Hart, Rushmoor & Surrey Heath Strategic Housing Market Assessment

APPENDICES

Appendix 1: Stakeholder Consultation

A1.1 The three local authorities invited comment from selected stakeholders, primarily neighbouring local authorities, on the proposed methodology for assessing objectively assessed housing need (OAHN) and Wessex Economics' analysis of the market area.

A1.2 A stakeholder event was held on 25th March 2014 which was attended by 40 individuals from a mix of organisations including local authority officers, Councillors, house builders and their representatives and registered providers.

A1.3 This summary does not attempt to cover all of the issues raised by stakeholders in detail but draws out some of the common themes and concerns. Where possible, we have attempted to pick up and address these points in the document.

A1.4 Key feedback from stakeholders on the emerging evidence in the SHMA can be summarised in headline form as follows:

- Concerns about the **market area** identified: some stakeholders highlighted the links between the three authorities and other neighbouring authorities and questioned how these links would be taken into account given that the SHMA focuses on Hart, Rushmoor and Surrey Heath. The challenges of planning without a County or regional oversight were acknowledged. It was suggested that the local economic partnership might provide some oversight, though its resources and powers in this respect were limited.

- This linked to calls for the need for **cross boundary working** between the three authorities in the housing market area but also with local authorities in neighbouring SHMAs. The difficulties of planning without a South East plan (and an overview of housing required at this level) and that different local authorities were on different timetables was highlighted as a real challenge.

- There were some questions about how **London's housing needs** had been taken into account and the moves made by the Mayor of London to have discussions with London fringe authorities about taking London's 'overspill'.

- Objectively assessed housing need: stakeholders broadly accepted the **methodology** used to identify OAHN, though there was significant scepticism about the **employment forecasts** for 2011-2031 and therefore the level of housing required to expand the labour force. One particular point was that no allowance had been made for any downturn/recession over a 20 year period. There was some concern that other SHMAs were using similar forecasts and these were being accepted nationally and that perhaps there was risk in identifying a level of housing provision which did not meet these forecasts in full. Overall, it was felt that more explanation of the limitations of forecasts was needed and explanation of the dynamics of the labour market to adjust to job growth.

- **Affordable housing**: there was discussion about the methodology and how this compared to previous HNAs. It was noted by some stakeholders that the affordable housing needs identified were lower than in previous assessments. There was some concern that perhaps Surrey Heath's waiting list was 'missing' some households that might be in need due to the approach taken to discourage applications from households who did not meet priority need criteria or could meet their own needs in the market. Some stakeholders pointed to the emphasis on the need for

subsidised rented housing and argued the need for intermediate housing – and the fact that developers would like to deliver this.

- **Older people**: there were a range of issues raised in relation to the accommodation needs of older people. Questions were raised about the scale of needs from this group in terms of overall housing supply and the extent of need/demand for older person specific housing. Suggestions were made about accessing County data on older person accommodation needs. It was also suggested that older person housing, specifically extra care accommodation, was a growth market and more popular form of development at present because of the lack of affordable housing required in these schemes.

- A range of points were made about the changing policy context: these included the Government's review of **housing standards** and linked to this, whether the three authorities should be requiring greater levels of Life Time homes to be built. There was also a review into local authorities' role in increasing housing supply. Questions were asked about how the local authorities were taken **custom builders**/ self-builders into account in their policies. This was also an area where the policy context was changing with announcements made in the Budget the week before the stakeholder event. **Welfare reform** was also a key concern, particularly among the registered providers at the stakeholder event. They cited difficulties in building larger properties because of the benefit cap and concerns about affordability.

- Policy implications: stakeholders considered some of the implications of the evidence for policy. A key concern was how the three local authorities and other neighbouring authorities would join up to plan for housing (and other requirements). Stakeholders acknowledged the political difficulties around this challenge and specifically the likely difficulty in agreeing a **distribution of housing requirements** between the three authorities. Some questioned whether there would be any review of Rushmoor and Surrey Heath's housing requirements given that they already have **adopted Core Strategies**. Stakeholders raised the issue of local **constraints** on house building, particularly the Special Protection Area. There was also discussion about how the SPA, in limiting past house building, had fed into the demographic projections by constraining population and household growth.

Appendix 2: The Housing Market Area

A2.1 This section brings together the evidence on the geography of the housing market that relates to Hart, Rushmoor and Surrey Heath. Wessex Economics has undertaken analysis for each of the three Councils in advance of the Strategic Housing Market Assessment and this paper summarises this research.

A2.2 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.

A2.3 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.

A2.4 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).*

A2.5 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.

A2.6 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 Councils is presented in Figure A2.1. This shows that the Duty to Co-operate particularly applies to strategic plan making.

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

A2.7 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 A2.1: 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

A2.8 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.

A2.9 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 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.

[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

A2.10 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.

A2.11 This section sets out the evidence on the geography of the housing market that relates to the three authorities and the implications this has for the strategic housing market assessment 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

The Blackwater Valley

A2.12 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).

A2.13 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.

A2.14 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.

A2.15 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).

A2.16 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.

A2.17 The Blackwater Valley area includes the following settlements (local authority in brackets):

- Aldershot (Rushmoor)

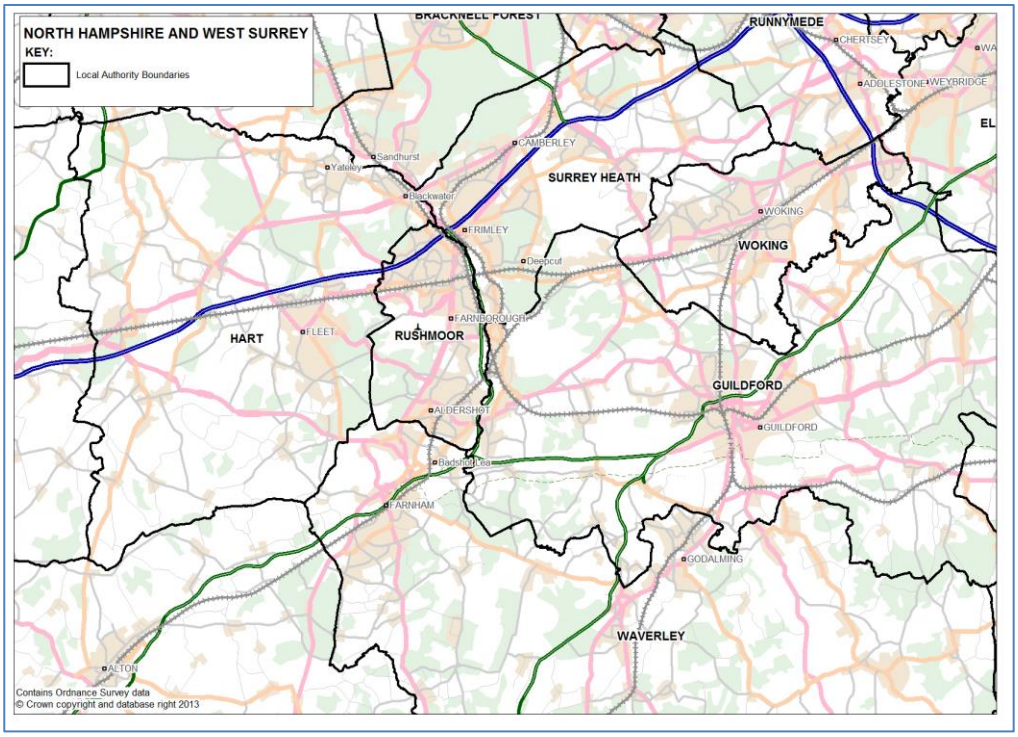
[3] ONS 2012 Mid Year Population Estimates

- 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)

A2.18 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).

A2.19 Figure A2.3 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 A2.3: The Geography of the Blackwater Valley Conurbation



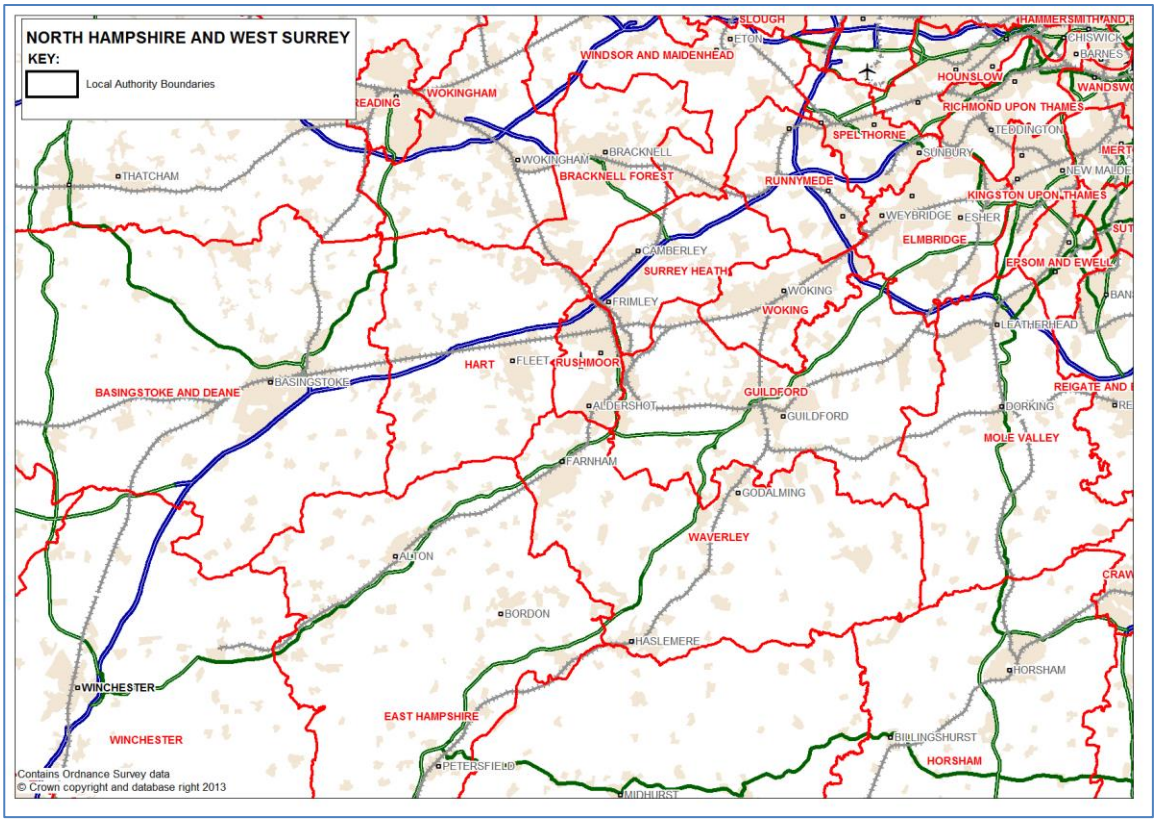
Source: Wessex Economics

A2.19 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 A2.4). 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.**

A2.20 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.

A2.21 The geography of each local authority needs to be borne in mind throughout this report, 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 A2.4: Local Authority Boundaries in the Study Area



Source: Wessex Economics

Housing Market Areas Identified in Previous Research

A2.22 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).

A2.23 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.

A2.24 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.

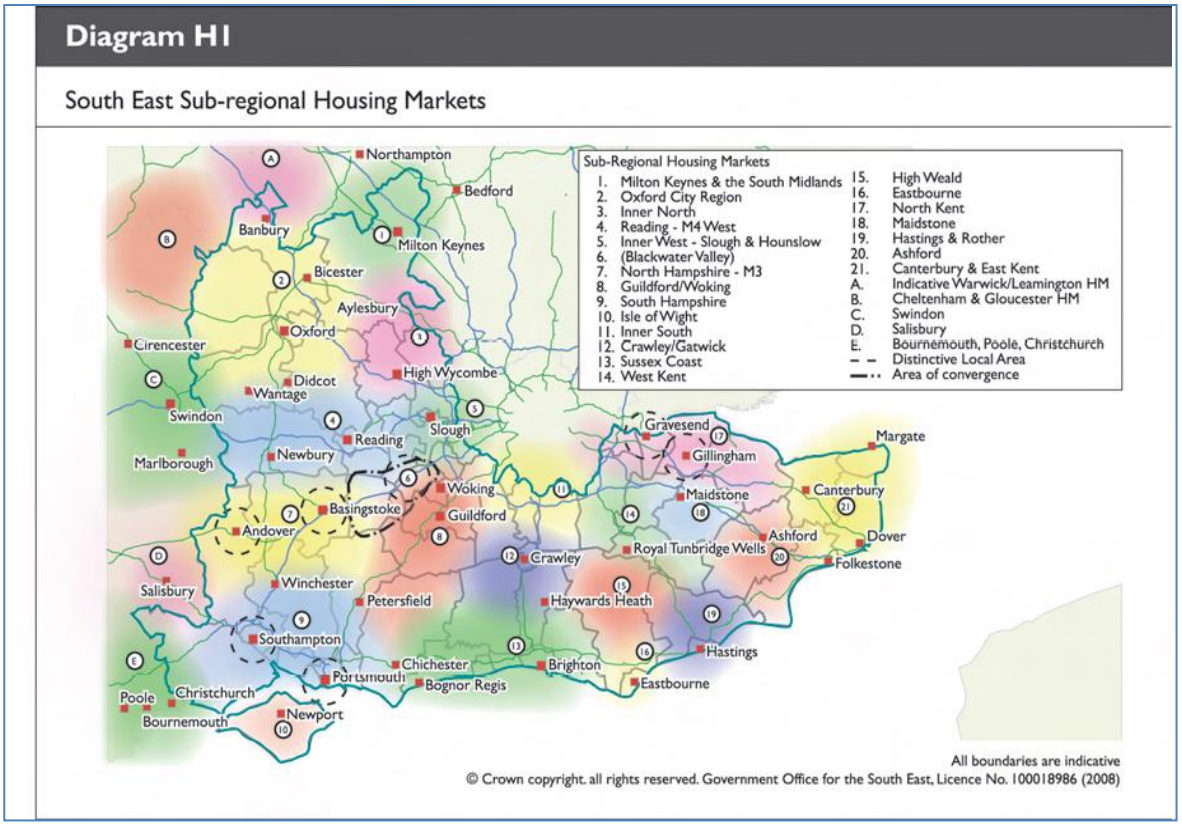
A2.25 Figure A4.5 shows the pattern of housing markets identified in the 2004 study. Across much of the South East the commissioning of SHMAs has broadly followed the pattern identified in the report. The pattern of housing markets identified played an important part in the development of strategic planning 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.

A2.26 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.

A2.27 **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 A2.5: Sub-Regional Housing Markets DTZ Pieda Study and South East Plan

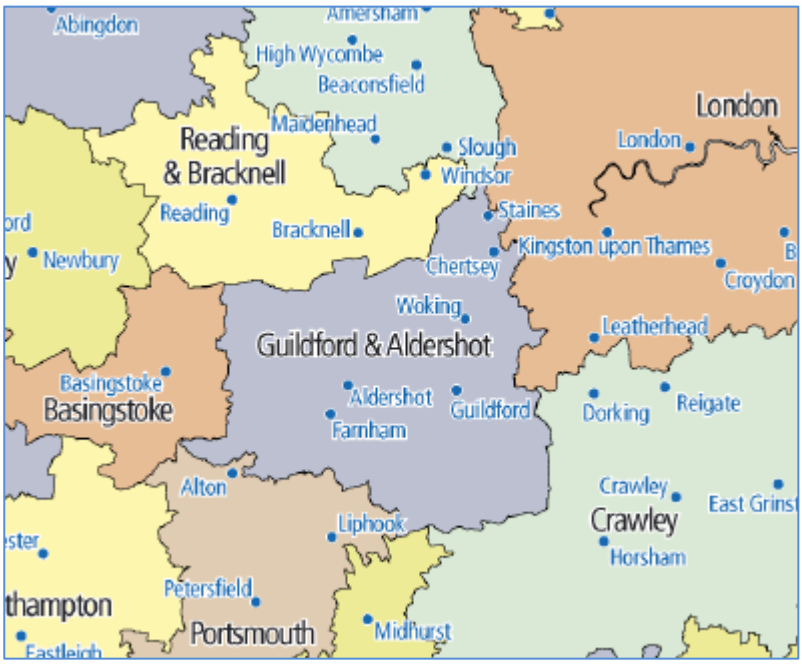


Source: South East Plan

A2.28 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).

A2.29 Figure A4.6 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 A2.6: Travel to Work Areas, 2001



Source: ONS

The National Housing and Planning Advice Unit Studies

A2.30 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 report summarises the work and identifies the market areas identified in this study covering the local authorities of Rushmoor, Hart and Surrey Heath.

A2.31 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.

A2.32 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

A2.33 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.

A2.34 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.'*

A2.35 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

A2.36 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 A2.7, A2.8 and A2.9.

A2.37 To avoid the rather confusing terminology used in the NHPAU report, this report refers to the three different market areas that have been mapped as follows:

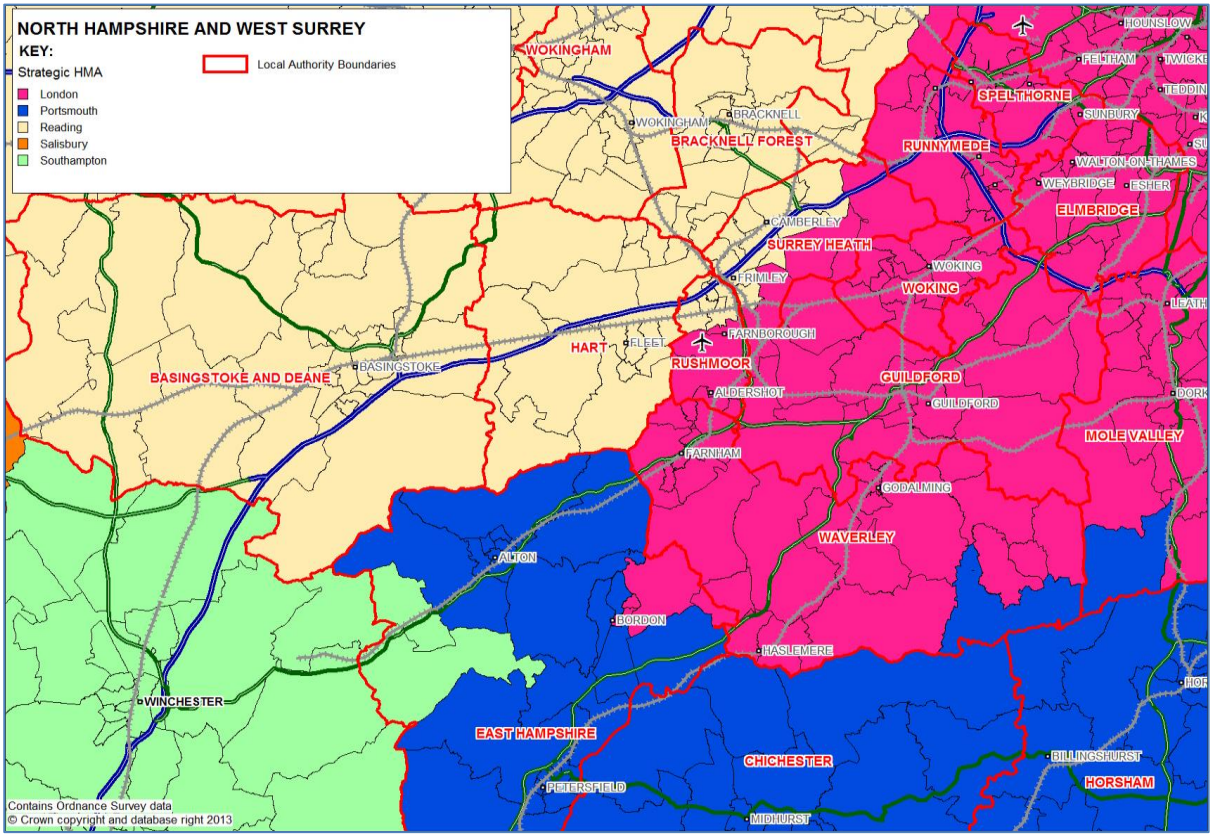
- Strategic Housing Market Areas (these being the framework housing market areas, defined by a high level of commuting closure (77.5 per cent self-containment))
- Local Housing Market Areas (these being the areas that nest within the Strategic Housing Market Areas, and by definition cover a smaller geography)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

A2.38 Figure A2.7 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

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

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 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 A2.7: Strategic Housing Market Areas (NHPAU) in North Hampshire and West Surrey



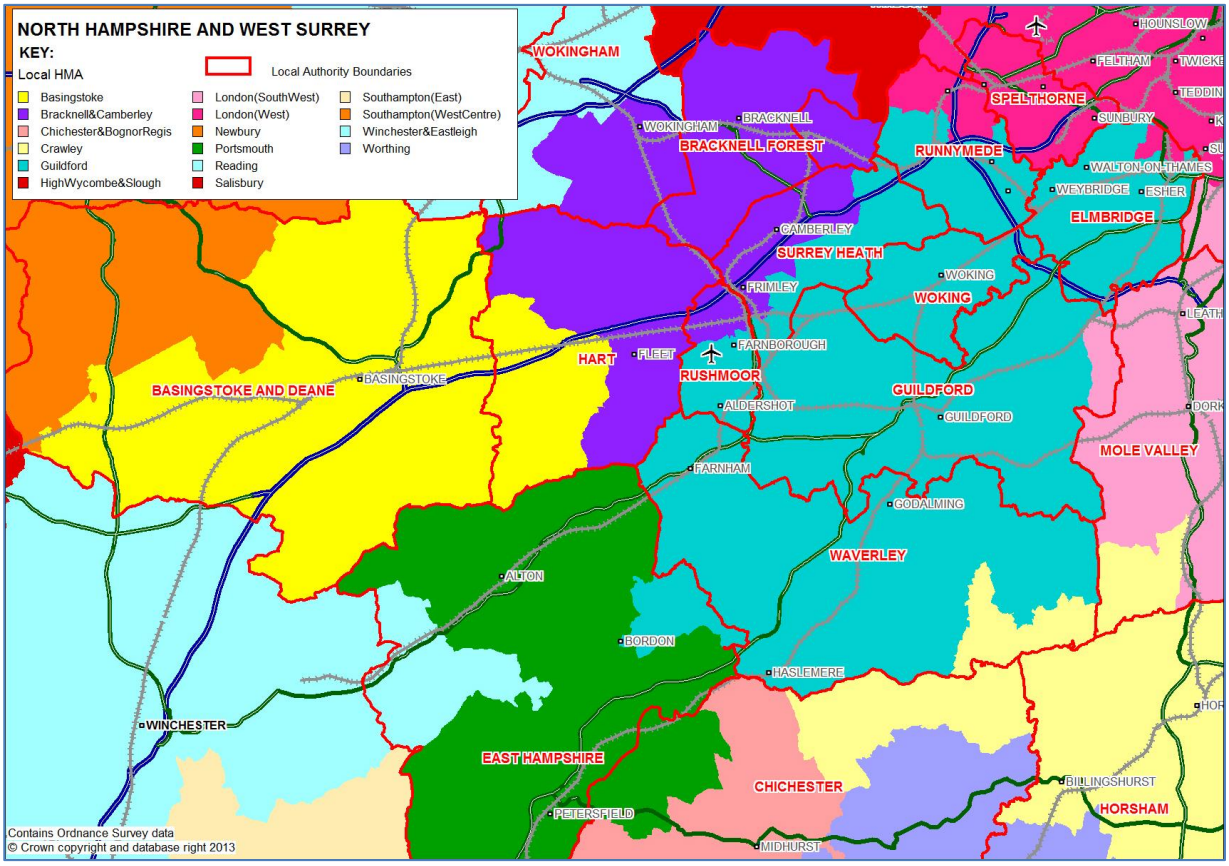
Source: Newcastle University (CURDS), Wessex Economics

A2.39 Figure A2.8 maps the Local HMAs which nest within the Strategic HMAs shown in Figure A2.7. 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 A2.8: Local Housing Markets (NHPAU) in North Hampshire and West Surrey



Source: Newcastle University (CURDS), Wessex Economics

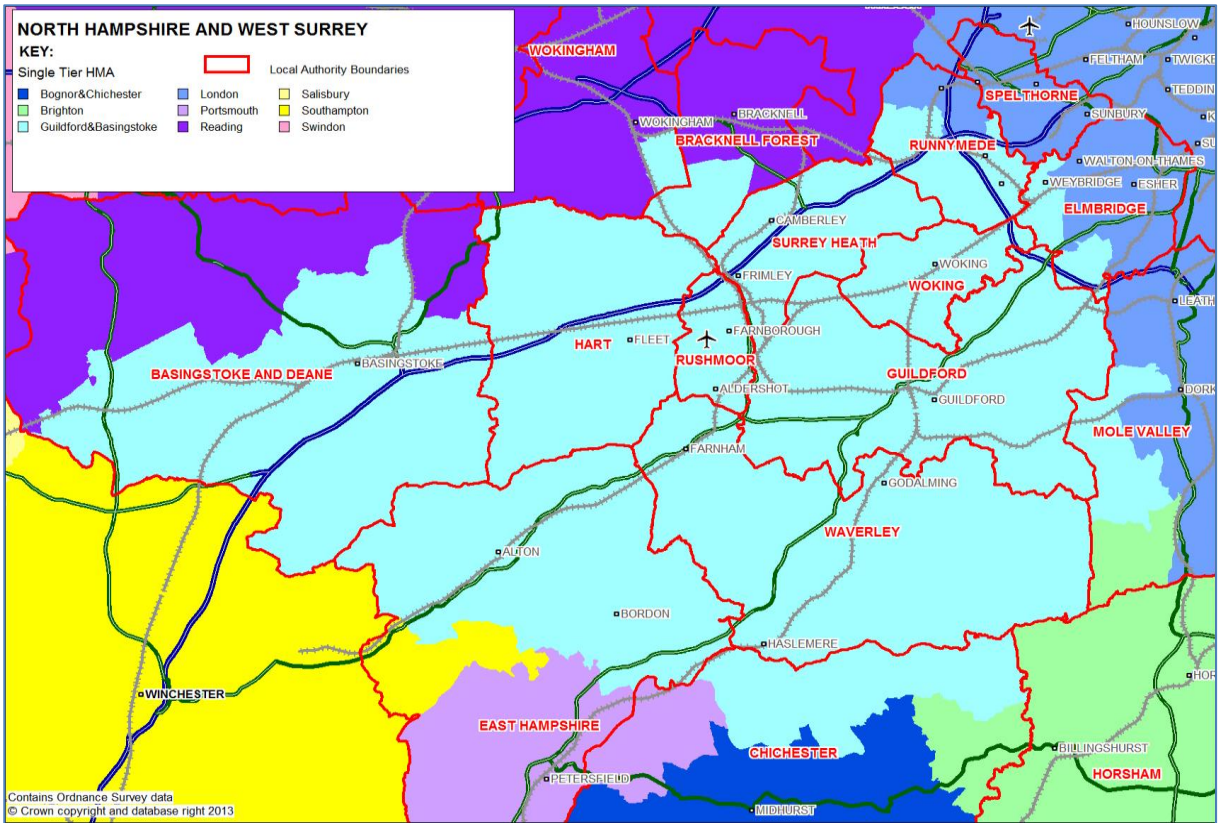
A2.40 Figure A2.9 shows the boundaries of the Sub-Regional HMA (the 'unitary' HMA structure developed by the NHPAU team). A single Guildford/Basingstoke Sub-Regional HMA covers the great majority of West Surrey and North Hampshire. Virtually all of the authorities in West Surrey except Spelthorne and 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.

A2.41 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 A2.9: Sub-Regional HMAs in North Hampshire and West Surrey



Source: Newcastle University (CURDS), Wessex Economics

The Implications for Hart, Rushmoor and Surrey Heath

A2.42 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.

A2.43 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.

A2.44 **Wessex Economics appreciates that the 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.

A2.45 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.

A2.46 **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 report 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

A2.47 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]

A2.48 Figures A2.10 and A2.11 show the pattern of migration between Hart, Rushmoor and Surrey Heath and the other authorities in the surrounding area. In terms of total movements:

- 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).

A2.49 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.

A2.50 Hart is most closely linked to Rushmoor, followed by Basingstoke and Deane. The next most important linkages are with Surrey Heath and Bracknell Forest.

A2.51 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.

A2.52 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).

A2.53 Figure A2.10 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.

[7] http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc25/index.html
[8] http://consult.rbwm.gov.uk/portal/blp/pojan2014/blppo?tab=files

Figure A2.10: 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

A2.54 Figure A2.11 is presented in the same format as Figure A2.10 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 A2.11: 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

A2.55 Taking Figures A2.10 and A2.11 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).

A2.56 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 A2.10 and A2.11).

A2.57 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.

A2.58 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.

A2.59 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.

A2.60 **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

A2.61 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.

A2.62 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.

A2.63 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.

A2.64 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

A2.65 Figures A2.12 and A2.13 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.

A2.66 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.

A2.67 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 A2.12). 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

A2.68 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 A2.12: 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 A2.13: 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

A2.69 Figures A2.14 and A2.15 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.

A2.70 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. In flows 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 A2.14: 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 A2.15: 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

A2.71 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 16 since it is not one of the 'top 5' locations where Surrey Heath's residents work.

A2.72 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).

A2.73 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 A2.16: 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 A2.17: 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

A2.74 The evidence presented in this section sets out the justification for a SHMA undertaken for the three authorities, on the basis that:

A2.75 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].

A2.76 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.

A2.77 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.

A2.78 This section 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).

A2.79 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:

[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.

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

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

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

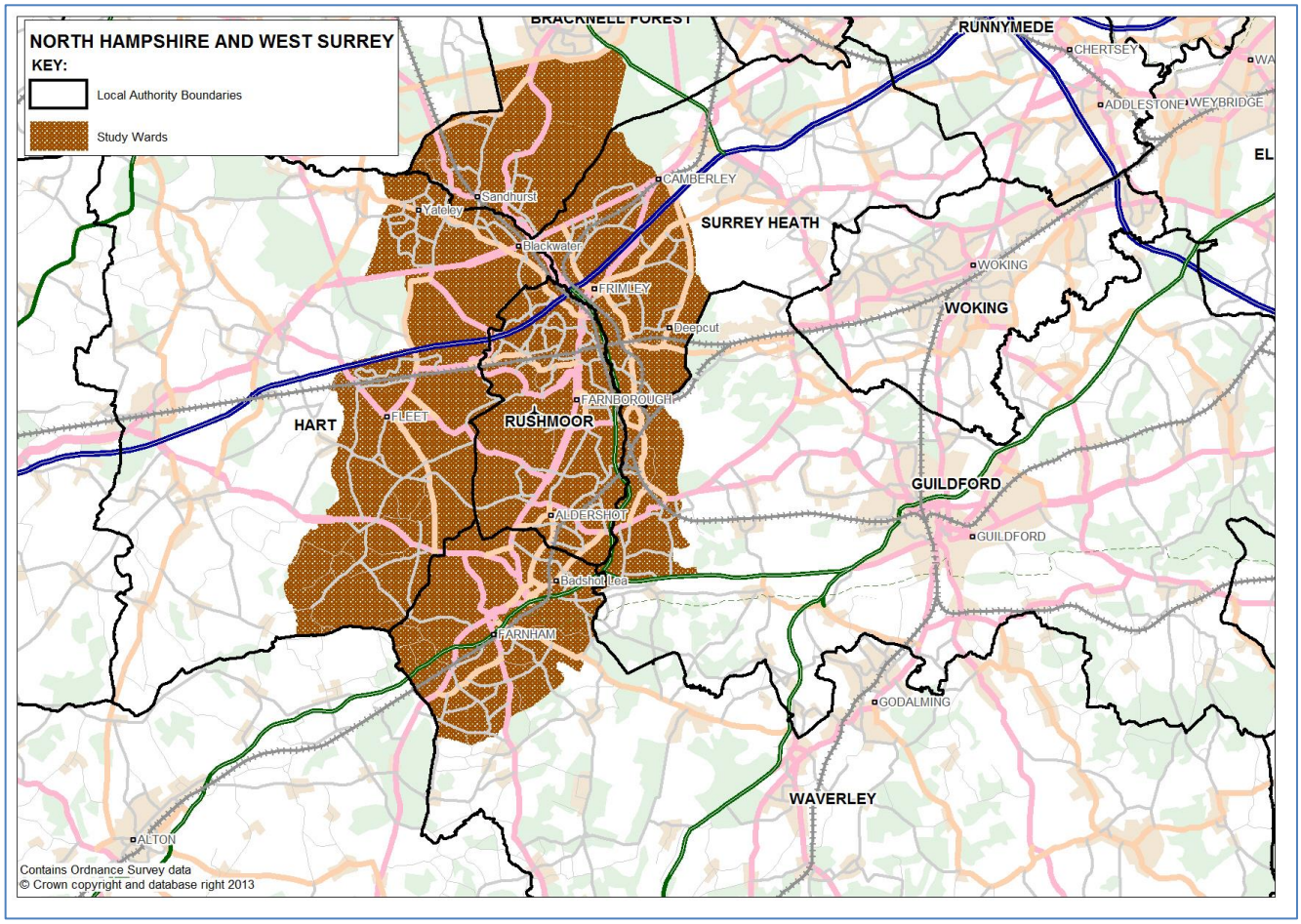
A2.80 Analysis set out in the following sections of this report support the particular importance of Hart, Rushmoor and Surrey Heath working together, and is the reason why these three authorities have chosen to work together in preparing a joint SHMA.

A2.81 In terms of the data analysis in the SHMA we analyse and present data for the following areas:

- Hart
- Rushmoor
- Surrey Heath
- The housing market area (all three authorities)
- South East
- England

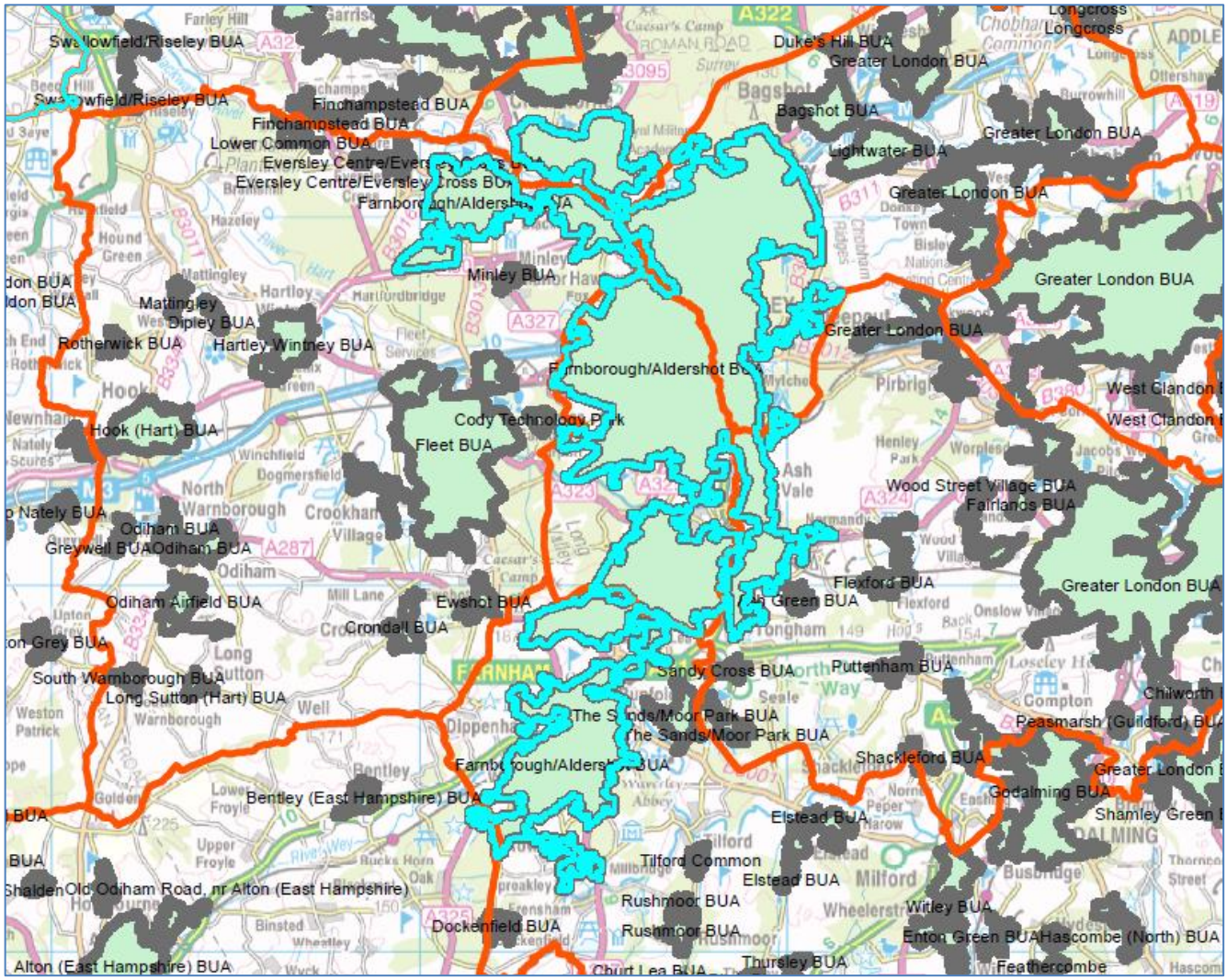
A2.82 Data is presented for the current position –2013 - though some datasets rely on Census 2011 data. The report also analyses past trends with a focus particularly on the last 10 year; though the report examines trends in demographic and tenure patterns over the last 20-30 years since this period takes in a full economic and housing market cycle. The report present demographic projections up to 2033 and provides figures for individual years so that the analysis can be used by the different authorities for their different planning periods.

Annex 1: Ward Based Definition of Blackwater Valley



Source: Wessex Economics

Annex 2: ONS Defined Farnborough – Aldershot Urban Area



Source: Rushmoor Borough Council

Appendix 3: Projection Methodology

Introduction

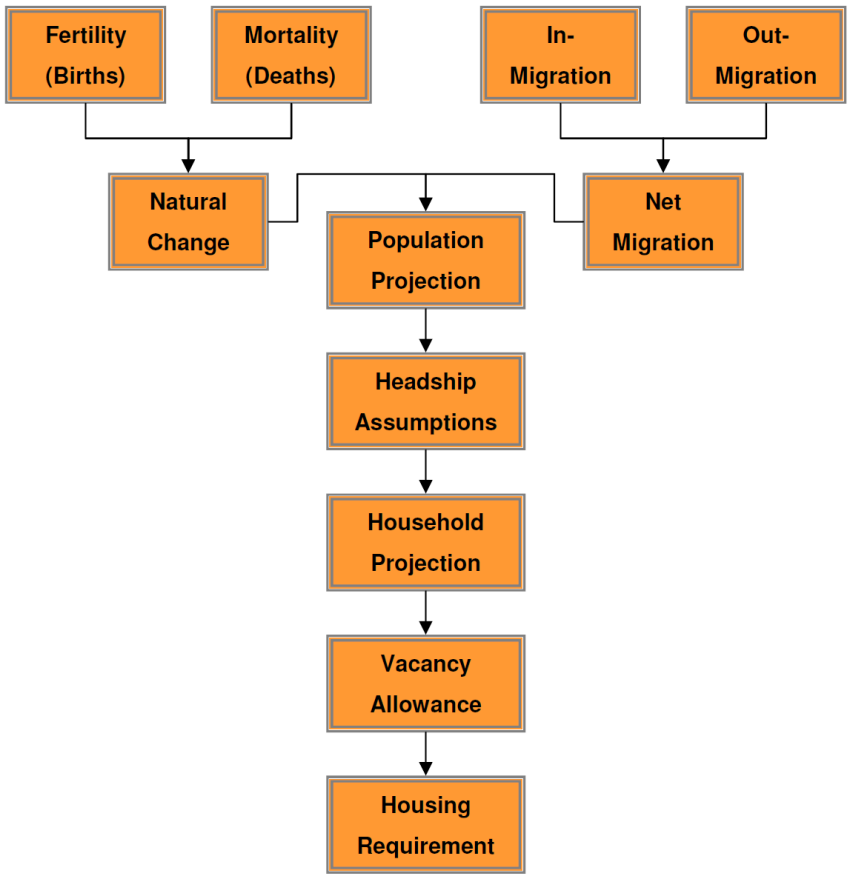
A3.1 The methodology used to determine population growth and hence housing requirements is based on standard population projection methodology consistent with the methodology used by ONS and CLG in their population and household projections. The approach establishes the current population and how will this change in the period from 2011 to 2031/2036. 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

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

A3.2 Figure A3.1 shows the key stages of the projection analysis through to the demographically based assessment of housing requirements.

Figure A3.1: Overview of Methodology



Projections Run

A3.3 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 CLG advice of August 2013 and are listed below:

- PROJ 1 (2011-based ONS and CLG projections rolled-forward to 2031/36)
- PROJ 2 (2011-based ONS and CLG projections updated to take account of more recent data about population growth)
- PROJ 2A (Linked to PROJ 2 above with a reduced household formation constraint)
- PROJ 3 (Linked to employment scenario based on Experian employment growth projections)
- PROJ 4 (Linked to employment scenario based on trends in employment growth in the 1998-2008 period)
- PROJ 5 (Linked to employment scenario based on a midpoint between the figures in PROJ 3 and PROJ 4 above)

Past Population Dynamics

A3.4 Before describing the projection process and key inputs it is of interest to study past population growth and the components of change. Figure A3.2 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. Subsequent Figures provide the same data for each of the individual local authorities.

Figure A3.2: Components of population change (2001-12) - 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		1,252

Source: ONS Components of Change

A3.5 The information in Figure A3.2 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 very slightly and levelled off in the region of 1,500-1,600 per annum. This trend is consistent with that seen in many areas where relatively high birth rates have driven a greater level of population growth than was observed earlier in the past decade.
- 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 per annum). From 2004/5 to 2006/7 there was net in-migration (averaging about 560 per annum). The last five years generally 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 in 2004/5 and 646 in 2005/6. In the more recent past, the data shows net international out-migration in three of the last four years although the one positive year (2009/10) shows a level of net in-migration in excess of the level of net out-migration seen for the other three years
- The other changes are relatively minor in number compared to the migration figures although the figures are quite high compared with many other areas where JGA have carried out a similar analysis. 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 higher figures in the HMA than elsewhere.
- 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 most probable 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 2011/12 as there is no Census data against which to measure whether or not population change has been over- or under-estimated.

Figure A3.3: Components of population change (2001-12) - 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	-	500

Source: ONS

Figure A3.4: Components of population change (2001-12) - 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	-	516

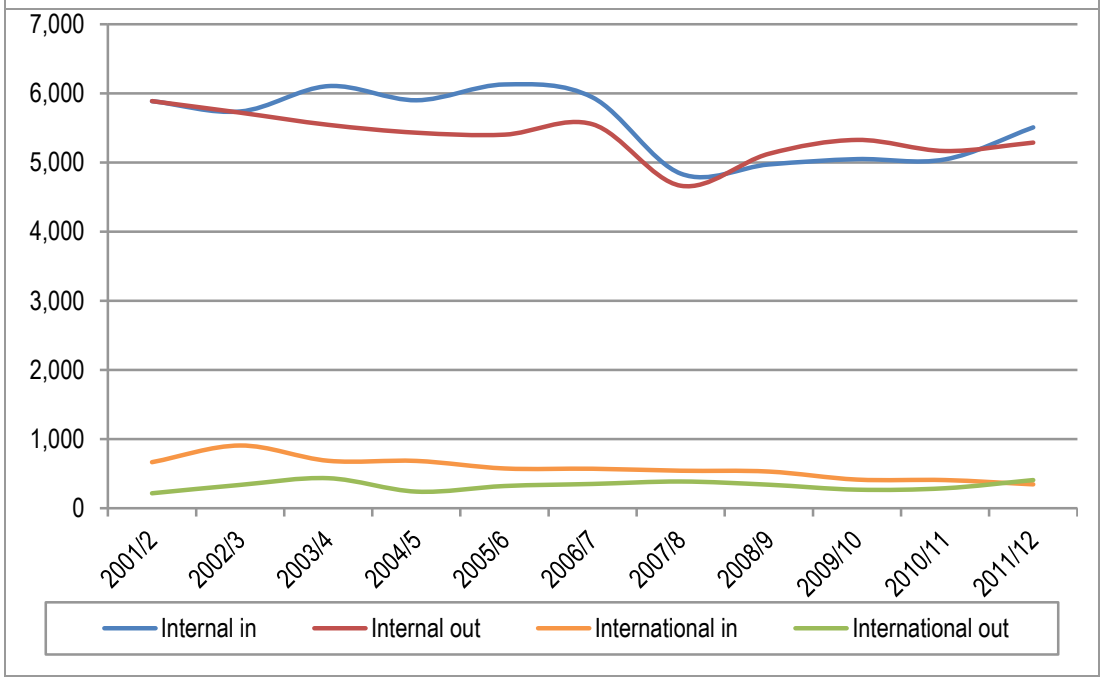
Source: ONS

Figure A3.5: Components of population change (2001-12) – 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		236

Source: ONS

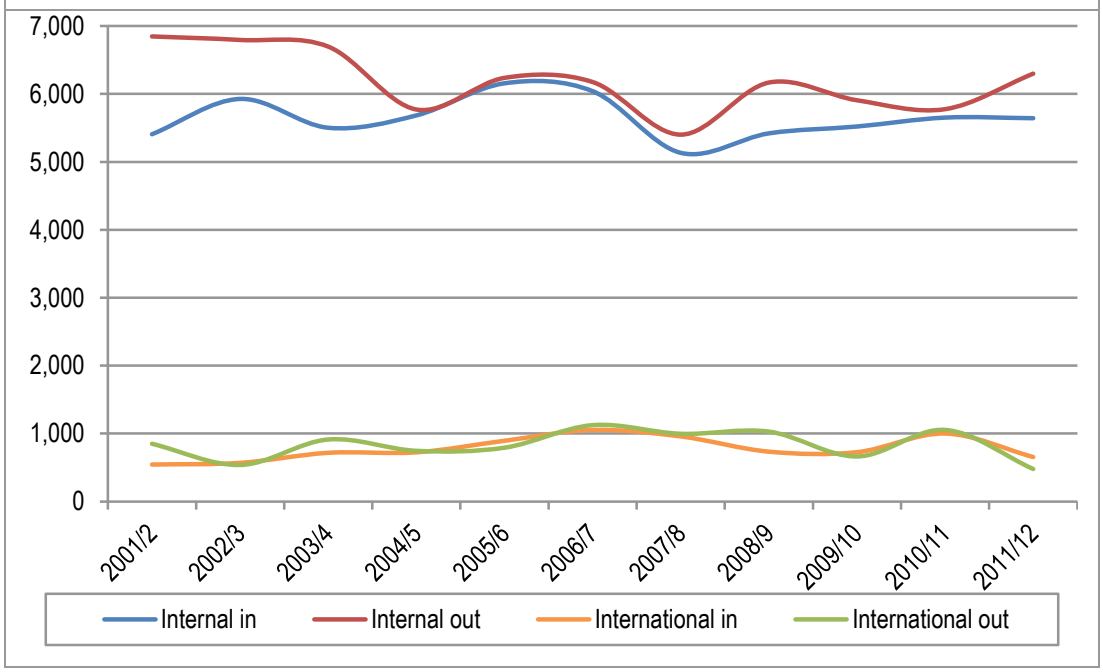
A3.6 Overall the key finding from this analysis is that migration has fluctuated significantly over time. This makes it difficult to develop a demographic trend based projection with absolute confidence. The fluctuations in migration are more clearly illustrated in Figures A3.6, A3.7 and A3.8 which separate 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 A3.6: Past migration trends by component and type (2001-12) - Hart



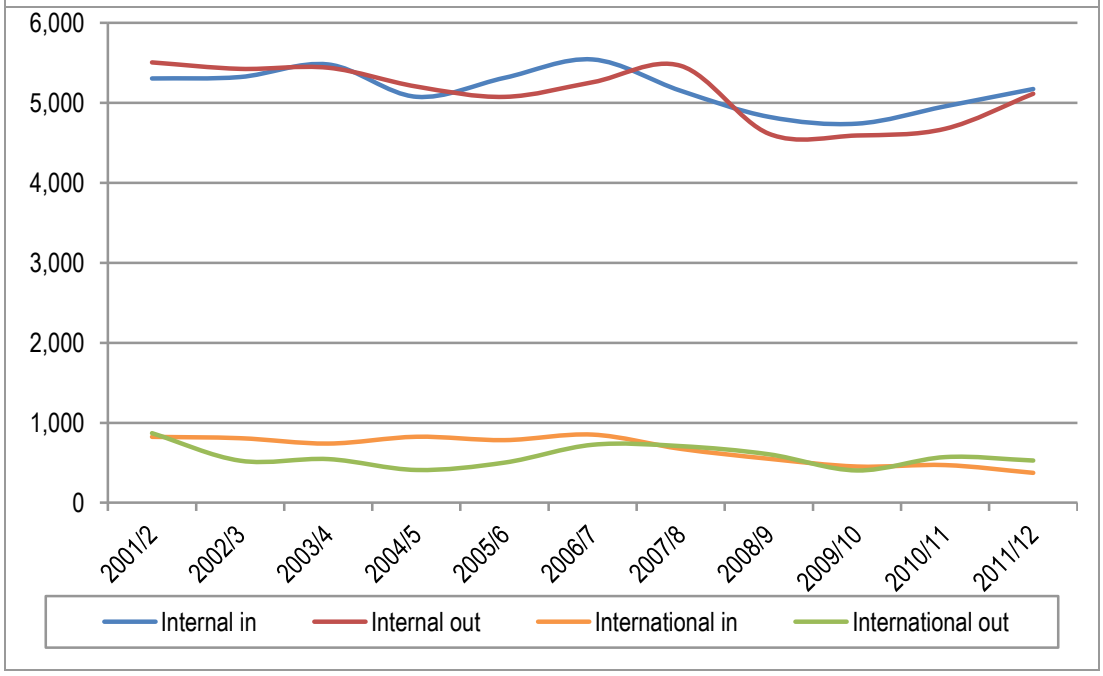
Source: ONS Components of Change

Figure A3.7: Past migration trends by component and type (2001-12) - Rushmoor



Source: ONS Components of Change

Figure A3.8: Past migration trends by component and type (2001-12) – Surrey Heath



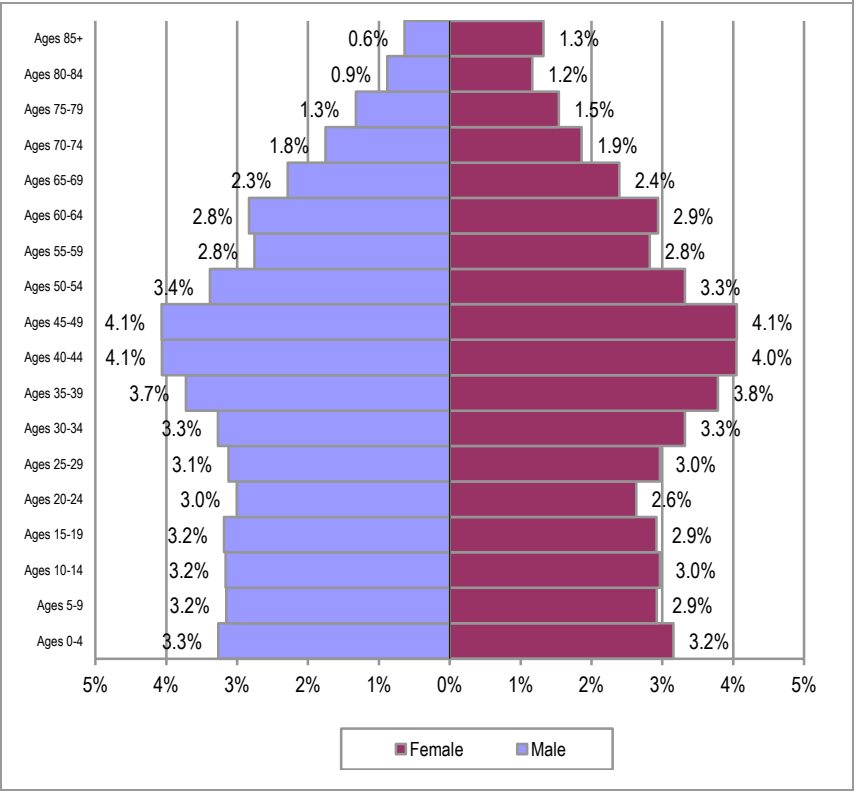
Source: ONS Components of Change

Baseline Population

A3.7 The baseline for the projections in this report are the 2011 figures, with the projection run for each year over the period up to 2036 (and core outputs provided in the report to 2031). The estimated population profile as of 2011 has been taken from ONS mid-year population estimates. The overall population in 2011 is estimated to be 272,400 with slightly more females than males.

Figure A3.9: Population of HMA (5 year age bands) – 2011

Age group	Male	Female
Ages 0-4	8,895	8,604
Ages 5-9	8,595	7,956
Ages 10-14	8,619	8,088
Ages 15-19	8,676	7,942
Ages 20-24	8,189	7,169
Ages 25-29	8,501	8,088
Ages 30-34	8,907	9,047
Ages 35-39	10,144	10,314
Ages 40-44	11,059	11,026
Ages 45-49	11,074	11,036
Ages 50-54	9,212	9,038
Ages 55-59	7,507	7,683
Ages 60-64	7,712	8,003
Ages 65-69	6,225	6,526
Ages 70-74	4,777	5,073
Ages 75-79	3,610	4,195
Ages 80-84	2,395	3,176
Ages 85+	1,731	3,602
All Ages	135,828	136,566



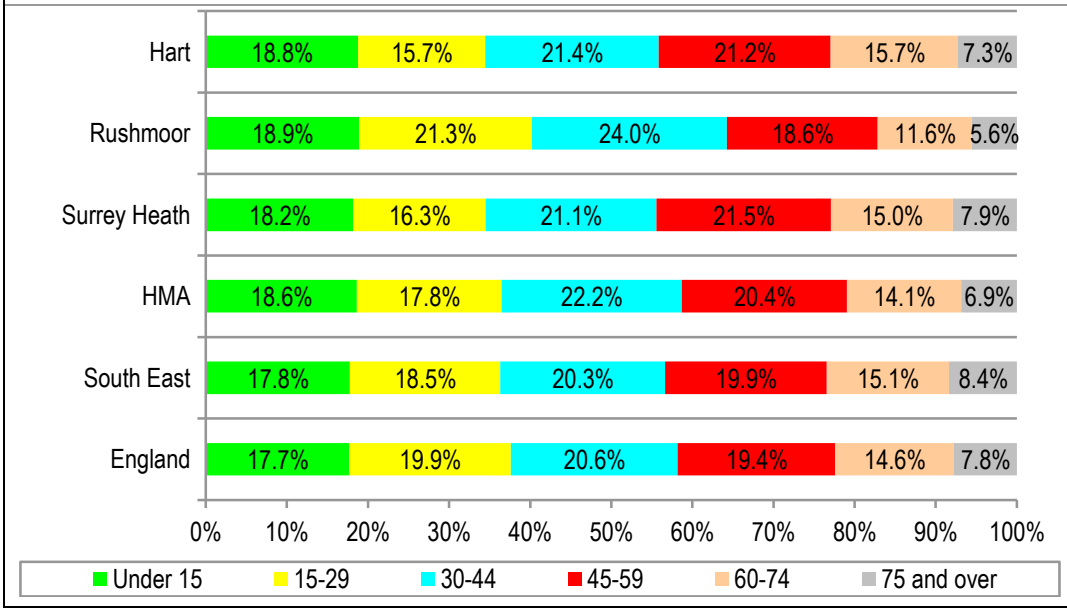
Source: ONS mid-year population estimates

A3.8 Figures A3.10 and A3.11 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 86,400 in Surrey Heath to 94,400 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. There are some differences within each of the different local authorities. Rushmoor in particular has a younger population with 40% 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 23% of the population is aged 60 or over compared with just 17% in Rushmoor.

Figure A3.10 Comparison of population profile in different local authorities (2011)				
Age group	Hart	Rushmoor	Surrey Heath	HMA
Under 15	17,216	17,823	15,718	50,757
15-29	14,371	20,120	14,074	48,565
30-44	19,606	22,683	18,208	60,497
45-59	19,413	17,549	18,588	55,550
60-74	14,400	10,935	12,981	38,316
75+	6,656	5,244	6,809	18,709
Total	91,662	94,354	86,378	272,394

Source: 2011-Mid-Year population estimates

Figure A3.11: Population age profile (2011)



Source: 2011-Mid-Year population estimates

Fertility and Mortality Rate Assumptions

A3.9 For modelling of fertility we have used the rates contained within the ONS 2010-based population projections (with very small adjustments to ensure consistency with the 2011-based SNPP). In all areas fertility rates are expected to drop quite notably through the projection period. We also interrogated the ONS 2010-based projections with regard to death rates; this indicates that life expectancy is expected to increase over time for both males and females.

A3.10 Figure A3.12 shows figures for the 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, though highest in Rushmoor and lowest in Hart. 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.

A3.11 There is no evidence to suggest that either the fertility or mortality estimates used by ONS are

unreasonable and note 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 A3.12: Fertility and mortality assumptions (key periods)			
	Hart	Rushmoor	Surrey Heath
TFR – 2011/12	2.08	2.24	2.19
TFR – 2030/31	1.91	2.03	1.98
Male e0 – 2011/12	80.8	79.2	80.3
Male e0 – 2030/31	84.5	83.0	83.6
Female e0 – 2011/12	84.9	82.8	83.6
Female e0 – 2030/31	88.1	86.3	86.9

Source: Derived from ONS 2010-based SNPP

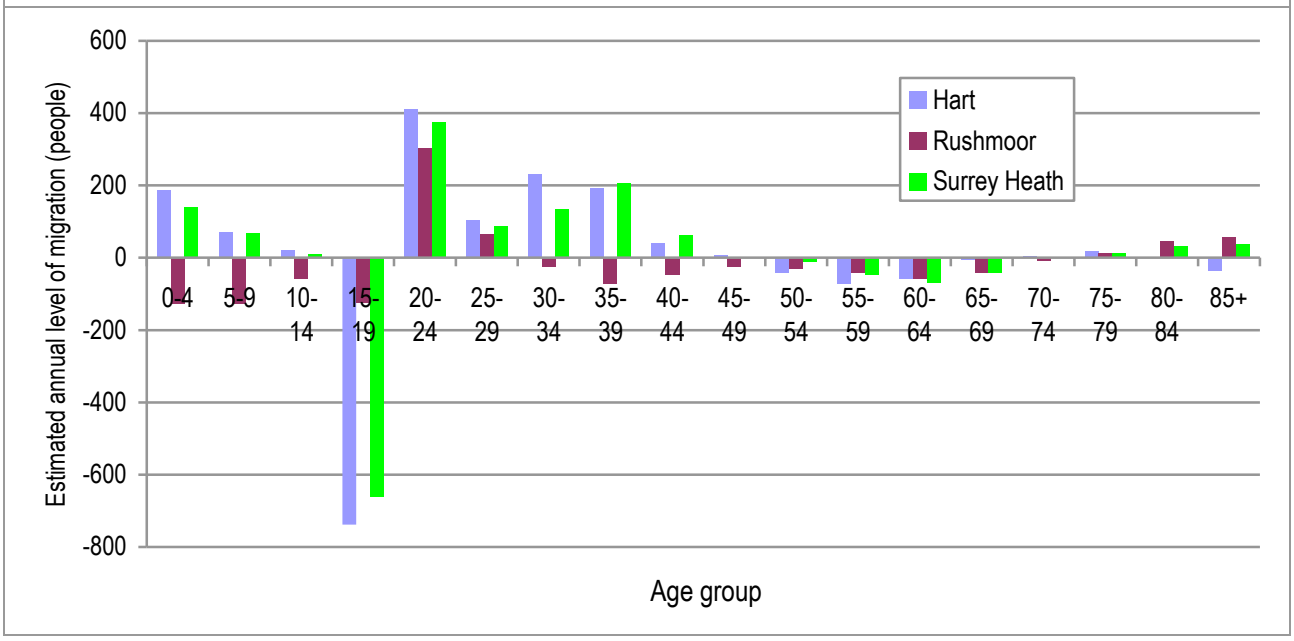
Migration Assumptions

A3.12 For the purposes of understanding the profile of migrants, data from the ONS 2010-and 2011-based sub-national population projections has been used. Over the period from 2011 to 2031, the data shows an average annual level of net in-migration of 371 people (this is based on the PROJ 2 which uses ONS data with a small adjustment due to over or under-estimations of population growth shown in the 2011 Census). Figure A3.13 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.

A3.13 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. The data for Rushmoor also indicates an expected net in-migration of older people (aged 80 and over). The general pattern of migration observed suggests a movement of families from Rushmoor to other parts of the HMA.

A3.14 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 our 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.

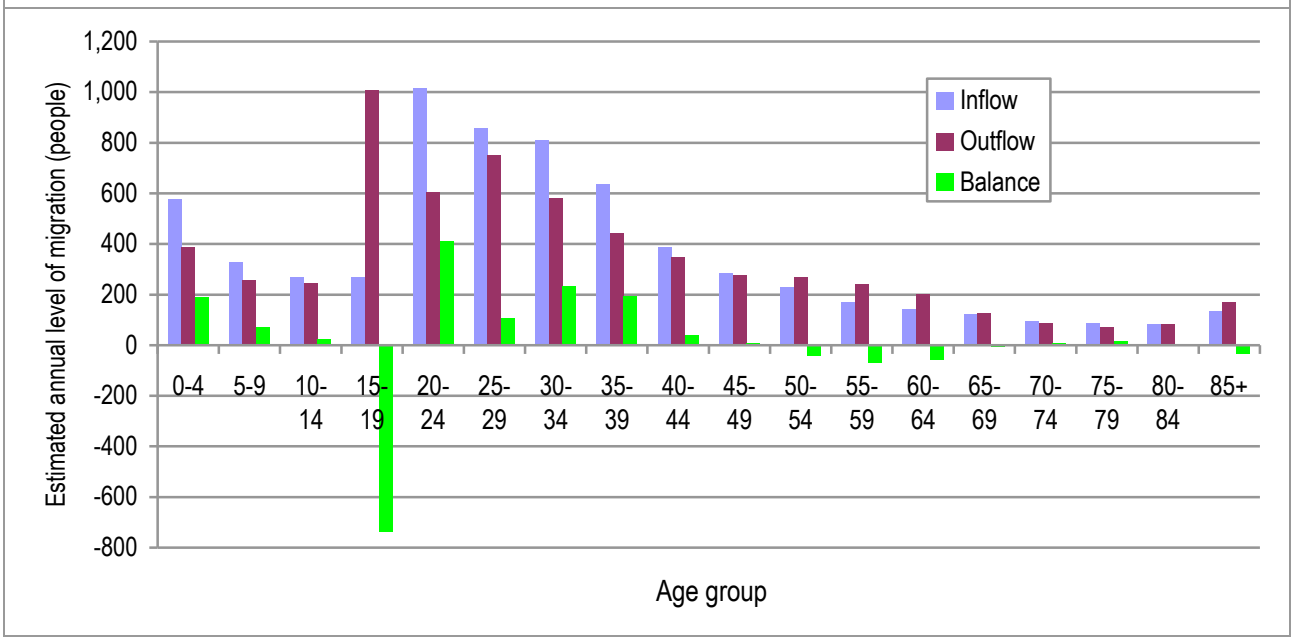
Figure A3.13: Estimated annual level of net migration by five-year age band (2011-2031) – HMA



Source: Derived from ONS 2010- and 2011-based population projections

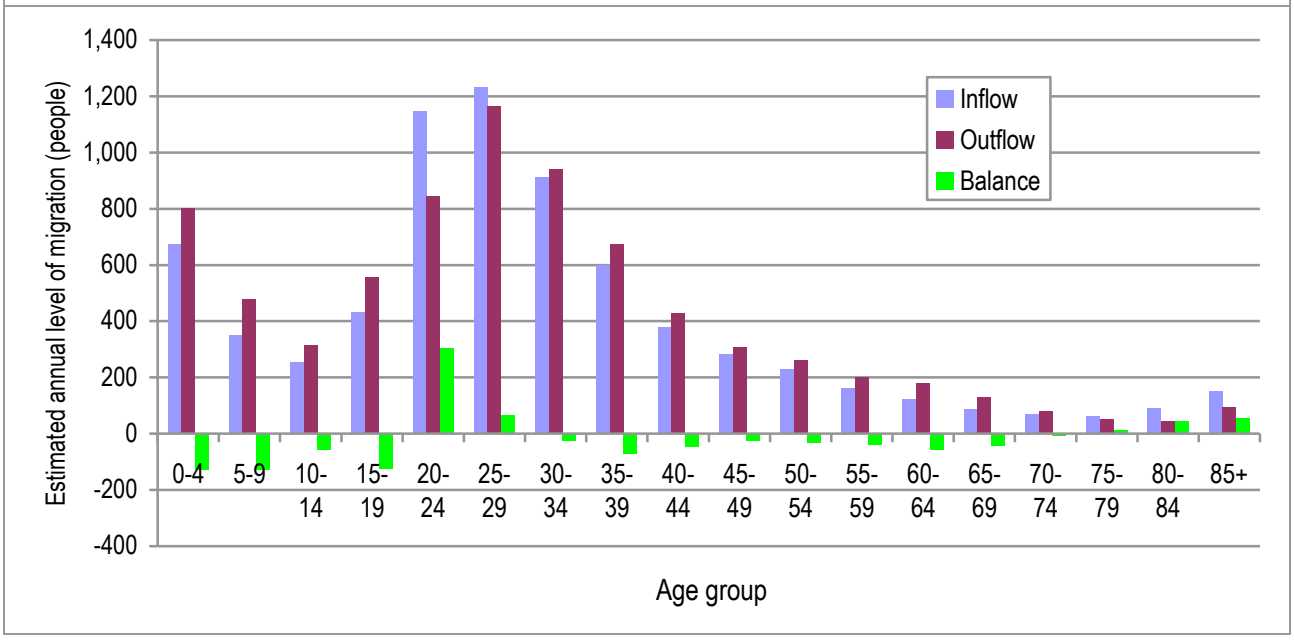
A3.15 Figures A3.14, A3.15 and A3.16 show the migration data for individual local authorities. As well as showing net migration these figures show levels of in- and out-migration separately. A similar analysis is not possible for the whole HMA as some of the migration movements will be from one local authority in the HMA to another.

Figure A3.14: Estimated annual level of net migration by five-year age band (2011-2031) – Hart



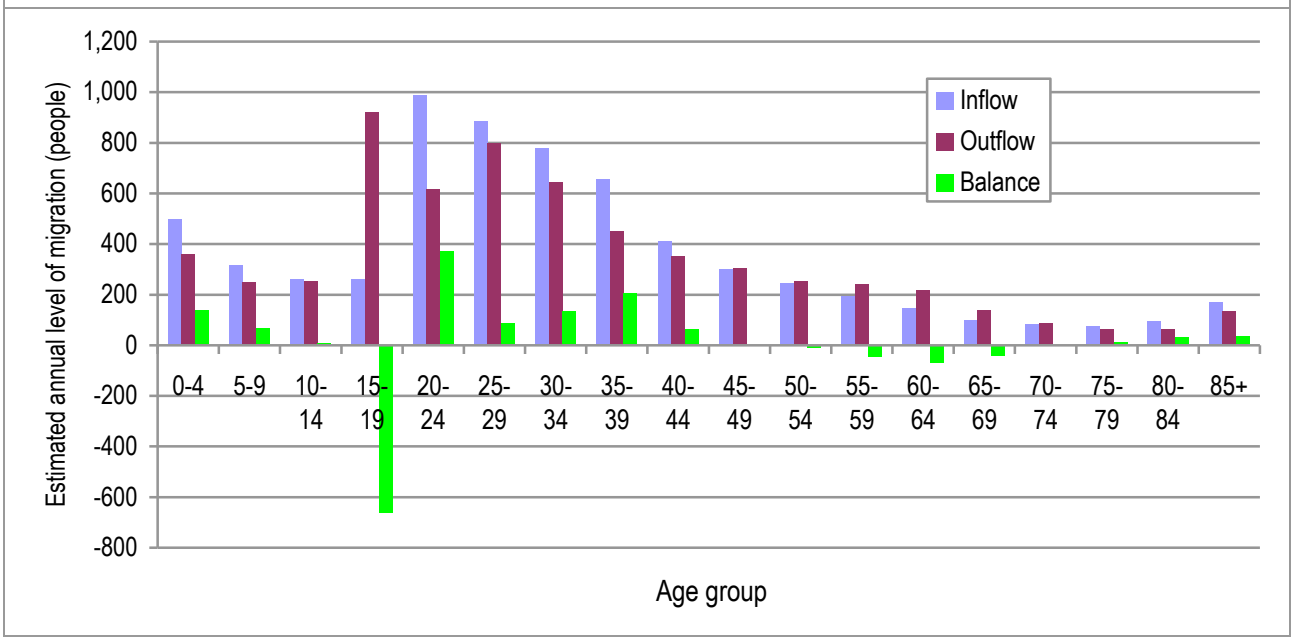
Source: Derived from ONS 2010- and 2011-based population projections

Figure A3.15: Estimated annual level of net migration by five-year age band (2011-2031) – Rushmoor



Source: Derived from ONS 2010- and 2011-based population projections

Figure A3.16: Estimated annual level of net migration by five-year age band (2011-2031) – Surrey Heath



Source: Derived from ONS 2010- and 2011-based population projections

Workforce Assumptions

A3.16 Changes in demographic structure of an area generate changes in the available workforce of an area – those willing and able to work - as the population of people of working age changes. The next stage of the projection process entails estimating how the working age population will change with each of the demographic projections and hence how the change in the available workforce. Figure A3.17 illustrates the process of arriving at estimates of the available workforce. The process is set out in the figure

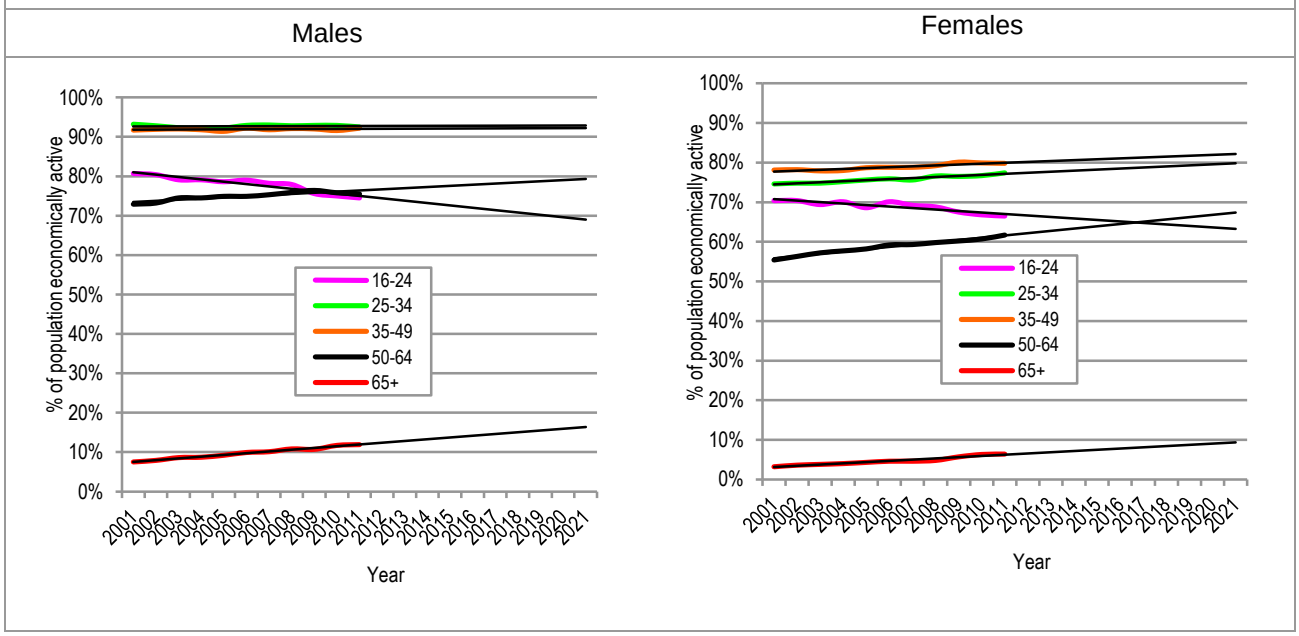
below.

Figure A3.17: Workforce Projections

A3.17 The first stage of the process is to establish working patterns in each local authority area. Data from the 2011 Census data for the number of people in employment in each of five core age groups (and by sex) has been used. To establish the future size of the workforce consideration also needs to be given to how economic activity rates will change in future for different age groups. This includes consideration of whether people some people will work longer due to changes in pensionable age, improving health, and a desire to boost incomes to compensate for inadequate pension income.

A3.18 Figure A3.18 shows past trends in economic activity rates (nationally) from 2001 to 2011. The black lines show the pattern of change if these trends are projected forward to 2021. The data shows that there have been some notable increases in activity rates for older age groups over the past decade (and indeed for all age groups other than 16-24 in the case of females). In examining the future availability of labour to meet expected employment growth, it has been assumed that these trends continue into the future to 2031. The only exceptions to this are: a) for the 16-24 age group, the decrease in economic activity rates are largely due to increased student numbers and this trend is not expected to continue; and b) the change in rates for those aged 65+ have only been applied to the population aged 65-74.

Figure A3.18: Past trends and projected change to economic activity rates (national)



Source: Derived from Labour Force Survey (LFS) data

A3.19 Figure A3.19 shows the employment rates used for modelling from 2011 to 2031. From the population modelling exercise it is estimated that in mid-2011 there were 145,680 people in employment in the

HMA area, an employment rate of 73.0% (this being the percentage of people age 16-74 who are in work). Based on the assumed trend in economic activity rates, it is expected that the employment rate will rises to 76.7% by 2031.

Figure A3.19: Employment Rates by Age and Sex

Area	Sex	Year	Aged 16 to 24	Aged 25 to 34	Aged 35 to 49	Aged 50 to 64	Aged 65 to 74
Hart	Male	2011	64.5%	93.7%	95.4%	81.8%	29.8%
		2031	64.5%	94.1%	96.4%	87.5%	47.0%
	Female	2011	66.0%	81.8%	80.6%	65.8%	18.7%
		2031	66.0%	86.8%	85.3%	78.2%	33.7%
Rushmoor	Male	2011	64.9%	91.8%	91.7%	79.6%	25.3%
		2031	64.9%	92.2%	92.7%	85.3%	42.5%
	Female	2011	61.4%	78.4%	81.0%	65.9%	18.8%
		2031	61.4%	83.4%	85.7%	78.3%	33.8%
Surrey Heath	Male	2011	59.9%	90.2%	92.7%	81.6%	31.4%
		2031	59.9%	90.6%	93.7%	87.3%	48.6%
	Female	2011	62.7%	81.0%	80.2%	67.8%	20.0%
		2031	62.7%	86.0%	84.9%	80.2%	35.0%

Source: Derived from a range of data sources (including 2011 Census and LFS)

Household (and Housing) Growth Projections

A3.20 Having estimated the population size and the age/sex profile of the population the next step in the process is to convert this information into estimates of the number of households in the area. To do this the concept of headship rates is used. Headship rates can be described in their most simple terms as the number of people who are counted as heads of households (or in this case the more widely used Household Reference Person (HRP)).

A3.21 For the purposes of this analysis the start point is data contained in the 2011-based CLG household projections about the relationship between the total population in an age group and the number of household reference persons (HRPs) in that age group. Because the 2011-based CLG household projections only go up to 2021 it has been necessary to make assumptions for the remainder of the projection period. The analysis is of projected changes to 2021 is based on a linear basis based on the headship rate assumptions in each of 2011 and 2021 in the CLG projections.

A3.22 Whilst the 2011-based CLG household projections contain headship rates based on trends from 2001 to 2011 it is also necessary to consider the extent to which household formation in the HMA may have been constrained by housing market factors such as the difficulty in obtaining mortgage finance. Such a check is required by the CLG advice of August 2013.

A3.23 The extent of any suppression of household formation can be gauged through a comparison between 2008- and 2011-based household projections. The 2008-base projections were produced at a time when the housing market was fairly buoyant and can be considered to provide an unconstrained view of household formation whilst the 2011-based data looked at a trend period including the economic

downturn and may well therefore include some degree of constraint.

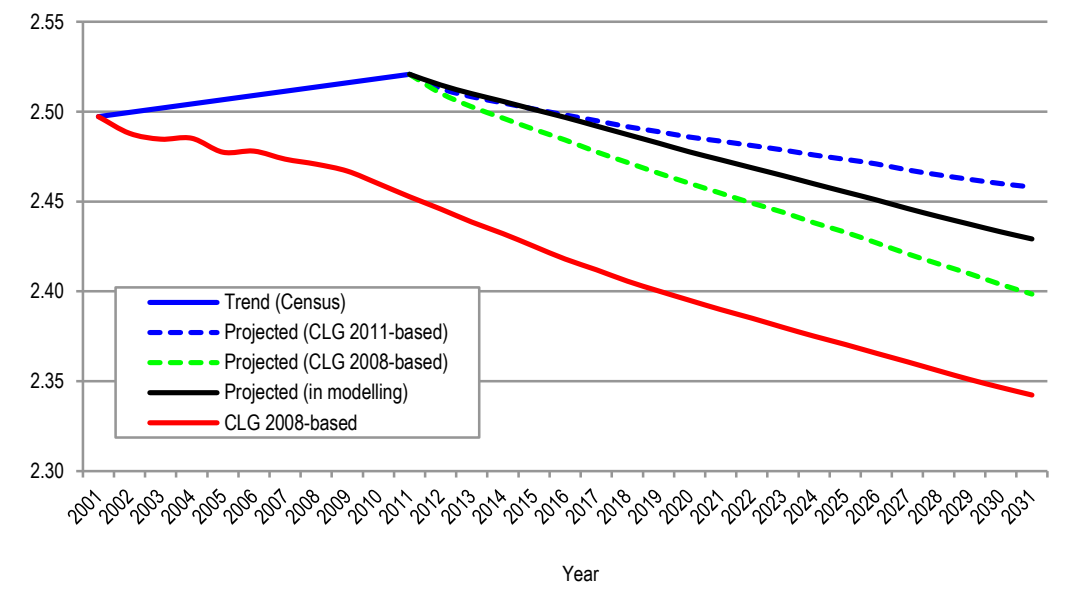
A3.24 By looking at expected average household sizes (rebased to the same 2011 population profile) it is possible to see if household formation has fallen below what might have been expected. This does appear to be the case in the HMA. The 2011-based projections show an average household size of 2.52 whilst the 2008-based projections anticipated a figure of 2.45. In projecting forward it is important to consider the extent to which any constraint is expected to continue and make allowances for housing market recovery where relevant.

A3.25 However, despite there being some evidence through analysis of average household sizes of suppressed household formation it is not entirely clear to what extent this is due solely to households being unable to form and how much might be due to other factors. A recent (September 2013) study produced by CCHPR on behalf of the TCPA sheds some light on this issue, stating:

"The central question for the household projection is whether what happened in 2001 – 11 was a structural break from a 40-year trend; or whether household formation was forced downwards by economic and housing market pressures that are likely to ease with time. At the time of the 2011 Census, the British economy was still in recession and the housing market was depressed. The working assumption in this study is that a considerable part but not all of the 375,000 shortfall of households relative to trend was due to the state of the economy and the housing market. 200,000 is attributed to over-projection of households due to the much larger proportion of recent immigrants in the population, whose household formation rates are lower than for the population as a whole. This effect will not be reversed. The other 175,000 is attributed to the economy and the state of the housing market and is assumed to gradually reverse."

A3.26 On the basis of this analysis it can broadly be suggested that half of the lack of expected households is due to market factors, with roughly half attributable to other issues (notably international migration). The approach taken in modelling data for the HMA has been to take a pragmatic approach that future household formation will fall somewhere between figures in the 2011-based CLG projections (which appear to project forward a trend of constraint) and the data in the 2008-based figures (which are largely unconstrained). This is shown in Figure A3.20. The main demographic modelling anticipates that average household size will fall from 2.52 persons per household in 2011 to 2.43 in 2031.

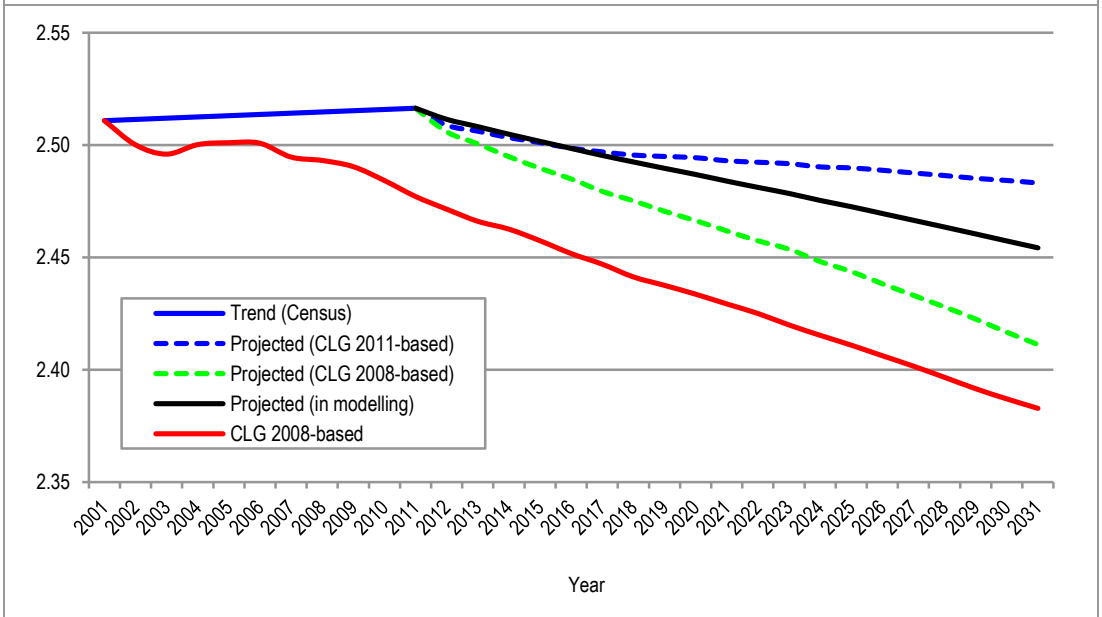
Figure A3.20: Past and projected trends in Average Household Size – HMA



Source: Derived from ONS and CLG data

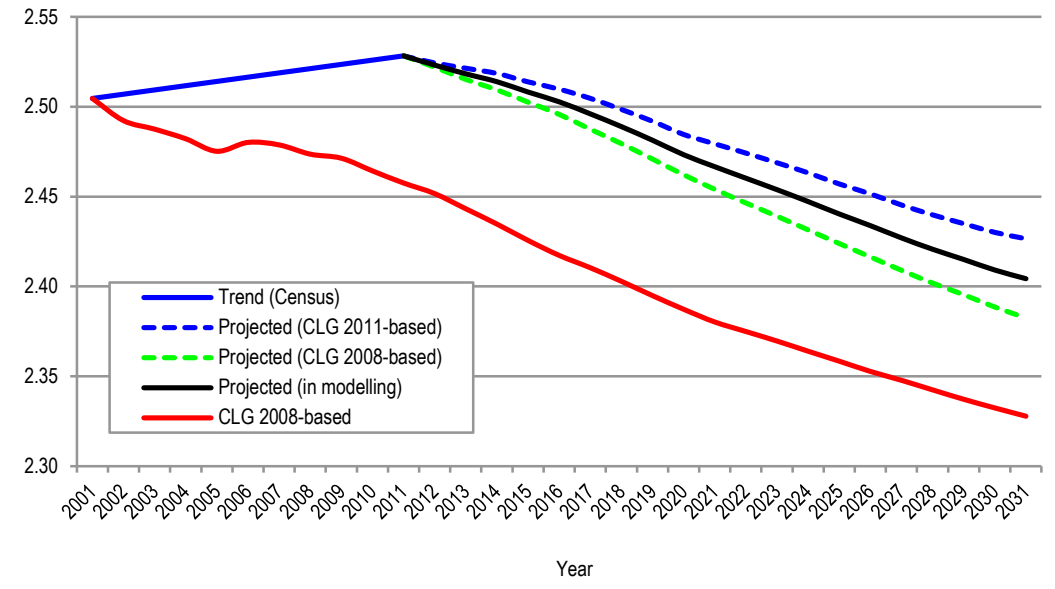
A3.27 Figures A3.21, A3.22. and A3.23 show the projected average household size used in preparing the projections of household numbers. The projections anticipate that average household size will fall over time from 2011. The CLG data shows sharp changes from year to year. In developing the projections for this study the decline in average household sizes over the decade has been smoothed. This is particularly evident in Surrey Heath and to a lesser extent Hart. The smoothing does not have any impact on the outputs when taken through to 2031 (or beyond to 2036).

Figure A3.21: Past and projected trends in Average Household Size – Hart



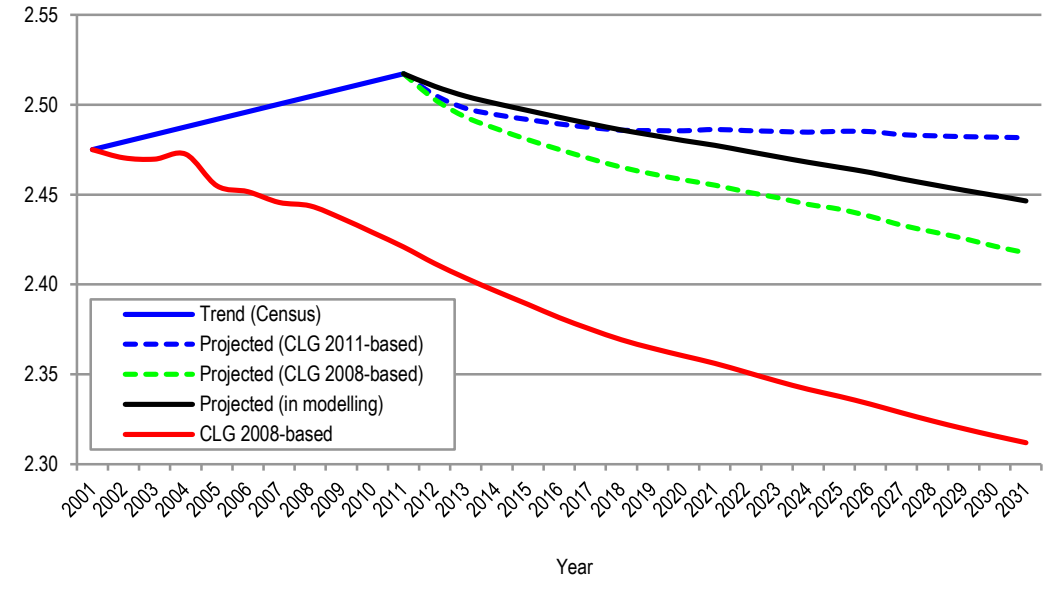
Source: Derived from ONS and CLG data

Figure A3.22: Past and projected trends in Average Household Size – Rushmoor



Source: Derived from ONS and CLG data

Figure A3.23: Past and projected trends in Average Household Size – Surrey Heath



Source: Derived from ONS and CLG data

A3.28 Figure A3.24 shows headship rates derived from the analysis for each of the key periods of 2011 and 2031. The data shows that whilst most headship rates remain at a fairly constant level over time there are a number of groups where notable changes are projected to occur (both in an upward and downward direction and particularly in relation to females).

Figure A3.24: Estimated Headship Rates by Age and Sex (2011 and 2031)

Age group	Hart				Rushmoor				Surrey Heath			
	Male		Female		Male		Female		Male		Female	
	2011	2031	2011	2031	2011	2031	2011	2031	2011	2031	2011	2031
Ages 15-19	0.7%	0.7%	0.7%	1.0%	1.4%	1.3%	1.1%	1.3%	1.6%	1.3%	1.4%	1.4%
Ages 20-24	16.6%	15.0%	6.4%	7.5%	22.7%	20.7%	7.0%	7.8%	15.6%	13.9%	8.3%	9.2%
Ages 25-29	52.5%	45.5%	12.3%	14.1%	54.7%	46.3%	10.7%	11.7%	48.5%	42.3%	14.3%	16.0%
Ages 30-34	77.2%	69.1%	13.6%	16.8%	81.8%	75.6%	18.3%	22.0%	78.6%	73.8%	15.0%	19.4%
Ages 35-39	86.9%	84.0%	13.3%	12.9%	88.0%	88.8%	18.3%	21.4%	84.7%	80.5%	16.2%	19.5%
Ages 40-44	93.5%	92.5%	13.7%	6.9%	91.2%	90.6%	22.6%	26.3%	93.2%	92.9%	14.5%	13.0%
Ages 45-49	94.8%	93.1%	16.6%	16.6%	91.2%	91.8%	21.6%	21.0%	94.1%	93.1%	16.4%	15.4%
Ages 50-54	95.9%	94.1%	16.2%	17.7%	91.3%	87.8%	24.4%	27.6%	95.4%	94.9%	17.3%	17.5%
Ages 55-59	97.4%	96.5%	17.5%	21.1%	96.4%	96.4%	24.9%	29.1%	96.4%	96.0%	18.0%	21.9%
Ages 60-64	97.8%	97.2%	20.5%	23.7%	97.1%	97.0%	29.9%	34.8%	95.9%	94.2%	19.6%	22.1%
Ages 65-69	98.4%	97.7%	23.9%	26.6%	97.7%	97.1%	37.2%	42.7%	97.4%	97.0%	25.6%	28.4%
Ages 70-74	98.7%	98.8%	31.9%	31.2%	98.7%	99.0%	46.9%	46.2%	97.9%	97.6%	31.6%	29.7%
Ages 75-79	97.8%	98.3%	47.6%	39.9%	97.7%	98.3%	56.1%	49.7%	96.5%	96.2%	42.1%	34.1%
Ages 80-84	97.5%	98.6%	60.0%	46.3%	98.0%	99.4%	69.5%	58.7%	96.6%	97.5%	57.8%	47.0%
Ages 85+	94.9%	98.1%	76.4%	68.5%	95.7%	97.5%	77.7%	70.0%	93.8%	95.9%	71.5%	61.5%

Source: Derived from CLG 2011- and 2008-based household projections

A3.29 When applying these headship rates to the population an estimated number of households in 2011 of 105,943 is derived. This figure is consistent with the number of households shown in the 2011 Census and the 2011-based household projections (CLG).

A3.30 In converting an estimated number of households into requirements for additional dwellings we have also factored in a small vacancy allowance which is normal to allow for movement of households between properties. For the analysis we have taken information from the 2011 Census about the number of unoccupied household spaces to derive the vacancy figure. This source suggests a vacancy rate of 2.9% in Hart, 3.8% in Rushmoor and 3.6% for Surrey Heath. It is assumed that these figures will be reflective of what can be achieved in new housing stock and includes an allowance for second homes.

Appendix 4: Detailed Projection Outputs

Introduction

A4.1 This section provides detailed outputs of the modelling under each of the scenarios run to look at population growth, employment change and housing requirements. All the projections examine the period from 2011 to 2031 and onward to 2036 with outputs available for each year of the projection (although these have generally been summarised for five year periods). The projections run are summarised in the Figure below.

Figure A4.1: Description of Projections used for Demographic Modelling

Projection	Description
PROJ 1	Based on the 2011-based ONS and CLG projections rolled-forward to 2031/36
PROJ 2	Based on 2011-based ONS and CLG projections updated to take account of more recent data about population growth
PROJ 2A	Linked to PROJ 2 above with a reduced household formation constraint
PROJ 3	Linked to employment growth shown in an Experian economic forecast
PROJ 4	Linked to trends in employment growth in the 1998-2008 period
PROJ 5	Linked to a midpoint between the figures in PROJ 3 and PROJ 4 above

Population Projections

A4.2 Figure A4.2 shows the expected growth in population under each of the scenarios. (PROJ 2 and 2A are not shown separately due to population growth figures being exactly the same under these two projections). Under demographic assumptions linked to the SNPP (PROJ 1 and 2) the population of the HMA is expected to increase by between 39,800 and 44,200 people over the 25-year period; this represents population growth of 15%-16%. The difference between the two projections is driven by the increased migration assumptions linked to a positive unattributable population change in the HMA recorded by ONS.

A4.3 If new homes are built on a scale required to meet the full labour force requirements associated with Experian employment growth scenario (PROJ 3), population growth is significantly higher than under the employment scenario associated with the historic trend employment scenario (PROJ 4). The level of population growth associated with the historic employment trend scenario entails a similar level of population growth as the main demographic based projection (PROJ 2). Taking a midpoint job growth scenario (PROJ 5) is associated with population growth of 57,200 (21%) over the full 25-year projection period 2011-36.

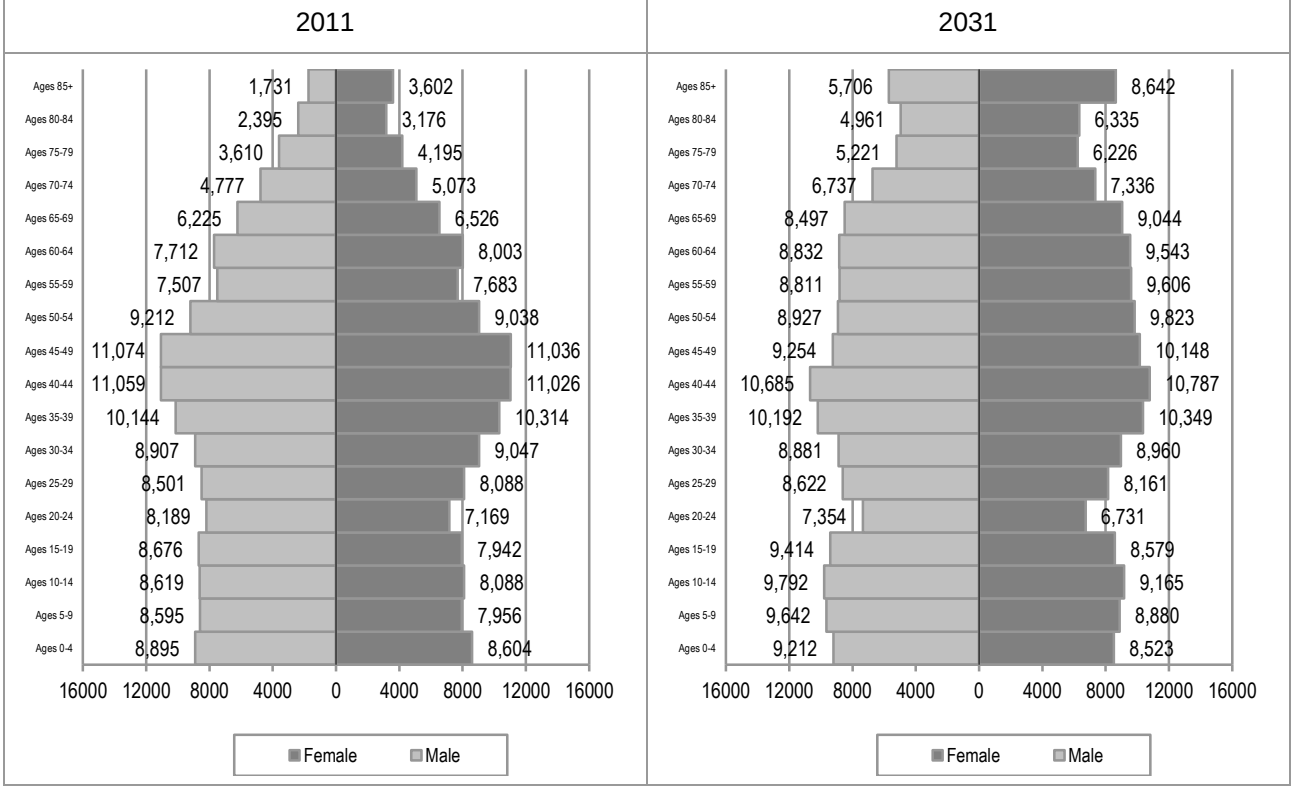
Figure A4.2: Population Estimates 2011 to 2036

	2011	2016	2021	2026	2031	2036
PROJ 1 (2011-based SNPP)	272,394 0.0%	279,582 2.6%	288,012 5.7%	296,279 8.8%	304,113 11.6%	312,144 14.6%
PROJ 2 (2011-based SNPP (updated))	272,394 0.0%	280,332 2.9%	289,604 6.3%	298,786 9.7%	307,578 12.9%	316,600 16.2%
PROJ 3 (Experian job-led)	272,394 0.0%	290,968 6.8%	308,940 13.4%	323,176 18.6%	334,354 22.7%	343,509 26.1%
PROJ 4 (Job trends)	272,394 0.0%	284,039 4.3%	294,196 8.0%	303,480 11.4%	310,202 13.9%	315,672 15.9%
PROJ 5 (Midpoint employment growth)	272,394 0.0%	287,503 5.5%	301,570 10.7%	313,326 15.0%	322,278 18.3%	329,598 21.0%

Population Change Dynamics

A4.4 Figure A4.3 shows population pyramids for 2011 and 2031 under the projection linked to ONS/CLG trends (as updated) – PROJ 2. The 'pyramids' clearly show the growth in population overall and highlight the ageing of the population with a greater proportion of the population expected to be in age groups aged 60 and over (and even more so for older age groups). In particular the oldest age group (85+) shows an increase from 5,333 people to 14,348.

Figure A4.3: Distribution of Population 2011 and 2031 for PROJ 2 (SNPP (updated))



A4.5 Figure A4.4 summarises the findings for key (5 year) age groups under PROJ 2 (SNPP (updated)). The largest growth will be in people aged 65 and over. In 2031 it is estimated that there will be 68,700 people aged 65 and over. This is an increase of 27,400 from 2011, representing growth of 66%. The population aged 85 and over is projected to increase by an even greater proportion, 169%. Looking at the other end of the age spectrum the data shows that there are projected to be around 9% more people aged under 15 with moderate increases (and some decreases) shown for other age groups.

Figure A4.4: PROJ 2 (SNPP (updated)) population change 2011 to 2031 by five year age bands

Age group	Population 2011	Population 2031	Change in population	% change from 2011
Under 5	17,499	17,735	236	1.3%
5-9	16,551	18,522	1,971	11.9%
10-14	16,707	18,957	2,250	13.5%
15-19	16,618	17,992	1,374	8.3%
20-24	15,358	14,085	-1,273	-8.3%
25-29	16,589	16,783	194	1.2%
30-34	17,954	17,842	-112	-0.6%
35-39	20,458	20,540	82	0.4%
40-44	22,085	21,472	-613	-2.8%
45-49	22,110	19,402	-2,708	-12.2%
50-54	18,250	18,750	500	2.7%
55-59	15,190	18,417	3,227	21.2%
60-64	15,715	18,375	2,660	16.9%
65-69	12,751	17,541	4,790	37.6%
70-74	9,850	14,073	4,223	42.9%
75-79	7,805	11,447	3,642	46.7%
80-84	5,571	11,296	5,725	102.8%
85+	5,333	14,348	9,015	169.0%
Total	272,394	307,578	35,184	12.9%

Population in Employment

A4.6 Figure A4.5 shows the estimated number of people living in the HMA who are working under each of the projections (again only PROJ 2 is shown as the figures are identical to those in PROJ 2A). The analysis shows under demographic based assumptions (PROJ 1 & 2) that the number of people working is projected to increase by 20,400 to 22,900 from 2011 to 2036. The projection linked to the Experian job growth scenario (PROJ 3) shows a significantly higher workforce increase of 38,300; whilst the scenario linked to past trends in job growth (PROJ 4) shows an increase in-line with the demographic based figures. Taking a midpoint job growth scenario (PROJ 5) shows an increase in the resident workforce of 30,200 people.

Figure A4.5: Employment Estimates 2011 to 2036

	2011	2016	2021	2026	2031	2036
PROJ 1 (2011-based SNPP)	145,681 0.0%	147,533 1.3%	151,133 3.7%	155,184 6.5%	160,325 10.1%	166,083 14.0%
PROJ 2 (2011-based SNPP (updated))	145,681 0.0%	147,962 1.6%	152,022 4.4%	156,561 7.5%	162,233 11.4%	168,590 15.7%
PROJ 3 (Experian job-led)	145,681 0.0%	154,219 5.9%	163,074 11.9%	170,070 16.7%	177,001 21.5%	183,939 26.3%
PROJ 4 (Job trends)	145,681 0.0%	150,124 3.1%	154,559 6.1%	159,004 9.1%	163,444 12.2%	167,880 15.2%
PROJ 5 (Midpoint employment growth)	145,681 0.0%	152,171 4.5%	158,818 9.0%	164,536 12.9%	170,223 16.8%	175,914 20.8%

Household (and Housing) Growth

A4.7 Figure A4.6 shows the projected growth in the number of households under each of the scenarios. The SNPP-based projection (PROJ 1) shows household growth of about 18% over the 25-year period whilst the updating of this projection (PROJ 2) to take account of more recent data shows a higher figure (of 19%). With the same projection and an adjustment for supressed household formation (PROJ 2A) the household growth comes out slightly higher (a 21% increase). PROJ 2A implies a 22,400 increase in households over the period 2011-36 (about 900 per annum).

A4.8 The projection linked to the Experian baseline scenario (PROJ 3) shows a 30% increase in households whilst linking population growth to past job growth trends is somewhat lower (a 21% increase) which is in-line with demographic forecasts once supressed household formation has been taken into account). Finally, the projection linked to a midpoint job growth scenario (PROJ 5) shows a 25% increase in the number of households (26,900 – 1,077 per annum).

Figure A4.6: Household Estimates 2011 to 2036

	2011	2016	2021	2026	2031	2036
PROJ 1 (2011-based SNPP)	105,943 0.0%	109,730 3.6%	113,692 7.3%	117,528 10.9%	121,223 14.4%	124,775 17.8%
PROJ 2 (2011-based SNPP (updated))	105,943 0.0%	109,970 3.8%	114,212 7.8%	118,358 11.7%	122,384 15.5%	126,272 19.2%
PROJ 2A (PROJ 2 – reduced household formation constraint)	105,943 0.0%	110,030 3.9%	114,691 8.3%	119,325 12.6%	123,837 16.9%	128,364 21.2%
PROJ 3 (Experian job-led)	105,943 0.0%	113,414 7.1%	120,965 14.2%	127,334 20.2%	132,740 25.3%	137,574 29.9%
PROJ 4 (Job trends)	105,943 0.0%	111,204 5.0%	116,189 9.7%	120,872 14.1%	124,736 17.7%	128,156 21.0%
PROJ 5 (Midpoint employment growth)	105,943 0.0%	112,309 6.0%	118,578 11.9%	124,102 17.1%	128,738 21.5%	132,868 25.4%

A4.9 The analysis above has concentrated on the number of additional households. In reality there are always likely to be some vacant homes in the area and so the number of properties required to house all of these households will be slightly greater than the projected household numbers. A vacancy allowance of between 2.9% and 3.8% has therefore been applied to all of the above figures to make estimated housing requirements; the resulting figures are shown in Figure A4.7.

Figure A4.7: Estimated housing numbers with vacancy allowance (to 2036)			
Projection variant	Annual household growth	Annual requirement with vacancy allowance	Requirement over 25-years
PROJ 1 (2011-based SNPP)	753	779	19,466
PROJ 2 (2011-based SNPP (updated))	813	841	21,025
PROJ 2A (reduced household formation constraint)	897	927	23,187
PROJ 3 (Experian job-led)	1,265	1,309	32,727
PROJ 4 (Job trends)	889	919	22,983
PROJ 5 (Midpoint employment growth)	1,077	1,114	27,858

A4.10 Figure A4.8 develops this information to show estimated housing need for each year of the projection along with a summary for every five years.

Figure A4.8: Estimated housing need in each year of projection – HMA						
Period	PROJ 1 (2011-based SNPP)	PROJ 2 (2011-based SNPP (updated))	PROJ 2A (reduced household formation constraint)	PROJ 3 (Experian job-led)	PROJ 4 (Job trends)	PROJ 5 (Midpoint employment growth)
2011/12	801	848	760	1,405	983	1,194
2012/13	756	804	815	1,485	1,047	1,266
2013/14	754	804	842	1,543	1,086	1,314
2014/15	805	856	905	1,635	1,159	1,397
2015/16	796	849	900	1,660	1,166	1,413
2011-16	3,911	4,161	4,223	7,727	5,441	6,584
2016/17	796	851	925	1,487	990	1,239
2017/18	804	861	928	1,514	996	1,256
2018/19	822	880	975	1,574	1,043	1,309
2019/20	845	905	998	1,612	1,064	1,338
2020/21	829	890	995	1,626	1,063	1,345
2016-21	4,096	4,387	4,820	7,813	5,157	6,486
2021/22	811	873	973	1,333	989	1,161
2022/23	790	854	952	1,317	967	1,142
2023/24	796	861	954	1,314	966	1,140
2024/25	786	852	962	1,318	968	1,143
2025/26	783	849	952	1,307	957	1,132
2021-26	3,966	4,289	4,792	6,589	4,847	5,717
2026/27	801	868	950	1,142	826	984
2027/28	770	838	936	1,127	808	968
2028/29	760	830	929	1,113	794	954
2029/30	758	828	938	1,118	798	958
2030/31	731	802	916	1,095	772	934
2026-31	3,820	4,166	4,668	5,595	3,999	4,798
2031/32	751	821	906	968	689	829

2032/33	750	822	935	998	712	855
2033/34	738	806	949	1,012	719	866
2034/35	740	809	966	1,031	731	881
2035/36	694	764	927	994	689	842
2031-36	3,673	4,023	4,683	5,003	3,539	4,273
2011-36	**19,466**	**21,025**	**23,187**	**32,727**	**22,983**	**27,858**

Summary of Projections by Local Authority

A4.11 The series of Figures below show summary outputs for each local authority under each of the projection scenarios. In each case the first Figure shows annual figures with the second one showing data for the 20-year period to 2031. Additional information has been provided about the changing population age structure (based on the SNPP (updated) projection – PROJ 2) to show the extent of population ageing in each area. The final Figure in the section shows estimated housing needs in each year of the projection and for each scenario – this data is provided up to 2036.

Hart

Figure A4.9: Summary of projections 2011 to 2031 – annual - Hart

Projection Scenario	Population growth		Housing numbers		Employment growth	
	Per annum	% change	Per annum	% change	Per annum	% change
PROJ 1 (2011-based SNPP)	795	0.9%	332	0.9%	412	0.8%
PROJ 2 (2011-based SNPP (updated))	715	0.8%	306	0.8%	365	0.8%
PROJ 2A (reduced hh formation constraint)	715	0.8%	337	0.9%	365	0.8%
PROJ 3 (Experian job-led)	993	1.1%	431	1.2%	523	1.1%
PROJ 4 (Job trends)	599	0.7%	299	0.8%	297	0.6%
PROJ 5 (Midpoint employment growth)	796	0.9%	365	1.0%	410	0.8%

Figure A4.10: Summary of projections 2011 to 2031 – total - Hart

Projection Scenario	Population growth		Housing numbers		Employment growth	
	Per annum	% change	Per annum	% change	Per annum	% change
PROJ 1 (2011-based SNPP)	15,908	17.4%	6,648	18.1%	8,233	16.9%
PROJ 2 (2011-based SNPP (updated))	14,293	15.6%	6,112	16.6%	7,297	15.0%
PROJ 2A (reduced hh formation constraint)	14,293	15.6%	6,749	18.3%	7,297	15.0%
PROJ 3 (Experian job-led)	19,854	21.7%	8,625	23.4%	10,455	21.5%
PROJ 4 (Job trends)	11,974	13.1%	5,980	16.3%	5,932	12.2%
PROJ 5 (Midpoint employment growth)	15,912	17.4%	7,302	19.8%	8,192	16.8%

Figure A4.11: PROJ 2 (SNPP (updated)) population change 2011 to 2031 by five year age bands – Hart				
Age group	Population 2011	Population 2031	Change in population	% change from 2011
Under 15	17,216	18,883	1,667	9.7%
15-29	14,371	15,251	880	6.1%
30-44	19,606	20,450	844	4.3%
45-59	19,413	20,258	845	4.4%
60-74	14,400	17,605	3,205	22.3%
75+	6,656	13,508	6,852	102.9%
Total	91,662	105,955	14,293	15.6%

Figure A4.12: Estimated housing need in each year of projection – Hart						
Period	PROJ 1 (2011-based SNPP)	PROJ 2 (2011-based SNPP (updated))	PROJ 2A (reduced household formation constraint)	PROJ 3 (Experian job-led)	PROJ 4 (Job trends)	PROJ 5 (Midpoint employment growth)
2011/12	406	384	351	491	353	422
2012/13	370	347	362	507	364	435
2013/14	385	362	375	524	377	450
2014/15	377	353	374	530	376	453
2015/16	381	357	373	533	375	454
2011-16	1,919	1,803	1,835	2,586	1,844	2,215
2016/17	359	334	364	487	327	407
2017/18	349	323	353	482	314	398
2018/19	349	323	365	495	325	410
2019/20	335	308	351	485	309	397
2020/21	348	321	354	490	311	400
2016-21	1,741	1,610	1,787	2,438	1,587	2,012
2021/22	328	301	344	413	303	358
2022/23	319	291	333	403	292	347
2023/24	319	291	328	395	285	340
2024/25	301	272	320	388	277	332
2025/26	307	279	322	388	278	333
2021-26	1,575	1,434	1,647	1,985	1,434	1,710
2026/27	291	263	303	333	233	283
2027/28	286	257	299	327	227	277
2028/29	284	254	296	322	223	272
2029/30	278	248	296	321	221	271
2030/31	273	243	287	312	211	262
2026-31	1,413	1,265	1,481	1,616	1,115	1,365
2031/32	277	247	280	277	186	232
2032/33	279	248	285	283	188	236
2033/34	272	236	291	289	192	241
2034/35	265	228	296	295	194	245

2035/36	259	222	293	292	190	241
2031-36	1,353	1,181	1,446	1,435	951	1,194
2011-36	8,001	7,293	8,195	10,060	6,931	8,496

Rushmoor

Figure A4.13: Summary of projections 2011 to 2031 – annual - Rushmoor						
Projection Scenario	Population growth		Housing numbers		Employment growth	
	Per annum	% change	Per annum	% change	Per annum	% change
PROJ 1 (2011-based SNPP)	287	0.3%	222	0.6%	69	0.1%
PROJ 2 (2011-based SNPP (updated))	466	0.5%	283	0.7%	169	0.3%
PROJ 2A (reduced hh formation constraint)	466	0.5%	303	0.8%	169	0.3%
PROJ 3 (Experian job-led)	1,178	1.2%	549	1.4%	555	1.1%
PROJ 4 (Job trends)	738	0.8%	397	1.0%	315	0.6%
PROJ 5 (Midpoint employment growth)	958	1.0%	473	1.2%	435	0.8%

Figure A4.14: Summary of projections 2011 to 2031 – total - Rushmoor						
Projection Scenario	Population growth		Housing numbers		Employment growth	
	Per annum	% change	Per annum	% change	Per annum	% change
PROJ 1 (2011-based SNPP)	5,737	6.1%	4,434	11.7%	1,384	2.7%
PROJ 2 (2011-based SNPP (updated))	9,322	9.9%	5,665	14.9%	3,373	6.5%
PROJ 2A (reduced hh formation constraint)	9,322	9.9%	6,063	16.0%	3,373	6.5%
PROJ 3 (Experian job-led)	23,554	25.0%	10,979	28.9%	11,100	21.5%
PROJ 4 (Job trends)	14,757	15.6%	7,945	20.9%	6,295	12.2%
PROJ 5 (Midpoint employment growth)	19,159	20.3%	9,463	24.9%	8,700	16.8%

Figure A4.15: PROJ 2 (SNPP (updated)) population change 2011 to 2031 by five year age bands – Rushmoor				
Age group	Population 2011	Population 2031	Change in population	% change from 2011
Under 15	17,823	18,869	1,046	5.9%
15-29	20,120	19,731	-389	-1.9%
30-44	22,683	20,940	-1,743	-7.7%
45-59	17,549	17,117	-432	-2.5%
60-74	10,935	15,784	4,849	44.3%
75+	5,244	11,235	5,991	114.2%
Total	94,354	103,676	9,322	9.9%

Figure A4.16: Estimated housing need in each year of projection – Rushmoor						
Period	PROJ 1 (2011-based SNPP)	PROJ 2 (2011-based SNPP (updated))	PROJ 2A (reduced household formation constraint)	PROJ 3 (Experian job-led)	PROJ 4 (Job trends)	PROJ 5 (Midpoint employment growth)
2011/12	126	173	191	493	347	420
2012/13	130	179	209	526	372	449
2013/14	143	194	217	553	390	471
2014/15	190	242	259	610	440	524
2015/16	181	236	258	626	448	537
2011-16	770	1,025	1,133	2,808	1,997	2,401
2016/17	200	256	281	563	382	473
2017/18	225	283	299	592	404	498
2018/19	244	304	322	624	429	527
2019/20	268	329	342	651	451	551
2020/21	246	309	334	653	446	550
2016-21	1,184	1,481	1,578	3,083	2,111	2,599
2021/22	240	303	325	534	404	469
2022/23	241	306	324	535	403	469
2023/24	243	309	328	538	406	472
2024/25	258	324	339	546	415	480
2025/26	244	312	332	541	409	475
2021-26	1,226	1,553	1,648	2,693	2,037	2,364
2026/27	265	333	347	487	369	428
2027/28	255	324	342	483	363	423
2028/29	248	318	336	473	354	414
2029/30	253	325	347	483	364	424
2030/31	234	306	333	469	349	410
2026-31	1,255	1,606	1,704	2,394	1,800	2,099
2031/32	244	316	333	409	309	359
2032/33	246	320	350	428	326	377
2033/34	251	326	357	433	330	381
2034/35	248	324	358	436	330	383
2035/36	211	289	326	407	298	353
2031-36	1,201	1,575	1,724	2,113	1,594	1,854
2011-36	5,635	7,241	7,787	13,091	9,539	11,317

Surrey Heath

Figure A4.17: Summary of projections 2011 to 2031 – annual - Surrey Heath						
Projection Scenario	Population growth		Housing numbers		Employment growth	
	Per annum	% change	Per annum	% change	Per annum	% change
PROJ 1 (2011-based SNPP)	504	0.6%	236	0.7%	251	0.6%
PROJ 2 (2011-based SNPP (updated))	578	0.7%	261	0.7%	294	0.6%
PROJ 2A (reduced hh formation constraint)	578	0.7%	285	0.8%	294	0.6%
PROJ 3 (Experian job-led)	928	1.1%	406	1.2%	488	1.1%
PROJ 4 (Job trends)	554	0.6%	276	0.8%	277	0.6%
PROJ 5 (Midpoint employment growth)	741	0.9%	341	1.0%	383	0.8%

Figure A4.18: Summary of projections 2011 to 2031 – total – Surrey Heath						
Projection Scenario	Population growth		Housing numbers		Employment growth	
	Per annum	% change	Per annum	% change	Per annum	% change
PROJ 1 (2011-based SNPP)	10,073	11.7%	4,711	13.5%	5,027	11.1%
PROJ 2 (2011-based SNPP (updated))	11,569	13.4%	5,225	15.0%	5,882	13.0%
PROJ 2A (reduced hh formation constraint)	11,569	13.4%	5,692	16.3%	5,882	13.0%
PROJ 3 (Experian job-led)	18,552	21.5%	8,120	23.3%	9,765	21.5%
PROJ 4 (Job trends)	11,078	12.8%	5,519	15.8%	5,537	12.2%
PROJ 5 (Midpoint employment growth)	14,813	17.1%	6,819	19.6%	7,650	16.8%

Figure A4.19: PROJ 2 (SNPP (updated)) population change 2011 to 2031 by five year age bands – Surrey Heath				
Age group	Population 2011	Population 2031	Change in population	% change from 2011
Under 15	15,718	17,461	1,743	11.1%
15-29	14,074	13,879	-195	-1.4%
30-44	18,208	18,464	256	1.4%
45-59	18,588	19,194	606	3.3%
60-74	12,981	16,601	3,620	27.9%
75+	6,809	12,349	5,540	81.4%
Total	86,378	97,947	11,569	13.4%

Figure A4.20: Estimated housing need in each year of projection – Surrey Heath						
Period	PROJ 1 (2011-based SNPP)	PROJ 2 (2011-based SNPP (updated))	PROJ 2A (reduced household formation constraint)	PROJ 3 (Experian job-led)	PROJ 4 (Job trends)	PROJ 5 (Midpoint employment growth)
2011/12	269	290	218	421	283	352
2012/13	256	278	245	452	311	382
2013/14	226	248	251	465	319	393
2014/15	238	261	272	495	343	419
2015/16	233	256	270	500	344	422
2011-16	1,222	1,334	1,255	2,334	1,601	1,968
2016/17	238	261	279	436	280	358
2017/18	229	254	277	441	278	359
2018/19	228	253	289	455	289	372
2019/20	241	267	305	476	305	390
2020/21	234	260	306	483	306	394
2016-21	1,171	1,296	1,456	2,291	1,459	1,874
2021/22	243	270	304	387	282	334
2022/23	230	257	294	380	272	326
2023/24	234	261	299	382	274	328
2024/25	227	255	303	385	276	330
2025/26	231	258	298	378	271	324
2021-26	1,165	1,301	1,498	1,911	1,375	1,643
2026/27	245	273	299	322	224	273
2027/28	228	257	295	317	217	267
2028/29	228	257	297	317	217	267
2029/30	227	255	296	314	214	264
2030/31	225	253	296	313	212	263
2026-31	1,153	1,295	1,483	1,584	1,084	1,334
2031/32	230	258	293	281	194	238
2032/33	226	255	299	287	197	242
2033/34	214	244	301	290	197	244
2034/35	226	257	312	300	206	253
2035/36	223	253	308	296	201	249
2031-36	1,119	1,267	1,513	1,455	994	1,226
2011-36	5,830	6,492	7,205	9,575	6,513	8,045