA
- Runnymede – in the Sub-Regional North Hampshire - West Surrey HMA and in the Guildford Local HMA.

46. **Wessex Economics appreciates that this analysis presents a confusing picture. When the practicalities of commissioning and co-ordinating a joint SHMA are taken into consideration, Wessex Economics are of the firm opinion that none of the above definitions of market areas are very helpful.** A SHMA undertaken for the Strategic London HMA would be a huge task involving over 70 authorities. Even a SHMA undertaken for those authorities in West Surrey and North Hampshire that fall into the Strategic London SHMA would involve 7 authorities, too large in Wessex Economics' view for effective project management. Similarly, undertaking a SHMA for the Sub-Regional North Hampshire - West Surrey HMA, would involve 9 authorities.

47. It is therefore the Local HMA that provides the best basis for what might be a sensible geography in terms of the options provided by the NHPAU for a joint SHMA. The NHPAU team do not identify the specific authorities that would make up this this area, but the Guildford Local HMA would involve at least 5 authorities: Waverley, Guildford, Woking, Elmbridge and Runnymede. Rushmoor falls half within this Local HMA and half in the Bracknell Forest Local HMA. Hart and Surrey Heath are also divided, though the main population centres in both authorities are located, along with Farnborough in Rushmoor to the Bracknell Forest Local HMA.

48. **The NHPAU does not therefore provide an unequivocal answer of which authorities in this area should work with in terms of a joint SHMA. However, further analysis set out in the following sections of this Appendix support the particular importance of Hart, Rushmoor and Surrey Heath working together, and is the reason why these three authorities have chosen to work together in preparing a joint SHMA.** This analysis examined the linkages between the three authorities and their other neighbouring authorities, with a focus on more recent data than that used by the NHPAU team or by the 2004 DTZ study.

Migration between Local Authorities in North Hampshire – West Surrey

49. The previous section examined analyses of housing market areas based on analysis of 2001 Census data. 2011 Census data are not yet published on household movements or travel to work patterns. However, more up to date data is available on migration between local authorities than the 2001 Census. This section examines the pattern of such movements between the authorities in the study area. Data relates to the number of moves between individual authorities in the year to July 2012. Data is sourced from the ONS.[7] 2011 Census data on migration subsequently released is presented in Appendix C.

50. Figures 9 and 10 show the pattern of migration between Hart, Rushmoor and Surrey Heath and the other authorities in the surrounding area. In terms of total movements:

[7] http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc25/index.html

- Between Rushmoor and the other authorities the largest number of movements are between Rushmoor and Hart (1,270 moves), followed by Guildford (1,120 moves), Surrey Heath (950), and Waverley (800).
- Between Hart and the other authorities the largest number of movements are between Hart and Rushmoor (1,270 moves), followed by Basingstoke and Deane (830), Bracknell Forest (570) then Surrey Heath (500).
- Between Surrey Heath and the other authorities the largest number of movements are between Surrey Heath and Rushmoor (950 moves), followed by Woking (760) and Guildford (560), closely followed by Bracknell Forest (550) and Hart (500).

51. The analysis indicates that in order of significance in terms of migration, judged by the overall **volume** of movements to and from the authorities, Rushmoor has the strongest relationships with Hart and Guildford, followed by Surrey Heath, then Waverley.

52. Hart is most closely linked to Rushmoor, followed by Basingstoke and Deane. The next most important linkages are with Surrey Heath and Bracknell Forest.

53. Surrey Heath is most closely linked to Rushmoor and Woking – the two large neighbouring urban centres. These two authorities account for the largest volume of movements to and from Surrey Heath. The next most important linkages are with Guildford, Bracknell Forest, Runnymede and Hart.

54. It is relevant to note, since the SHMA undertaken by The Royal Borough of Windsor and Maidenhead identifies Surrey Heath as part of the RBWM market area, that the volume of migration to and from the RBWM and Surrey Heath is much less significant than with other authorities.[8] The overall volume of movements in 2012 was 320 (ranking 7th in the overall volume of movements with Surrey Heath).

55. Figure 9 examines the pattern of in-migration to the study authorities from neighbouring authorities in the study area. To read the table, identify which of the authorities you are interested in and find it in the column headings; then read the figures downwards in that column to find how many people moved into that authority from other authorities in the study area. Thus, 700 people in the year to July 2012 moved into Hart from Rushmoor; and 430 people moved into Surrey Heath from Rushmoor. The five largest migration flows for each authority are highlighted in yellow. This figure helps to identify which of the authorities are most closely tied to each other in terms of migration flows.

[8] http://consult.rbwm.gov.uk/portal/blp/pojan2014/blppo?tab=files

Figure 9: In-Migration to Core Authorities from Study Area Authorities, Year to July 2012

From Sending Authority	To Receiving authority					
	Rushmoor	Hart	Surrey Heath	Guildford	Woking	Waverley
Rushmoor		700	430	500	80	400
Hart	570		190	120	30	150
Surrey Heath	520	310		280	250	120
Guildford	620	190	280		460	1050
Woking	120	60	510	590		170
Waverley	400	240	120	880	110	
Bracknell Forest	140	280	290	80		40
Runnymede	60	50	250	100	410	60
Elmbridge	40	50	100	430	420	220
Mole Valley			30	310	60	120
Horsham				60	30	110
Chichester	30	30		90	20	260
East Hants	100	90	40	120		430
Basingstoke and Deane	90	370	50	70	40	30
Wokingham	60	210	80	70		40
Royal Borough of Windsor & Maidenhead	140	60	200	50	60	60

Source: ONS

56. Figure 10 is presented in the same format as Figure 9 but shows the pattern of out-migration from the authorities to the other authorities in the wider area. Thus, in the year to July 2012 620 people moved from Guildford into Rushmoor, and 400 people moved from Waverley into Rushmoor.

Figure 10: Out-Migration from Core Authorities from Study Area Authorities, Year to July 2012

To Receiving Authority	From Sending authority					
	Rushmoor	Hart	Surrey Heath	Guildford	Woking	Waverley
Rushmoor		570	520	620	120	400
Hart	700		310	190	60	240
Surrey Heath	430	190		280	510	120
Guildford	500	120	280		590	880
Woking	80	30	250	460		110
Waverley	400	150	120	1050	170	
Bracknell Forest	190	290	260	60	70	40
Runnymede	50	30	150	90	440	40
Elmbridge	20		50	180	200	90
Mole Valley	30			330	60	100
Horsham				110	40	170
Chichester	30		30	130	40	370
East Hants	160	120	80	200	70	740
Basingstoke and Deane	200	460	120	110		60
Wokingham	60	170	110	70	50	30
Royal Borough of Windsor & Maidenhead	70	50	120	50	50	40

Source: ONS

57. Taking Figures 9 and 10 together, in terms of net migration, the largest net movements associated with the three authorities are as follows:

- The largest net movement into Rushmoor arose from Guildford (120 people), followed by the flows from Surrey Heath (90 people). There was net out-migration from Rushmoor to Woking (140 people) and Hart (130 people). Moves between Rushmoor and Waverley balanced.
- The largest net movement into Hart arose from Surrey Heath (190 people), followed by Rushmoor (120 people). There was net out-migration from Hart to Basingstoke & Deane (90 people).
- The largest net movement into Surrey Heath arose from Woking (260 people), followed by Runnymede (100 people). There was net out-migration from Surrey Heath to Hart (120 people) and Rushmoor (90 people).

58. Across all the authorities examined in the study there is a pattern of movement from locations in or close to London out along radial routes. Analysis of the source of in-migration to the area shows significant flows particularly to Woking and Guildford from London Boroughs in the south west quadrant such as Wandsworth and Kingston-upon-Thames (these data are not included in Figures 9 and 10).

59. There is also a pattern of out-migration from the authorities in the area close to London such as Spelthorne and Elmbridge and Runnymede, to authorities in the study area further from London; and from the authorities in the centre and furthest from London in the study area to adjacent areas still further from London, such as East Hampshire and Basingstoke and Deane.

60. This is a long standing pattern, often associated with the fact that London sucks in younger people; London has a much higher proportion of people aged 20-35 than most of the South East. Subsequently as people in London get older there is a pattern that they move out further from the centre of London. Often out-migration from central London is associated with various key trigger points in people's lives; when people form couples and have children; at key stages in the education process; and as household income increases. Many will still commute to London, but others will find work in the commuter belt outside the boundaries of London itself.

61. There is also a pattern that, as people who live in the London commuter belt get older, they too have a higher than average propensity to move further from London either in search of the perceived quality of life available in rural areas, or to areas of lower cost housing. Retirement is also a significant factor in household migration since people no longer need to live close to major centres of employment. There is a clear urban house price gradient from London, from central areas to outer areas of London, to the commuter belt, to more distant urban areas. The high values in attractive rural areas mean that the same is not necessarily true if one maps house prices passing through rural areas.

62. **Overall, the analysis of migration patterns demonstrates strong inter-linkages in terms of migration between the trio of authorities – Rushmoor, Hart and Surrey Heath. Rushmoor also has strong migration linkages with Guildford, but both Guildford and Waverley have stronger relationship with each other than with Rushmoor, Hart or Surrey Heath.**

Travel to Work Patterns in North Hampshire – West Surrey

63. The NHPAU work on housing markets makes great use of travel to work patterns, but the data used in those studies is from the 2001 Census. Wessex Economics has analysed data from the 2011 Annual Population Survey, to identify the pattern of travel to work in North Hampshire and West Surrey. It is important to note that the APS data is sample based and as such the data should be treated with caution since there are quite large margins of error associated with the data. Analysis of the 2011 Census data on commuting patterns is set out in Appendix D.

64. However the APS is used here to identify potential changes in commuting patterns between 2001, 2008[9] and 2011, such as might be associated with infrastructure improvements or economic restructuring. 2008 was too early to pick up changes arising from the economic downturn, since it was the collapse of Lehman Brothers in September 2008 that triggered the financial crisis in the UK and Europe, but it is likely that these changes will have been reflected in the data from 2011.

65. Commuting patterns are examined for each of the authorities in turn, identifying key points. It should be noted that all of the authorities are likely to have quite significant numbers of people who work in London as a whole. However, this does not show up in the analysis since data is collected by local authority, and those working in London tend to be quite widely dispersed between the different London Boroughs.

66. Throughout this analysis it should be remembered that when flows from *'Guildford'* are reported, this represents flows from the whole of the Borough, not just the town Guildford; and that a number of urban settlements that are in Guildford Borough are part of the Blackwater Valley Urban Area, and hence closer to the centres of employment in Rushmoor and Surrey Heath than to Guildford town.

Rushmoor

67. Figures 11 and 12 show patterns of commuting between Rushmoor and the other authorities in the study area. Only the most important flows are shown. Less than half (45.5%) of those in work who live in Rushmoor, work in the Borough.

68. Somewhat over a quarter of Rushmoor's labour force work in other local authority areas in North Hampshire – West Surrey. The largest local flows are to Surrey Heath, Waverley, Guildford and Hart. This pattern has changed little over the last decade. However, the data suggests that there has been an increase in commuting to Basingstoke and Deane in recent years, with almost 6% of Rushmoor's labour force working in the Borough in 2011.

69. However, there are also significant in-flows of people who live outside Rushmoor, but who work in the Borough. There are important inflows from Surrey Heath and Guildford (see Figure 12). The data suggests that in-flows of workers from Hart have been reduced in recent years. One possible explanation for this change is the relocation of Nokia. However, the figure needs to be treated with caution because of the APS sample size.

[9] 2008 APS data on commuting was analysed as part of separate Housing Market Area studies undertaken by Wessex Economics for Rushmoor, Hart and Surrey Heath Councils

70. Comparisons with the 2001 Census data suggest that both in and out commuting increased between 2001 and 2011, which points to closer integration of the North Hampshire – West Surrey labour market; which very probably is also reflected in the closer integration of the housing market across the area.

Figure 11: Where Rushmoor Residents Work 2001-2011 (Top 5 Locations in 2001, 2008 and 2011)

	2001	2008	2011
Rushmoor	**55.1%**	**46.3%**	**45.5%**
Surrey Heath	7.5%	7.7%	12.5%
Waverley	6.5%	7.5%	7.3%
Hart	5.2%	4.6%	4.7%
Guildford	4.0%	5.6%	4.8%
Hillingdon	-	4.0%	1.4%
Woking	-	2.5%	-
Basingstoke & Deane	-	-	5.9%
RBWM	-	-	2.4%
East Hampshire	-	-	2.1%

Source: Census 2001, Annual Population Survey 2008 and 2011, Wessex Economics: Local authorities ranked according to commuting in 2001

Figure 12: Where Rushmoor's Workers Live 2001-2011 (Top 5 Locations in 2001, 2008 and 2011)

	2001	2008	2011
Rushmoor			**50.9%**
Hart	11.3%	15.2%	3.9%
Waverley	6.9%	5.3%	2.1%
Guildford	5.5%	5.0%	9.7%
Surrey Heath	4.8%	7.2%	9.0%
East Hampshire	2.0%	3.2%	-
Wokingham	1.6%	1.4%	1.3%
Bracknell Forest	1.1%	2.2%	1.2%
Southampton	-	1.5%	0.4%
Basingstoke & Deane	-	-	2.9%

Source: Census 2001, Annual Population Survey 2008 and 2011, Wessex Economics: Local authorities ranked according to commuting in 2001

Hart

71. Figures 13 and 14 show patterns of commuting between Hart and the other authorities in the study area. Hart has a low level of labour market self-containment but this appears to have improved over the last 10 years. Nevertheless, less than half of those in work who live in Hart work in the District. Almost 20% of Hart residents who are in work commute to work in Rushmoor, Surrey Heath and Waverley – though the importance of Rushmoor seems to have reduced in recent years. There are significant outward commuter flows to Basingstoke and Deane (7%) and Reading (accounting for 5.5%) of resident workers.

72. There are relatively modest inflows of labour to Hart, and evidence that they have declined in percentage terms between 2001 and 2011. The largest sources of in-commuting are from Basingstoke and Deane and Rushmoor, which together account for 14% of jobs in Hart. Inflows from Guildford and Surrey Heath appear to have increased in recent years and accounted for almost 8% of jobs in Hart in 2011. Inflows from Berkshire amount to just under 7% of jobs and appear to have reduced over time.

On the basis of these data, this would suggest that Hart has become more integrated with the North Hampshire – West Surrey area, and it links to the Berkshire market may have become weaker. This may mean that if the NHPAU analysis was run with 2011 Census data, Hart might be incorporated into the Guildford Local HMA, rather than being part of the Bracknell Forest Local HMA.

Figure 13: Where Hart Residents Work 2001-2011 (Top 5 Locations in 2001, 2008 and 2011)

	2001	2008	2011
Hart	**37.3%**	**36.6%**	**45.1%**
Rushmoor	14.6%	14.5%	3.6%
Surrey Heath	10.1%	8.6%	9.2%
Basingstoke & Deane	5.9%	4.6%	7.0%
Bracknell Forest	4.7%	3.2%	2.8%
Reading	2.8%	3.7%	5.5%
Waverley	-	6.6%	5.3%
Southwark	-	-	3.8%
City of London	-	-	2.4%

Source: Census 2001, Annual Population Survey 2008 and 2011, Wessex Economics: Local authorities ranked according to commuting in 2001

Figure 14: Where Hart's Workers Live (Top 5 Locations in 2001, 2008, 2011)

	2001	2008	2011
Hart			**45.1%**
Basingstoke & Deane	11.8%	6.8%	7.6%
Rushmoor	7.7%	5.8%	5.8%
Bracknell Forest	2.7%	3.8%	3.0%
Wokingham	1.9%	3.1%	-
West Berkshire	1.0%	2.3%	1.9%
Guildford	-	-	4.0%
Surrey Heath	-	-	3.7%
Reading	-	1.5%	1.4%

Source: Census 2001, Annual Population Survey 2008 and 2011, Wessex Economics: Local authorities ranked according to commuting in 2001

Surrey Heath

73. Of those who work outside of Surrey Heath, the largest flows to individual authorities are to Rushmoor and Guildford. Commuting to Guildford has increased significantly over the decade and Guildford now provides work for 9% of Surrey Heath's residents who are in work. Out commuting to Woking appears to have reduced in recent years, from 7% in 2008 to just under 4% in 2011. In terms of local outward flows of workers to work outside the District, Surrey Heath is unusual in having a large identified flow into particular parts of London (Hillingdon and Southwark), and an outflow of workers to Reading, though commuting to all of these Boroughs appears to have reduced in recent years when the data for 2011 is compared to 2008. Just 1% of Surrey Heath residents worked in the Royal Borough of Windsor and Maidenhead in 2011 and hence RBWM is not included in Figure 15 since it is not one of the 'top 5' locations where Surrey Heath's residents work.

74. Employers in Surrey Heath pull in workers from Hart and Rushmoor in large numbers and the importance of Hart as a place of work for people living in Rushmoor has increased in recent years. A proportion of Surrey Heath's workforce commutes in from the Berkshire authorities of Bracknell Forest,

The Royal Borough of Windsor & Maidenhead and Wokingham (collectively accounting for 13% of the workforce).

75. The data lend support to the conclusion that emerges from the NHPAU work that, more so than other authorities in the North Hampshire – West Surrey area, Surrey Heath looks both ways – towards Berkshire and towards its neighbours in Hampshire and Surrey. In the NHPAU work this is shown by the boundary between the Berkshire Strategic HMA and the London Strategic HMA running lengthways through the District. However, as with the migration data, commuting patterns appear to show that links with the Surrey authorities are stronger than those with the Berkshire authorities.

Figure 15: Where Surrey Heath Residents Work 2001-2011 (Top 5 Locations in 2001, 2008 and 2011)

	2001	2008	2011
Surrey Heath	**43.3%**	**44.8%**	**40.9%**
Woking	6.9%	7.0%	4.3%
Rushmoor	6.6%	7.9%	9.1%
Hillingdon	4.7%	6.0%	0.7%
Reading	3.9%	3.1%	1.7%
Bracknell Forest	3.8%	3.0%	2.7%
Basingstoke & Deane	3.1%	3.0%	0.8%
Guildford	-	-	9.0%
Hart	-	-	3.3%
Southwark	-	3.7%	1.7%

Source: Census 2001, Annual Population Survey 2008 and 2011, Wessex Economics: Local authorities ranked according to commuting in 2001

Figure 16: Where Surrey Heath's Workers Live 2011-2011

	2001	2008	2011
Surrey Heath	**43.3%**	**44.8%**	**40.9%**
Hart	11.2%	9.8%	9.6%
Rushmoor	9.4%	7.8%	13.4%
Bracknell Forest	8.1%	8.7%	6.9%
Woking	4.7%	2.8%	1.9%
Wokingham	2.2%	1.6%	1.9%
RBWM	1.6%	2.7%	3.6%
Guildford	-	-	3.5%

Source: Census 2001, Annual Population Survey 2008 and 2011, Wessex Economics: Local authorities ranked according to commuting in 2001

Housing Market Area Conclusions

76. The evidence presented in this section sets out the justification for a SHMA undertaken for the three authorities, on the basis that this approach would reflect the principal area covered by the Blackwater Valley urban area identified by ONS, plus Fleet. Rushmoor, Surrey Heath and Hart account for the majority of the population of the Blackwater Valley urban area (defined by ONS plus Fleet), and in each case have over half of their resident population in the area[10].

77. The 2004 study undertaken by DTZ mapping housing markets across the South East, identified the Blackwater Valley as *'an area of convergence'*, where a number of housing market areas overlap. This analysis identified the Blackwater Valley and the immediately surrounding areas as the part of the South East with the most complex housing market geography. It was recommended that it would be appropriate to undertake a SHMA for this area in its own right because of its distinct characteristics, and the fact that it would not be easily incorporated into a SHMA undertaken for any one of the surrounding areas which have better defined market areas.

78. Research on housing markets undertaken by the NHPAU in 2010 does not provide an unequivocal answer of which authorities in this area should work with in terms of a joint SHMA. Furthermore, those market areas identified by the NHPAU study include such a large number of authorities that it would present substantial practical difficulties. In addition, Waverley and Guildford had already commissioned a SHMA prior to Hart, Rushmoor and Surrey Heath Councils being in a position to commission a SHMA. Woking is not planning to undertake a SHMA since it has an adopted Core Strategy.

79. This Appendix has considered the relationships between the Hart, Rushmoor and Surrey Heath authorities in more detail and using up to date data. In terms of migration, the authorities are closely linked to one another. Rushmoor's most significant relationship is with Hart. Hart and Surrey Heath's most significant relationships are with Rushmoor. Hart and Surrey Heath are also connected to one another through migrations flows but these are less significant than those with Rushmoor and Basingstoke (for Hart) and Woking (for Surrey Heath).

80. There are also significant travel to work flows between the three authorities. Each authority experiences low levels of self-containment (the proportion of residents who work in the same authority). The majority of residents in work commute to work outside of the local authority in which they live. There are also significant flows of workers into each authority from neighbouring authority areas. Of those who do not live and work in the same authority area:

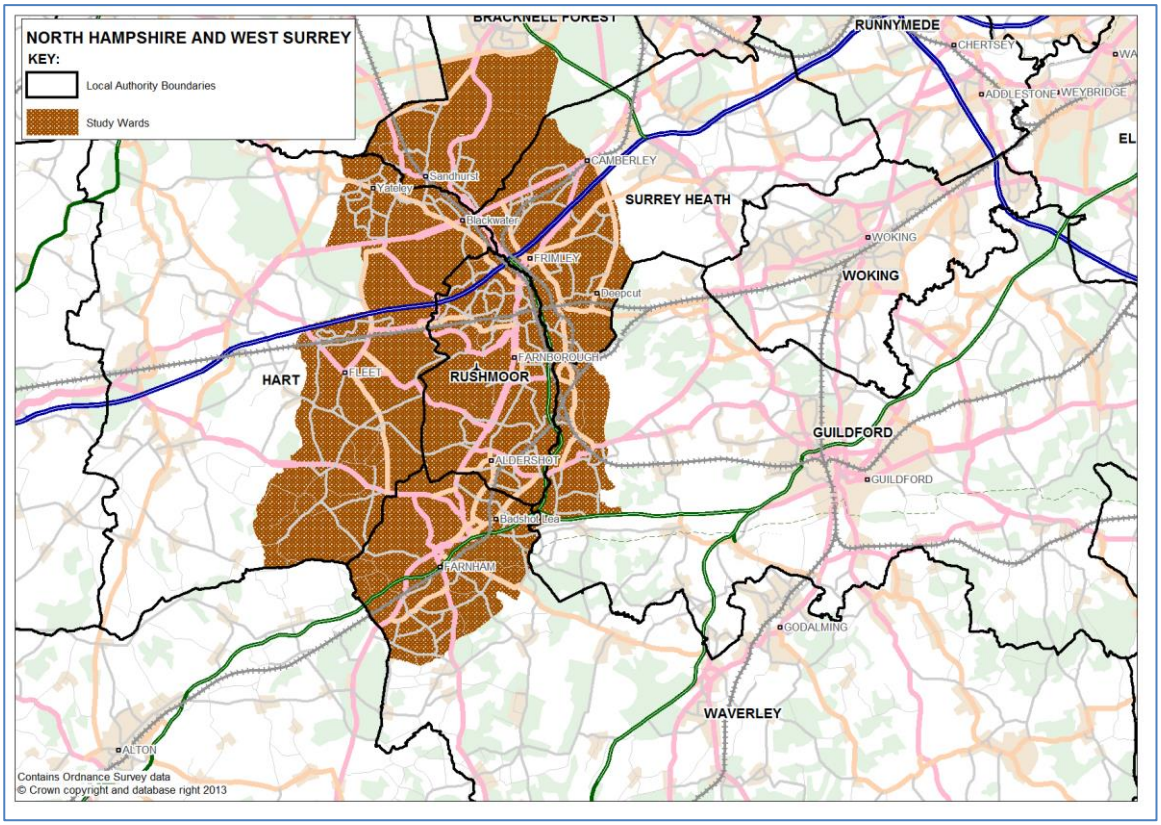
- The largest proportion of Rushmoor's residents commute to Surrey Heath, Waverley, Guildford and Hart for work. There are significant inflows of workers to Rushmoor from Surrey Heath and Guildford.

[10] All of Rushmoor's population live in the Blackwater Valley and an estimated 68% of the population of Hart and 66% of Surrey Heath live in the Blackwater Valley area. Together the three authorities have an estimated population of 213,000 residents in the Blackwater Valley, compared to the total population of the three authorities of 270,000; and an estimated population of the Aldershot-Farnborough urban area (which excludes Fleet) as defined by ONS of 252,000.

- The largest proportion of Hart's residents commute to Rushmoor and Surrey Heath for work. There are inflows of workers to Hart from Basingstoke and Deane, Rushmoor, Guildford and Surrey Heath.

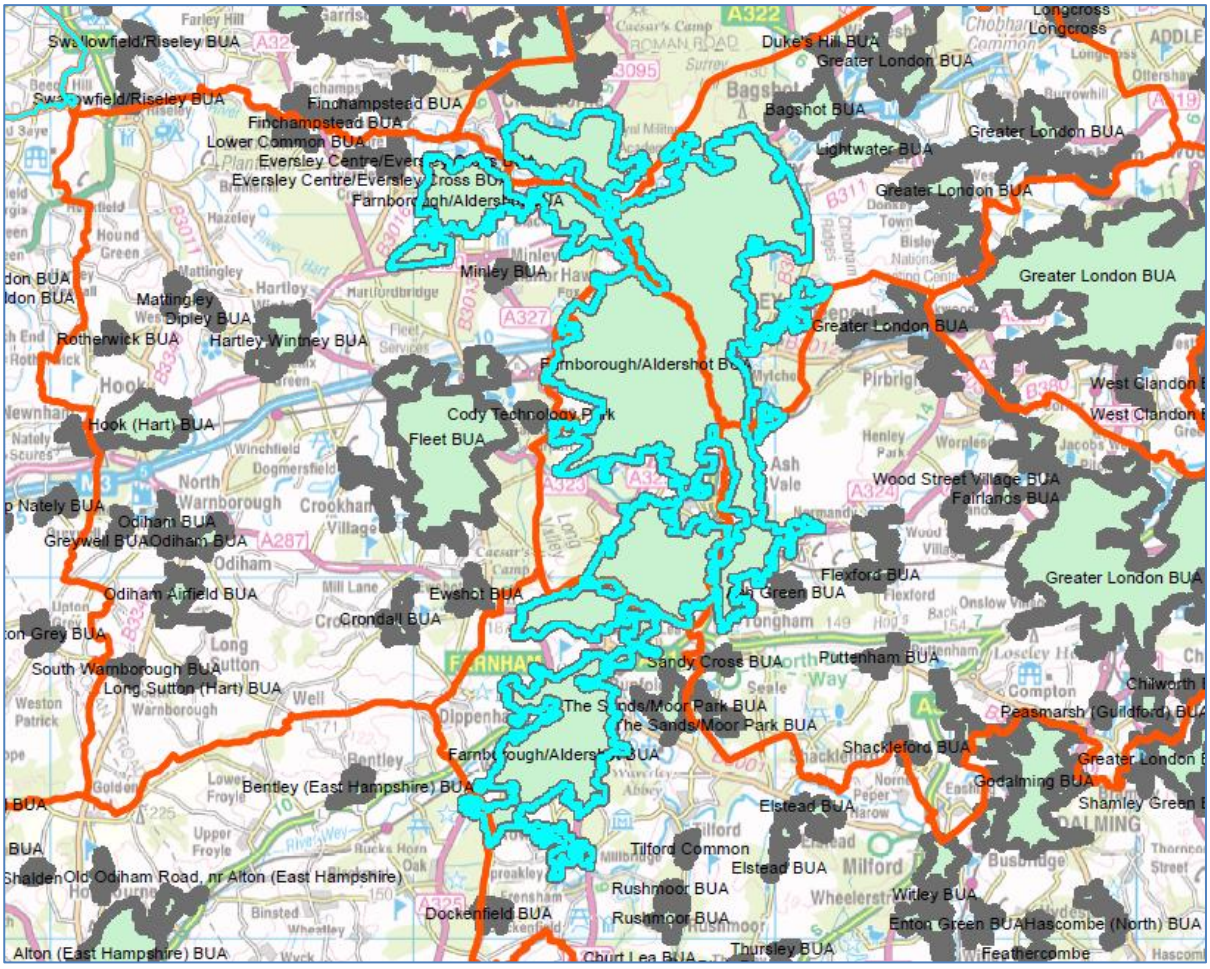
- The largest proportion of Surrey Heath's residents commute to Rushmoor and Guildford. There are inflows of workers to Surrey Heath from Hart and Rushmoor.

Annex 1: Ward Based Definition of Blackwater Valley



Source: Wessex Economics

Annex 2: ONS Defined Farnborough – Aldershot Urban Area



Source: Rushmoor Borough Council

Appendix B: Hart, Rushmoor and Surrey Heath Household Movement Analysis

1. This Appendix presents the analysis of domestic household migration patterns for Hart District, Rushmoor Borough and Surrey Heath Borough (referred to as the HRSH area). The aim is to present an overview of migration patterns with the HRSH area as a whole, built up from the analysis of the migration patterns of each local authority.

2. The data set used is the MM01CEW table from the 2011 Census of Population, which provides data on the origin and destination of all domestic migrants in the year prior to the Census. The table can be analysed in two ways:

   - To identify where those who have moved from a home in Hart, Rushmoor and Surrey Heath now live. The Census data includes all those who have moved home in the year prior to the Census day itself. This includes those who have moved home within the same local authority, but broadly this data set gives a sense of patterns of domestic out-migration from the HRSH area.

   - To identify those who lived in Hart, Rushmoor and Surrey Heath on Census day 2011, but were living somewhere different a year before Census day. This helps to identify patterns of domestic in-migration to the HRSH area, though it also identifies the extent to which people have moved home within the same local authority area within the HRSH area.

Approach

3. Wessex Economics has analysed the MM01CEW dataset to answer two questions:

   - Where do those who move out of the HRSH area move to?

   - Where have those who now live in the HRSH area moved from?

4. The procedure for analysis has been:

   - Identify the migration flows between and within the HRSH area and every local authority in the South East of England

   - Identify the migration flows between and within the HRSH area and every region other than the South East

   - Ranking of all the migration flows in terms of overall volumes and any area (SE LA or region) to identify all areas that accounts for more than 0.5% (which is rounded up to 1%). These areas are identified in the tables generated.

   - Calculation of the percentage of the total accounted for by each LA or region is shown for each of Hart, Rushmoor and Surrey Heath

   - An overview of the migration flows for the combined totals of Hart, Rushmoor and Surrey Heath and accompanying percentages by source is reported.

Out-migration from Hart, Rushmoor and Surrey Heath in the year 2010-11

5. Figure 1 shows where those who used to live in the HRSH area and who moved home in the year prior to Census Day 2011 now live. Half of all those who lived in Hart, Rushmoor and Surrey Heath in March 2010 and moved home in the following year still live in the HRSH area. By implication half of all those who were resident in the HRSH area and moved home in the year March 2010-March 2011, moved out of the area.

6. In terms of where people moved to, the data identifies significant outflows of migrants from the HRSH area to the South West Region as a whole and into London. In terms of local movements the most significant flows from the HRSH area are to Basingstoke and Deane, Guildford, Waverley and Woking. It is notable that longer distance moves (ie moves to a different region) feature quite strongly.

7. It should be remembered that these moves will include all moves; students going to university (Census Day was during University term) and retirement moves as well as job related moves. Figure 1 shows that in Rushmoor, 47% of people who moved home simply moved within the Borough. The equivalent figures for Hart are 37% and for Surrey Heath 36%.

Figure 1: Where Those Who Moved Home in the Year Before Census Day Now Live

	Address One Year Ago							
	Hart		Rushmoor		Surrey Heath		HRSH Area	
Usual Residence 2011	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Rushmoor	582	6%	5,232	47%	572	7%	6,386	22%
Hart	3,390	37%	593	5%	244	3%	4,227	15%
Surrey Heath	224	2%	437	4%	2,908	36%	3,569	12%
South West	719	8%	633	6%	542	7%	1,894	7%
London	510	6%	458	4%	639	8%	1,607	6%
Basingstoke and Deane	524	6%	232	2%	84	1%	840	3%
Guildford	124	1%	466	4%	243	3%	833	3%
East Region	225	2%	283	3%	214	3%	722	3%
Bracknell Forest	269	3%	147	1%	272	3%	688	2%
West Midlands	223	2%	245	2%	138	2%	606	2%
Waverley	187	2%	303	3%	104	1%	594	2%
Yorkshire and The Humber	171	2%	251	2%	97	1%	519	2%
East Midlands	199	2%	153	1%	124	2%	476	2%
Woking	30	0%	93	1%	287	4%	410	1%
Wales	148	2%	183	2%	67	1%	398	1%
North West	126	1%	132	1%	130	2%	388	1%
East Hampshire	155	2%	139	1%	54	1%	348	1%
Wokingham	159	2%	54	0%	122	2%	335	1%
Windsor and Maidenhead	45	0%	58	1%	149	2%	252	1%
Southampton	96	1%	70	1%	68	1%	234	1%
Winchester	96	1%	71	1%	48	1%	215	1%
North East	58	1%	81	1%	37	0%	176	1%
Portsmouth	67	1%	65	1%	35	0%	167	1%
Reading	46	0%	62	1%	58	1%	166	1%
Runnymede	20	0%	29	0%	112	1%	161	1%
Test Valley	55	1%	45	0%	43	1%	143	1%
Brighton and Hove	47	1%	42	0%	54	1%	143	1%
Other	774	8%	654	6%	671	8%	2,099	7%
Total	9,269	100%	11,211	100%	8,116	100%	28,596	100%

Source: Wessex Economics, 2011 Census

8. In terms of local moves the most important relationships with other local authorities are as follows:

- For Hart, the greatest flows of local out-migration is to Rushmoor, followed by Basingstoke and Deane
- For Rushmoor, the greatest flows of local out-migration are to Hart, followed by Guildford (which will include those parts of Guildford in the Blackwater Valley)
- For Surrey Heath, the greatest flows of local out-migration is to Rushmoor, followed by Woking.

9. These data provide evidence of the integration of the Hart, Rushmoor and Surrey Heath in terms of housing market dynamics.

In-migration to Hart, Rushmoor and Surrey Heath in the Year 2010-11

10. Figure 2 shows where those who moved home in the 12 month period before Census day and now live in the HRSH area have come from. Over half (52%) of all moves within or into Hart, Rushmoor and Surrey Heath in the year to Census Day were internal moves within the HRSH area. This confirms that there is quite a high level of self-containment in the HMA in terms of internal movements.

11. In terms of significant sources of in-migration to the HRSH area, it is no surprise that there is a significant inflow from London as a whole, with Guildford Borough, the South West region as a whole, Bracknell Forest, Waverley and Woking being the next most significant sources of in-migration.

Figure 2: Where Those that Live in Hart, Rushmoor and Surrey Heath Work

	Usual Residence Census Day 2011							
	Hart		Rushmoor		Surrey Heath		HRSH Area	
Address One Year Ago	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Rushmoor	593	7%	5,232	47%	437	6%	6,262	23%
Hart	3,390	41%	582	5%	224	3%	4,196	15%
Surrey Heath	244	3%	572	5%	2,908	37%	3,724	14%
London	493	6%	714	6%	604	8%	1,811	7%
Guildford	185	2%	602	5%	300	4%	1,087	4%
South West	354	4%	426	4%	224	3%	1,004	4%
Bracknell Forest	257	3%	237	2%	315	4%	809	3%
Waverley	182	2%	415	4%	106	1%	703	3%
Woking	59	1%	129	1%	431	6%	619	2%
East	198	2%	246	2%	164	2%	608	2%
West Midlands	203	2%	139	1%	107	1%	449	2%
Yorkshire and The Humber	103	1%	236	2%	102	1%	441	2%
Basingstoke and Deane	256	3%	117	1%	60	1%	433	2%
East Midlands	131	2%	112	1%	109	1%	352	1%
Wokingham	184	2%	60	1%	76	1%	320	1%
North West	97	1%	107	1%	107	1%	311	1%
Runnymede	35	0%	45	0%	220	3%	300	1%
East Hampshire	108	1%	144	1%	38	0%	290	1%
Windsor and Maidenhead	43	1%	45	0%	189	2%	277	1%
Wales	83	1%	76	1%	89	1%	248	1%
Scotland	101	1%	51	0%	76	1%	228	1%
Elmbridge	45	1%	40	0%	76	1%	161	1%
Other	855	10%	886	8%	871	11%	2,612	10%
Total	8,199	100%	11,213	100%	7,833	100%	27,245	100%

Source: Wessex Economics, 2011 Census

Net migration Pattern March 2010-2011

12. If one examines the pattern of net migration based on Census data it is clear that, in terms of the HRSH area as a whole, often in-migration and out–migration flows from many parts of the South East broadly balance or the differences between inflows and outflows are modest (less than +/- 50 people). It is interesting however to identify the broader pattern of migration in terms of where inflows and outflows do not balance; that is where net in-migration or out-migration exceeds 50 people.

13. Overall the Census data points to a net domestic migration outflow from the HRSH area of around 1,700 people. The area 'imports' people from Guildford, Woking, London and a number of West Surrey, Berkshire and North Hampshire authorities; and 'exports' people in large numbers to the South West region but also to other regions outside the South East; to Basingstoke and Deane, and to the south coast.

14. This broadly seems to fit a pattern of net movement in from higher prices areas in or close to London and net movement out to potentially cheaper areas and/or more rural and coastal areas. For all movements it is quite probable that relocation decisions are informed by house price differentials and lifestyle choices, but linked to where people work, whether they work, and the nature of that work.

Figure 3: HRSH Net Migration Balance – Locations where the Net Migration Balance is > 50 Persons

Local Authority/Region	HRSH In-migration less Out-migration
Guildford	254
Woking	209
London	204
Runnymede	139
Bracknell Forest	121
Waverley	109
Slough	103
Spelthorne	55
Elmbridge	52
Reading	-52
Canterbury	-55
East Hampshire	-58
Portsmouth	-69
North West	-77
Yorkshire and The Humber	-78
Winchester	-85
Brighton and Hove	-90
Southampton	-107
East	-114
East Midlands	-124
Wales	-150
West Midlands	-157
Basingstoke and Deane	-407
South West	-890
Total All LAs/Regions	-1,687

Source: Wessex Economics, 2011 Census

Appendix C: Hart, Rushmoor and Surrey Heath Commuting Analysis

1. This Appendix presents the analysis of commuting patterns for Hart District, Rushmoor Borough and Surrey Heath Borough. The aim is to present an overview of commuting patterns with the HRSH area as a whole, built up from the analysis of commuting patterns of each local authority.

2. The data set used is the RF04AEW Tables taken from the 2011 Census of Population data, entitled *'Location of where people live when working and place of work'*. The 2011 Census is the first time this data has been available. It is distinguished from previous commuting datasets by virtue of the fact that the 2011 Census for the first time asked not just for people's principal residence but also for *'where they live when working'*.

3. The RF04AEW Table is based on *'where people live when working'*. In effect this allows for the fact that people may have a principal home in one part of the country, but live somewhere else during their working week – be that lodgings, a flat rented close to where they work, a pied-a-terre, on-site accommodation provided by an employer, etc – which will very likely be close to where they work. In common parlance, these are likely to be 'weekly commuters'.

4. This is likely to provide a more accurate reflection of daily commuting patterns than the RF03AEW Tables taken from the 2011 Census of Population data, entitled *'Location of usual residence and place of work'*. It is very likely that for the great majority of the population there is no difference between their *'usual residence'* and where they *'live when working*. As yet no analysis has been done on how many people nationally or locally on how many people have a different usual place of residence and a place where they live when working.

Housing Market Area

5. Wessex Economics has analysed the RF04AEW dataset to answer two questions:

   - Where do those who work in Hart, Rushmoor and Surrey Heath live?
   - Where do those who live in Hart, Rushmoor and Surrey Heath work?

6. The procedure for analysis has been:

   - the flows between Hart, Rushmoor and Surrey Heath and every local authority in the South East of England have been identified
   - the flows between Hart, Rushmoor and Surrey Heath and every region other than the South East have been identified
   - the flows have been ranked in terms of overall volumes and any area (SE LA or region) that accounts for more than 0.5% (which is rounded up to 1%) has been reported on in the tables generated

- the percentage of the total accounted for by each LA or region is shown for each of Hart, Rushmoor and Surrey Heath
- an overview of flows for the combined totals of Hart, Rushmoor and Surrey Heath and accompanying percentages by source is reported.

Where do those who work in Hart, Rushmoor and Surrey Heath live?

7. Figure 1 shows where those who work in Hart, Rushmoor and Surrey Heath live, both for each of the individual authorities and for the HRSH area as a whole. Around 56% of all those who work in the HRSH area also live in the HRSH. It should also be noted when considering self-containment that these figures do not include those who work at or mainly from home.

8. In every case in North Hampshire-West Surrey, residents of a particular local authority are the most important source of labour for employers in their area; that is for every area more residents live and work locally than commute in from any other single area; but taken overall the number of people who commute into work in each local authority area, is larger than the number of people who live and work in that local authority area.

9. Thus none of the three HRSH local authorities are self-contained:

- In Hart 39% of those who work in the District are local residents
- In Rushmoor 41% of those who work in the Borough are local residents
- In Surrey Heath 32% of those who work in the Borough are local residents
- (Note all these figures exclude those working from home).

Figure 1: Where Those Working in Hart, Rushmoor and Surrey Heath Live.

2011	Place of Work							
	Hart		Rushmoor		Surrey Heath		HRSH Area	
Address whilst Working	**No.**	**% of total**	**No.**	**% of total**	**No.**	**% of total**	**No.**	**% of total**
Rushmoor	3,226	11%	16,752	41%	4,711	14%	24,689	24%
Hart	11,468	39%	4,679	11%	2,971	9%	19,118	18%
Surrey Heath	1,247	4%	2,804	7%	11,044	32%	15,095	14%
Bracknell Forest	1,163	4%	1,072	3%	2,887	8%	5,122	5%
Guildford	576	2%	2,669	6%	1,560	5%	4,805	5%
Basingstoke and Deane	2,863	10%	1,210	3%	652	2%	4,725	5%
London	974	3%	1,480	4%	1,655	5%	4,109	4%
Waverley	843	3%	2,181	5%	792	2%	3,816	4%
East Hampshire	868	3%	1,238	3%	417	1%	2,523	2%
Wokingham	915	3%	760	2%	835	2%	2,510	2%
Woking	236	1%	629	2%	1,357	4%	2,222	2%
South West	523	2%	621	2%	387	1%	1,531	1%
Reading	401	1%	332	1%	283	1%	1,016	1%
Windsor and Maidenhead	180	1%	311	1%	469	1%	960	1%
East Region	226	1%	377	1%	352	1%	955	1%
West Berkshire	415	1%	249	1%	164	0%	828	1%
Winchester	348	1%	339	1%	131	0%	818	1%
Runnymede	108	0%	183	0%	466	1%	757	1%
Spelthorne	97	0%	166	0%	327	1%	590	1%
Test Valley	252	1%	213	1%	101	0%	566	1%
Elmbridge	112	0%	189	0%	239	1%	540	1%
Southampton	240	1%	140	0%	80	0%	460	0%
Slough	113	0%	127	0%	198	1%	438	0%
Other	1,114	4%	1,622	4%	1,412	4%	4,148	4%
Total	**29,195**	**100%**	**41,217**	**100%**	**34,065**	**100%**	**104,477**	**100%**

Source: Wessex Economics, 2011 Census

10. For each of the three HSRH authorities one of the other two HRSH authorities is the next most important source of labour for employers in their area:

- In Hart, it is Rushmoor that is the next most important source of labour for its employers, followed by Basingstoke and Deane
- In Rushmoor it is Hart that is the next most important source of labour for its employers, followed by Surrey Heath
- In Surrey Heath it is Rushmoor that is the next most important source of labour for its employers, followed by Hart

11. These data provide strong evidence of the economic integration of the Hart, Rushmoor and Surrey Heath labour markets.

Where do those who live in Hart, Rushmoor and Surrey Heath work?

12. Figure 2 shows where those who live in Hart, Rushmoor and Surrey Heath work, both for each of the individual authorities and for the HRSH area as a whole. Around 53% of all those who live in the HRSH area (including all those who work at or from home) also work in the HRSH area.

Figure 2: Where Those that Live in Hart, Rushmoor and Surrey Heath Work

	Address whilst Working							
	Hart		Rushmoor		Surrey Heath		HRSH Area	
Place of Work	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Rushmoor	4,679	10%	16,752	32%	2,804	6%	24,235	17%
Surrey Heath	2,971	6%	4,711	9%	11,044	24%	18,726	13%
Mainly work at or from home	*6,969*	*14%*	*4,575*	*9%*	*6,284*	*14%*	*17,828*	*12%*
Hart	11,468	24%	3,226	6%	1,247	3%	15,941	11%
London	4,212	9%	3,325	6%	5,359	12%	12,896	9%
No fixed place	*3,762*	*8%*	*4,165*	*8%*	*3,715*	*8%*	*11,642*	*8%*
Guildford	1,293	3%	3,568	7%	2,221	5%	7,082	5%
Bracknell Forest	1,954	4%	1,158	2%	1,624	4%	4,736	3%
Waverley	1,146	2%	2,704	5%	656	1%	4,506	3%
Basingstoke and Deane	2,481	5%	931	2%	495	1%	3,907	3%
Woking	496	1%	1,009	2%	2,150	5%	3,655	3%
Runnymede	462	1%	460	1%	1,642	4%	2,564	2%
Wokingham	1,229	3%	497	1%	601	1%	2,327	2%
Windsor and Maidenhead	453	1%	297	1%	1,076	2%	1,826	1%
Reading	753	2%	358	1%	379	1%	1,490	1%
East Hampshire	520	1%	633	1%	172	0%	1,325	1%
Elmbridge	211	0%	271	1%	620	1%	1,102	1%
Spelthorne	293	1%	213	0%	589	1%	1,095	1%
Slough	274	1%	245	0%	436	1%	955	1%
West Berkshire	465	1%	207	0%	187	0%	859	1%
South West	234	0%	277	1%	146	0%	657	0%
Winchester	276	1%	258	0%	84	0%	618	0%
Other	1,997	4%	1,901	4%	1,696	4%	5,594	4%
Total	**48,598**	**100%**	**51,741**	**100%**	**45,227**	**100%**	**145,566**	**100%**

Source: Wessex Economics, 2011 Census

13. Not surprisingly a high proportion of those people in work in each of the authorities also work in that authority, but the areas are far from being self-contained. Thus:

- 38%[11] of those who live in Hart work in Hart, and 62% commute out to work in other areas
- 41% of those who live in Rushmoor work in Rushmoor, and 59% commute out to work in other areas
- 38% of those who live in Surrey Heath work in Surrey Heath, and 62% commute out to work in other areas.

14. Figure 2 highlights the most important commuting destinations for residents of each authority's area:

- For Hart residents the largest numbers of out-commuters travel to Rushmoor, followed by London as a whole, then Surrey Heath
- For Rushmoor residents the largest numbers of out-commuters travel to Surrey Heath, then Guildford, London and Hart
- For Surrey Heath residents the largest numbers of out-commuters travel to London, then Rushmoor, Guildford and Woking

[11] 11,468 + 6969 home workers

- Across the HRSH area less than half of residents in work commute out the area. The largest flows of out-commuters are to London, and then the surrounding authorities – Guildford, Waverley, Bracknell Forest, Woking and Basingstoke and Deane.

15. It is worth noting that a significant proportion of those in work in each of the local authorities (c8%) in each authority have no fixed place of work. These are likely to be contractors and self-employed people who are mobile workers working at different sites for different clients.

Appendix D: Employment Forecasts by Forecasting House

Total Employment in '000	CE	Experian	OE
2014	159.17	157.85	171.29
2015	162.01	158.71	174.70
2016	163.62	160.06	176.76
2017	164.71	161.17	178.67
2018	165.57	162.06	180.15
2019	166.30	162.88	181.56
2020	167.04	163.73	183.18
2021	167.71	164.61	184.79
2022	168.45	165.52	186.28
2023	169.23	166.37	187.66
2024	170.00	167.13	189.04
2025	170.76	167.91	190.43
2026	171.60	168.71	191.84
2027	172.34	169.61	193.11
2028	173.06	170.57	194.11
2029	173.78	171.48	195.03
2030	174.55	172.40	195.94
2031	175.36	173.30	196.93
2032	176.18	174.22	197.93
2033	177.00	175.16	198.94
2034	177.84	176.10	199.95
2035	178.71	177.04	200.95
2036	179.59	177.99	201.95

Source: Wessex Economics, Cambridge Econometrics, Experian, Oxford Economics
Sourced Q4 2015

Appendix E: Commentary on Sectoral Patterns of Employment Growth

1. Figure 1 shows the overall pattern of employment change for each of the individual local authorities in the HMA broken down by sector. The Figure shows the dramatic shift of employment in the HRSH area away from manufacturing to an economy based on private sector services over the period 1981 to 2014, with very substantial growth in financial and business services and information and communications.

2. Rushmoor's weak overall growth is indicated by a large loss of manufacturing business and government employment (probably linked to a reduction in the military presence over time) and a lower level of replacement employment in the two main sectors where there has been dramatic employment growth in the other parts of the HRSH area.

Figure 1: CE Total Employment Change in the HRSH Area 1981-2014

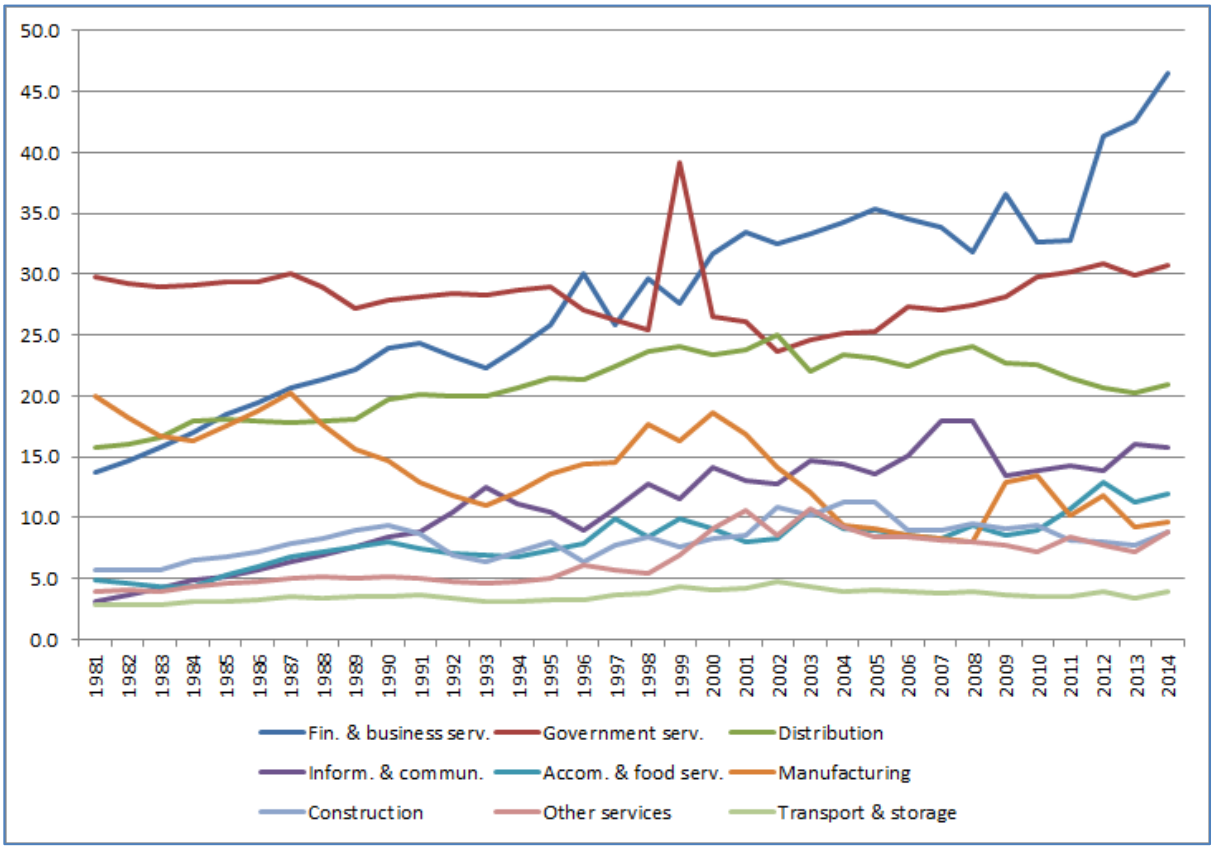
Sector	Hart	Rushmoor	Surrey Heath	HRSH HMA
Agriculture etc	33	161	-296	-102
Mining & quarrying	51	4	12	67
Manufacturing	262	-4,886	-5,699	-10,323
Elect., gas, water etc	217	-1	51	267
Construction	634	968	1,529	3,131
Distribution	2,027	-325	3,554	5,256
Transport & storage	965	-445	619	1,139
Accomodation & food services	3,467	1,455	2,267	7,189
Information & communications	4,663	5,573	2,425	12,661
Financial & business services	11,868	8,771	12,077	32,716
Government services	2,203	-8,207	6,925	921
Other services	2,516	159	2,164	4,839
Total Employment	**28,904**	**3,228**	**25,629**	**57,761**

Source: Wessex Economics, Cambridge Econometrics

3. Figure 2 shows the pattern of change by sector over the period 1981 to 2014 for the 9 sectors in the HMA which account for 99% of employment in the HRSH area. The chart makes it clear that employment growth in the HRSH HMA has been driven particularly by growth in Financial and Business Services, and to some extent by the Information and Communications Sector and the Government Services sector.

4. Figure 2 highlights the unusual pattern of change in the Government Services sector in the period 1998 to 2000, with a dramatic jump in employment in this sector in 1999 but a return to a similar level as 1998 in the year 2000. This spike is entirely associated with Rushmoor. However, since the analysis captures the entire period 1981 to 2014 the issue of the Government Services in Rushmoor in the period 1998 to 2000 is not material when analysing trends over the longer term period.

Figure 2: Total Employment Change in the HRSH Area 1981-2014 ('000)



Source: Wessex Economics, Cambridge Econometrics

Appendix F: Projection Methodology

Introduction

1. This Appendix discusses some more detailed outputs from the demographic modelling included within the main SHMA report. This has a particular focus on the population projections underpinning a range of scenarios. The projections also include information about household growth and changes to the resident workforce; the methodologies for these parts of the work are set out in the main report. This Appendix sets out additional information not included in the main report.

2. The methodology used to determine population growth and hence housing requirements is based on standard population projection methodology consistent with the methodology used by ONS and CLG in their population and household projections. The approach establishes the current population and how this will change in the period from 2014 to 2032.

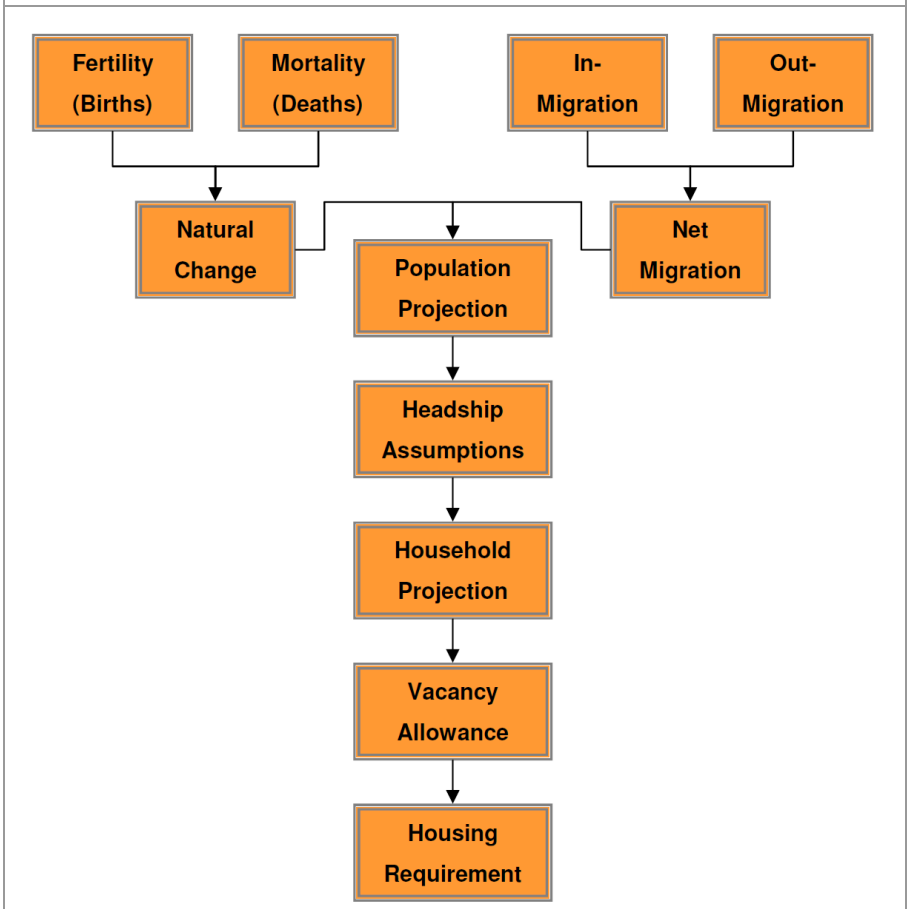
3. This requires calculation of:

   - how likely it is that women will give birth (the fertility rate)
   - how likely it is that people will die (the death rate)
   - how likely it is that people will move into or out of each local authority area.

4. These are the principal components of population change and are used to construct Wessex Economics' population projections.

5. Figure 1 shows the key stages of the projection analysis through to the demographically based assessment of housing requirements.

Figure 1: Overview of Methodology



Projections Run

6. As part of this assessment a number of projections have been generated to assess how the population and local economy (number of people in employment) might change under different assumptions. The projections were developed to follow the logical set of steps set out in Planning Practice Guidance (PPG) – first published in March 2014 and are listed below:

- PROJ 1 (2012-based SNPP (as updated)) – using the 2012-based subnational population projections (SNPP) with additional data from ONS mid-year population estimates (MYE) to rebase population levels (and structure) to 2014
- PROJ 2 (Long-term migration) – based on studying migration levels over the 13-year period from 2001 to 2014; this being, at the time of drafting the longest period for which a reasonable quality of past trend data was available
- PROJ 3 (UPC adjustment) – taking the data from PROJ 1 and applying an additional adjustment for Unattributable Population Change (UPC). UPC is an adjustment made by ONS for any differences between estimated and actual population growth in the 2001-11 period (as informed by Census data). For the purposes of this projection, it was assumed that UPC can be attributed to migration having been incorrectly recorded
- PROJ 4 (Long-term migration/UPC) – similar to PROJ 3, but with the UPC adjustment being applied

to long-term migration trends rather than figures in the SNPP;

- PROJ 5 (Linked to employment scenario with 900 additional jobs per annum across the HMA)
- PROJ 6 (Linked to employment scenario with 1,050 additional jobs per annum across the HMA)
- PROJ 7 (Linked to employment scenario with 1,200 additional jobs per annum across the HMA)
- PROJ 8 (Linked to employment scenario with 1,350 additional jobs per annum across the HMA)
- PROJ 9 (Linked to employment scenario with 1,500 additional jobs per annum across the HMA)

7. Additionally, for each of the scenarios a range of different assumptions were made about household representative rates (HRRs). A HRR is the probability of anyone in a particular demographic (age/sex) group being part of a separate household (essentially the likelihood of being considered as a 'head of household').

8. The three modelling scenarios are:

- 2012-based headship – using the HRRs underpinning the 2012-based CLG household projections (using Stage 1 figures from the CLG projections which considered HRRs by age, sex and marital status)
- Selected part-return to trend – household formation rates based on Stage 1 figures for the 25-34 and 35-44 age groups are assumed to return to the midpoint between 2008- and 2012-based figures by 2032, being the end of the core projection period used in this report.
- Full part-return to trend – household formation rates based on the average of Stage 1 and Stage 2 figures for each age cohort are assumed to return to the midpoint between 2008- and 2012-based figures by 2032, being the end of the core projection period used in this report. Stage 2 projections use household typologies (e.g. single people, households with children) rather than age, sex and marital status.

Past Population Dynamics

9. Before describing the projection process and key inputs it is of interest to study past population growth and the components of change. Figure 2 summarises key data from ONS mid-year population estimates (MYE) going back to 2001. The data for 2001-11 is from the revised MYE which uses Census data to adjust past estimates to ensure consistency between data for 2001 and 2011. Figures 3, 4 and 5 provide the same data for each of the individual local authorities.

Figure 2: Components of population change (2001-14) - HMA						
Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	976	-1,641	58	102	187	-318
2002/3	1,094	-953	959	119	153	1,372
2003/4	1,237	-594	277	396	195	1,511
2004/5	1,266	254	853	-34	185	2,524
2005/6	1,470	884	646	94	249	3,343
2006/7	1,698	538	285	-34	261	2,748
2007/8	1,595	-405	90	-19	268	1,529
2008/9	1,543	-691	-150	180	318	1,200
2009/10	1,591	-516	259	164	318	1,816
2010/11	1,514	36	-31	74	285	1,878
2011/12	1,556	-377	-39	112	0	1,252
2012/13	1,214	-116	-329	180	0	949
2013/14	1,261	-180	351	127	0	1,559

Source: ONS Components of Change

10. The information in Figure 2 highlights a number of interesting trends in relation to the HMA and these are summarised below:

- Natural change (the number of births minus the number of deaths) has been increasing over time from around 1,000 people in 2001/2 up to 1,698 in 2006/7. Since then the level has dropped to be in the 1,200-1,300 range over the past two years for which data is provided.
- Net internal migration (people moving from one part of the country to/from the HMA) shows considerable variation over time. From 2001/2 to 2003/4 there was a notable level of net out-migration (averaging over 1,000 persons per annum). From 2004/5 to 2006/7 there was net in-migration (averaging about 560 persons per annum). The last seven years show net out-migration (other than a small net in-migration in 2010/11).
- Looking at international migration the data again shows considerable variation over time. Up until 2008/9 the HMA saw net in-migration for all years with particularly high figures of 853 persons in 2004/5 and 646 persons in 2005/6. In the more recent past, the data shows net international out-migration in four of the last six years although the two positive years (2009/10 and 2013/14) show a level of net in-migration in excess of the level of net out-migration seen for the other four years.
- The other changes are relatively minor in number compared to the migration figures. Other changes are largely linked to estimated changes in the prison and armed forces populations – the latter group is likely to have had some influence on the figures in the HMA when compared with many other areas.
- The other (unattributable) column of data reflects an adjustment made by ONS to ensure consistency between Census based mid-year population estimates and the mid-year estimates prior to Census data being available. In the HMA the positive figures imply that the various components of population change (once added together) are about 2,400 people lower than the overall level of population growth (in the decade to 2011). Whilst it is unknown as to what components of change this difference is linked to it is possible that this will be due to the under-

recording of in-migration or over-recording of out-migration; this in turn may be linked to international migration data which has historically been the most difficult component of population change to accurately measure. The ONS data does not provide a figure for other (unattributable) in 2011-14 as there is no Census data against which to measure whether or not population change has been over- or under-estimated.

Figure 3: Components of population change (2001-14) – Hart

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	363	0	420	15	-150	648
2002/3	435	17	570	85	-165	942
2003/4	353	560	253	178	-157	1,187
2004/5	415	469	444	-14	-162	1,152
2005/6	506	726	254	19	-150	1,355
2006/7	524	388	220	3	-143	992
2007/8	511	175	156	-3	-139	700
2008/9	491	-154	192	31	-140	420
2009/10	505	-278	146	32	-115	290
2010/11	452	-121	118	37	-100	386
2011/12	463	220	-62	-121	0	500
2012/13	367	330	-159	20	0	558
2013/14	333	127	6	139	0	605

Source: ONS Components of Change

Figure 4: Components of population change (2001-14) – Rushmoor

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	429	-1,440	-286	97	185	-1,015
2002/3	402	-868	93	15	208	-150
2003/4	563	-1,195	-173	213	223	-369
2004/5	560	-87	-9	-16	234	682
2005/6	650	-80	109	76	270	1,025
2006/7	755	-135	-63	1	268	826
2007/8	715	-268	-32	-3	286	698
2008/9	650	-748	-288	25	344	-17
2009/10	772	-386	64	70	305	825
2010/11	791	-124	-51	51	290	957
2011/12	776	-656	177	219	0	516
2012/13	685	-698	4	110	0	101
2013/14	705	-659	227	52	0	325

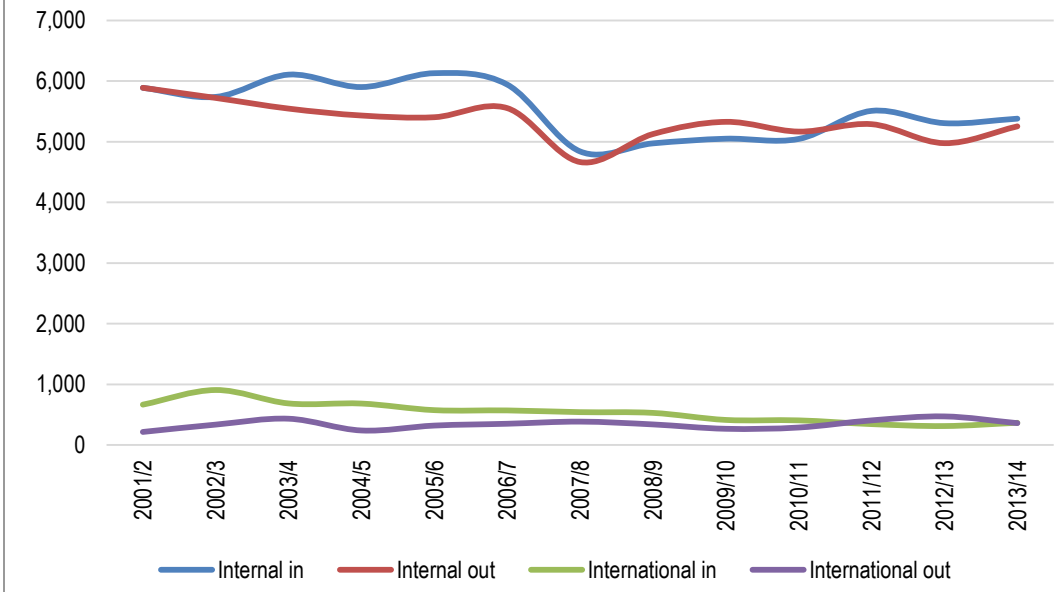
Source: ONS Components of Change

Figure 5: Components of population change (2001-14) – Surrey Heath						
Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	184	-201	-76	-10	152	49
2002/3	257	-102	296	19	110	580
2003/4	321	41	197	5	129	693
2004/5	291	-128	418	-4	113	690
2005/6	314	238	283	-1	129	963
2006/7	419	285	128	-38	136	930
2007/8	369	-312	-34	-13	121	131
2008/9	402	211	-54	124	114	797
2009/10	314	148	49	62	128	701
2010/11	271	281	-98	-14	95	535
2011/12	317	59	-154	14	0	236
2012/13	162	252	-174	50	0	290
2013/14	223	352	118	-64	0	629

Source: ONS Components of Change

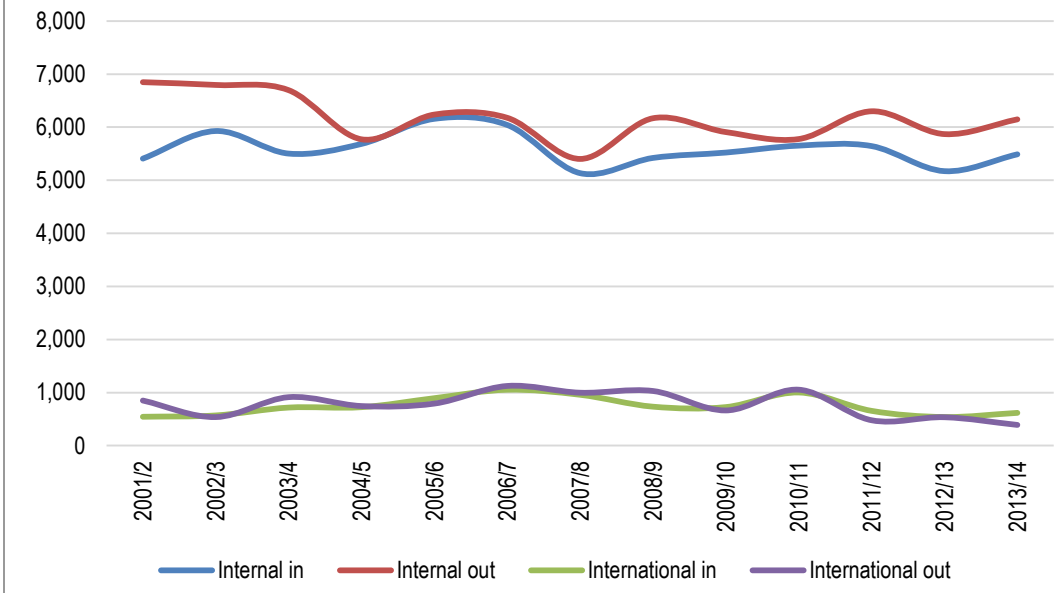
11. Overall the key finding from this analysis is that migration has fluctuated significantly over time. This makes it difficult to develop a demographic trend based projection with absolute confidence. The fluctuations in migration are more clearly illustrated in Figures 6, 7 and 8 which separate out in and outmigration (rather than just showing the net figures as in the Figures above). Figures are provided only for each of the three local authorities as it is not possible to simply sum the data to make a HMA-level output. This is due to the fact that there will be important migration flows between each of the three authorities in the HMA area.

Figure 6: Past migration trends by component and type (2001-14) – Hart



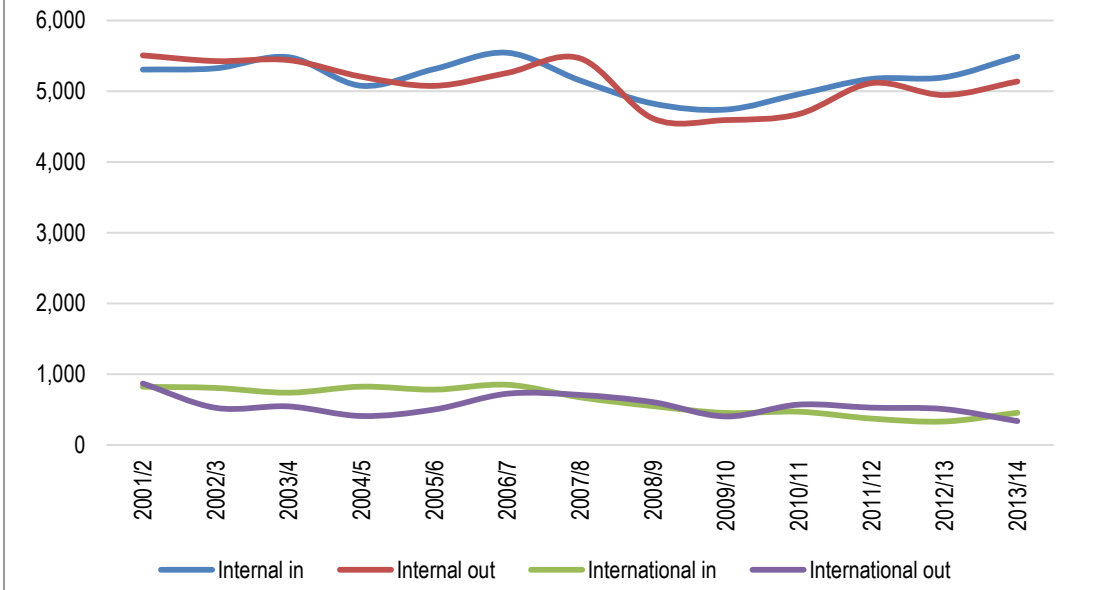
Source: ONS Components of Change

Figure 7: Past migration trends by component and type (2001-14) – Rushmoor



Source: ONS Components of Change

Figure 8: Past migration trends by component and type (2001-14) – Surrey Heath



Source: ONS Components of Change

Baseline Population

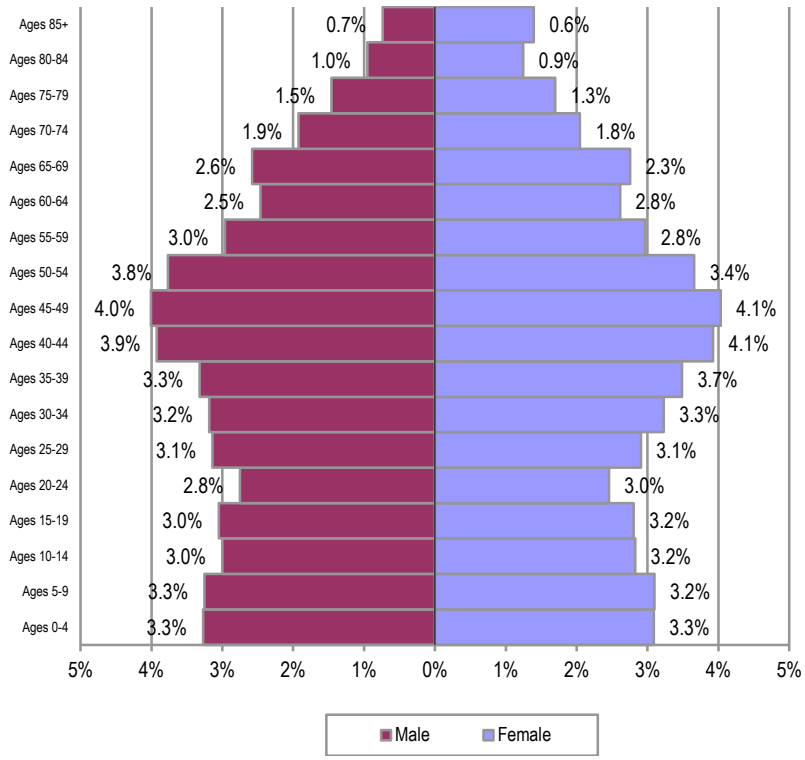
12. The baseline for the projections in this report are the 2014 figures, with projections run for each year over the period up to 2032. The estimated population profile as of 2014 has been taken from ONS mid-year population estimates (MYE). The overall population in 2014 is estimated to be 276,200 with slightly more females than males. Figure 9 shows the age and gender profile of the population in 2014.

13. Figures 10 and 11 show the population distribution in each local authority area in broad 15-year age categories. The data shows that all areas have a similar population size; ranging from 87,500 in Surrey Heath to 95,300 in Rushmoor. When looking at the population age structure for the whole HMA the data shows a similar profile when compared with the national average and a slightly younger profile when compared with data for the South East.

14. There are some differences within each of the different local authorities. Rushmoor in particular has a younger population with 39% of the population aged under 30 (compared with a HMA average of 36%). In contrast, the other two areas have older populations. In Hart and Surrey Heath some 24% of the population is aged 60 or over compared with just 18% in Rushmoor.

Figure 9: Population of HMA (5 year age bands) – 2014

Age group	Male	Female
Ages 0-4	9,032	8,528
Ages 5-9	8,982	8,558
Ages 10-14	8,286	7,808
Ages 15-19	8,420	7,748
Ages 20-24	7,601	6,780
Ages 25-29	8,673	8,027
Ages 30-34	8,797	8,914
Ages 35-39	9,171	9,627
Ages 40-44	10,843	10,844
Ages 45-49	11,065	11,142
Ages 50-54	10,400	10,107
Ages 55-59	8,190	8,198
Ages 60-64	6,796	7,222
Ages 65-69	7,126	7,609
Ages 70-74	5,317	5,652
Ages 75-79	4,033	4,684
Ages 80-84	2,638	3,443
Ages 85+	2,039	3,854
All Ages	137,409	138,745



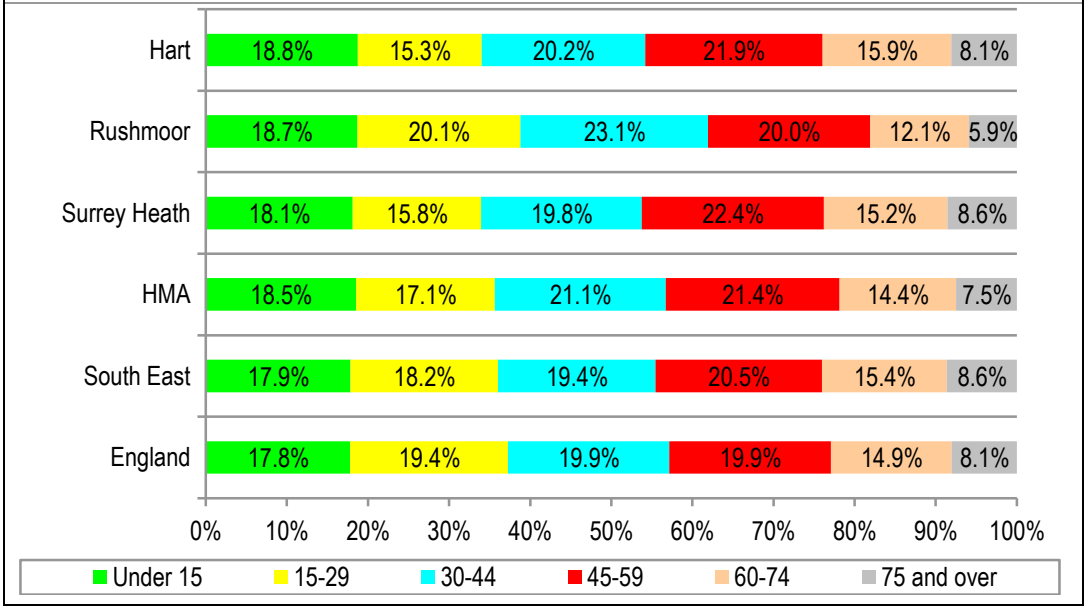
Source: ONS mid-year population estimates

Figure 10: Comparison of population profile in different local authorities (2014)

Age group	Hart	Rushmoor	Surrey Heath	HMA
Under 15	17,507	17,824	15,863	51,194
15-29	14,233	19,161	13,855	47,249
30-44	18,822	22,036	17,338	58,196
45-59	20,403	19,052	19,647	59,102
60-74	14,816	11,577	13,329	39,722
75+	7,544	5,646	7,501	20,691
Total	93,325	95,296	87,533	276,154

Source: 2011-Mid-Year population estimates

Figure 11: Population age profile (2011)



Source: 2011-Mid-Year population estimates

Fertility and Mortality Rate Assumptions

15. For modelling of fertility, the rates contained within the ONS 2012-based population projections have been used. In all areas fertility rates are projected to be roughly constant through the projection period, and at a level in the range of 1.94 to 1.99 (this is the average number of births per woman). The ONS 2012-based projections were also interrogated with regard to death rates; this indicates that life expectancy is expected to increase over time for both males and females.

16. Figure 12 shows figures for the fertility rates (TFR) and life expectancy (e0) in each area for key dates at the start and towards the end of the projection period. The data indicates that fertility rates are broadly similar in all parts of the HMA. Life expectancy shows some variation between the different parts of the HMA with Hart in particular having the highest life expectancy and Rushmoor the lowest.

17. There is no evidence to suggest that either the fertility or mortality estimates used by ONS are unreasonable and it is worth noting that the expected figures and changes in the HMA are consistent with past trend data and future expected patterns as published by ONS on a national basis.

Figure 12: Fertility and Mortality Assumptions (key periods)			
	Hart	Rushmoor	Surrey Heath
TFR – 2014/15	1.98	1.97	1.95
TFR – 2031/32	1.99	1.94	1.97
Male e0 – 2014/15	82.0	79.4	80.9
Male e0 – 2031/32	85.4	82.8	84.3
Female e0 – 2014/15	85.3	83.0	84.2
Female e0 – 2031/32	88.0	85.9	86.9

Source: Derived from ONS 2012-based SNPP

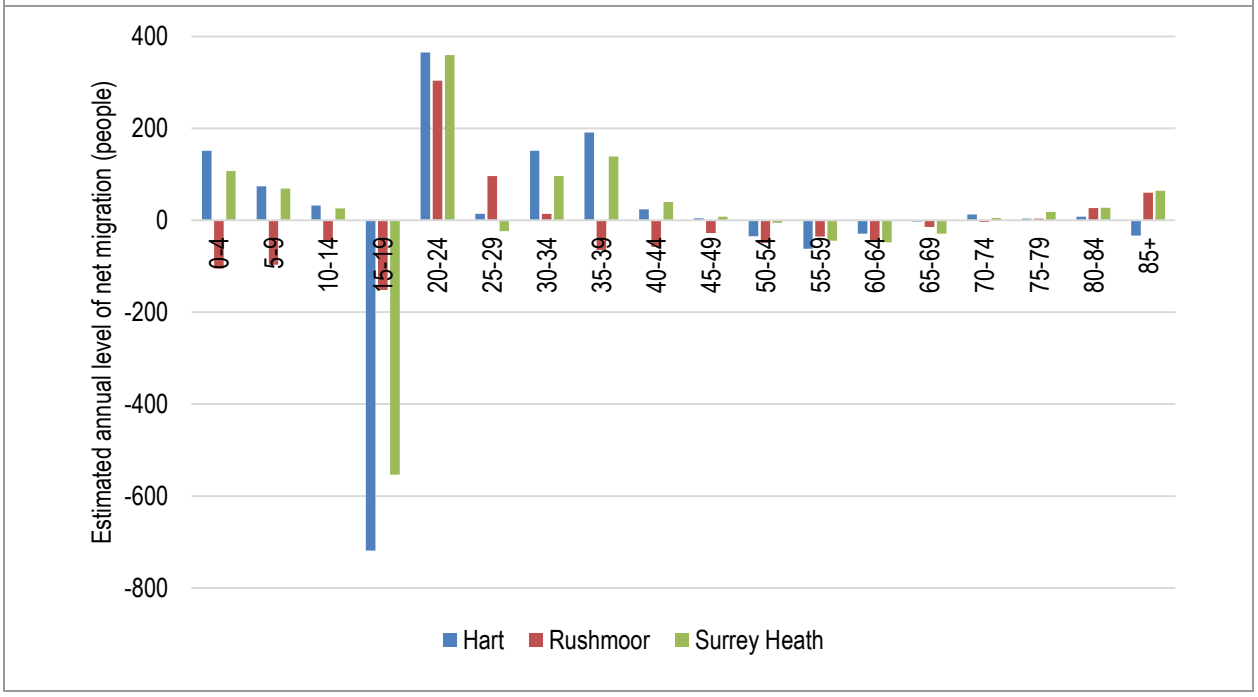
Migration Assumptions

18. For the purposes of understanding the profile of migrants, data from the ONS 2012-based sub-national population projections have been used. Over the period from 2014 to 2032, the data shows an average annual level of net in-migration of 213 people. Figure 13 clearly shows that the most important age groups in terms of migration are from 15 to 19 and 20 to 24 which is strongly linked to student migration patterns.

19. Looking at the data it is clear that there are differences between areas. Hart and Surrey Heath see the most significant outflow of people aged 15-19 with stronger in-migration of people aged up to 44 and also an in-migration of children. Rushmoor sees in-migration of people aged 20-24 and 25-29 along with net out-migration of most other age groups.

20. When projecting migration patterns for the various projection scenarios use has been made of the migration data and adjusted levels of net migration to match the requirements of the scenario (e.g. when testing what level of migration is required to support a workforce of a particular size). This approach has consistently been adopted across all analysis.

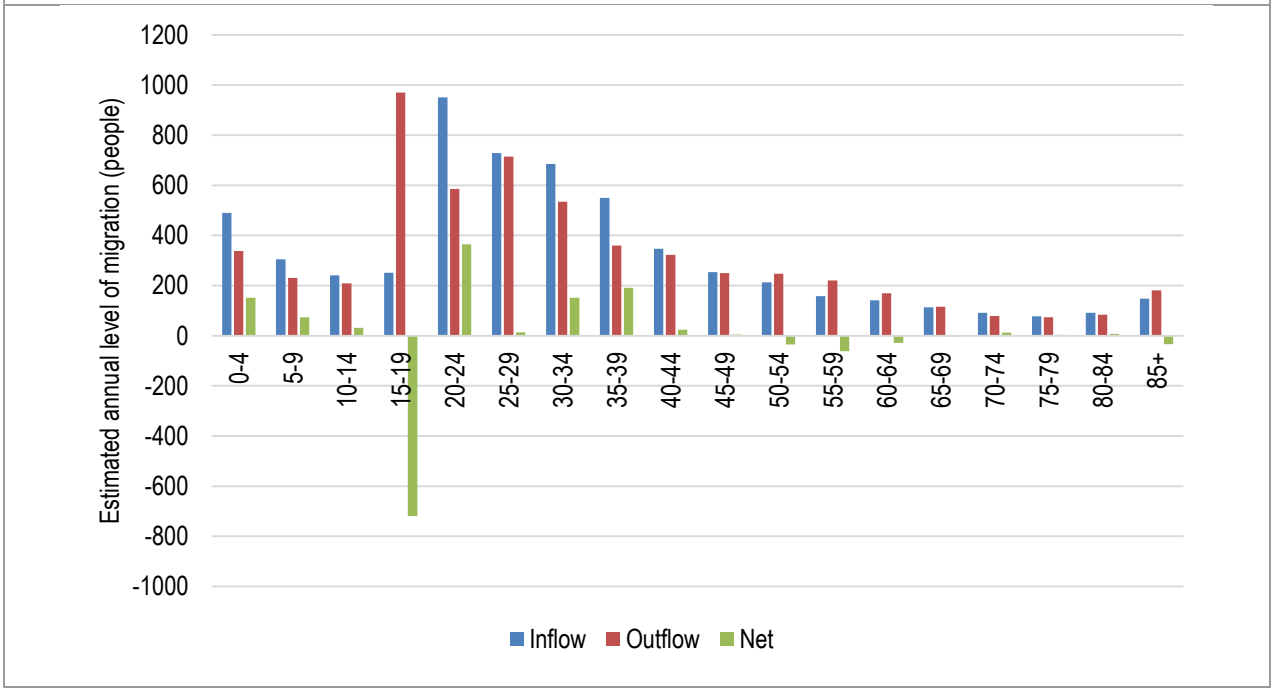
Figure 13: Estimated annual level of net migration by five-year age band (2014-2032) – HMA



Source: Derived from ONS 2012-based population projections

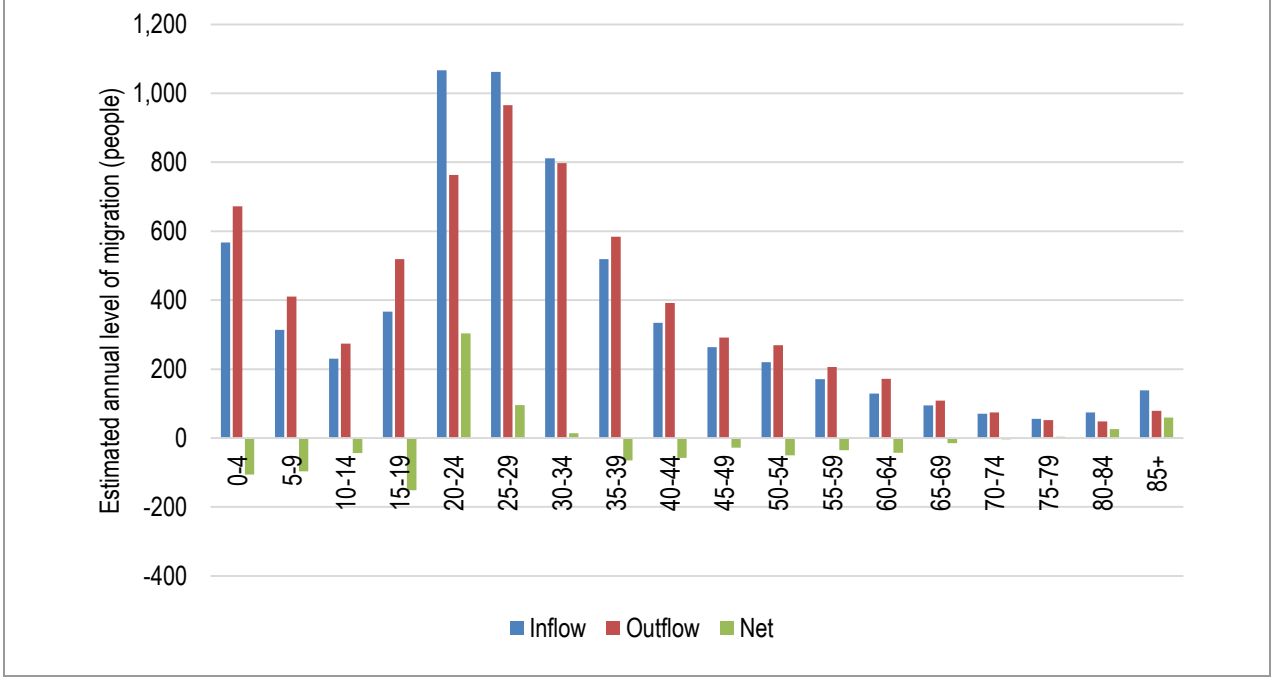
21. Figures 14, 15 and 16 show the migration data for individual local authorities. As well as showing net migration these figures show levels of in- and out-migration separately. A similar analysis is not possible for the whole HMA as some of the migration movements will be from one local authority in the HMA to another.

Figure 14: Estimated annual level of net migration by five-year age band (2014-2032) – Hart



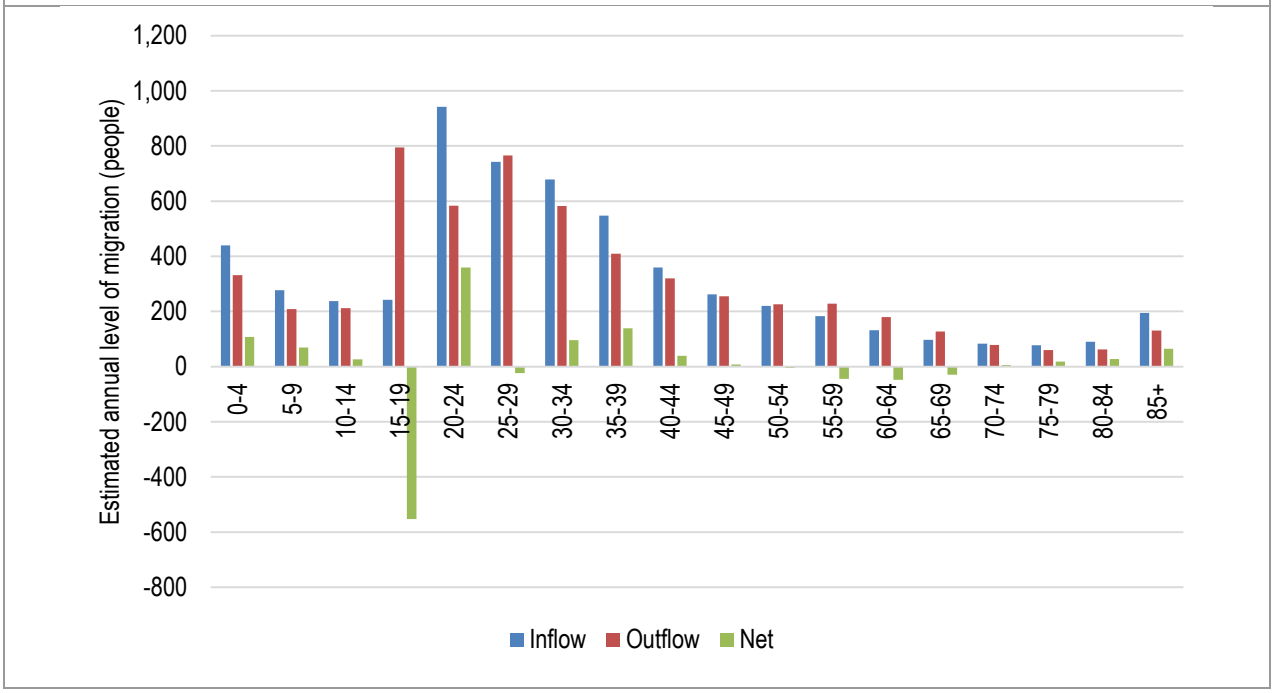
Source: Derived from ONS 2012-based population projections

Figure 15: Estimated annual level of net migration by five-year age band (2011-2031) – Rushmoor



Source: Derived from ONS 2012-based population projections

Figure 16: Estimated annual level of net migration by five-year age band (2011-2031) – Surrey Heath



Source: Derived from ONS 2012-based population projections

Appendix G: Detailed Projection Outputs

Introduction

1. This section provides detailed outputs of the modelling under each of the scenarios run to look at housing need. All the projections examine the period from 2014 to 2032. The projections run are summarised in the Figure below.

Figure 1: Description of Projections used for Demographic Modelling	
Projection	Description
PROJ 1	(2012-based SNPP (as updated)) – using the 2012-based subnational population projections (SNPP) with additional data from ONS mid-year population estimates (MYE) to rebase population levels (and structure) to 2014
PROJ 2	(Long-term migration) – based on studying migration levels over the 13-year period from 2001 to 2014; this being, at the time of drafting the longest period for which a reasonable quality of past trend data was available
PROJ 3	(UPC adjustment) – taking the data from PROJ 1 and applying an additional adjustment for Unattributable Population Change (UPC). UPC is an adjustment made by ONS for any differences between estimated and actual population growth in the 2001-11 period (as informed by Census data). For the purposes of this projection, it was assumed that UPC can be attributed to migration having been incorrectly recorded
PROJ 4	(Long-term migration/UPC) – similar to PROJ 3, but with the UPC adjustment being applied to long-term migration trends rather than figures in the SNPP
PROJ 5	(Linked to employment scenario with 900 additional jobs per annum across the HMA)
PROJ 6	(Linked to employment scenario with 1,050 additional jobs per annum across the HMA)
PROJ 7	(Linked to employment scenario with 1,200 additional jobs per annum across the HMA)
PROJ 8	(Linked to employment scenario with 1,350 additional jobs per annum across the HMA)
PROJ 9	(Linked to employment scenario with 1,500 additional jobs per annum across the HMA)

Figure 2: Estimated housing need in each year of projection – HRSH – demographic scenarios (CLG household representative rates)				
Period	PROJ 1 (2012-based SNPP (as updated))	PROJ 2 (Long-term migration)	PROJ 3 (UPC adjustment)	PROJ 4 (Long-term migration/UPC)
2014/15	738	788	820	854
2015/16	868	892	953	965
2016/17	660	632	749	699
2017/18	863	842	954	916
2018/19	898	847	993	924
2019/20	1,020	955	1,119	1,035
2020/21	795	707	897	790
2021/22	760	661	865	746
2022/23	777	689	883	775
2023/24	737	653	845	741
2024/25	751	663	861	752
2025/26	755	657	866	747
2026/27	722	605	835	697
2027/28	751	609	866	702
2028/29	764	608	881	703
2029/30	841	664	960	760
2030/31	729	536	850	633
2031/32	697	471	819	570
2014-32	14,127	12,481	16,014	14,010

Figure 3: Estimated housing need in each year of projection – HRSH – demographic scenarios (CLG household representative rates)					
Period	PROJ 5 (900 jobs)	PROJ 6 (1,050 jobs)	PROJ 7 (1,200 jobs)	PROJ 8 (1,350 jobs)	PROJ 9 (1,500 jobs)
2014/15	867	940	1,012	1,084	1,157
2015/16	1,005	1,082	1,159	1,235	1,312
2016/17	796	872	948	1,023	1,100
2017/18	1,007	1,087	1,168	1,249	1,330
2018/19	1,046	1,129	1,212	1,295	1,379
2019/20	1,173	1,259	1,344	1,430	1,516
2020/21	956	1,046	1,136	1,227	1,317
2021/22	924	1,016	1,108	1,200	1,293
2022/23	944	1,038	1,131	1,225	1,319
2023/24	907	1,003	1,098	1,193	1,289
2024/25	923	1,020	1,116	1,212	1,309
2025/26	930	1,029	1,127	1,225	1,324
2026/27	900	1,000	1,099	1,199	1,299
2027/28	932	1,034	1,135	1,236	1,338
2028/29	948	1,051	1,153	1,256	1,360
2029/30	1,029	1,133	1,238	1,343	1,449
2030/31	921	1,029	1,136	1,244	1,352
2031/32	891	1,001	1,110	1,219	1,328
2014-32	17,102	18,768	20,430	22,096	23,769

Summary of Projections by Local Authority

Figure 4: Estimated housing need in each year of projection – Hart – demographic scenarios (CLG household representative rates)				
Period	PROJ 1 (2012-based SNPP (as updated))	PROJ 2 (Long-term migration)	PROJ 3 (UPC adjustment)	PROJ 4 (Long-term migration/UPC)
2014/15	237	339	192	304
2015/16	355	458	307	416
2016/17	145	224	99	190
2017/18	262	355	212	316
2018/19	294	374	243	333
2019/20	345	437	293	395
2020/21	254	342	199	298
2021/22	218	307	162	262
2022/23	258	355	201	309
2023/24	243	353	185	306
2024/25	236	348	178	301
2025/26	253	367	194	319
2026/27	231	344	171	295
2027/28	250	357	189	307
2028/29	246	356	185	306
2029/30	289	399	227	348
2030/31	232	340	168	288
2031/32	221	320	156	268
2014-32	4,570	6,375	3,563	5,560

Figure 5: Estimated housing need in each year of projection – Hart – demographic scenarios (CLG household representative rates)					
Period	PROJ 5 (900 jobs)	PROJ 6 (1,050 jobs)	PROJ 7 (1,200 jobs)	PROJ 8 (1,350 jobs)	PROJ 9 (1,500 jobs)
2014/15	277	299	321	343	366
2015/16	397	421	445	469	493
2016/17	186	209	232	255	278
2017/18	306	330	355	379	404
2018/19	339	364	390	415	440
2019/20	391	417	443	469	496
2020/21	303	331	359	386	414
2021/22	268	296	325	353	381
2022/23	309	338	366	395	424
2023/24	295	324	353	383	412
2024/25	289	318	348	377	407
2025/26	307	338	368	398	429
2026/27	286	316	347	377	408
2027/28	306	337	369	400	431
2028/29	302	334	365	397	429
2029/30	347	379	411	444	476
2030/31	292	325	358	391	425
2031/32	281	315	349	382	416
2014-32	5,482	5,993	6,503	7,014	7,527

Figure 6: Estimated housing need in each year of projection – Rushmoor – demographic scenarios (CLG household representative rates)				
Period	PROJ 1 (2012-based SNPP (as updated))	PROJ 2 (Long-term migration)	PROJ 3 (UPC adjustment)	PROJ 4 (Long-term migration/UPC)
2014/15	292	218	378	288
2015/16	292	193	381	270
2016/17	274	173	367	242
2017/18	302	186	398	264
2018/19	296	173	395	254
2019/20	332	197	435	281
2020/21	309	161	416	247
2021/22	295	140	404	228
2022/23	280	122	391	212
2023/24	266	105	379	197
2024/25	284	117	398	211
2025/26	274	98	391	194
2026/27	253	68	372	165
2027/28	251	53	372	152
2028/29	256	48	378	148
2029/30	279	60	404	162
2030/31	260	31	388	135
2031/32	249	7	378	112
2014-32	5,044	2,148	7,024	3,761

Figure 7: Estimated housing need in each year of projection – Rushmoor – demographic scenarios (CLG household representative rates)					
Period	PROJ 5 (900 jobs)	PROJ 6 (1,050 jobs)	PROJ 7 (1,200 jobs)	PROJ 8 (1,350 jobs)	PROJ 9 (1,500 jobs)
2014/15	340	367	394	421	448
2015/16	342	370	398	426	454
2016/17	326	355	384	413	442
2017/18	356	386	416	446	476
2018/19	352	383	414	445	477
2019/20	390	422	454	487	519
2020/21	369	402	436	469	503
2021/22	356	390	424	459	493
2022/23	342	377	412	447	482
2023/24	330	365	401	436	472
2024/25	348	384	420	457	493
2025/26	340	377	413	450	487
2026/27	320	358	395	433	470
2027/28	319	357	395	434	472
2028/29	325	364	403	442	481
2029/30	350	390	430	469	510
2030/31	333	374	414	455	496
2031/32	323	364	405	447	488
2014-32	6,161	6,786	7,410	8,035	8,663

Figure 8: Estimated housing need in each year of projection – Surrey Heath – demographic scenarios (CLG household representative rates)				
Period	PROJ 1 (2012-based SNPP (as updated))	PROJ 2 (Long-term migration)	PROJ 3 (UPC adjustment)	PROJ 4 (Long-term migration/UPC)
2014/15	209	231	250	263
2015/16	221	242	265	278
2016/17	241	235	283	267
2017/18	299	301	345	337
2018/19	308	300	354	337
2019/20	343	321	390	359
2020/21	232	205	283	245
2021/22	247	215	298	256
2022/23	240	212	292	253
2023/24	228	196	281	239
2024/25	231	198	285	241
2025/26	227	191	281	235
2026/27	238	193	292	237
2027/28	250	198	305	243
2028/29	262	204	318	248
2029/30	273	206	329	251
2030/31	237	165	293	211
2031/32	227	144	284	189
2014-32	4,513	3,957	5,427	4,689

Figure 9: Estimated housing need in each year of projection – Surrey Heath – demographic scenarios (CLG household representative rates)					
Period	PROJ 5 (900 jobs)	PROJ 6 (1,050 jobs)	PROJ 7 (1,200 jobs)	PROJ 8 (1,350 jobs)	PROJ 9 (1,500 jobs)
2014/15	251	274	297	320	343
2015/16	266	291	316	341	366
2016/17	284	308	331	355	379
2017/18	346	372	397	423	449
2018/19	355	382	408	435	462
2019/20	392	419	447	474	502
2020/21	284	313	342	371	400
2021/22	300	329	359	389	419
2022/23	293	323	353	383	413
2023/24	283	313	344	374	405
2024/25	286	317	348	379	409
2025/26	283	314	345	377	408
2026/27	294	326	357	389	420
2027/28	307	339	371	403	435
2028/29	320	353	385	418	450
2029/30	332	364	397	430	463
2030/31	297	330	364	397	431
2031/32	288	322	356	389	424
2014-32	5,459	5,989	6,517	7,047	7,579

Appendix H: Review of ONS 2014-based SNPPs and CLG 2012-based Household Projections

1. The starting point for the analysis of demographic trends as set out in this SHMA are the 2012-based Sub-National Population Projections, and the linked 2012-based CLG Household Projections. These were the most recent demographic projections available at the time that the analysis of future demographic growth for the SHMA was being undertaken (January to April 2016).

2. Subsequent to the work on anticipated demographic growth in the HRSH area being completed, the ONS issued 2014-based Population Projections (on 25th May 2016) ; and the CLG issued the linked 2014-based Household Projections (on 12th July 2016). It was decided not to re-run the demographic analysis with the new data, but to consider what the implications of the newly issued projections would be, in the light of the work that had been completed.

Projected Population Growth

3. Figure I.1 presents data on total population taken from the 2012 and 2014-based Population Projections for each authority in the HRSH area, and for the HRSH area in total. The Figure shows total population at 5 year intervals. Figure I.2 shows the difference between the total population as projected for the same set of years between the 2012-based SNPPs and the 2014-based SNPPs.

Figure 1: Estimated Population by HRSH Authority 2014-37

2014 based SNPPs '000 All ages	2014	2019	2024	2029	2034	2037	% Change 2014-37
Hart	93.3	95.2	97.2	98.9	100.4	101.3	8.6%
Rushmoor	95.3	96.8	98.5	100.0	101.7	102.8	7.9%
Surrey Heath	87.5	89.4	91.4	93.2	95.0	96.1	9.8%
HRSH	**276.1**	**281.4**	**287.1**	**292.1**	**297.1**	**300.2**	8.7%
2012 based SNPPs '000 All ages	**2014**	**2019**	**2024**	**2029**	**2034**	**2037**	% Change 2014-37
Hart	93.0	95.4	97.7	99.5	101.1	102.1	9.8%
Rushmoor	95.5	97.5	99.7	101.6	103.6	104.8	9.7%
Surrey Heath	87.1	88.9	90.8	92.6	94.4	95.5	9.6%
HRSH	**275.6**	**281.8**	**288.2**	**293.7**	**299.1**	**302.4**	**9.7%**

Source: Wessex Economics, ONS 2014-based SNPPs, CLG 2014-based Household Projections

Figure 2: The Difference between the 2012 and 2014 Population Projections 2014-37

2014 SNPP less 2012 SNPP All Ages	2014	2019	2024	2029	2034	2037
Hart	300	-200	-500	-600	-700	-800
Rushmoor	-200	-700	-1,200	-1,600	-1,900	-2,000
Surrey Heath	400	500	600	600	600	600
HRSH	**500**	**-400**	**-1,100**	**-1,600**	**-2,000**	**-2,200**

Source: Wessex Economics, ONS 2014-based SNPPs, CLG 2014-based Household Projections

4. Key points to note from the comparison of the SNPPs are as follows:

- The population figures for 2014 in the 2014-based SNPPs are *estimates* (derived from the Mid Year Estimates), while the equivalent figures from the 2012-based SNPPs are *projections*. The former are the better estimate of actual population in the HRSH area in 2014 than the latter, and for most practical purposes are regarded as the actual population of the area in 2014 as estimated by ONS in 2016.

- The actual population of the HRSH area in 2014 is *larger* by some 500 persons than was projected by the 2012-based SNPPs, with both Surrey Heath and Hart experiencing a *larger* growth in population than anticipated by the 2012-based SNPPs. However the population in Rushmoor in 2014 is some 200 persons *less* than projected in the 2012-based SNPPs.

- However, by 2037, the last date for which the 2012-based and 2014-based SNPPs can be compared, the population of the HRSH area as projected by the 2014-based projections is some 2,200 person *less* than was projected by 2012-based SNPPs. Over the period 2014-37 the 2014-based SNPPs anticipate population growth of 8.7% in the HRSH area compared to growth of 9.7% as projected by 2012-based SNPPs.

- The 2014-based SNPPs, while associated with a larger population base in 2014 than anticipated in the 2012-based SNPPs, anticipates a slower rate of population growth than the 2012-based SNPPs, resulting in the total population of the HRSH area being some 2,200 less in 2037 than anticipated in the 2012-based SNPPs.

5. Figure 3 compares the 2014 and 2032 population of the HRSH area as adopted as the starting point for the demographic projection process with the 2014 and 2032 HRSH population taken from the 2014-based SNPPs. The figure shows that the SHMA anticipates population of growth of some 2,800 more persons, than the 2014-based SNPPs. The additional population growth is largely associated with Hart and Rushmoor.

Figure 3: Comparison of SHMA Adopted Population Projections and the 2014-based SNPPs

	2016 SHMA			2014-based SNPP			
	2014	2032	Change 2014-32	2014	2032	Change 2014-32	2016 SHMA less 2014 SNPP
Hart	93,325	101,001	7,676	93,300	99,700	6,400	1,301
Rushmoor	95,296	102,371	7,075	95,300	101,000	5,700	1,371
Surrey Heath	87,533	94,440	6,907	87,500	94,300	6,800	140
HRSH	276,154	297,812	21,658	276,100	295,000	18,900	2,812

Source: Figures 8.17, 8.18, 8.19 and 8.29 in the 2016 HRSH SHMA; 2014-based SNPP

6. With respect to population growth, the SHMA therefore forecasts population growth to be somewhat higher than the latest SNPPs (7.8% growth 2014-32 rather than the 2014 SNPP growth of 6.8%). Other things being equal, this would lead the SHMA to slightly overstate the demographically determined housing requirement.

Projected Household Growth

7. Figure I.4 presents data on the total number of households taken from the 2012 and 2014-based Household Projections for each authority in the HRSH area, and for the HRSH area in total. The Figure shows total households at 5 year intervals. Figure I.5 shows the difference between the total number of households as projected for the same set of years between the 2012-based and the 2014-based Household Projections.

Figure 4: Estimated Households by HRSH Authority 2014-37

2014 based HH Projections	**2014**	**2019**	**2024**	**2029**	**2034**	**2037**	% Change 2014-37
Hart	36,644	37,728	38,765	39,775	40,757	41,305	12.7%
Rushmoor	37,636	38,802	39,885	40,908	41,893	42,459	12.8%
Surrey Heath	34,402	35,753	36,976	38,125	39,260	39,959	16.2%
HRSH	**108,682**	**112,283**	**115,626**	**118,808**	**121,910**	**123,723**	**13.8%**
2012 based HH Projections	**2014**	**2019**	**2024**	**2029**	**2034**	**2037**	% Change 2014-37
Hart	36,515	37,742	38,958	40,154	41,288	41,917	14.8%
Rushmoor	37,561	39,065	40,501	41,835	43,096	43,812	16.6%
Surrey Heath	34,337	35,540	36,718	37,855	38,988	39,680	15.6%
HRSH	**108,413**	**112,347**	**116,177**	**119,844**	**123,372**	**125,409**	**15.7%**

Source: CLG 2012-based and 2014-based Household Projections

Figure 5: The Difference between the 2012 and 2014 Household Projections 2014-37

2014-based HHP less 2012 HHP	2014	2019	2024	2029	2034	2037
Hart	129	-14	-193	-379	-531	-612
Rushmoor	75	-263	-616	-927	-1,203	-1,353
Surrey Heath	65	213	258	270	272	279
HRSH	**269**	**-64**	**-551**	**-1,036**	**-1,462**	**-1,686**

8. Key points to note from the comparison of the 2012 and 2014-based Household Projections are as follows:

- The 2014-based Household Projections estimate that there are around 270 more households in the HRSH area than were anticipated in the 2012-based Household Projections. This will be the result, largely of the fact that the 2014 SNPPs identify that the population of the HRSH area is some 500 persons larger than anticipated in 2012.

- However the 2014-based Household Projections anticipate that by 2037 there will be around 1,690 fewer households than projected by the 2012-based Household Projections. This will be largely due to the fact that the 2014-based SNPPs anticipate that the population of the HRSH area will be some 2,200 lower in 2037 than anticipated by the 2012-based SNPPs.

- The analysis of components of change in household number as set out in the 2014-based Household Projections is that the great majority of household growth 2014-39 is driven by population change rather than changes in household formation rates[12]. Over the course of the period 2014-39 average household size falls.

9. The demographic starting point in terms of dwelling provision in the draft 2016 HRSH SHMA is 785 dwellings pa over the period 2014-32. Figure 6 shows that on the basis of the 2014-based CLG Household Projections the requirement for additional dwellings would be around 691 dwellings pa, 94 dwellings pa less than the demographic starting point used in the draft the SHMA. This is a material difference, but without working through all the steps of the OAHN process WEc cannot definitively say that basing the SHMA on the 2014-based Household Projection would reduce the OAHN.

Figure 6: Comparison of SHMA Adopted Household Projections and the 2014-based GLG HH Projections

	2016 SHMA		2014-based CLG HP			
	Change in Households pa	Change in Dwellings pa	Change in Households pa	Change in Dwellings pa	Difference in HH pa (CLG14 less SHMA)	Difference in Dwellings pa (CLG14 less SHMA)
Hart	247	254	207	213	-40	-41
Rushmoor	270	280	215	223	-55	-57
Surrey Heath	242	251	245	254	3	3
HRSH	759	785	667	691	-91	-94

[12] Table 414 in the 2014-basd CLG Household Projections

Data Sets:

https://www.gov.uk/government/statistics/2014-based-household-projections-in-england-2014-to-2039

http://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/subnationalpopulationprojectionsforengland/previousReleases

Appendix I: Migration Flows Linked to Employment Growth

Introduction

1. This Appendix presents the findings of additional technical work commissioned by Hart District Council (HDC) linked to the Hart, Rushmoor and Surrey Heath SHMA. The report investigates the implications that increasing the dwelling requirement in the HRSH area as a response to forecast employment growth would have on migration patterns, and the associated impacts on other neighbouring authorities.

2. The specific issue being investigated is that any assumed uplift in net in-migration that might be deemed necessary to ensure an adequate resident labour supply to support job growth of 1,200 new jobs in the HRSH area, might be at odds with the patterns of migration assumed by neighbouring authorities which are the source or destination of migrants from/to the HRSH authorities.

3. Put another way, any substantive departure in the HRSH area from the assumed patterns of migration associated with the Sub-National Population Projections for the HRSH area, has the potential to have knock on effects in terms of the labour force available in other areas, particularly those which are an important source or destination for people moving to or from the HRSH area, which in turn may affect the OAHN for other areas.

4. Thus, there Duty to Co-operate issues potentially arise from the presumption that the HRSH area will boost housing delivery significantly in order to ensure growth in the resident labour force sufficient to meet the anticipated growth of employment in the HRSH area without any significant change in net commuting flows.

5. The key questions set out in the brief are set out in Figure J1. The rest of this Appendix sets out the conclusions of the analysis undertaken. The detailed technical work is presented in Appendices, since it assumed that most readers will want to know the conclusions, rather than understand the detail of the analysis.

Figure 1: Study Brief

To identify the implications for the Duty to Co-operate arising from any planned increase housing provision in the HRSH area as a way to boost the resident population of working in order to ensure forecast employment growth is not constrained, there is the need to answer the following questions:

a) To what extent is the increase in the working age population to enable job growth of 1,200 jobs pa in the HRSH HMA assumed to rely on increased in-migration to the HMA?

b) To what extent has the increase in the working age population needed to enable job growth of 1,200 jobs pa in the HRSH HMA assume decreased out-migration from the HMA?

c) What are the past trends regarding in- and out-migration between areas outside of the HMA and the HMA authorities?

d) Regarding any increased in-migration for the 1,200 job growth pa scenario: where is the increase in the working age population presumed to come from, given the age/sex profile of in- and out-

migrants underpinning the SNPP?

e) Regarding any increased net in-migration for the 1,200 jobs growth pa scenario: where is the increase in the pensionable age population presumed to come from, given the age/sex profile of in- and out-migrants underpinning the SNPP?

f) How do these past trends compare to commuting flows to/from these areas?

6. It is important to appreciate throughout this discussion, it is assumed that any additional labour force requirements arising from employment growth is fully met by an increase in the resident labour force enabled by additional housing provision. It is assumed that the net commuting balance is held constant and that there is no increase in economic activity rates over and above that assumed in the SHMA.

7. These assumptions regarding net commuting balance and economic activity rates are assumptions, and it may well be that growth in labour demand within the HRSH area would lead to increased net in-commuting or reduced net out-commuting; or would draw more people into the labour market of both working age and pensionable age.

8. In such circumstances planning for additional housing over and above that arising out of local determined demographic requirements, would probably be associated with increased out-commuting, as the additional homes are occupied by people who work outside the HRSH SHMA. As the analysis of commuting patterns show, the HRSH HMA is a very open labour market, with large commuter flows in and out of the HMA .

9. However, the assumption that one should assess the need for additional working population and hence homes, on the basis that there is no change in net commuting is a standard assumption widely used in SHMAs when considering what possible adjustment should be made to planned housing provision to achieve a balance between anticipated job growth and resident labour force. This paper discusses this issue further in its concluding remarks.

Key Findings

The Scale of Increased Net Migration Flows

10. The first key issue to be addressed is to understand the assumed change in migration patterns required to ensure adequate labour to meet an anticipated growth in employment of 1,200 jobs pa over the period 2014-32 (questions a and b in the Study Brief). Figure J.2 shows that at the HRSH HMA level the required increase in net in-migration compared to that embedded in the 2012-based SNPPs is 855 persons.

11. This is made up of an assumed increase in in-migration of 430 persons, and reduced out-migration of 425 persons. Under this scenario the overall population of the HRSH area based on this pattern of migration is some 15,400 persons higher at the end of the period 2014-32 than assumed in 2012 SNPPs.

Figure 2: HRSH HMA Change in Annual Migration (Persons per annum) Relative to 2012 SNPP Migration Patterns

	SNPP	Job-led	Difference
Increase in in-migration above SNPP	18,128	18,559	430
Decrease in net out-migration from SNPP	17,915	17,490	-425
Change to net migration from SNPP	213	1,068	855

12. The annual growth shown in Figure J.2 would imply that the population of the HRSH HMA would increase from 276,100 people in 2014 to 310,400 people in 2032, a 12.4% increase compared to the 7.5% increase based on the 2012-based SNPP projected 2032 population of 297,000. The assumed need to provide housing to boost the availability of labour within the HMA therefore has a significant impact on anticipated population growth.

13. It should be borne in mind that not all of the people represented by the annual increase of 885 SHMA residents persons over and above SNPP projection will be economically active; any assumed increase in in-migration or reduced out-migration includes some economic inactive persons, with the number of such persons based on the proportion they currently account for in net migration flows.

Where will the increased population be drawn from?

14. The most appropriate assumption to make as to where the additional people who would come to live in the HRSH HMA will come from, is that they will be drawn from the same places from which those who move into the area currently come from; likewise where it is assumed that net out-migration will fall, the reduction in population will be experienced most in those areas where HRSH HMA residents have typically moved to in the past.

15. Wessex Economics has therefore examined ONS data on domestic (internal) UK migration patterns at the local level for the 2005-15 period. This has been supplemented by analysis of ONS data on the components of population change which allows calibration of the scale and pattern of international migration and overall totals for internal migration flows. Where there is a difference between the total figures sourced from the internal migration statistics and the totals shown in the ONS components of change, any difference has been allocated into the *'rest of UK'* category.

16. The analysis presented in Figure J3 shows where, on the basis of trends over the past decade, it can be expected that the *'additional HRSH HMA'* residents will come from; and the contribution to these totals in terms of the contribution of additional in-migration from other areas and reduced out-migration from the HRSH HMA to those other areas.

17. Authorities bordering the HRSH area only account for 30% of the total impact on the population redistribution assumed. The '*rest of the South East*', and the London and the South West regions collectively account for 38% of the 'additional population' requirement of the HRSH but the numbers involved are very small compared to the population of these regions; and so are unlikely to be of significance in planning terms.

Figure 3: Projected Increase in Annual Net In-Migration to the HRSH Area 2014-32 linked to Employment Scenario

	Additional Migration to HRSH from …	Reduced Migration from HRSH to …	Change in Net Annual Migration	% of Total
Guildford	28	23	51	6%
Waverley	20	18	38	4%
Bracknell Forest	20	17	37	4%
Basingstoke & Deane	14	20	34	4%
Woking	18	10	28	3%
East Hampshire	8	11	19	2%
Wokingham	9	9	18	2%
Windsor & Maidenhead	8	7	15	2%
Runnymede	9	5	14	2%
Rest of South East	*75*	*80*	*155*	18%
London	*58*	*39*	*97*	11%
South West	*29*	*47*	*76*	9%
Rest of UK	*83*	*93*	*176*	21%
Overseas	*51*	*45*	*96*	11%
Total	430	424	855	100%

18. It should be noted in passing that West Berkshire does not have a common border with any of the HRSH authorities, but its border almost touches that of Hart. However, West Berkshire is not characterised by strong population flows between it and any of the HRSH authorities, so it is not separately listed among the neighbouring authorities; instead included in the data for the Rest of the South East Category.

The Implications for Areas with reduced In-Migration and Increased Out-Migration

19. The HRSH SHMA and the analysis set out in earlier in this working paper identifies the implications of planning for a higher level of housing provision in the HRSH HMA in order to increase the resident population as a response to anticipated employment growth and relative shortage of locally resident labour. However, by planning for increase net in-migration, this has implications from those areas from which such labour will be drawn.

20. In theory at least, if there is an increase in net in-migration to the HRSH HMA from surrounding areas, there should be a reduced requirement for housing in neighbouring areas from which a significant proportion of those who are now assumed to migrate to the HRSH HMA. So, for example, if net migration were to be reduced by 51 people per annum in Guildford (918 people over the period 2014-32) then how many homes would this equate to?

21. It is arguable that if the HRSH is to provide additional homes due to increasing labour-supply then the additional labour force would need to come from somewhere, and those areas would then see a lower level of population growth and hence a lower level of housing need. It is instructive, therefore, to consider how far, under this scenario, the HRSH HMA would be meeting housing needs that would otherwise have to be met in other locations.

22. Wessex Economics has modelled the implications of the proposed uplift to population in the HRSH area on adjacent areas, based on the 2014 SNPPs and Headship Rates, and running the demographic model

with and without the revised migration assumptions associated with uplift in the HRSH area in population and households to meet the perceived shortfall in labour supply[13].

23. Figure J4 identifies that, with the proposed uplift in net in-migration to the HRSH HMA, the HMA would be making a potential contribution of 352 dwellings per annum to meet housing needs arising in other locations; with some 112 dwellings per annum of this contribution from the immediately adjoining authorities to the HMA. Some 38 dwellings pa of this figure is attributable to assumptions about increased international migration.

24. For example, the analysis would suggest that the HRSH HMA would be contributing some 23 dwellings to meet needs that would otherwise be provided in Guildford Borough (the highest figure of any neighbouring authority) and 39 dwellings to meet needs from London; in this latter case it should be noted that this figure is over and above any needs already linked to the trend-based projections, and noting that all areas see net migration from London within their past trends.

Figure 4: Estimated Reduction in Housing Need of Higher projected Net Migration to the HRSH Area

	Per annum	2014-32
Basingstoke and Deane	15	276
Bracknell Forest	17	300
East Hampshire	8	148
Guildford	23	416
Runnymede	6	109
Waverley	16	295
Windsor and Maidenhead	7	122
Woking	12	224
Wokingham	7	132
Rest of SE	62	1,119
London	39	694
South West	31	550
Rest of UK	70	1,268
Abroad	38	692
TOTAL	**352**	**6,345**

Source: Wessex Economics

The Implications

25. It is important to appreciate that the analysis of housing requirements arising from a potential shortage of resident labour supply is fundamentally different in terms of the confidence that can be placed on the analysis to the analysis of demographic trends and market signals.

26. The demographic analysis is grounded in the SNPPs and Household Projections which can be taken as authoritative, albeit they are based on forward projection of past trends, which could change, but are only likely to do so slowly; and the uplift applied to these demographic projections as a response to

[13] This element of the analysis is new and has therefore been based on 2014 SNPPs and Headship Rates, while other elements of the analysis draw upon the SHMA modelling which is based on the 2012 SNPPs and Headship Rates. The use of different data set is not of any significance since this analysis is examining potential *changes* to population and not *overall levels*. In addition, there is little difference between 2012- and 2014-based data in terms of headship rates. Taken together the findings based on 2012 SNPPs and headship rates would be virtually identical to those based on 2014 SNPPs and Headship rates.

market signals, which in the SHMA are cross-checked by reference to assumed uplifts in household formation rates.

27. In contrast, estimates of the population uplift that might be deemed necessary in response to anticipated employment growth are subject to two major uncertainties:

- First, economic forecasts, and hence forecasts of employment, even at the national level are the subject to a high degree of uncertainty, and this uncertainty increases significantly when forecasts are made at the sub-regional level, with uncertainty increasing as the size of the area for which the forecast is being made gets smaller.
- Second, it is custom and practice, when undertaking these assessments, to assume that the net commuting balance is held constant. This is a necessary simplifying assumption, and is partly linked to PPG para 2a-018-20140306, which makes reference to the danger that if the supply of labour is less than projected job growth, this could result in unsustainable commuting patterns.

28. It is outside of the scope of SHMAs to assess whether anticipated levels of job growth would result in unsustainable commuting patterns, since this is the realm of transport planning. Whether the assessment area can cope with increased commuting depends on current capacity and planned infrastructure investment. To avoid being drawn into analysis of these topics SHMAs examine the labour supply to forecast jobs on the basis of no change in the net commuting balance.

29. The HRSH HMA is already characterised by relatively low levels of self-containment. Around 56% of all those who work in the HRSH area (excluding those who work at or mainly from home) also live in the HRSH HMA; which implies that 46% of those who work in the HRSH HMA live outside the HMA. If, as indicated by job forecasts there is potential for significant job growth in the HMA in the period to 2032, there may well be potential for net in-commuting to increase.

30. Net in-commuting to the HRSH HMA might also increase even if the additional homes identified as being required to meet growing labour demand within the HRSH HMA are provided. There is no guarantee that the homes built in the HRSH HMA will be occupied by those who intend to work in the HRSH area. It is necessary for the purposes of analysis to assume no change in the net commuting balance but where people live in relation to where they work is not something that authorities have any control over.

31. Given good public transport and road connections to other areas with many jobs – London, the Berkshire towns, and other towns in Surrey in the M25 corridor including Guildford and Woking, increased house building in the HRSH area might attract significant numbers of those working in these locations, perhaps with HRSH employers relying to an increasing extent on those living further to the west and south of the area.

32. The analysis also highlights that were the HRSH authorities to provide housing in the HMA for all the anticipated additional local labour force required by employment forecasts (assuming no change in net commuting patterns), that the HRSH would be providing for an element of the housing needs of surrounding authorities, as well as potentially relying on labour they have assumed will be available to meet the labour demand from employers in their own area.

33. In principle this raises Duty to Co-operate issues. However in general the change in the number of dwellings that each of the surrounding authorities would need to plan for is not very large whether

measured on an annual basis or as part of their overall requirements over the plan period they are working to.

34. It is the impact on housing requirements at the regional level that is more significant in overall numerical terms though in the context of overall planned provision at this spatial level the annual requirements or plan period numbers associated with an employment-led uplift to planned housing provision would not be significant.

Appendix J: Review of Influences on Household Formation Rates

1. Section 9 of the main report sets out the approach taken to uplift housing requirements in response to evidence on market signals. The level of uplift has been tested against scenarios of different levels of increased household formation based on a mid-point between the 2012 household formation rates and the 2008 household formation rates.

2. This Appendix comments briefly on why Wessex Economics does not believe it is appropriate to assume a full return to the 2008-based household formation rates. This largely relates to significant social changes that have occurred subsequent to the time-period on which 2008-based Household Projections are based.

3. There are three main reasons why headship rates are likely to have fallen since 2001 that are not directly related to housing affordability issues.

   - Changes in headship rates associated with international migrants.
   - Increased participation in higher education and rising student debts
   - Changes in lifestyle and expectations of young adults.

4. Levels of net international in-migration to the UK have increased since 2004, since the accession of the A8 nations to the EU. These migrants are typically younger than other migrant groups, and concentrated in the 25-34 age bracket; and on average they have a lower propensity to form independent households than other groups of people in the 24-35 age bracket. Many do not seek to live in self-contained housing since they are single. This behavior may persist since some wish to remit money to family members elsewhere, and others may anticipate returning in due course to the country of origin.

5. At the national level this group of migrants has boosted the size of the 25-34 age cohort in the population, which has a relatively low rate of household formation in any case; and, because this group is less likely to form independent households than those of the same age, they have contributed to reducing the household formation rate in the 25-34 age group as a whole.

6. If there continues to be a pattern of young adults from the EU moving to the UK, with a significant proportion returning to their country of origin, and being replaced by a new cohort of younger migrants, this can be expected to result in a permanent reduction in the household formation rate among the 25-34 age group compared to the pre-2004 headship rates. The 2008-based headship rates do not take account of this change. The impact of Brexit on migration patterns represent a new uncertainty.

7. A second factor that not directly related to housing affordability that has contributed to the reduction in household formation rates is increased participation in higher education and rising student debt. Over the period 1999/00 to 2013/14 the participation of 17-30 year olds domiciled in England has increased from 39% to 47%.

8. The increase participation in Higher Education is likely to play some part in delaying household formation since graduates are more mobile than non-graduates. They will have typically experienced living in shared accommodation at university, and therefore more inclined to continue living in shared accommodation. Accumulated student debt is also a factor that deters or prevents these young adults from forming independent households.

9. Since 1999/00 the system of funding for Higher Education has fundamentally changed with the introduction of tuition fees and replacement of maintenance grants with student loans. A recent study undertaken by the Institute of Fiscal Studies (IFS) estimates that students in future will graduate with debts averaging £44,000.[14] Prior to the most recent reforms, graduates debts averaged around £21,000. Average repayments are estimated to be relative modest, on average £610 per annum for those aged 22-30, but will rise as income rises; among those aged 41-51 will pay on average £1,380 pa.

10. While student debts are not included in credit ratings, mortgage lenders do have a responsibility to ensure that those they lend to can sustain the mortgage they are offered. As part of this student debt repayments will be assessed as part of outgoings. Whether debt repayments outweigh the salary premium secured by graduates is likely to depend in part on the subject studied and the degree gained. Linked to lifestyle changes, rising participation in HE is likely to be a factor in depressing household formation among the 17-30 age group.

11. A third factor why household formation among young adults as a whole is likely to be changes in lifestyles and expectations particularly regarding what are termed co-residential partnerships and parenthood; research shows that young adults form permanent partnerships at a later than in the past. This is when they are likely to move from sharing accommodation with other un-related adults, to living in a couple partnership in their own accommodation. Another factor that discourages independent living is labour market uncertainty, which has increased since the 2008-09 recession[15].

[15] The Changing Determinants of UK Young Adult's Living Arrangements; J Stone, A Berrington, J Falkingham, Demographic Research Volume 25, 27th September 2011

Appendix I: Affordable Housing Policy Discussion

Introduction

1. This Appendix comments on the National Planning Practice Guidance for purposes of taking account of affordable housing need in developing the Objectively Assessed Housing Need (OAHN) and the local housing requirements that follow. This commentary supplements and clarifies the approach that has been adopted within this SHMA towards the assessment of affordable housing needs. The Appendix also summarises recent appeal decisions relevant to the treatment of affordable housing in determining OAHN; and draws attention to commentary from Local Plan Inspectors relating to the approach and treatment of affordable housing in arriving at OAHN.

2. Key issues to be addressed are the degree to which household projections already count those households in housing need; consideration of the fact that the type of affordable housing provided is very much the product of policy decisions by central government; and the fact that the quantum of affordable housing that can be provided is also strongly linked to the scale and type of government funding. Thus the decision by a local authority on how to secure affordable housing is very much a 'policy on' decision, while the process of arriving at OAHN is a 'policy off' approach.

Guidance

3. Paragraph 47 of the National Planning Policy Framework provides the context for this discussion. The paragraph states that in order *'To boost significantly the supply of housing, local planning authorities should….. (bullet 1 of 5)…. use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with the policies set out in this Framework, including identifying key sites which are critical to the delivery of the housing strategy over the plan period'* (Paragraph 47).

4. The NPPG describes how the need for affordable housing should impact on local housing requirements. The relevant paragraph in the NPPG (*Paragraph: 029 Reference ID: 2a-029-20140306)* states that: *'The total affordable housing need should then 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.'*

5. The NPPG makes clear that an increase in *'total housing figures'* in local plans should be considered as a means of increasing the delivery of a particular type of housing – namely affordable housing. It is clear from the text that the increase in '*total housing figures'* is something for local authorities to consider in the plan making process in the light of the assessed need for affordable housing. The decision to make such an adjustment to planned housing provision is a 'policy on' consideration.

6. This makes sense since household projections, and any subsequent adjustment to those projections that essentially aim to improve housing affordability, are the process that determine how many homes of all types are required in an area. The affordable housing assessment feeds in additional information to

inform decisions about the mix of market and affordable homes required within this overall requirement. These policy considerations are for the local authorities rather than the SHMA.

7. The Planning Advisory Service's Technical Advice Note on Objectively Assessed Housing Need (July 2015) it clear what the role that the result of the affordable housing need assessment means for the OAHN (overall need). Paragraph 9.3 of the PAS note states that '*affordable housing need is a policy consideration that bears on housing targets, rather than a factor that bears on objectively assessed need.'*

8. The PAS Technical Advice Note goes explains this more fully, stating that; *'in practical terms, there is no arithmetic way of combining the two calculations set out in the PPG to produce a joined up assessment of overall housing need. We cannot add together the calculated OAN and the calculated affordable need, because they overlap: the OAN of course covers both affordable and market housing, but we cannot measure these components separately, because demographic projections – which are the starting point for the OAN – do not distinguish between different sectors of the housing market.*'

9. The PAS Technical Advice Note summarises the position thus; '*In summary, it seems logically clear that affordable need, as defined and measured in paragraphs 22-29 of the PPG, cannot be a component of the OAN. The OAN does have an affordable component – which cannot be measured separately but will normally be much smaller than the affordable need discussed at paragraphs 22-29. When paragraph 47 of the NPPF says that plans should meet in full 'the need for market and affordable housing', it is referring to that component rather than the separately calculated affordable need'.*

10. It is relevant to consider how NPPF policy and the NPPG has been interpreted by Planning Inspectors.

11. Given that NPPG is not totally prescriptive in terms of methodology and there are differing interpretations, it is not surprising that the process of arriving at OAHN, and the role within this of the affordable housing need assessment has been tested through appeal decisions. In addition the approach taken by Planning Inspectors to the determination of OAHN and the role within this of the affordable housing need assessment has evolved over time as the approach to determining OAHN and the interpretation of NPPG has been debated and tested.

12. The following cases and Local Plan Inspector's Reports' listed in date order are relevant to understanding the interaction of OAHN and Affordable Housing Need. these are summarised in turn;

    - Satnam Millennium Ltd v Warrington Borough Council (Feb 2015)
    - Cornwall Local Plan Preliminary Finds (June 2015)
    - Oadby and Wigston v Bloor Homes (July 2015)
    - Kings Lynn v Elm Park Holdings (July 2015):

Satnam Millennium Ltd v Warrington Borough Council (Feb 2015)

13. A challenge to the adoption of the Warrington Local Plan Core Strategy succeeded, resulting in the quashing of the Plan's housing provision policies. The judge found that the assessment of the full, objectively assessed needs for housing had not taken account of the (substantial) need for affordable housing. Paragraph 43 of the judgement concluded that *'the Local Plan should then meet the OAN for affordable housing, subject only to the constraints referred to in the NPPF, paragraphs 14 and 47.*

14. Some have interpreted the judge's conclusion to imply that the need for affordable housing (as estimated in Section 10 of this report) needs to be met in full. What this might imply for the HRSH Councils would depend on whether the affordable housing need is taken to be the need for subsidised rent (380 homes per annum) or the combined need for subsidised rent and home ownership (970 homes per annum).

15. Assuming delivery of a maximum of 40% affordable housing through new development, a level which has been established in practice based on the past availability of funding and developer's expectations about policy quotas, the Councils would need to deliver 960 homes per annum in total to deliver 380 subsidised rented homes. The figure would rise to 2,438 homes per annum to deliver 970 subsidised rented and home ownership homes (see Figure L.1).

Cornwall Local Plan Preliminary Finds (June 2015):

16. The Planning Inspector for the Cornwall Local Plan (Simon Emerson), commenting on the preliminary findings of the Cornwall's Local Plan Inquiry (June 2015, paragraph 3.20) states the following with respect to affordable housing provision: *'National guidance requires consideration of an uplift; it does not automatically require a mechanistic increase in the overall housing requirement to achieve all affordable housing needs based on the proportions required from market sites. The realism of achieving the intended benefit of additional affordable housing from any such uplift is relevant at this stage, otherwise any increase may not achieve its purpose'.*

17. If a *'mechanistic uplift'* is not required by the OAHN process, then the decision of whether to uplift planned provision of housing and, if so, by how much, is a policy decision for the local authority to make as part of determining local housing requirements. The OAHN process, and in particular the assessment of need for affordable housing, provides the evidence on which an authority can make an informed policy decision as to whether to plan to provide more homes than implied by the OAHN in order to achieve particular policy objectives for delivery of affordable housing.

Oadby and Wigston v Bloor Homes (July 2015)

18. The key issue before the judge in this appeal case was whether or not the original Inspector's adoption of a figure of 147 dwellings per annum as the OAHN was sound. The Council's position was that the need was in the range 80-100 dwellings per annum and that this was a policy off figure based on the most up to date population and household projections. The appellant suggested a need in the range of 147-161 dwellings pa based on long-term migration trends and the needs of the local economy (in terms of matching job growth and housing need).

19. The Judge concluded that the Council's planned position (80-100 dwellings) was a 'policy on' figure. The Judge reached this conclusion on the basis that the SHMA indicated a need for 173 dwellings per annum to provide sufficient labour to support economic growth and 160 per annum as the affordable housing need. However it is unclear from this decision whether the OAHN must include all of the affordable housing need. Some of the wording of the judgement would suggest this was the case with the Judge stating that the assessment of need *'becomes policy on as soon as the Council takes a course of not providing sufficient affordable housing to satisfy the FOAN'.*

Kings Lynn v Elm Park Holdings (July 2015)

20. The issue of affordable housing was a key part in the final judgement in this case which involved the Council's challenge to an Inspector's granting permission for 40 dwellings in a village. In paragraph 35 of the judgement the Judge stated that the '*Framework [NPPF] makes clear that these needs* (affordable housing needs) *should be addressed in determining the FOAN, but neither the Framework nor the PPG suggest that they have to be met in full when determining the FOAN. This is no doubt because in practice very often the calculation of unmet affordable housing need will produce a figure which the planning authority has little or no prospect of delivering in practice.'*

21. In relation to the Oadby and Wigston case (see above) the Judge noted that *'Insofar as Hickinbottom J in the case of Oadby and Wigston Borough Council v Secretary of State [2015] EWHC 1879 might be taken in paragraph 34(ii) of his judgement to be suggesting that in determining the FOAN, the total need for affordable housing must be met in full by its inclusion in the FOAN, I would respectfully disagree. Such a suggestion is not warranted by the Framework or the PPG'.*

22. This most recent judgement is clear that an assessment of affordable housing need should be carried out, but that the level of affordable housing need shown by analysis does not have to be met in full within the assessment of the OAHN. The relevant part of the NPPF is paragraph 159, which confirms that affordable housing needs should be addressed by a local planning authority preparing a local plan.

23. There may be future judgements that interpret NPPG and the relationship between the affordable housing assessment, OAHN, and whether the former calls for an adjustment to OAHN; or calls for local authorities to consider as part of their policy making process to plan for a higher level of planned housing provision. The current position is in terms of legal decisions is contested though the most recent decision indicates that the OAHN does not have to be uplifted to deliver all affordable housing in full, though it is a consideration in determining OAHN.

Affordable Housing Need, the OAHN and Local Housing Requirements

24. Wessex Economics draws from the discussion above that, first, there is no well-proven evidence-based formula which can be used to uplift OAHN to address the need for affordable housing; and second that there is nothing in NPPF and NPPG that requires the OAHN to be uplifted in a mechanistic way in order to meet all affordable housing needs. However, the HRSH Councils do need to take the estimates of affordable housing need into account in determining their local housing requirements, alongside other considerations, but this does not mean that those requirements have to be met in full.

25. However, it is useful for the HRSH Councils to know the extent of the uplift to local housing requirements that *would* be needed if they were to meet the assessed affordable housing need in full. This can inform the policy decisions that the Councils will have to make. However, the proportion of affordable housing that can be delivered through new development is very much a 'policy on' decision, given that this is largely determined by the decision of the setting of a quota for affordable housing on new developments, taking account of other matters such as development viability.

26. In the recent past local authorities in the south of England have typically sought to require that up to 40% of all dwellings on a development site above a certain size are provided as affordable housing. However, in a context where the assessed need for affordable housing has consistently outstripped the

ability of affordable housing providers to deliver, quotas have not been based solely on an objective assessment of need; rather they have been determined by what level of public funding has been available and what is consistent with development viability.

27. The household income data included in this report shows that, if new development reflected the distribution of household income and affordability based on current prices and rents, around 60% of new homes should be delivered in the form of affordable homes and 40% as market homes. If funding and viability were not a constraint, this would suggest that affordable housing quotas ought to be around 60%. Whether this would be desirable for other reasons (e.g. achieving mixed and balanced communities) is a different debate.

28. Figure L.1 sets out scenarios for the HRSH housing requirement based on different affordable housing quotas. Whilst a figure is provided for the requirement that might be associated with the need for 380 subsidised rented homes, it is important to note that the consultation on the Starter Homes regulation (Housing and Planning Act 2016) proposes that Starter Homes should be provided on development sites of 10 or more units or more than 0.5 ha. The intention of Government policy is to deliver homes to meet the needs of those who cannot afford to buy and that these are likely to be given priority on new development sites over other forms of affordable housing.

29. It is important to remember that the affordable housing need assessment does not use PRS properties released by households in need to offset affordable housing needs. However, these properties should be considered in determining overall housing requirements since, if new affordable homes are provided for those in housing need including those living in private rented sector, their homes will become available to those who are not in affordable housing need. Figure L.1 provides figures which estimate the effects of this supply on meeting the overall need for housing.

30. Finally, it important to remember' that once OAHN has been established (as set out in Sections 8-12 of the SHMA), this does not automatically mean that this should be the level of housing for which the Local Plan makes provision. In determining the number of new homes to plan for, local authorities need to consider a range of other factors in developing their policies, such as land availability, environmental and infrastructure constraints etc, alongside the OAHN requirement.

31. However, once other 'policy on' considerations are taken into account, it is possible that the OAHN determined by this SHMA would equate to the preliminary housing requirements for the local plans of the HRSH authorities. In this event, Figure L.1 provides one input into co-operative discussions of how the figures for the different local plans could be increased, to address affordable housing need.

32. For sake of clarity and to avoid any misunderstanding, Figure L.1 is not part of the objective assessment of need for housing and is only intended to provide useful information to inform a discussion of local plan housing requirements. It has no privileged authority over other 'policy on' considerations, although it does fulfill the advice of the PPG to consider the total affordable housing need in the context of its likely delivery as proportion of mixed market and affordable housing developments.

Figure 1: HRSH Housing Requirement to Deliver Full Affordable Housing Needs through New Development, Per Annum

	Affordable housing as a % of total housing requirement		
	20%	40%	60%
Total Homes Required to Deliver 380 Affordable Homes per annum (based on need for subsidised rent)	1,920	960	640
Total Homes Required to Deliver 970 Affordable Homes per annum (based on need for subsidised rent + subsidised home ownership) (Gross)	4,875	2,438	1,625
Total Homes Required to Deliver 380 Affordable Homes per annum Minus PRS Supply (450 homes per annum)	1,470	510	190
Total Homes Required to Deliver 970 Affordable Homes per annum Minus PRS Supply (450 homes per annum)	4,425	1,988	1,175

Source: Section 10 of the SHMA details the estimates of the need for affordable housing and the number of private rented properties likely to be released if these households are accommodated in suitable affordable housing. Figures rounded to nearest 10 and may not sum due to rounding.