

SW Herts SHMA Appendices

Final Report

January 2016

Prepared by

GL Hearn
280 High Holborn
London WC1V 7EE

T +44 (0)20 7851 4900
glhearn.com

Contents

Section	Page
APPENDIX A: DEFINING HOUSING MARKET AREAS REPORT	7
APPENDIX B: COMPONENTS OF CHANGE DATA – PAST TRENDS & SNPP SCENARIO	57
APPENDIX C: HEADSHIP RATES BY AGE GROUP	65
APPENDIX D: AFFORDABLE HOUSING DEFINITIONS	75

List of Figures

FIGURE 1: CURDS-DEFINED LONDON FRAMEWORK HMA	12
FIGURE 2: LONDON FRAMEWORK HMA BOUNDARIES IN SOUTH WEST HERTFORDSHIRE	13
FIGURE 3: CURDS-DEFINED LOCAL HOUSING MARKET AREAS	15
FIGURE 4: EAST OF ENGLAND PLAN HOUSING STRATEGY SUB-REGIONS	17
FIGURE 5: FUNCTIONAL HOUSING MARKET AREAS DEFINED BY ORS WITH LOCAL AUTHORITY BOUNDARIES	20
FIGURE 6: DEFINITION OF WELWYN HATFIELD HMA BOUNDARY	23
FIGURE 7: CENTRAL BUCKINGHAMSHIRE HMA AND FEMA	25
FIGURE 8: UNDERSTANDING HOUSING DEMAND DRIVERS	28
FIGURE 9: PRICES OF SEMI-DETACHED AND TERRACED HOMES SOLD, 2014	30
FIGURE 10: PRICES OF SEMI-DETACHED AND TERRACED HOMES SOLD – SW HERTFORDSHIRE, 2014	31
FIGURE 11: CHANGE IN HOUSE PRICES (ALL PROPERTIES), 2009-14	32
FIGURE 12: GROSS MIGRATION FLOWS BETWEEN LOCAL AUTHORITIES, 2010-11	35
FIGURE 13: NET MIGRATION FLOWS BETWEEN LOCAL AUTHORITIES, 2010-11	36
FIGURE 14: 2011 TRAVEL TO WORK AREAS	40
FIGURE 15: LONDON COMMUTING CATCHMENT (2011)	42
FIGURE 16: MAIN DESTINATION OF EMPLOYMENT, 2011	45

FIGURE 17:	MAIN DESTINATION FOR EMPLOYMENT, EXCLUDING LONDON COMMUTING, 2011	46
FIGURE 18:	VOA BROAD RENTAL MARKET AREAS	48
FIGURE 19:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2013 – DACORUM	57
FIGURE 20:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2013 – HERTSMERE	58
FIGURE 21:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2013 – ST. ALBANS	59
FIGURE 22:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2013 – THREE RIVERS	60
FIGURE 23:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2013 – WATFORD	61
FIGURE 24:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2036 - DACORUM	62
FIGURE 25:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2036 - HERTSMERE	62
FIGURE 26:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2036 – ST. ALBANS	63
FIGURE 27:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2036 – THREE RIVERS	63
FIGURE 28:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2036 – WATFORD	64
FIGURE 29:	PROJECTED HOUSEHOLD FORMATION RATES BY AGE OF HEAD OF HOUSEHOLD – DACORUM	65
FIGURE 30:	PROJECTED HOUSEHOLD FORMATION RATES BY AGE OF HEAD OF HOUSEHOLD – HERTSMERE	67
FIGURE 31:	PROJECTED HOUSEHOLD FORMATION RATES BY AGE OF HEAD OF HOUSEHOLD – ST. ALBANS	69
FIGURE 32:	PROJECTED HOUSEHOLD FORMATION RATES BY AGE OF HEAD OF HOUSEHOLD – THREE RIVERS	71
FIGURE 33:	PROJECTED HOUSEHOLD FORMATION RATES BY AGE OF HEAD OF HOUSEHOLD – WATFORD	73

List of Tables

TABLE 1:	SELF-CONTAINMENT OF MIGRATION FLOWS WITHIN INDIVIDUAL AUTHORITIES, 2010-11	33
TABLE 2:	SELF-CONTAINMENT OF MIGRATION FLOWS WITHIN INDIVIDUAL AUTHORITIES EXCLUDING LONG DISTANCE MOVES, 2010-11	33
TABLE 3:	MAJOR MIGRATION FLOWS (2011)	37
TABLE 4:	MAJOR MIGRATION FLOWS (2011)	37
TABLE 5:	MIGRATION SELF-CONTAINMENT LEVELS, 2010-11	38
TABLE 6:	MIGRATION SELF-CONTAINMENT LEVELS – EXCLUDING LONDON, 2010-11	39
TABLE 7:	MAJOR COMMUTING FLOWS FROM THE COMMISSIONING AUTHORITIES (2011)	43
TABLE 8:	COMPONENTS OF POPULATION CHANGE (2001-13) – DACORUM	57
TABLE 9:	COMPONENTS OF POPULATION CHANGE (2001-13) – HERTSMERE	58
TABLE 10:	COMPONENTS OF POPULATION CHANGE (2001-13) – ST. ALBANS	59
TABLE 11:	COMPONENTS OF POPULATION CHANGE (2001-13) – THREE RIVERS	60
TABLE 12:	COMPONENTS OF POPULATION CHANGE (2001-13) – WATFORD	61

APPENDIX A: DEFINING HOUSING MARKET AREAS REPORT

1 INTRODUCTION AND CONTEXT

- 1.1 The purpose of this report section is to assess what the relevant Housing Market Area (HMA) or areas which the commissioning local authorities of Dacorum, Hertsmere, Three Rivers and Watford sit within. The paper does not seek to prejudge whether there is more than one HMA in which the commissioning authorities sit; nor whether the HMA extends beyond the boundaries of the commissioning authorities to include other local authority areas. The purpose of the report is to investigate these issues.

National Policy and Guidance

National Planning Policy Framework

- 1.2 The National Planning Policy Framework (NPPF) sets out that local planning authorities (LPAs) should have a clear understanding of housing needs in their area, and that they should prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries¹. In Paragraph 47 it outlines that to significantly boost the supply of housing, local planning authorities should use their evidence base to ensure that their local plan meets the full, objectively-assessed need for market and affordable housing in the housing market area, as far is consistent with the policies set out in the Framework.
- 1.3 The NPPF emphasises that housing need is expected to be assessed for the Housing Market Area, and that development constraints should not be applied to the assessment of need, although these are relevant considerations in bringing together evidence to set policy targets in plans.

Planning Practice Guidance

- 1.4 Planning Practice Guidance (PPG) on *Housing and Economic Development Needs Assessments* was issued by Government in March 2014 and is maintained as an online resource (and updated periodically). This provides a definition of a Housing Market Area (HMA) and provides Guidance on how this should be defined. The PPG outlines what a housing market area is, setting out:

“A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work. It might be the case that housing market areas overlap.”

¹ CLG (2012) *National Planning Policy Framework*, Paragraph 159

The extent of the housing market areas identified will vary, and many will in practice cut across various local planning authority administrative boundaries. Local planning authorities should work with all the other constituent authorities under the duty to cooperate²."

1.5 The PPG sets out that housing market areas can broadly be defined using three different sources of information:

- **House prices and rates of change in house prices** – providing a market-based definition based on areas with similar house price characteristics;
- **Household migration and search patterns** – considering the extent to which people move house within an area, with a housing market area considered to be that in which typically 70% or more of local moves are contained within (excluding long-distance moves);
- **Contextual data** - such as travel to work areas, retail and school catchments – with travel to work areas providing information regarding commuting.

1.6 The three strands of information look at different aspects of household behaviour, and there is no right or wrong answer regarding what weight should be applied to different factors. What the PPG says is that:

"No single source of information on needs will be comprehensive in identifying the appropriate assessment area; careful consideration should be given to the appropriateness of each source of information and how they relate to one another. For example, for housing, where there are issues of affordability or low demand, house price or rental level analyses will be particularly important in identifying the assessment area. Where there are relatively high or volatile rates of household movement, migration data will be particularly important. Plan makers will need to consider the usefulness of each source of information and approach for their purposes³."

1.7 This report addresses the indicators identified in the PPG in drawing conclusions on the HMA. It has been prepared alongside work, led by Regeneris Consulting, on defining the Functional Economic Market Area (FEMA).

Practical Issues

1.8 The PPG largely reiterates previous guidance on defining HMAs set out within the CLG's 2007 Advice Note on *Identifying Sub-Regional Housing Market Areas*.

1.9 There has been effectively no change in guidance, which continues to emphasise that there is no right or wrong answer as to how an HMA or FEMA should be defined and that the approach should, in effect, reflect local market characteristics and circumstances.

1.10 There is a range of previous work which has been undertaken to define HMAs over the last decade, at national, regional and local levels. It is now however appropriate to review this, not least given

² Reference ID: 2a-011-20140306

³ Reference ID: 2a-009-20140306

that a significant proportion of the past work is informed by 2001 Census data regarding commuting and migration patterns. 2011 Census flow data was issued in late July 2014.

- 1.11 There are some further practical issues which are dealt with in the recent Planning Advisory Service (PAS) Technical Advice Note on *Objectively Assessed Need and Housing Targets*.⁴ This outlines that in practice, the main indicators used to define HMAs are migration and commuting flows, but goes on to point out that:

“One problem in drawing boundaries is that any individual authority is usually most tightly linked to adjacent authorities and other physically close neighbours. But each of these close neighbours in turn is most tightly linked to its own closest neighbours, and the chain continues indefinitely.

Therefore, if individual authorities worked independently to define HMAs, almost each authority would likely draw a different map, centred on its own area. This of course would produce nearly as many HMAs as local authorities, with huge overlaps.” [Paras 5.5 – 5.6]

- 1.12 The PAS Advice Note argues that to address this issue, **it is useful to start with a “top down analysis”** which looks at the whole country. This is provided by a research study led by the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University to define HMAs across England, which was published by Government in November 2010⁵. This has defined a consistent set of HMAs across England based on migration and commuting data from the 2001 Census.

- 1.13 Peter Brett Associates (PBA) emphasise that this should be considered ‘only a starting point’ and should be sense-checked against local knowledge and more recent data, especially on migration and commuting. GL Hearn agrees with Peter Brett Associates’ conclusions in this respect.

- 1.14 A further practical issue regards the geographical building blocks that housing market areas are built up from. A key purpose of an SHMA is to define the Objectively Assessed Need (OAN) for housing. The PPG is clear that the starting points are the official population and household projections. These are published at a national level, and for local authorities. They are not published below local authority level, nor is the data available (regarding migration and trends in household formation which are key drivers within the projections) below local authority level. On this basis we consider that **Housing Market Areas should be based on the ‘best fit’ to local authority boundaries**; albeit that SHMAs can (and should) recognise cross-boundary influences and interactions. The PAS Guidance supports this, concluding that:

“It is best if HMAs, as defined for the purposes of needs assessments, do not straddle local authority boundaries. For areas smaller than local authorities data availability is poor and analysis becomes impossibly complex.” [Para 5.21]

⁴ Peter Brett Associates (PBA) for PAS (July 2015) *Objectively Assessed Need and Housing Targets*

⁵ C Jones, M Coombe and C Wong for CLG (Nov 2010) *Geography of Housing Markets, Final Report*

- 1.15 This approach seems widely accepted and is a practical response to data availability and one we recommend is adopted. In practical terms, we are of the view that towards the edges of most housing markets there are likely to be influences in two directions.

Report Structure

- 1.16 The findings set out herein have been informed by engagement with adjoining local authorities to test emerging findings; and engagement with wider stakeholders through a Stakeholder Workshop held on 14th September 2015.
- 1.17 The remainder of the report presents our analysis and findings regarding the HMA geography. It is structured as follows:
- Section 2: Review of Previous Research;
 - Section 3: Defining the HMA;
 - Section 4: Conclusions – HMA Geography.

2 REVIEW OF PREVIOUS RESEARCH

- 2.1 This section of the report reviews existing research which has sought to consider the definition of HMAs and FEMAs.

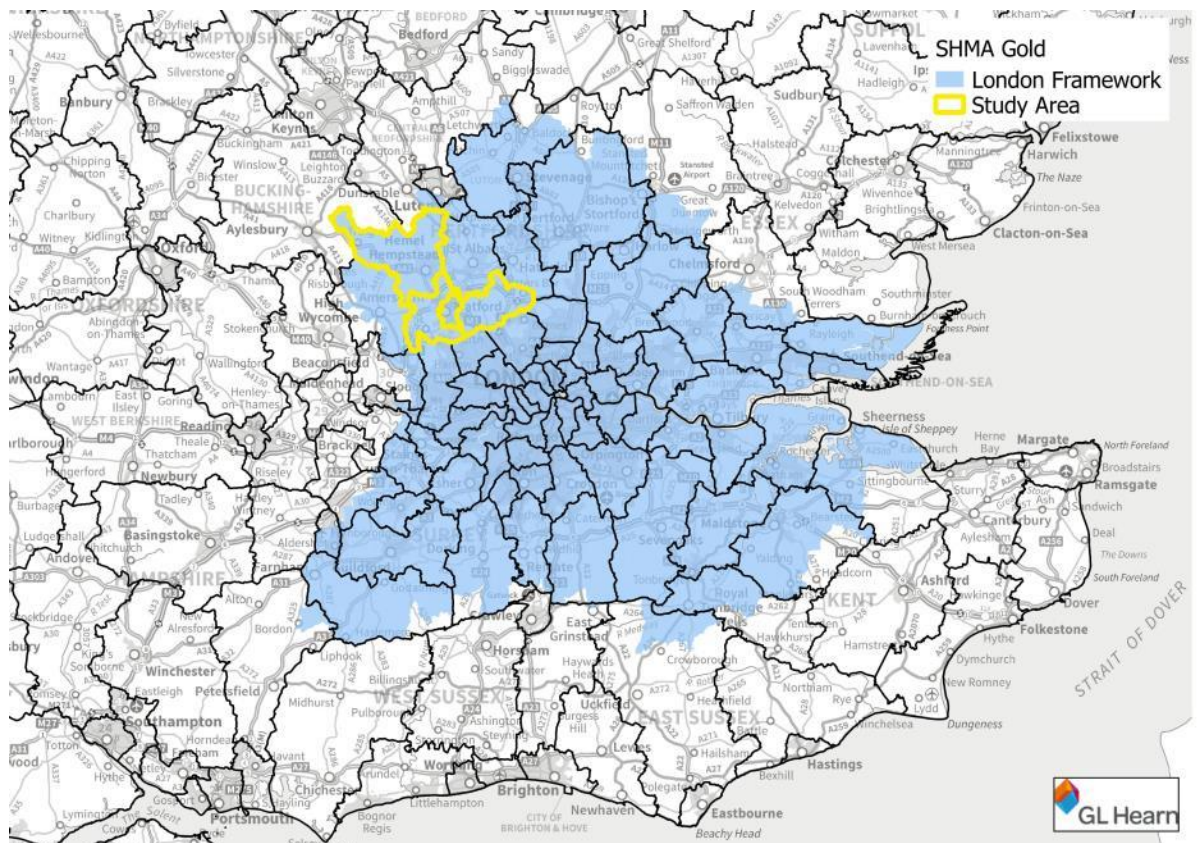
CLG/ CURDS Study (2009/10)

- 2.2 National research undertaken for Government by a consortium of academics led by the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University has sought to define housing markets across England. As the PAS Technical Advice Note recommends, we have used this as a 'starting point' for considering the HMA geography.
- 2.3 The CURDS Study for CLG considers commuting and migration dynamics (based on 2001 Census data) and house prices (standardised to account for differences in housing mix and neighbourhood characteristics). This information was brought together to define a three tiered structure of housing markets, as follows:
- Strategic (Framework) Housing Markets– based on 77.5% commuting self-containment;
 - Local Housing Market Areas – based on 50% migration self-containment; and
 - Sub-Markets – which would be defined based on neighbourhood factors and house types.
- 2.4 The Strategic and Local HMAs are mapped across England, with the Local HMAs embedded within the wider Strategic HMAs. Both are defined based on wards at a gold standard and based on local authorities for the silver standard.
- 2.5 The report considers a range of factors, including house price geographies; but concludes that the most appropriate basis for defining housing market areas on a standard basis nationally is through reference to commuting and migration patterns.

The London Framework HMA

- 2.6 The Study defines a London Framework HMA which extends into the Home Counties. In our view a national analysis of house prices would tend to support this, showing the influence of London and transport links into London extending well beyond Greater London into the South East and East of England. House price geographies are considered further in Section 3.
- 2.7 Figure 1 shows how the London Framework HMA is defined in the CURDS Study (using the 'Gold Standard' geography). This includes all parts of the four commissioning authorities, as well as most of the rest of Hertfordshire. Within Hertfordshire only small parts of North Hertfordshire and East Hertfordshire fall outside of the London Framework HMA – principally close to Royston.

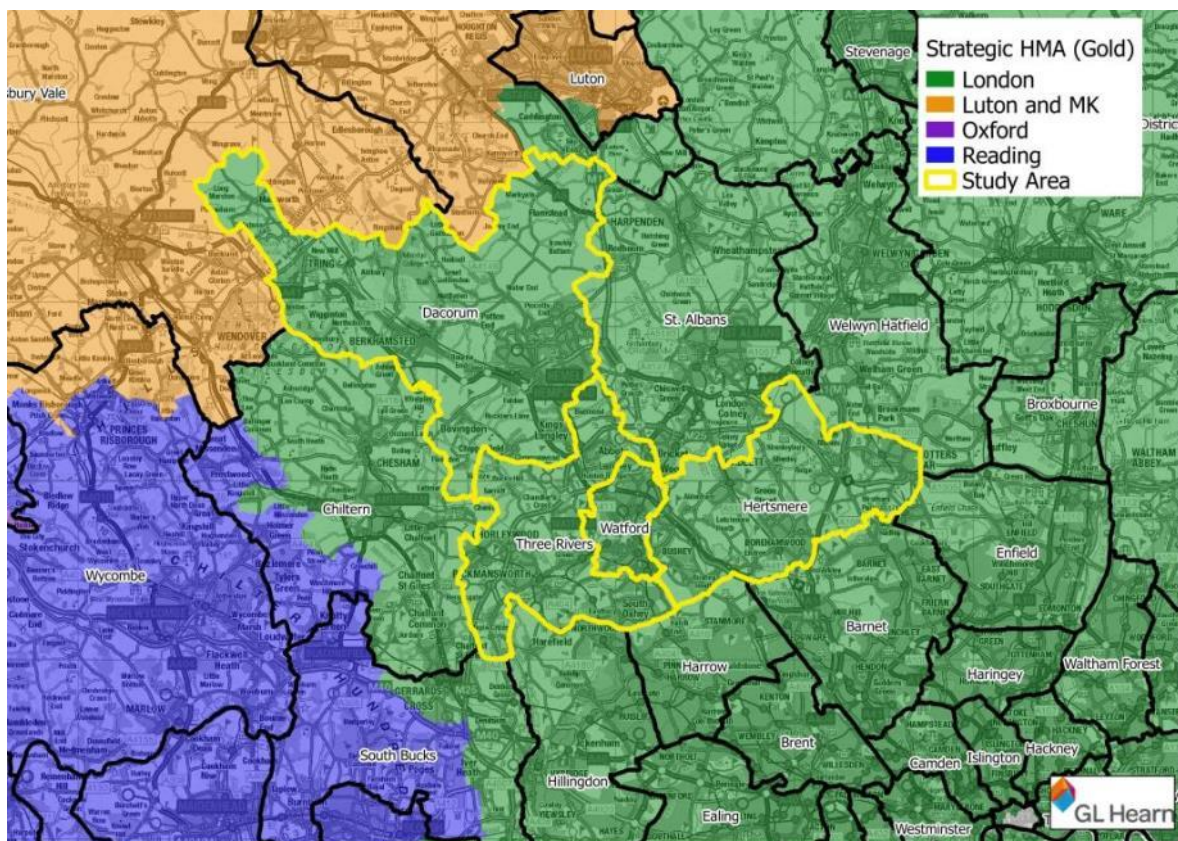
Figure 1: CURDS-Defined London Framework HMA



Source: CURDS 2009/10

- 2.8 The definition of the London Framework HMA reflects commuting flows between areas within the Home Counties and London, and is in effect an approximation for London's wider travel to work area of influence using 2001 Census data and a 77.5% self-containment threshold.
- 2.9 The boundaries of the London Framework HMA are notable, in that the northern boundary of this area does not extend further north beyond Hertfordshire – such as into Aylesbury Vale or substantially into Bedfordshire. Luton also falls outside of it. As we will come onto, it is notable that this correlates with our analysis of house price geographies.
- 2.10 Figure 2 shows the boundaries of the London Framework HMA in and around the South West Hertfordshire area.

Figure 2: London Framework HMA Boundaries in South West Hertfordshire



Source: CURDS 2009/10

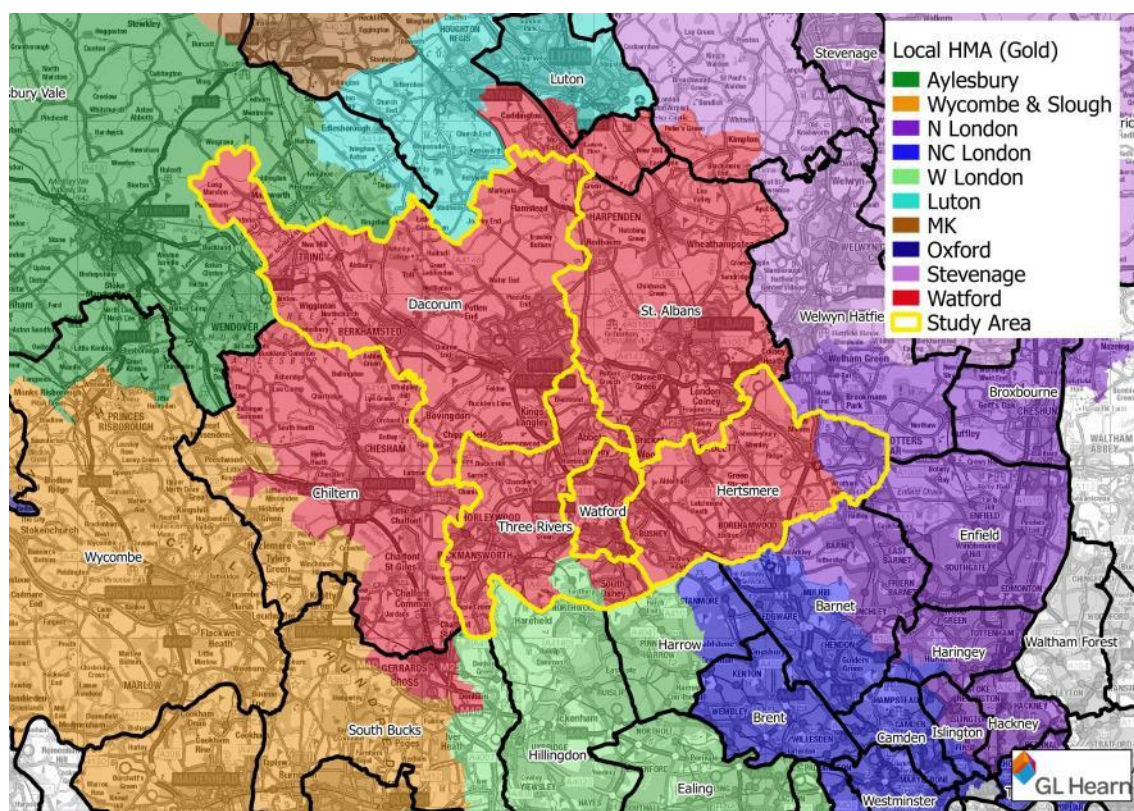
- 2.11 As the 2013 London SHMA demonstrates, there is an established trend of migration into London from across the UK and abroad, with net movement out of London into the Home Counties. In our view this movement out of London is influenced both by quality of place/ lifestyle factors and by housing costs, and is most apparent for family households.
- 2.12 Whilst recognising the important influence of London, the CURDS Study identifies that the use of Local Housing Market Areas is particularly relevant in housing markets which include a major urban area, setting out:

“Without a tiered perspective, a focus on large Framework HMAs (will run the risk of) any local areas of very high and very low house prices (being) averaged out. Which fails to diagnose the dynamics of local changes in the housing market.

The more fine-grained differentiation of multiple housing markets within a major urban area will also be missed – the latter is most obvious in London where much of Greater London is identified as a large Framework HMA. It is in such areas that an additional lower-tier geography can reflect more localised housing market conditions, and it is notable that in such areas that separate lower-tier HMAs are mostly identified.”

- 2.13 The Planning Advisory Service's Advice Note on *Objectively Assessed Need and Housing Targets* (PBA, July 2015, Para 5.9) reinforces this, commenting that "*for some areas, including many close to London, the single-tier silver standard geography looks unconvincing; in that plan-makers should look for guidance to other levels in the NHPAU analysis.*"
- 2.14 In respect of the use of the lower-tier local HMAs, the CURDS Study goes on to comment that "*a tiered geography links to both national/ cross-regional and more strategic sub-regional analysis whilst, at the same time, providing a sufficiently fine-grained basis for more locally based analysis and policy formulation in respect of, for example, issues relating to affordability and/or to core strategy / LDF preparation and monitoring by individual local planning authorities.*"
- 2.15 The Local Housing Market Areas (LHMAs) defined by CURDS are based on areas with 50% self-containment of migration flows (based on 2001 Census data). The Study defined a South West Hertfordshire LHMA (termed 'Watford') which extends to include all of St Albans local authority district, the majority of Hertsmere, Three Rivers and Chiltern Districts as well as small areas of Central Bedfordshire, Luton and North Hertfordshire.
- 2.16 Figure 3 identifies a limited number of wards within these and adjoining local authorities which fall within other HMAs. The Watford LHMA included the main settlements in Chiltern District including Amersham, Chesham and 'the Chalfonts;' Woodside and Luton Hoo in Central Bedfordshire; and Peters Green and Gustard Wood in North Hertfordshire. It excluded Moor Park in Three Rivers which was identified as within a West London LHMA; and defined Potters Bar in Hertsmere as within a Stevenage-focused LHMA.

Figure 3: CURDS-Defined Local Housing Market Areas



Source: CURDS,2009/10

- 2.17 The CURDS work has defined HMAs by grouping wards together. However as population and household projections are only published at a local authority basis, it is accepted standard practice to group local authorities as the “best fit” to Housing Market Areas. The benefits of drilling down below local authority level are outweighed by the complexities and multiple assumptions necessary to model housing need at this more local level.
- 2.18 A best fit of the CURDS-defined Local Housing Market Area to local authority boundaries would comprise:
- Chiltern
 - Dacorum
 - Hertsmere
 - St Albans
 - Three Rivers
 - Watford
- 2.19 The Planning Advisory Service’s Advice Note on *Objectively Assessed Need and Housing Targets* (PBA, July 2015) outlines that best fit local authority geography is preferable given that planning

policy is mostly made at the local authority level, and many kinds of data are unavailable for smaller areas.

- 2.20 The CURDS Study is particularly useful as it provides a nationally-consistent geography. However it must be borne in mind that the CURDS work is based on 2001 data, which is now 13 years old. 2011 Census commuting and migration flow data has been released in Summer 2014 which provides a basis for reconsidering housing market geographies using more recent information. This is considered in Section 3 of the Report.

London SHMA (2013)

- 2.21 The GLA's 2013 SHMA looks at the Greater London area, but recognises links beyond this setting out that 'its urban area extends beyond this boundary and encompasses a substantial hinterland' but sets out that there is no universally accepted way of measuring this, noting that boundaries based on analysis of commuting and migration "are highly sensitive to the specific level of containment uses" based on reference to the CURDS Study.

- 2.22 The examination of Further Alternations to the London Plan took place in September 2014. This included consideration of whether London can be described as a single Housing Market Area. The report from the Planning Inspector, Anthony Thickett, following the Examination in Public was published in December 2014. In Paragraph 22 the Inspector did not challenge the GLA's contention that London represents a single Housing Market area, commenting that:

"The Mayor points to the acceptance by previous EiP Panels that London constitutes a single housing market area with sub markets which span Borough boundaries. The Mayor also points to the findings of the High Court, following a challenge to the Revised Early Minor Alterations to the London Plan, within which in his (undisputed) opinion, the Court accepted that although local variations exist, this did not compromise the view that London constitutes a single housing market area."

- 2.23 The practical implications of this for local authorities in the Home Counties around London is that HMA geographies need in effect to be defined which recognise inter-relationships with London; but which do not extend across the London boundary.

East of England Plan

- 2.24 The East of England Plan (adopted in 2008, but now withdrawn) defined a number of housing strategy sub-regions for the purposes of sub-regional coordination on housing issues. The South West Hertfordshire authorities were defined as within a London Commuter Belt Sub-Region which included all of the Hertfordshire local authorities, together with Uttlesford, Harlow, Epping Forest, Brentwood and Chelmsford Districts within Essex.

Figure 4: East of England Plan Housing Strategy Sub-Regions



Source: East of England Plan, 2008

Existing SHMA Studies

- 2.25 Housing market geographies have been considered through a number of Strategic Housing Market Assessment (SHMA) reports. We have sought to summarise the findings of these below:

London Commuter Belt (West)

- 2.26 A London Commuter Belt (West) SHMA was prepared by ORS, published in April 2010. This SHMA covered part of the LCB Sub-Region as defined in the East of England Plan. It covered the following local authority areas:

- Dacorum;
- Hertsmere;
- St Albans;
- Three Rivers;
- Watford; and
- Welwyn Hatfield.

2.27 The Study assessed house prices, but its conclusions were particularly driven by an analysis of migration flows. It used an approach of assessing commuting flows between the main towns, and self-containment within them. On this basis a number of sub-markets were defined focused on:

- Hemel Hempstead;
- St Albans;
- Watford;
- Welwyn Hatfield.

2.28 The Study was not definitive in identifying a Housing Market Area, recognising links to London and the wider defined LCB Sub-region, but did set out that the study area 'had the makings of a housing market area, as it reflects where people both live and work.' This was based on an assessed commuting self-containment of 67-68% using 2001 Census data.

London Commuter Belt (East)

2.29 This Study was prepared over a similar period, for the following local authorities:

- Brentwood;
- Broxbourne;
- East Hertfordshire;
- Epping Forest;
- Harlow;
- Uttlesford.

2.30 An SHMA was originally prepared by ORS and published in 2008. This was updated in 2012 (published March 2013), however the Update did not review housing market geographies.

2.31 The Study drew similar conclusions to the LCB West Study, concluding that three sub-markets could be identified in this area:

- Cheshunt and A10 Corridor;
- Harlow and M11 Corridor;
- Brentwood.

2.32 These three corridors were identified principally through analysis of commuting flows. These authorities collectively saw 61% residence-based self-containment using 2001 Census data, and 71% on a workplace-basis.

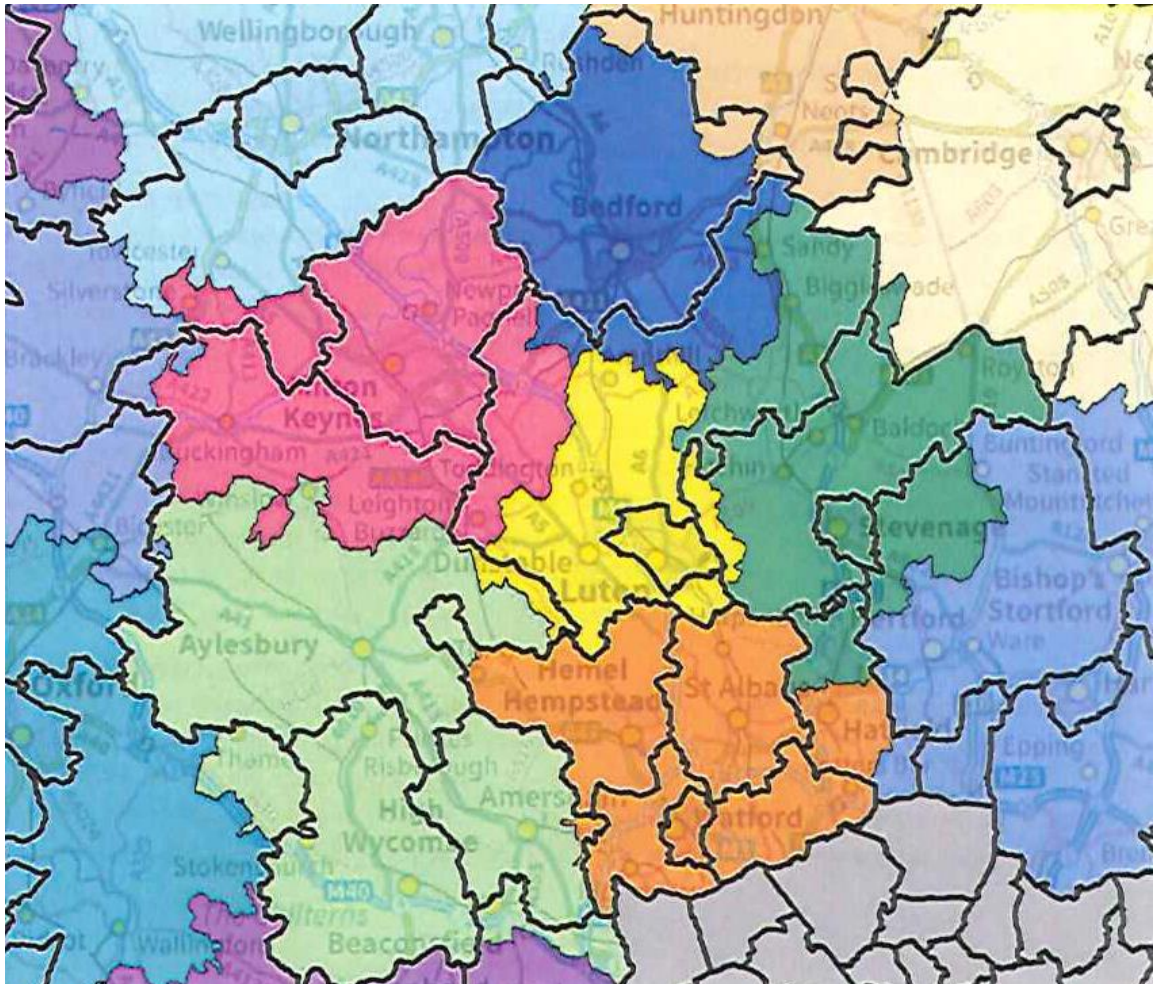
Bedfordshire and Surrounding Areas

2.33 Central Bedfordshire Council, Bedford Borough Council, Luton Borough Council, Milton Keynes Council, North Hertfordshire District Council, Stevenage Borough Council and Aylesbury Vale District Council have jointly commissioned ORS to identify Housing Market Areas (HMAs) which

influence their areas. A Consultation Draft Report was issued in November 2015 and has been considered herein.

- 2.34 The report reviews previous studies (as we are herein) and analyses commuting and migration flows, house prices and rents; as well as considering Broad Rental Market Areas defined by the Valuation Office Agency (VOA).
- 2.35 The draft conclusions identify the following housing market areas:
- Bedford Housing Market Area;
 - Central Buckinghamshire Housing Market Area;
 - Luton Housing Market Area;
 - Milton Keynes Housing Market Area; and
 - Stevenage Housing Market Area.
- 2.36 These are defined based particularly on analysis of commuting and migration flows, based on defining 'seeds' and attributing these to others with which they have the closest relationship until threshold self-containment levels are achieved. The areas defined broadly correspond with official Broad Rental Market Areas defined by the VOA, which reflect local house prices and rents, and represent the area in which a person could reasonably be expected to live taking into account access to facilities and services.
- 2.37 The geography of the HMAs suggested is shown below, in Figure 5.

Figure 5: Functional Housing Market Areas defined by ORS with Local Authority Boundaries



2.38 This Study by ORS, which has been prepared independently to this South West Hertfordshire SHMA, shows a South West Herts HMA which includes the commissioning authorities, together with St Albans; as well as the southern part of Welwyn Hatfield District (including Hatfield). It however shows (based on sub-district level analysis) the area around Puttenham and Long Marston in Dacorum, to the north of Tring, as falling in a Central Buckinghamshire HMA. The Study defines a 'best fit' to local authority boundaries, which groups local authorities as follows:

- Bedford HMA: Bedford Borough;
- Central Buckinghamshire HMA: Aylesbury Vale, Chiltern, Wycombe;
- Luton HMA: Luton and Central Bedfordshire;
- Milton Keynes HMA: Milton Keynes;
- Stevenage HMA: Stevenage and North Hertfordshire, and potentially Welwyn Hatfield.

- 2.39 This independent Study, based on the latest available data, defines a South West Hertfordshire HMA as including St Albans as within a common HMA to the commissioning authorities.

Luton and Central Bedfordshire

- 2.40 Luton and Central Bedfordshire Councils completed an “SHMA Refresh” which was published in June 2014; and have since prepared an “SHMA Update” which is dated Summer 2015.
- 2.41 The SHMA Update covers the whole administrative areas of Luton and Central Bedfordshire as a “best fit” to the Luton functional Housing Market Area (HMA). The definition of the Luton functional HMA was established by the original Luton and Bedfordshire SHMA (2010) and reviewed as part of the SHMA Refresh (2014).
- 2.42 The SHMA Refresh (2014) considered housing market geographies, based on review of the CURDS Study, migration, commuting, house prices and Broad Rental Market Areas (BMRAs). It concluded by identifying a Luton HMA which extends slightly into Hertfordshire (small parts of Dacorum and North Herts) and also Bucks (small part of Aylesbury Vale).
- 2.43 ORS has subsequently been reviewing the definition of all functional HMAs in Bedfordshire and the surrounding area based on data from the 2011 Census. The draft findings from this (as considered above) suggest that Luton and Central Bedfordshire continue to provide a “best fit” for that area.

St Albans

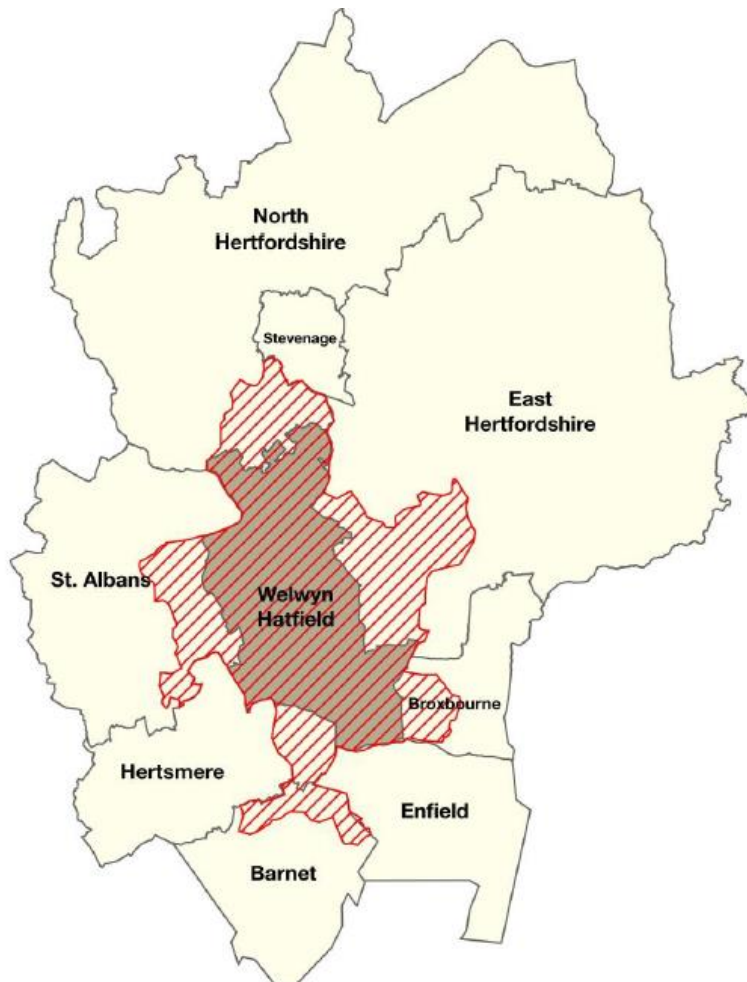
- 2.44 St Albans CDC commissioned Housing Vision to prepare an SHMA, which was published in November 2013. This has subsequently been updated with the latest report being the Draft 2015 St Albans Independent Housing Needs Assessment and Strategic Housing Market Assessment, again prepared by Housing Vision. The 2015 work does not include a review of HMA boundaries; and thus to consider HMA Geographies we have sought to look at the earlier 2013 SHMA.
- 2.45 The 2013 SHMA did not look at self-containment in respect of commuting and migration flows, as data was not available for lower tier local authorities, and its conclusions instead appear to be driven by mapping of house prices and engagement with local agents.
- 2.46 The Study identifies a ‘core market area’ which includes St Albans District together with principally rural areas which immediately surround it.
- 2.47 A ‘wider market’ is identified which includes most of the Hertfordshire local authorities (excluding Broxbourne), together with Luton and Central Bedfordshire. A number of London Boroughs are identified as part of a ‘peripheral area’ in recognition of migration flows to St Albans.

- 2.48 The report clearly identifies that 'demand was being led from outside of the District' and links to areas beyond its boundaries. GL Hearn would consider the HMA findings identified to somewhat fall into the trap highlighted in the PAS Technical Advice Note of starting with an area, with analysis principally showing links to areas which adjoin it. However we note that it is consistent to the definition of a St Albans Sub-Market in the previous LCB West SHMA; and note that the CURDS Study recognises that house prices may be particularly relevant in defining 'sub markets.'

Welwyn Hatfield

- 2.49 The Welwyn Hatfield Strategic Housing Market Assessment 2014, prepared by Turleys, considers the range of indicators identified in the PPG for defining HMAs and FEMAs. This was used to define a number of authorities with which Welwyn Hatfield shares a functional relationship and which form a wider housing market area. These comprise: Welwyn Hatfield; Broxbourne; East Hertfordshire; Enfield; Hertsmere; North Hertfordshire; St Albans; and Stevenage.
- 2.50 However a finer grain analysis was then undertaken to refine this, identifying wards which form part of a Welwyn Hatfield HMA. The findings are replicated in Figure 6. Areas of overlap between housing markets are recognised within the analysis, as well as a relationship to London.

Figure 6: Definition of Welwyn Hatfield HMA Boundary



Source: Turley

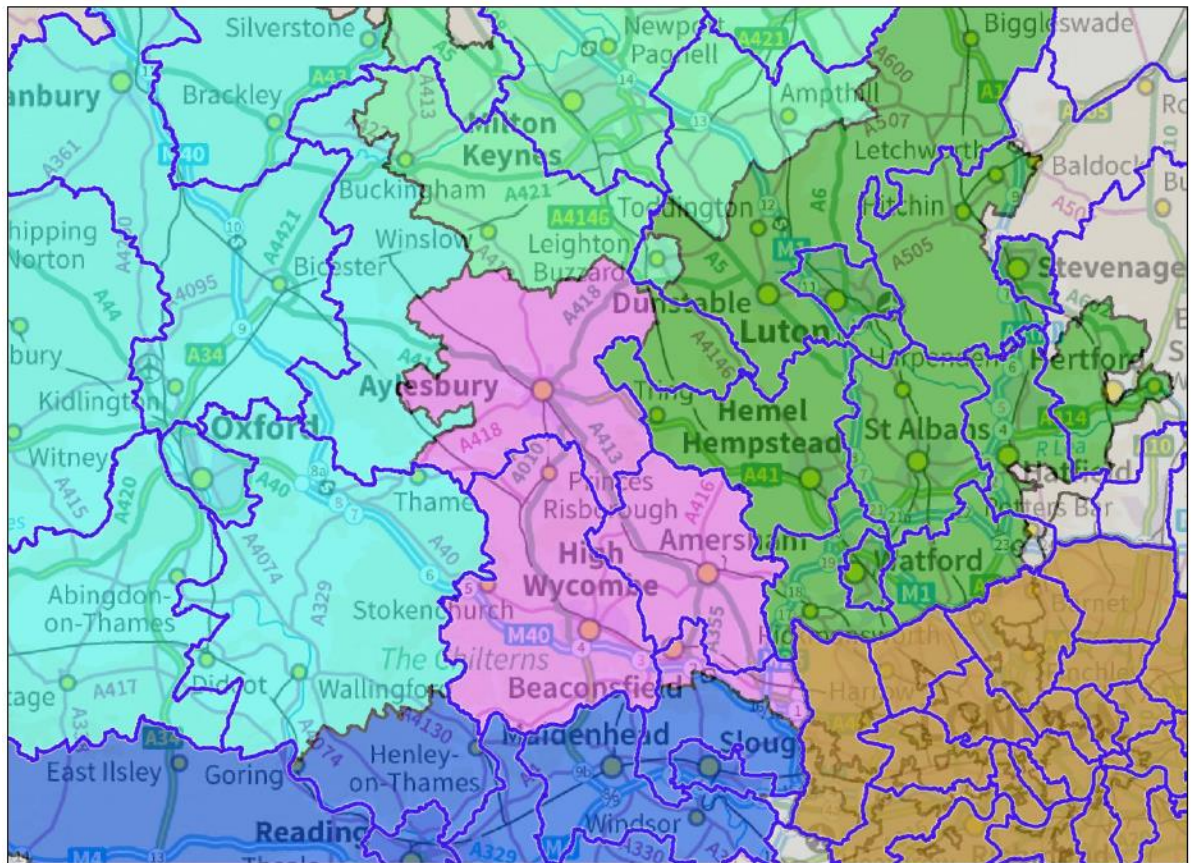
- 2.51 The Council's SHMA Partial Update 2015 considers further the HMA geography, taking account of studies being undertaken (largely as considered in this section), 2011 Census migration and travel to work patterns; and updated house price data. This updated work has confirmed that additional evidence published in surrounding areas has not identified Welwyn Hatfield as an integral part of the housing market areas defined in these studies. It points to a strong level of both migration and commuting flows with London, as well as other cross-boundary moves. Its analysis reveals that the strongest migratory relationships are with St Albans, North Hertfordshire, Stevenage, West Hertfordshire, Hertsmere and the London Boroughs of Enfield and Barnet.
- 2.52 The latest Census Travel to Work Areas suggest a shared relationship between Welwyn Garden City and Stevenage, with the TTWA centred on these towns covering much of the Borough; with a small self-contained area in the south of the Borough relating more to London.

- 2.53 Against this context, the Partial Update identifies that it will continue to be important for Welwyn Hatfield Borough Council to engage with other authorities within the wider housing market area (as defined in Figure 6 above) through the Duty to Co-operate process to ensure that housing needs are met in full at the strategic level. It outlines that this will primarily include North Hertfordshire, Broxbourne, St Albans, East Hertfordshire, Hertsmere and the London Borough of Barnet; together with the Greater London Authority. Welwyn Hatfield Borough Council has been engaged and consulted through the preparation of the South West Hertfordshire SHMA, including on the conclusions herein regarding housing market geographies.

Buckinghamshire

- 2.54 A report has been prepared by ORS and Atkins (Jan 2015) which considers *Housing Market Areas and Functional Economic Market Areas in Buckinghamshire and the surrounding areas*. This was commissioned jointly by the Buckinghamshire authorities. This sets out the jointly agreed Housing Market Areas and Functional Economic Market Area (FEMA).
- 2.55 The report reviews the range of indicators identified in the PPG as well as the CURDS research, but places greatest weight on the analysis of commuting flows. Various levels of self-containment are considered, and how this might relate through spatially to the definition of areas.
- 2.56 The report identifies commuting zones for Aylesbury and High Wycombe/Amersham based on a 67% self-containment threshold, based on 2011 Census data, and indicates that there are now stronger flows between Aylesbury and High Wycombe than with Milton Keynes.
- 2.57 Drawing principally on migration and commuting flow analysis, the report concludes that a Central Buckinghamshire HMA and FEMA can be identified as shown in pink in the map below, Figure 7. The definition of this area is supported by the following statistics:
- 74.8% of the workplace population live in the area;
 - 67.9% of residents work within the area;
 - 70.5% of residents who had moved in 2010-11 stayed in the area; and
 - 72.1% of those that use to live in the area in 2010-11 moved within it.
- 2.58 The precise geography was driven by the commuting flow analysis. This included a small part of Aylesbury Vale around Edlesborough as falling within a Hertfordshire-based HMA and FEMA.

Figure 7: Central Buckinghamshire HMA and FEMA



Source: ORS

2.59 The ORS/ Atkins Report identifies that for analytical purposes a “best fit” to local authority boundaries should be used for both the HMA and FEMA. Aylesbury Vale is allied most closely to the other Central Buckinghamshire authorities, with the best fit to the HMA and FEMA defined as:

- Aylesbury Vale;
- Chiltern; and
- Wycombe.

2.60 South Bucks is identified in this Study as relating most strongly towards Slough/ Windsor. The Buckinghamshire Study shows some connections between parts of Buckinghamshire and adjoining parts of Hertfordshire, but there are localised and not considered to be sufficiently strong to warrant the definition of a common HMA/ FEMA. We would note however that Chiltern District Council and South Bucks District Council have committed to preparing a Joint Local Plan. Additional analysis has been undertaken by ORS to consider the implications of this; and which Housing Market Area the combined plan area most strongly relates to. It concludes that the most pragmatically appropriate ‘best fit’ for Chiltern and South Bucks as a single, combined area would be as part of

the Central Buckinghamshire HMA; whilst recognising that the 'best fit' grouping including these authorities together with Aylesbury Vale and Wycombe within the Central Bucks HMA does not change the actual geography of the functional housing market areas identified in the January 2015 Study.

Implications

2.61 A review of the previous research highlights:

- Differences in the scale at which HMA and FEMA boundaries have been drawn;
- The influence of London on the economy and housing markets in South West Hertfordshire;
- The GLA's definition that London comprises its own Housing Market Area;
- A lack of evidence from previous work of substantive links north into Luton and Bedfordshire from the South West Hertfordshire authorities;
- Recent work suggesting that a Central Buckinghamshire HMA / FEMA can be defined which includes Chiltern, in contrast to the CURDS Study analysis which included Chiltern within a Watford-focused HMA;
- A range of evidence, including through the CURDS Study, previous SHMA Studies, and up-to-date independent evidence from a Study covering Bedfordshire and surrounding areas, which point to St Albans City and District falling within a common HMA to the commissioning authorities.

2.62 Overall a key question which arises is the extent to which the HMA / FEMA extends further into other parts of Hertfordshire, particularly St Albans and potentially Welwyn Hatfield.

3 DEFINING THE HMA

- 3.1 Paragraph 47 of the National Planning Policy Framework (NPPF) states that local planning authorities should use their evidence base to ensure Local Plans meet the full, objectively assessed needs for market and affordable housing in their Housing Market Area (HMA).
- 3.2 In simple terms, the HMA is a geographical area in which the majority of people, who move, will move within. It also reflects functional relationships between where people live and work. However, defining housing market areas is an inexact science and there is no single source of information that will clearly identify housing market areas. This section of the report considers key data to identify local housing markets.
- 3.3 It addresses the key sources of information identified in Planning Practice Guidance in regard to defining housing market areas (as identified in Paragraph 1.5), namely house prices, migration and commuting patterns. These are the key information sources typically used in defining HMAs, as the Planning Advisory Service's report sets out. School catchments tend to be relatively localised with many school catchments set within housing market areas. Retail catchments are relevant for retail planning; but tend not to particularly drive households' decision making on where to live.

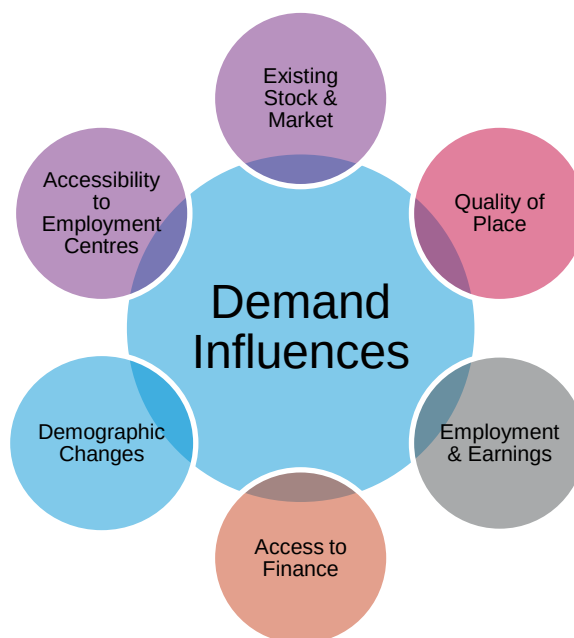
House Prices

- 3.4 House prices can be used to provide a 'market based' definition of HMA boundaries, based on considering areas which (as the PPG describes) have clearly different price levels compared to surrounding areas.

Conceptual Framework

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

Figure 8: Understanding Housing Demand Drivers



Source: GL Hearn

- 3.6 At the macro-level, the market is particularly influenced by interest rates and mortgage availability, as well as market sentiment (which is influenced by economic performance and prospects at the macro-level).
- 3.7 The market is also influenced by the economy at both regional and local levels, recognising that economic employment trends will influence migration patterns (as people move to and from areas to access jobs) and that the nature of employment growth and labour demand will influence changes in earnings and wealth (which influences affordability).
- 3.8 Housing demand over the longer-term is particularly influenced by population and economic trends: changes in the size and structure of the population directly influence housing need and demand, and the nature of demand for different housing products.
- 3.9 There are then a number of factors which play out at a more local level, within a functional housing market and influence demand in different locations. The importance of these local factors is perhaps more pronounced in stable or healthy economic times, when mortgage availability and market liquidity are far less of a constraint on activity. Local factors include:
- quality of place and neighbourhood character;
 - school performance and the catchments of good schools;
 - the accessibility of areas including to employment centres (with transport links being an important component of this); and

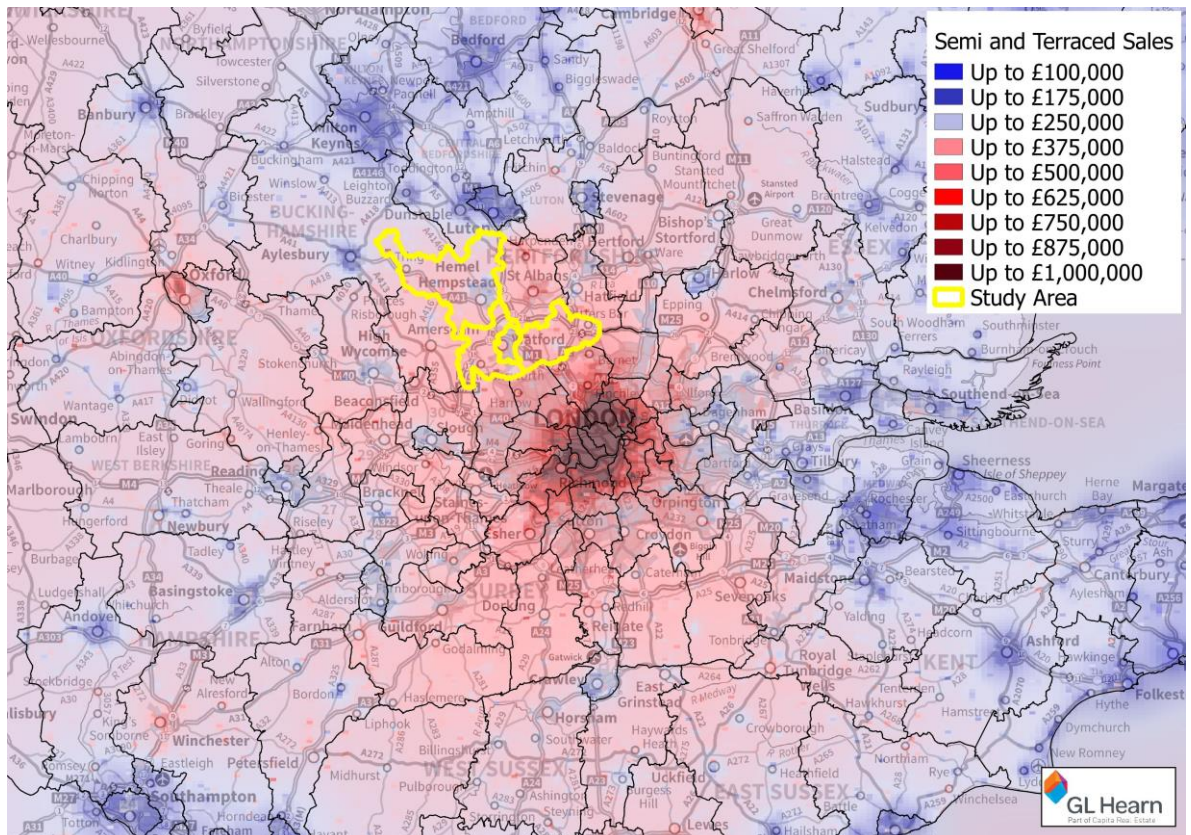
- the existing housing market and local market conditions.

- 3.10 These factors influence the demand profile and pricing within the market. At a local level, this often means that the housing market (in terms of the profile of buyers) tends to be influenced and consequently reinforce to some degree the existing stock profile.
- 3.11 Local housing markets or sub-markets are also influenced by dynamics in surrounding areas, in regard to the relative balance between supply and demand in different markets; and the relative pricing of housing within them. Understanding relative pricing and price trends is thus important.
- 3.12 The important things to recognise here is that **we are likely to see localised variation in housing costs within an HMA which reflect differences in the housing offer, quality of place and accessibility of different areas**. Some settlements, or parts of an area, are likely to command higher prices than others reflecting these factors. These are relevant in considering housing sub-markets (the third tier of market using the CURDS definition). This SHMA project has however sought to focus on addressing strategic issues regarding housing provision across the housing market area, and does not seek to define local sub-markets within the area.
- 3.13 What this report is focused upon is considering market geographies at a higher spatial level. Consideration of price differentials at a sub-region and regional level is therefore of most relevance.

Broad House Price Geography

- 3.14 Our analysis seeks to compare house prices spatially for comparable products. Figure 9 therefore provides an analysis of prices for semi-detached and terraced homes sold between January and November 2014 looking across the Greater South East. This plan provides a **market-based definition of the extent of London's housing market influence**.
- 3.15 This shows an area of higher house prices which extends beyond London into a number of the Home Counties, including Kent, Sussex, Surrey, Berkshire, Buckinghamshire, Hertfordshire and Essex.

Figure 9: Prices of Semi-Detached and Terraced Homes Sold, 2014



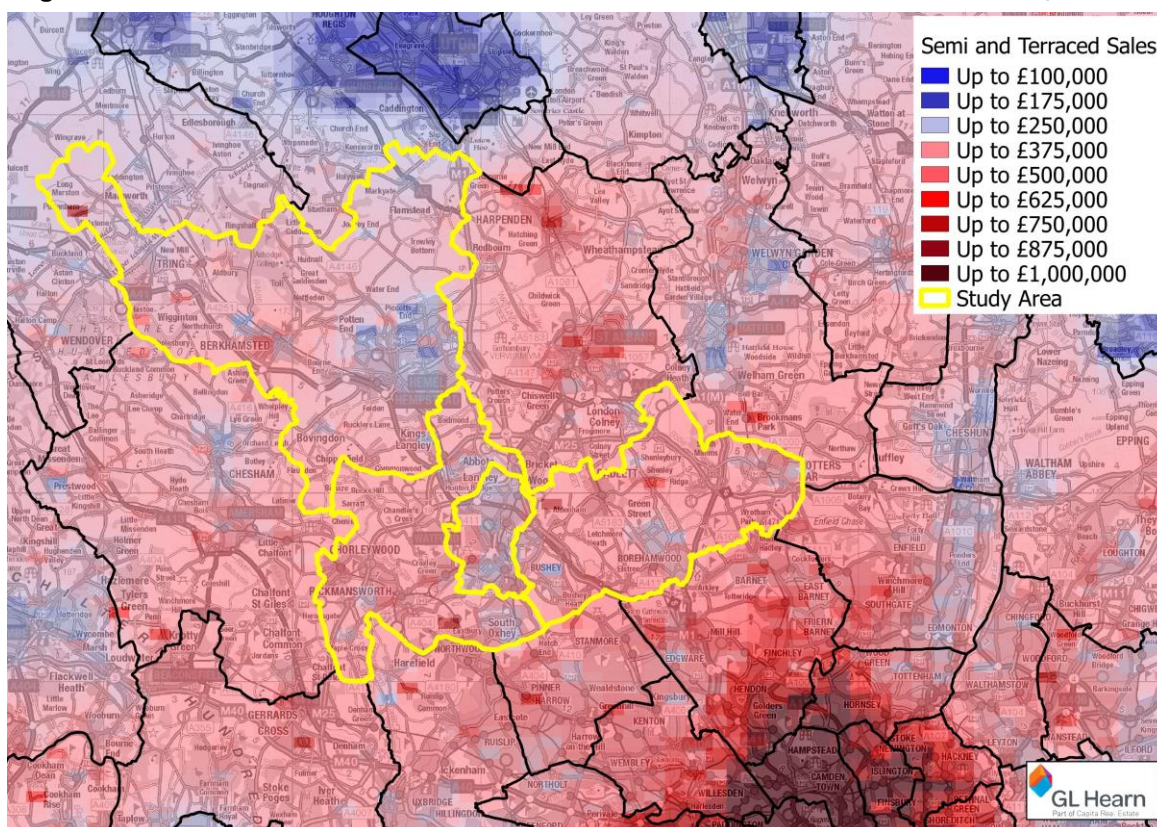
Source: Land Registry, 2015

- 3.16 Prices drop quite notably further north into Luton and Bedfordshire; in South Essex; and North Kent. We see corridors of higher prices extending into Oxfordshire and towards Cambridge (influenced by economic strength), as well as down towards the Sussex Coast.
- 3.17 What is particularly notable is the distinction in prices between areas within Hertfordshire and those in Luton and Bedfordshire, **providing clear evidence of a market-based distinction between HMAs in Luton and Central Bedfordshire and South West Hertfordshire**. Similarly we see lower house prices in Aylesbury, and Aylesbury Vale more widely. This is likely to be partly a reflection of journey time differentials by rail into London.
- 3.18 The house price geography supports the concept behind the definition of a London Commuter Belt housing market, characterised by strong commuting relationships with London and higher house prices relative to areas at a further distance from the Capital. This area however is not limited to those areas in the East of England – but would include parts of the South East region as well.

Localised Price Distinctions

- 3.19 As described above, we would fully expect more localised distinctions in house prices to emerge through a finer grain (more localised) analysis of house price differentials. These reflect differences in the housing offer, quality of place and accessibility of different areas to employment centres.

Figure 10: Prices of Semi-Detached and Terraced Homes Sold – SW Hertfordshire, 2014



Source: Land Registry, 2015

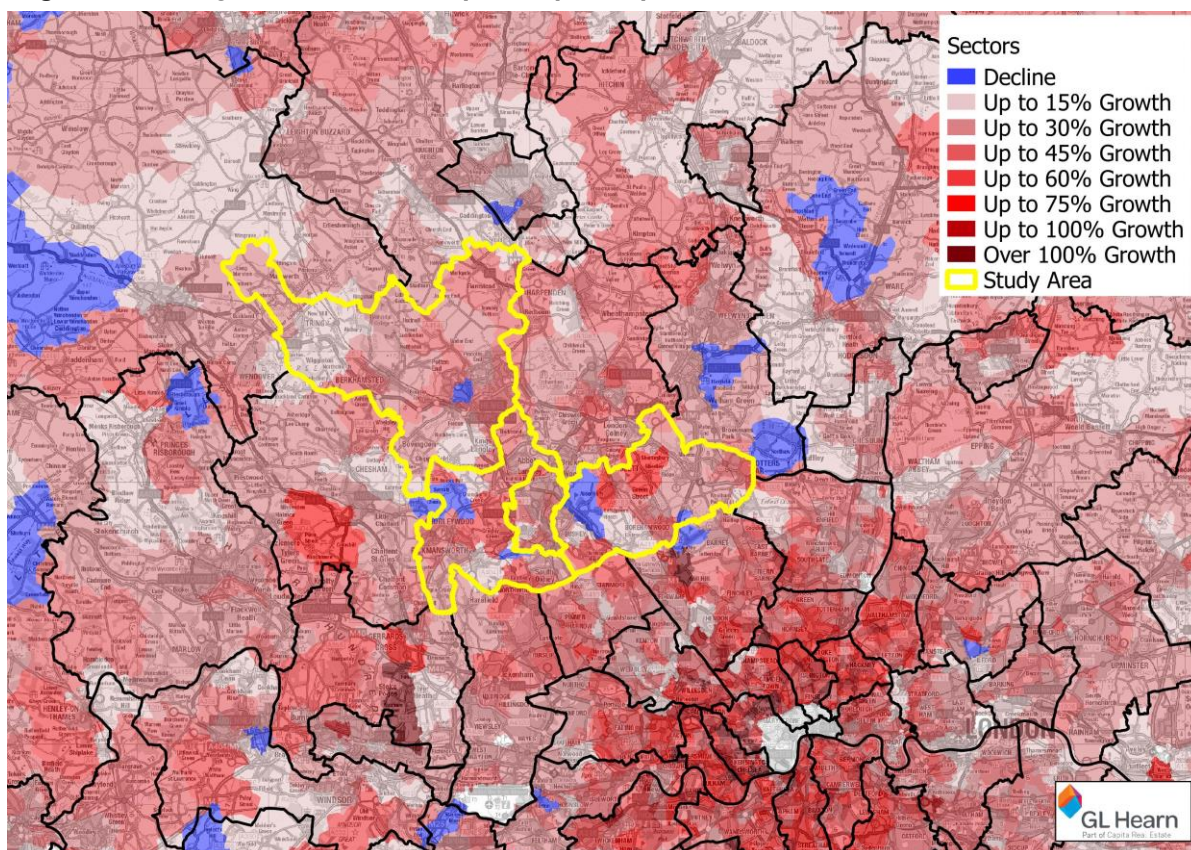
- 3.20 Figure 10 highlights higher house prices in Central compared to Outer London. It shows similar prices in parts of Outer London to Hertfordshire. Higher housing costs of over £750,000 can be identified in some settlements, including St Albans, Radlett, Berkhamsted and Harpenden; whilst lower prices are evident in the New Towns and larger urban areas, including Hemel Hempstead; Watford; Hatfield; and Welwyn Garden City as well as High Wycombe to the West⁶.

House Price Changes

- 3.21 Figure 11 analyses house how house prices have changed over the last five years (2009-14). It shows a picture which is quite varied at a local level. Besides showing stronger house price growth in Inner London, we do not consider that this map is particularly useful in considering housing market geographies.

⁶ The price bands used in this map are consistent to those in the St Albans SHMA Report

Figure 11: Change in House Prices (All Properties), 2009-14



Source: Land Registry, 2015

Migration Patterns

- 3.22 Migration flows reflect housing market relationships – they reflect where movement of people between homes. They are thus an important factor in considering the definition of an HMA. The PPG sets out that typically an HMA would be an area in which 70% or more of moves are contained within (excluding long distance moves).
- 3.23 Migration data from the 2011 Census has only been published at a local authority level. The Census records migration, asking people where they lived one year prior to Census day and on Census day itself. The use of Census data is preferable to other data (such as from NHS Central Health Register) as it records movement within individual local authorities, as well as between them.

Self-Containment within Individual Local Authorities

- 3.24 Table 1 shows self-containment levels within each of the individual authorities. These can be measured either in terms of those who moved who were living in the local authority in 2010; or the base being those living in the authority in 2011.

Table 1: Self-Containment of Migration Flows within Individual Authorities, 2010-11

	% Self-Containment of those moving who lived in area in 2010	% Self-Containment of those moving who lived in area in 2011
Dacorum	55.9%	55.1%
Three Rivers	34.6%	37.4%
Watford	46.5%	45.1%
Hertsmere	38.4%	39.6%
Barnet	48.6%	50.0%
Enfield	52.6%	53.6%
Harrow	43.1%	49.3%
Hillingdon	50.3%	50.5%
Aylesbury Vale	54.1%	54.0%
Central Bedfordshire	51.2%	50.1%
Chiltern	37.9%	41.7%
Luton	65.3%	69.5%
St Albans	50.7%	51.9%
Welwyn Hatfield	54.4%	50.0%

Source: 2011 Census

3.25 The self-containment levels vary from 34% in Three Rivers through to 69% in Luton.

3.26 In line with the guidance we have also sought to identify the self-containment rate once long distance moves are excluded. For the purposes of this exercise we have excluded moves from outside the East of England, Greater London and South East regions.

Table 2: Self-Containment of Migration Flows within Individual Authorities excluding Long Distance Moves, 2010-11

	% Self-Containment of those moving who lived in area in 2010	% Self-Containment of those moving who lived in area in 2011
Dacorum	59.7%	62.4%
Three Rivers	40.6%	39.8%
Watford	48.3%	50.9%
Hertsmere	42.7%	43.7%
Barnet	54.5%	52.5%
Enfield	57.6%	55.9%
Harrow	53.1%	49.6%
Hillingdon	54.6%	56.1%
Aylesbury Vale	61.3%	64.7%
Central Bedfordshire	55.8%	59.8%
Chiltern	45.4%	44.8%
Luton	75.6%	71.6%
St Albans	57.1%	58.2%
Welwyn Hatfield	54.6%	59.9%

Source: 2011 Census

- 3.27 The revised self-containment levels vary from 39% in Three Rivers through to 76% in Luton. Luton however is the only local authority which has a self containment rate which exceeds the typical threshold for a housing market area. The analysis however continues to show that **none of the four commissioning or the other surrounding local authorities (with the exception of Luton) have a sufficient self-containment level, based on the 2011 Census data, to be considered to represent a Housing Market Area in its own right.** This is an important finding. This therefore suggests that the local authorities seek to group themselves with neighbouring boroughs to comprise housing market areas. We would note that this data was not available at this scale when some previous studies were undertaken.

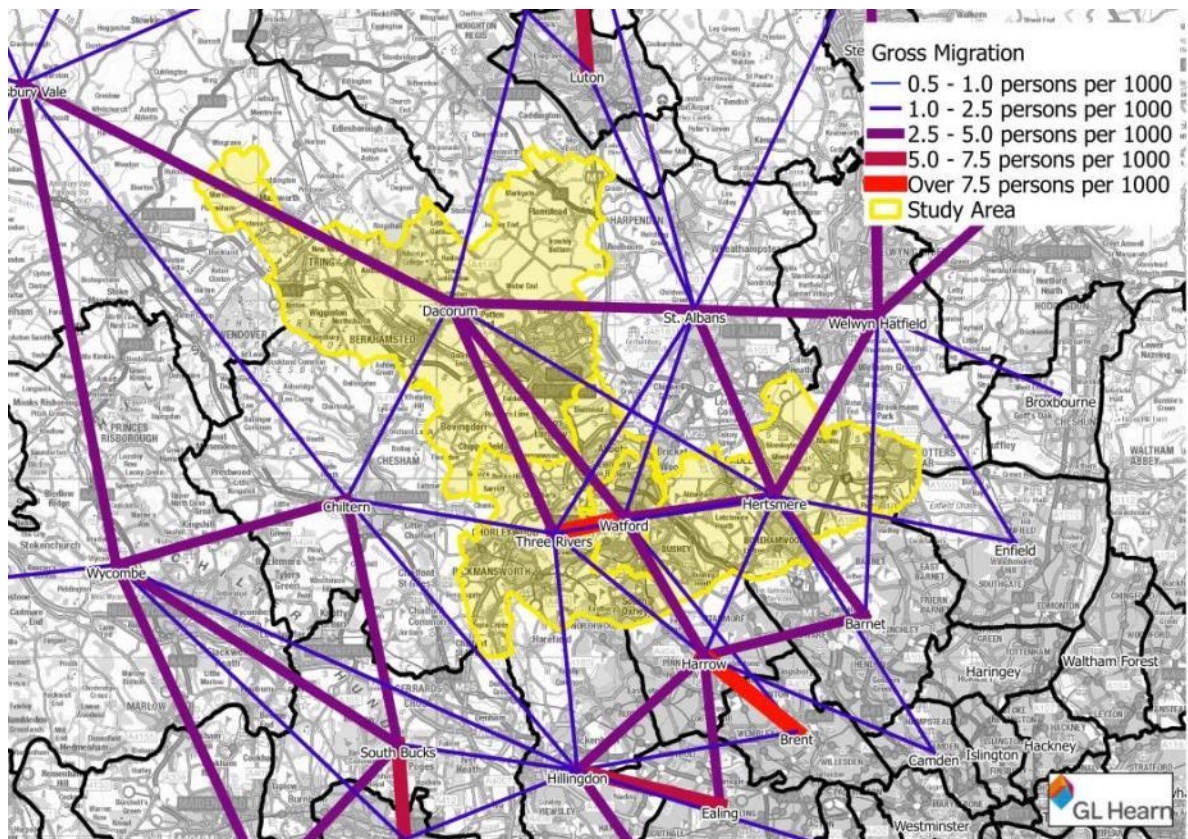
Migration Flows between Local Authorities

- 3.28 We have next sought to assess migration flows between local authorities. We have reviewed both net and gross flows. The first identifies the direction of movement; with the latter highlighting the strength of connections between two local authorities – and in effect showing more about the functional links between places.

Gross Flows Analysis

- 3.29 Typically we would expect a larger migration flow between two authorities with larger populations. To provide a comparative assessment of the strength of migration flows, we have therefore benchmarked flows based on the combined population of two authorities. Figures are expressed per 1,000 joint population in Figure 12.
- 3.30 The analysis clearly indicates the following:
- Strong migration flows of between 7.5 persons per 1,000 population between:
 - Three Rivers and Watford;
 - Harrow and Brent;
 - Ealing and Hillingdon;
 - South Bucks and Slough;
 - Luton and Central Bedfordshire.
 - Medium-strength flows of between 5.5 persons or more per 1,000 population between:
 - A number of the Hertfordshire authorities – Dacorum, Three Rivers, Watford, Hertsmere, St Albans and Welwyn Hatfield; as well as between Welwyn Hatfield and Stevenage and East Hertfordshire;
 - The analysis also shows flows of this strength between Watford and Harrow; and Hertsmere and Barnet within London; and between Dacorum and Aylesbury Vale in Buckinghamshire.
 - More limited migration between South West Hertfordshire and both Chiltern and South Bucks.

Figure 12: Gross Migration Flows between Local Authorities, 2010-11



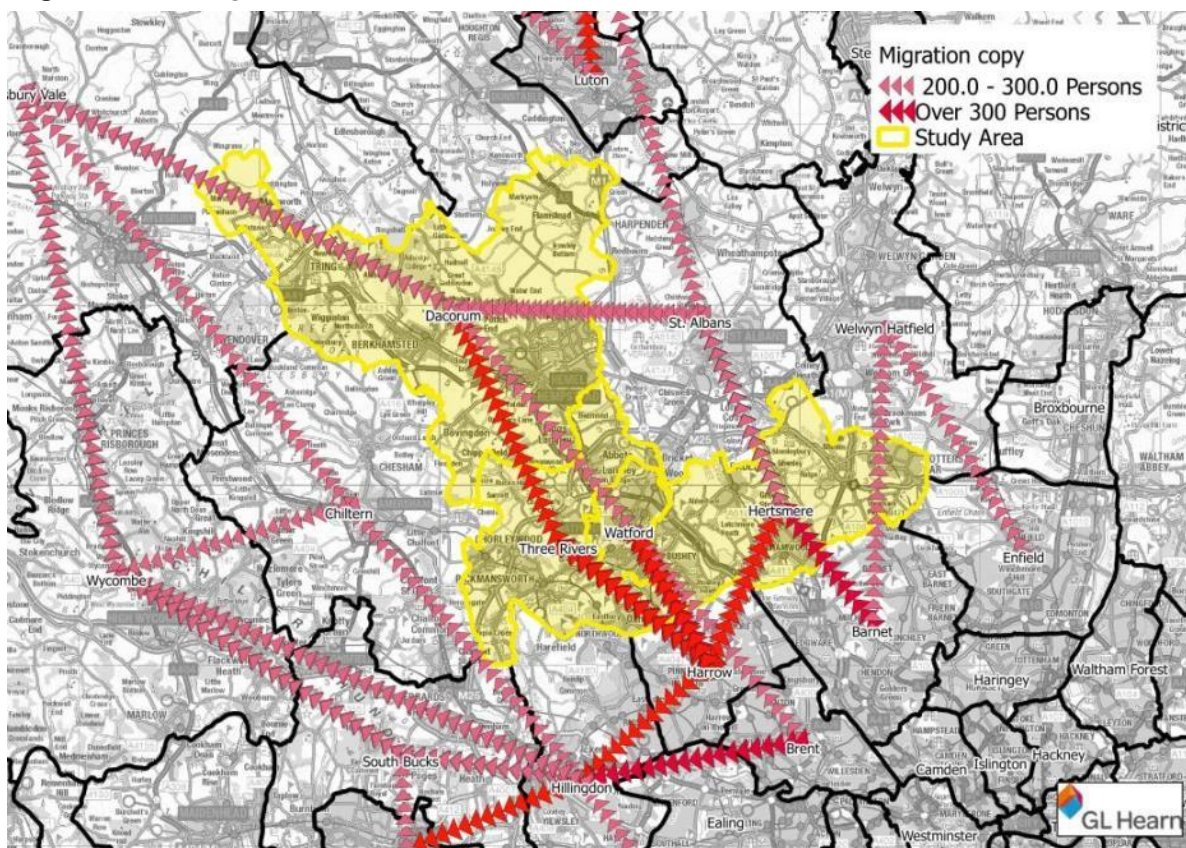
Source: 2011 Census

- 3.31 The analysis does point towards a degree of separation of the South West Hertfordshire area and both Chiltern and South Bucks. Whilst there are migration flows, they are not particularly strong. It points to a strong set of migration flows which cut across local authority boundaries in Hertfordshire; but does not suggest particularly strong migration links northwards with Luton and Central Bedfordshire.

Net Migration

- 3.32 An analysis of net flows shows a similar picture to that which we find in most areas around London (and other core cities across the UK). Cities tend to attract in migrants from across the country and internationally, but then see a net out-migration to surrounding areas. The cities tend to have a younger population structure. Net out-migration to surrounding areas partly reflects a lifestyle model, with middle aged households from cities moving to more suburban and rural environments. Movement is influenced a range of factors including house prices, quality of place, housing offer and schools.

Figure 13: Net Migration Flows between Local Authorities, 2010-11



Source: 2011 Census

- 3.33 This pattern is evident in Hertfordshire, with a cascading set of movements outwards from London.
- 3.34 We do not consider the net flows analysis to be particularly useful in defining Housing Market Area boundaries (in this or other areas).

Key Migration Flows

- 3.35 We have sought to strip back the data on migration to focus on the key flows to/from each of the commissioning authorities. As outlined in Table 3, there is a particularly strong migration flow between Three Rivers and Watford (relative to population size).
- 3.36 The strongest relationships from Dacorum are with Three Rivers and St Albans; from Hertsmere are with Watford and Barnet; from Three Rivers are with Watford and Dacorum; and from Watford are with Three Rivers and Hertsmere.

Table 3: Major Migration Flows (2011)

	Dacorum		Hertsmere		Three Rivers		Watford	
Migration	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000
Self Containment	Dacorum	27.00	Hertsmere	17.84	Three Rivers	15.48	Watford	26.51
1st External	Three Rivers	3.14	Watford	4.60	Watford	9.06	Three Rivers	9.06
2nd External	St Albans	3.13	Barnet	3.41	Dacorum	3.14	Hertsmere	4.60

Source: 2011 Census

3.37 We have then examined whether these external relationships (beyond the commissioning authorities) are as a result of a strong two way flow or whether they represent a marginal flow to/from the external authority taking account of flows to other areas.

3.38 As Shown in Table 4, the St Albans and Dacorum flow is notable for both local authorities with St Albans also having a wider relationship with Welwyn Hatfield. However Barnet has much stronger relationships with Haringey, Brent, Camden, Enfield and Harrow than it does with Hertsmere indicating that it is likely to be in a different HMA (i.e. a London HMA).

Table 4: Major Migration Flows (2011)

St Albans		Barnet		Welwyn Hatfield		Stevenage	
Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000
St Albans	26.92	Barnet	29.57	Welwyn Hatfield	34.92	Stevenage	26.11
Welwyn Hatfield	3.73	Haringey	5.92	St Albans	3.73	North Hertfordshire	7.32
Dacorum	3.13	Brent	5.57	Stevenage	3.08	Welwyn Hatfield	3.08

Source: 2011 Census

3.39 The analysis of migration relationships indicates that if London is considered as a separate HMA, there is a strong relationship between:

- Dacorum;
- Hertsmere;
- Three Rivers;
- St Albans; and
- Watford.

3.40 Acknowledging the strength of the relationship between St Albans and Welwyn Hatfield, we have again looked at the wider relationships with Welwyn Hatfield. This highlights that there is a notable

migration flow from Welwyn Hatfield to both St Albans (the strongest flow) and Stevenage. Stevenage (as a larger employment centre) however exerts a strong relationship on North Hertfordshire and Welwyn Hatfield.

- 3.41 The migration evidence would suggest that Welwyn Hatfield has links with both Stevenage and with St Albans.

Considering Self-Containment

- 3.42 The PPG sets out that an HMA would typically be an area in which 70% of moves are contained within (excluding long distance moves). We have therefore excluded long distance flows from the analysis and analysed migration self-containment levels for different potential geographies.
- 3.43 The self-containment rates are set out in two ways; firstly as the percentage of people who move to a house in the given area from somewhere else in the same area (labelled as % people moving in to the area), secondly the percentage of people who move from a given area that move to somewhere else in the same area (labelled as % people living in the area).
- 3.44 Self-containment rates of the individual authorities were set out above. Next we have sought to consider self-containment rates of local authorities grouped together, to consider if at this level a 70% self-containment threshold is passed.
- 3.45 When we start to group the local authorities this analysis shows that 62-64% of people moving do so within the four commissioning authorities. The self-containment level rises to between 64-66% when St Albans is included; and to 66-68% if Welwyn Hatfield is also included. This reflects linkages with St Albans; and between St Albans and Welwyn Hatfield.
- 3.46 Treating St Albans and Welwyn Hatfield separately, these two authorities have a relatively low self-containment level when considered together of 54-56%. This is insufficient for these areas to be considered as a separate HMA from the commissioning authorities. Self-containment is lower still when these authorities are considered individually (as Figures 12 and 13 demonstrated).

Table 5: Migration Self-Containment Levels, 2010-11

	% People moving in to the area	% People living in the area
Four Commissioning Authorities	61.6%	63.5%
Four Authorities + St Albans	64.3%	66.6%
Four Authorities + St Albans + Welwyn Hatfield	65.6%	68.3%
St Albans + Welwyn Hatfield	54.1%	55.8%

Source: 2011 Census

- 3.47 **The levels of migration self-containment are clearly influenced by migration from London into Hertfordshire.** For analytical purposes we have therefore sought to assess self-containment levels excluding the London flows. This is shown in Table 6.

Table 6: Migration Self-Containment Levels – Excluding London, 2010-11

	% People moving in to the area	% People living in the area
Four Commissioning Authorities	80.3%	73.1%
Four Authorities + St Albans	83.9%	76.7%
Four Authorities + St Albans + Welwyn Hatfield	85.5%	78.6%
St Albans + Welwyn Hatfield	60.7%	63.8%

Source: 2011 Census

- 3.48 With all moves to and from London excluded, the self-containment levels become much more significant. We can see that without London, the commissioning authorities have a containment rate of around 80% (around 20% higher than when London is included) on the basis of those moving to the area. This grows further still with St Albans and Welwyn Hatfield are included (to 84% and 86% respectively).
- 3.49 However Welwyn Hatfield and St Albans on their own only have a self-containment rate of around 61% when considered together (and with London moves excluded). This indicates that it would be difficult to justify the existence of a single HMA comprising St Albans and Welwyn Hatfield.
- 3.50 Looking at those moving whose origin was Hertfordshire the numbers are slightly lower. We can see that without London the commissioning authorities have a containment rate of around 73% (around 10% higher than when London is included). This again grows with the inclusion of St Albans and Welwyn Hatfield (77% and 79%).

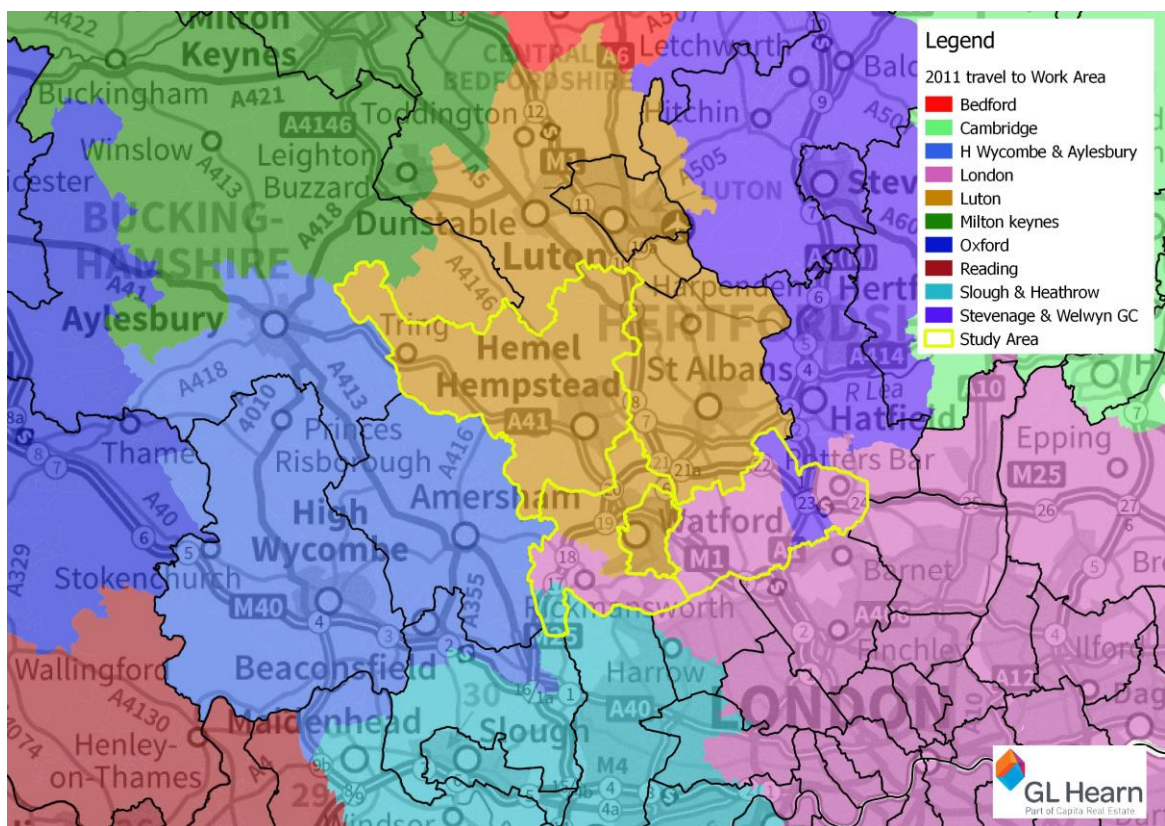
Commuting Flows

- 3.51 The analysis of commuting flows in this section has been used to consider further the housing market geography. It also provides a key input to the definition of the FEMA.
- 3.52 Our starting point for considering commuting patterns has been the 2011 Travel to Work Areas (TTWA) which were produced by the ONS. These are the only official and nationally consistent definition of Travel to Work Areas.
- 3.53 The TTWAs were an attempt to identify self-contained labour market areas in which the majority of commuting flows are contained. It should however be recognised that in practice, it is not possible to divide the UK into entirely separate labour market areas as commuting patterns are too diffuse.
- 3.54 The TTWAs were developed as approximations to self-contained labour markets, i.e. areas where most people both live and work. As such they are based on a statistical analysis rather than

administrative boundaries. The 2011 TTWAs were produced by analysing commuting flows from the 2011 Census.

- 3.55 The criteria for defining TTWAs were that at least 75% of the area's resident workforce work in the area and at least 75% of the people who work in the area also live in the area in most instances. The area must also have had a working population of at least 3,500. However, for areas where the working population in excess of 25,000, self-containment rates as low as 66.66% were accepted.
- 3.56 As illustrated in Figure 14, Watford, Dacorum and the north eastern part of Three Rivers fall within the Luton TTWA. The Luton TTWA also includes Luton and St Albans; and the southern parts of Central Bedfordshire, parts of Aylesbury Vale and North Hertfordshire.
- 3.57 Hertsmere predominantly falls within the London TTWA although the areas around the A1 fall within the Stevenage and Welwyn Garden City. The south western parts of Three Rivers fall within the London TTWA (including Rickmansworth); with a small part falls within the Slough and Heathrow HMA.

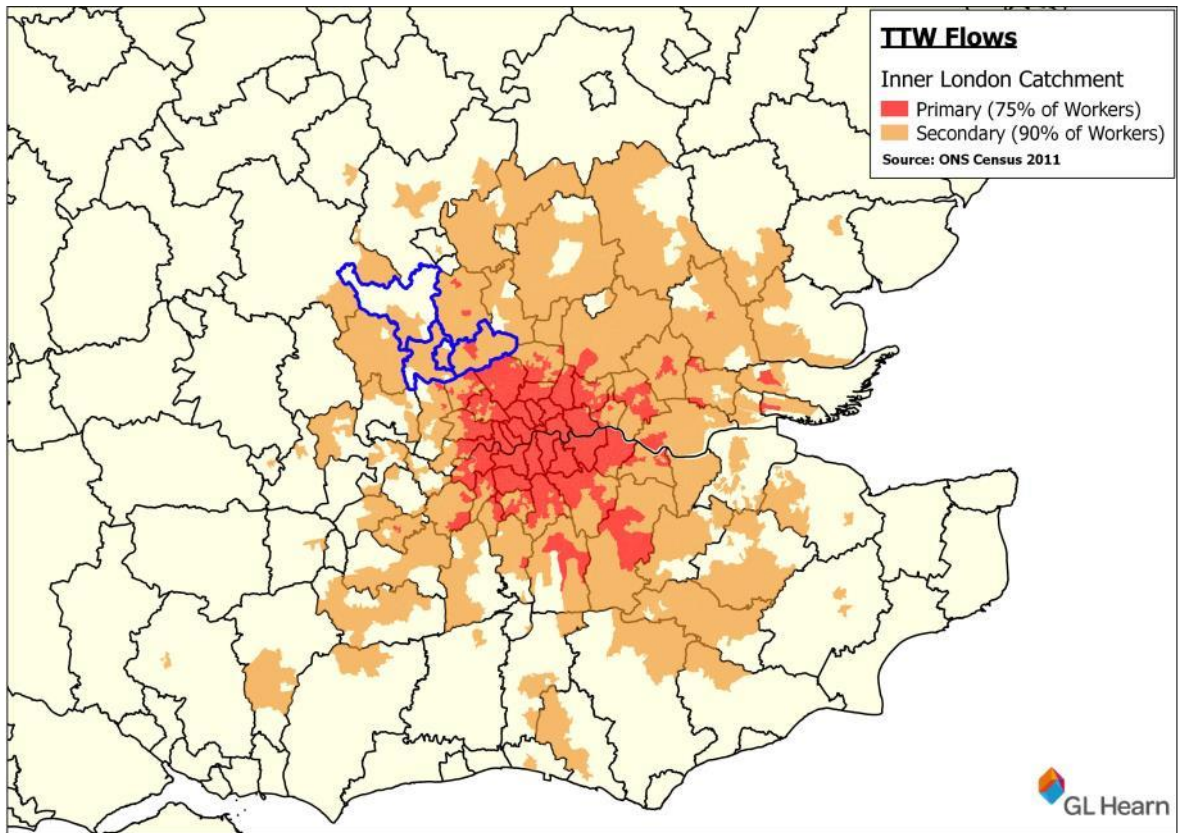
Figure 14: 2011 Travel to Work Areas



Source: ONS, 2015

- 3.58 Although the name suggests that the focus of the TTWA area is Luton, there are a number of other major employment centres that fall within it including Watford, Hemel Hempstead and St Albans.
- 3.59 The area does not include Welwyn Hatfield which is situated in the Stevenage and Welwyn Garden City TTWA.
- 3.60 Broadly, **ONS defined two labour market areas (based on 2011 Census data) which align broadly with the M1 and A1(M) Corridors. This analysis is important as it suggests that Welwyn Hatfield relates more to an A1-focused economy / housing market than to Watford and surrounds**, which along with St Albans is focused on the M1.
- 3.61 Clearly the influence of London is also at play when looking at commuting patterns. Its influence on commuting patterns is stronger than that on migration.
- 3.62 We have next sought to interrogate further commuting patterns locally using the 2011 Census data. Looking first at commuting flows to London, we have identified for the Inner London Boroughs:
- Primary Catchment – This reflects the Middle-Level Super Output Areas (MSOAs) with the highest contribution of employees comprising 75% of the total workforce;
 - Secondary Catchment – Which reflects the remaining MSOAs not within the primary catchment with the highest contribution of employees comprising up to 90% of the total workforce.
- 3.63 Figure 15 illustrates the primary and secondary catchment for the Inner London Boroughs. It shows the secondary catchment extends beyond the Greater London Boundary taking in much of Hertfordshire, Essex and Surrey. It also includes some MSOAs as far as Milton Keynes, Brighton and Winchester. The map highlights **the extensive influence of London on commuting from areas within the South East and East of England**. It shows the Capital's extensive economic influence.

Figure 15: London Commuting Catchment (2011)



Source: ONS, Census 2011

- 3.64 As well as considering commuting to Inner London, we have reviewed the flows from and between the commissioning authorities (and surrounding areas) to try and understand flows and the containment rates of the resident workforce.
- 3.65 Commuting data highlights **the economic influence of Watford on surrounding local authorities, from which it draws workers. There is a notable commuting flow (of over 5% of residents in work) to Watford from Hertsmere, Three Rivers and Dacorum.** Three Rivers in particular has around 17% of working residents travelling to Watford.
- 3.66 What is also noticeable are the particularly low rates of commuting self-containment (measured as % of residents in work) in individual local authorities. The number of residents working within the same authority is 21% in Three Rivers; 27% in Hertsmere; 37% in Watford; and highest at 47% in Dacorum.
- 3.67 Dacorum is slightly unusual in that it does not rely quite so much on Watford as a source of employment – this reflects the strength and scale of its own employment base. It thus has the highest levels of self-containment of any of the four commissioning authorities.

Table 7: Major Commuting Flows from the Commissioning Authorities (2011)

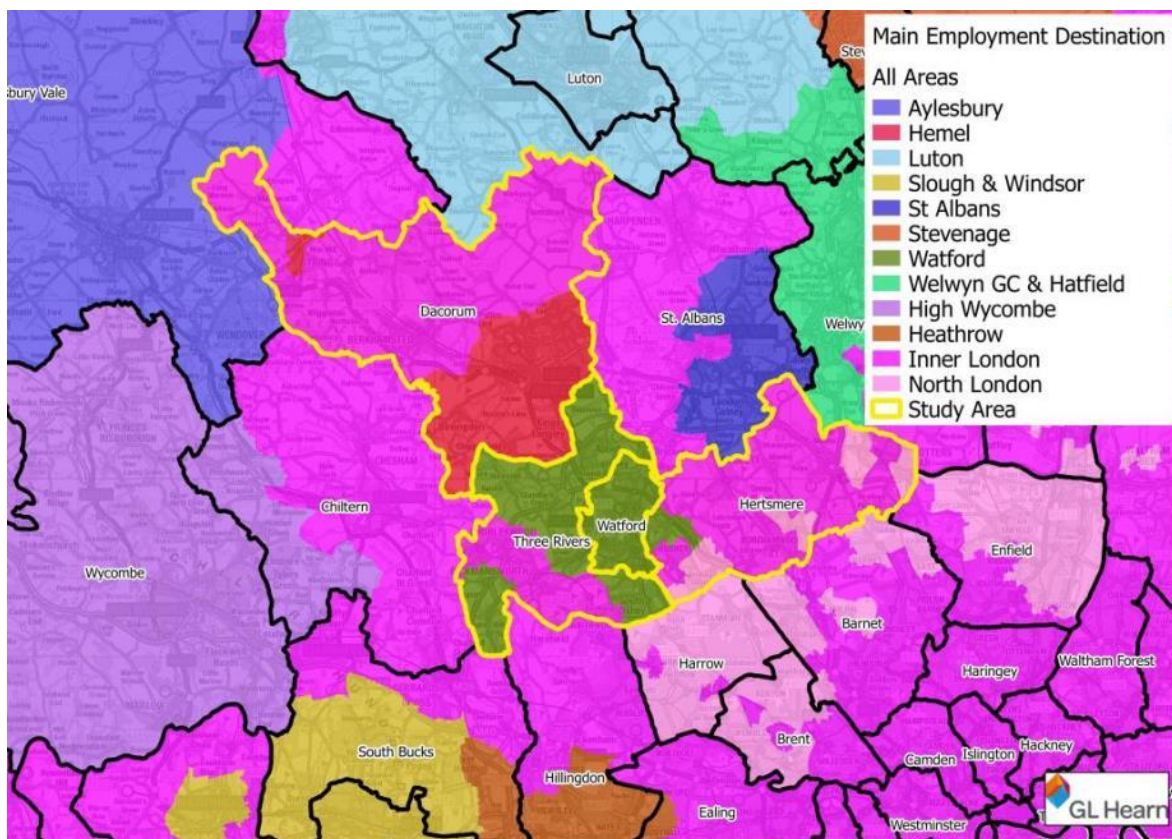
Dacorum Residents			Hertsmere Residents		
	Workers	% of Residents		Workers	% of Residents
Dacorum	27,003	46.65%	Hertsmere	10,378	26.87%
St Albans	3,420	5.91%	Barnet	4,206	10.89%
Watford	3,278	5.66%	Westminster & City	3,784	9.80%
Westminster & City	3,175	5.48%	Watford	2,466	6.38%
Three Rivers	2,102	3.63%	St Albans	1,698	4.40%
Three Rivers Residents			Watford Residents		
	Workers	% of Residents		Workers	% of Residents
Three Rivers	7,297	21.19%	Watford	14,428	36.79%
Watford	5,747	16.69%	Three Rivers	3,483	8.88%
Westminster & City	3,014	8.75%	Westminster & City	2,593	6.61%
Hillingdon	2,352	6.83%	Hertsmere	2,352	6.00%
Harrow	1,801	5.23%	St Albans	1,539	3.92%
St Albans Residents			Welwyn Hatfield Residents		
	Workers	% of Residents		Workers	% of Residents
St Albans	20,475	36.0%	Welwyn Hatfield	20,391	47.1%
Westminster & City	6,710	11.8%	St Albans	3,196	7.4%
Welwyn Hatfield	4,793	8.4%	Westminster & City	2,486	5.7%
Dacorum	2,241	3.9%	Hertsmere	1,682	3.9%
Hertsmere	2,122	3.7%	Stevenage	1,474	3.4%

Source: ONS, Census 2011

- 3.68 Looking beyond the commissioning authorities, Welwyn Hatfield has a particularly high resident self-containment rate (47%) relative to other authorities in Hertfordshire. The strongest commuting flow is with St Albans, with 7.4% of Welwyn Hatfield residents commute to St Albans to work.
- 3.69 St Albans has a self-containment rate similar to that of Watford (36%). It also has a considerable percentage traveling to Westminster and the City (12%) each day as well as to Welwyn Hatfield (8.4%).
- 3.70 Because of the low self-containment rate and the high levels of commuting to the capital, it is therefore prudent to recognise London's influence on employment within the commissioning authorities – but to seek to develop the analysis to provide more practical local boundaries to work with. In doing so we have to be mindful that the wider an area becomes the higher the self-containment rate is likely to be.

- 3.71 We have therefore reviewed where people live and work at more localised levels concentrating on the major employment centres around the commissioning authorities. We have done this by identifying which of the following is the most popular employment location for each Middle Level Super Output Area (MSOAs) in the wider area:
- Aylesbury Town;
 - Hemel Hempstead;
 - High Wycombe;
 - Luton and Dunstable;
 - Slough and Windsor;
 - St Albans Urban Area;
 - Stevenage;
 - Watford Urban Area; and
 - Welwyn GC and Hatfield.
- 3.72 For completeness we have also looked at the following areas in London as well:
- Heathrow;
 - Inner London; and
 - North London.
- 3.73 Figure 16 draws the analysis together to identify the main commuting destination from different MSOAs across the commissioning authorities, and in surrounding areas.

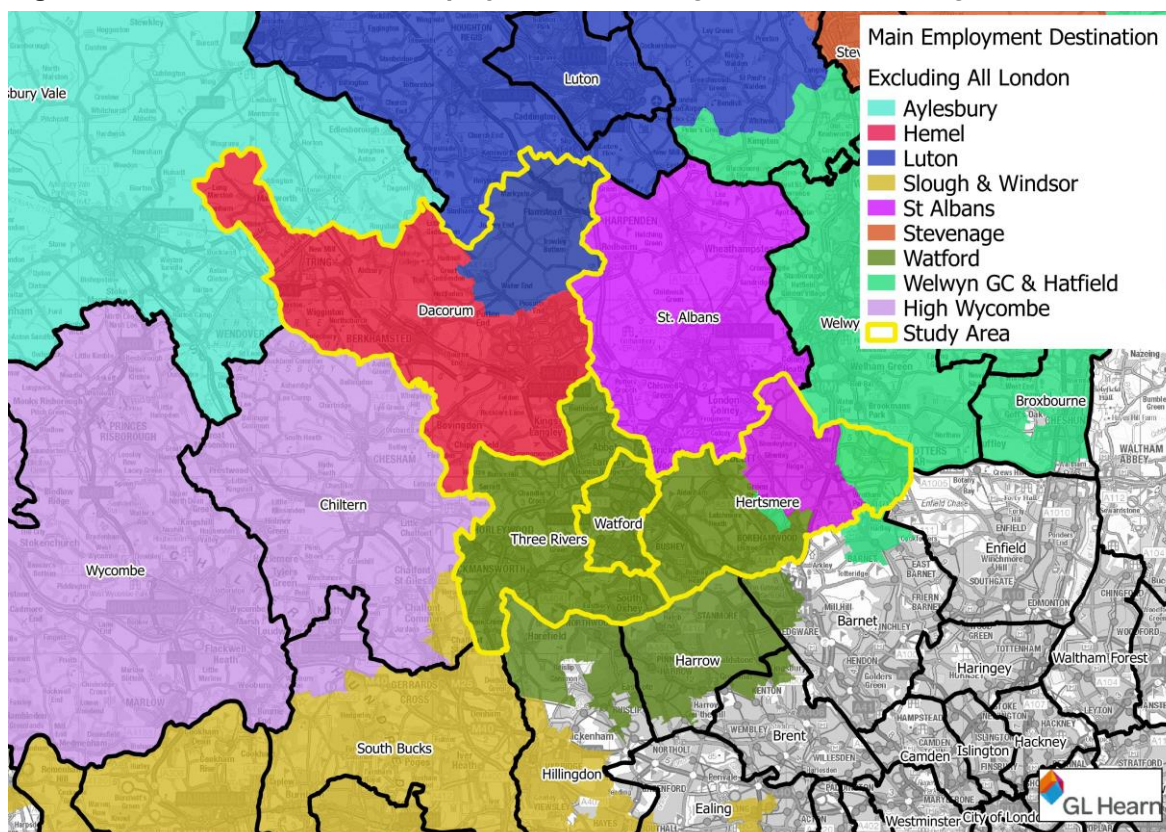
Figure 16: Main Destination of Employment, 2011



Source: ONS, Census 2011

- 3.74 As Figure 16 illustrates, the influence of London on commuting patterns across Hertfordshire is clear; although the areas in and around the major employment centres of Hemel Hempstead, Watford, St Albans, and Welwyn/Hatfield are the main commuting destinations for parts of the area – particularly focusing the urban areas and immediate surrounds.
- 3.75 While we recognise the influence of London on commuting patterns in Hertfordshire, its influence is a little unhelpful in trying to establish more local travel to work catchment areas. In Figure 17 we have therefore recalibrated the analysis with the influence of the three London commuting destinations excluded.

Figure 17: Main Destination for Employment, Excluding London Commuting, 2011



Source: ONS, Census 2011

- 3.76 Figure 17 illustrates that Watford is the main location for employment (once the influence of London is excluded) for all of Watford and Three Rivers local authority areas. Watford's influence extends into north London, however we acknowledge that is a little misleading and can be excluded on the basis that these areas are much more closely aligned to other parts of London; and that any other influences would be minimal.
- 3.77 Hemel Hempstead's influence covers the majority of Dacorum, with the exception of the north-western part of the authority including Markyate and Gaddesden Row which relate more strongly towards Luton.
- 3.78 Commuting relationships in Hertsmere are slightly more complicated. The western parts of the Borough (including Bushey and Borehamwood and Radlett) relate to Watford, as their core employment location. Shenley and South Mimms relates most strongly towards St Albans; whilst Potters Bar relates more towards Welwyn/Hatfield.
- 3.79 Taking those areas which relate most closely to the employment centres as a whole i.e. those areas in dark green (Watford Urban Area and excluding those MSOA in London) red (Hemel

Hempstead), and Blue (St Albans Urban Area) we have sought to identify the self-containment rate for each. These areas are not constrained to local authority boundaries and in Watford's case the commuting area extends into Three Rivers. These are referred to as catchment zones.

3.80 The two core catchment zones within the commissioning authorities have the following self-containment rate (as a proportion of working residents):

- Watford Catchment – 43%; and
- Hemel Hempstead Catchment – 47%

3.81 These are again influenced by those traveling to London for employment. Once those London commuters are removed the self-containment rate increases to (as a proportion of working residents):

- Watford Catchment – 67%; and
- Hemel Hempstead Catchment – 57%

3.82 If we are using the threshold of 75% commuting self-containment as an appropriate threshold for defining a Travel to Work Area, as established by the 2007 ONS work, these areas in their own right do not breach that level. We have therefore sought to assess self-containment for the combined area. Combining these two areas, the self-containment rate (as a proportion of working residents) increases to 51%. If commuting flows to London are excluded, this increases to 71%. Again this falls short of the 75% threshold.

3.83 We have sought to examine the effect of increasing this area again to include the St Albans Zone. This in its own right has a low self-containment rate of 36%. When London's influence is excluded the rate increases to 50%. Either way this is insufficient to justify considering St Albans as an HMA or TTWA in its own right. However when combined with the Hemel Hempstead and Watford zones the self-containment rate increases to 53%; and to 74% when those travelling to London are excluded.

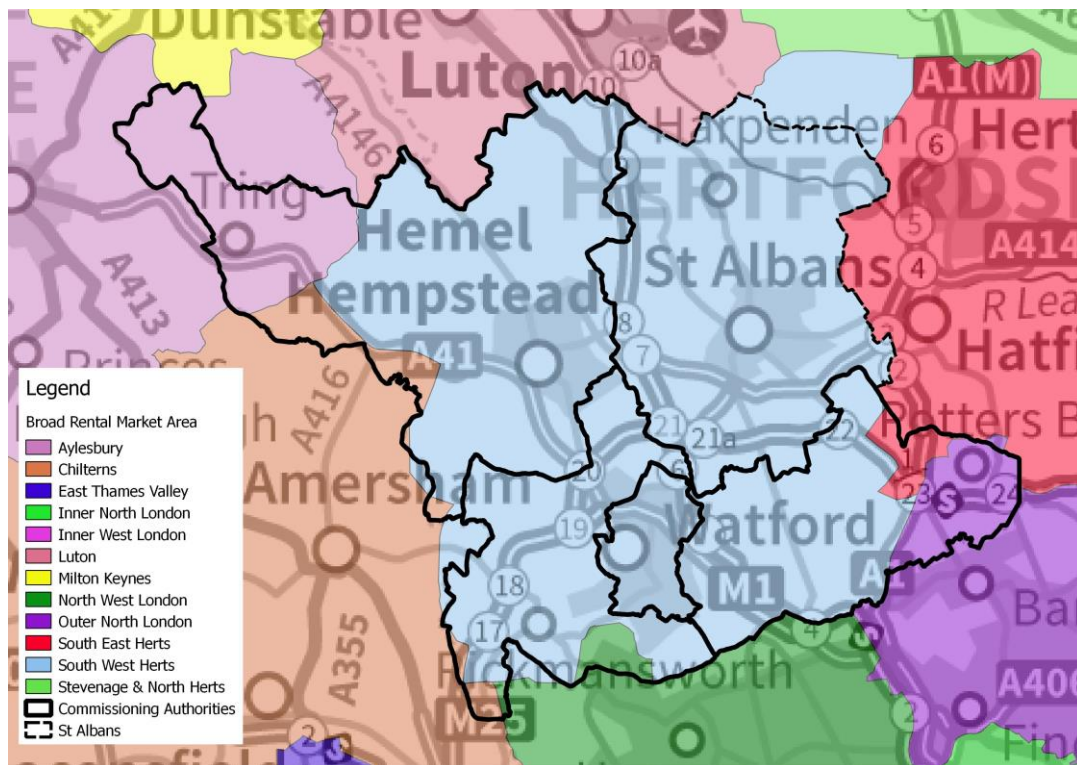
3.84 While this figure does not exceed the 75% threshold typically used for TTWAs, it does not take into account the 3,283 residents who live in the parts of Hertsmere and Dacorum which relate to Welwyn Hatfield and Luton respectively but who work somewhere in the three identified zones.

3.85 If we therefore look at the commuting self-containment level for the five local authorities of Dacorum, Hertsmere, Three Rivers, St Albans and Watford as a whole (based on administrative geographies); the self-containment level achieved is 53%. When the influence of London is excluded, this increases to 76% commuting self-containment. This is a sufficient level of self-containment to support the definition of this as an FEMA, and the identification of the area as a single HMA.

Broad Rental Market Areas

- 3.86 Separately from the SHMA analysis, the Valuation Office Agency (VOA) has defined Broad Rental Market Areas. These areas, last reviewed in 2011, represent areas where a person could reasonably be expected to live – taking into account access to facilities and services. They are used for benchmarking housing benefit.
- 3.87 The VOA has independently defined a South West Hertfordshire Broad Rental Market Area (BMRA). This includes all of Watford and St Albans local authorities; as well as the vast majority of Dacorum, Three Rivers and Hertsmere. The geography of this is shown below; and provides further justification for the grouping of the four commissioning authorities together with St Albans.

Figure 18: VOA Broad Rental Market Areas



Source: VOA

4 CONCLUSIONS – HMA GEOGRAPHY

4.1 This report has considered how the Housing Market Area (HMA) containing the four commissioning authorities of Dacorum, Hertsmere, Three Rivers and Watford should be defined.

4.2 The PPG sets out that:

A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work. It might be the case that housing market areas overlap.

The extent of the housing market areas identified will vary, and many will in practice cut across various local planning authority administrative boundaries. Local planning authorities should work with all the other constituent authorities under the duty to cooperate⁷.

4.3 It outlines that the HMA can be defined using three sources of information – house prices and rates of change; migration patterns; and contextual information including travel to work areas. In practice, migration and commuting data are the key inputs to defining HMAs (in both this and other areas). This is recognised in the Planning Advisory Service (PAS) Technical Note.

4.4 The PAS Report outlines that whilst recognising local relationships, it is appropriate for strategic planning purposes to define the HMA based on a 'best fit' to local authority boundaries. GL Hearn supports this approach – particularly given that a key purpose of an SHMA is to identify housing need; and that demographic projections which form an important input to this are not published below local authority level.

CURDS Research & Other Previous Research

4.5 The PAS report outlines is useful to start with a "top down analysis" which looks at the whole country – in particular to avoid defining HMAs based on the area which is identified as the starting point (which has been an issue with a number of existing studies which have considered these issues at a more local level). The top down analysis is provided by a research study led by the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University to define HMAs across England, which was published by Government in November 2010⁸.

4.6 The CURDS work identifies a strong relationship with London, defining the four commissioning authorities as part of a London Strategic HMA; however it recognises the practical benefits of looking at more local HMAs in areas around large conurbations. It defines a Local HMA which (using a best fit to local authority boundaries) would comprise:

- Chiltern;
- Dacorum;

⁷ Reference ID: 2a-011-20140306

⁸ C Jones, M Coombe and C Wong for CLG (Nov 2010) *Geography of Housing Markets, Final Report*

- Hertsmere;
- St Albans;
- Three Rivers; and
- Watford.

- 4.7 In addition to the commissioning authorities, the CURDS Study would thus have included Chiltern and St Albans local authorities within the defined HMA. However it must be borne in mind that the CURDS work is based on 2001 data, which is now 13 years old. 2011 Census commuting and migration flow data has been released in Summer 2014 and has been analysed to inform conclusions in this report.
- 4.8 A review of previous research undertaken at a local/ sub-regional level highlights a number of issues relevant to defining the HMA. These include:
- Differences in the scale at which HMA and FEMA boundaries have been drawn;
 - The influence of London on the economy and housing markets in South West Hertfordshire;
 - The GLA's definition that London comprises its own Housing Market Area;
 - A lack of evidence from previous work of substantive links north into Luton and Bedfordshire from the South West Hertfordshire authorities;
 - Recent work suggesting that a Central Buckinghamshire HMA / FEMA can be defined which includes Chiltern, in contrast to the CURDS Study analysis which included Chiltern within a Watford-focused HMA;
 - A range of evidence, including through the CURDS Study, previous SHMA Studies, and up-to-date independent evidence from a Study covering Bedfordshire and surrounding areas, which point to St Albans City and District falling within a common HMA to the commissioning authorities.
- 4.9 Analysis of commuting and migration flows using 2011 Census data confirm relatively weak/ local-based linked between Chiltern District and South West Hertfordshire. This supports the findings from the Buckinghamshire authorities' study.
- 4.10 Key questions arising from this, which this Report has examined, are therefore the extent to which the HMA extends further into other parts of Hertfordshire (including St Albans and Welwyn Hatfield).

House Prices

- 4.11 Our analysis has sought to compare house prices spatially for comparable products. This highlights the extent of London's housing market influence, which extends to include Hertfordshire and other parts of the Home Counties.
- 4.12 What is particularly notable is the distinction in prices between areas within Hertfordshire and those in Luton and Bedfordshire, providing clear evidence of a market-based distinction between HMAs in Luton and Central Bedfordshire and South West Hertfordshire. Equally there is a price distinction between South West Hertfordshire and Aylesbury Vale.

- 4.13 Typically within a functional housing market, there will be properties and areas at different price points, allowing households to move up and down the pricing structure. St Albans does demonstrate higher average house prices (and land values⁹) than in the commissioning authorities; but this is influenced by a higher proportion of larger homes within the housing stock; and there will typically within any defined HMA be areas of higher and lower prices and land values reflecting localised differences in the housing offer and quality of place. The mapping of house prices for similar sizes of properties indicates that house prices in St Albans are very much aligned to those in parts of Hertsmere and particularly Three Rivers; and shows variations in house prices within St Albans District.
- 4.14 The house price geography supports the concept behind of London commuter belt housing markets, characterised by strong commuting relationships with London and higher house prices relative to areas at a further distance from the Capital. Such areas are however is not limited to those areas in the East of England – but would include parts of the South East region as well. The price analysis broadly supports the definition of the regional-scale influence of London in housing market terms. More local level sub-markets, based on house price commonality, are evident within this.

Migration

- 4.15 Analysis of migration indicates that that none of the four commissioning or surrounding local authorities have a sufficient self-containment level, based on the 2011 Census data, to be considered to represent a Housing Market Area in its own right. Even when longer distance moves are excluded only Luton could be considered as having a level of self-containment which is typical for a housing market area. We therefore sought to group the local authorities into suitable housing market areas based on their strongest migratory links.
- 4.16 There is a strong level of migration between areas in Hertfordshire and London. However if London is considered as a separate HMA (based on the London Plan conclusions) and thus excluded, the migration analysis indicates a strong relationship between:
- Dacorum;
 - Hertsmere;
 - Three Rivers;
 - St Albans; and
 - Watford.
- 4.17 Excluding migration to/ from London, the commissioning authorities have a containment rate for migration of around 80% (around 20% higher than when London is included) on the basis of those

⁹ As shown in Section 6 of the main SHMA Report

moving to the area. This grows further still with St Albans and Welwyn Hatfield are included (to 84% and 86% respectively).

- 4.18 However Welwyn Hatfield and St Albans on their own only have a self-containment rate of around 61% when considered together (and with London moves excluded). This indicates that it would be difficult to justify the existence of a single HMA comprising St Albans and Welwyn Hatfield; or indeed separate HMAs covering these areas. St Albans District on its own has a level of migration self-containment of 57-58% (depending on how it is calculated and excluding long distance flows) – notably below the 70% threshold set out in the PPG.

Commuting Patterns

- 4.19 The final element of the analysis considered commuting patterns, using 2011 Census data. The ONS have recently published their own Travel to Work Areas using the Census data. This showed a Luton TTWA which included (among others) Luton, Dacorum, Watford and St Albans.
- 4.20 Wider commuting influences on the area include London, Heathrow and Slough, Welwyn and Stevenage. Broadly the analysis highlighted two distinct corridors along the M1 and A1(M). This analysis is important as it suggests that Welwyn Hatfield relates more to a A1-focused economy / housing market than to Watford and surrounds.
- 4.21 Our own analysis highlighted the strong commuting flows between Hertfordshire and London. However it also shows the economic influence of Watford on surrounding local authorities, from which it draws workers. There is a notable commuting flow (of over 5% of residents in work) to Watford from Hertsmeire, Three Rivers and Dacorum. There is a similar scale of flow between Dacorum and St Albans.
- 4.22 The travel to work analysis highlights a number of notable consistencies. Firstly it is clear that the self-containment rates within each of the commissioning authorities are notably low. This reflects the strong pull of London in terms of a location for employment. This is also highlighted when we examine the key employment centres. In this regard South West Hertfordshire is little different from many of the local authorities in the Home Counties.
- 4.23 Excluding those commuting to London the analysis identifies four key employment centres for those living in the commissioning authority areas, those being:
- Hemel Hempstead;
 - St Albans;
 - Watford; and
 - Welwyn Hatfield.

- 4.24 We have looked at the self-containment rates of the core catchment zones for these employment centres. i.e. the area which most people (excluding those travelling to London) live and seek employment within. Again these zones show relatively low levels of self-containment even when excluding those commuting to London from the equation.
- 4.25 We have sought to group these zones until the self-containment rate exceeds 75% when commuting to London is excluded. The combination of the Hemel Hempstead and Watford zones has a self-containment rate of around 71%. This increases to 74% when the St Albans catchment is included. While this in itself does not exceed the 75% threshold self-containment rate for a travel to work area, with the addition of those areas which are within the commissioning authorities but do not relate to the identified catchment zones for Watford, Hemel or St Albans (see Figure 24) the self-containment rate increases to 76%, based on administrative boundaries. This is a sufficient level of self-containment to support the definition of the area as an FEMA, and subsequently the identification of the area as a single HMA based on the commissioning authorities and St Albans on the basis of commuting patterns.

Bringing the Analysis Together

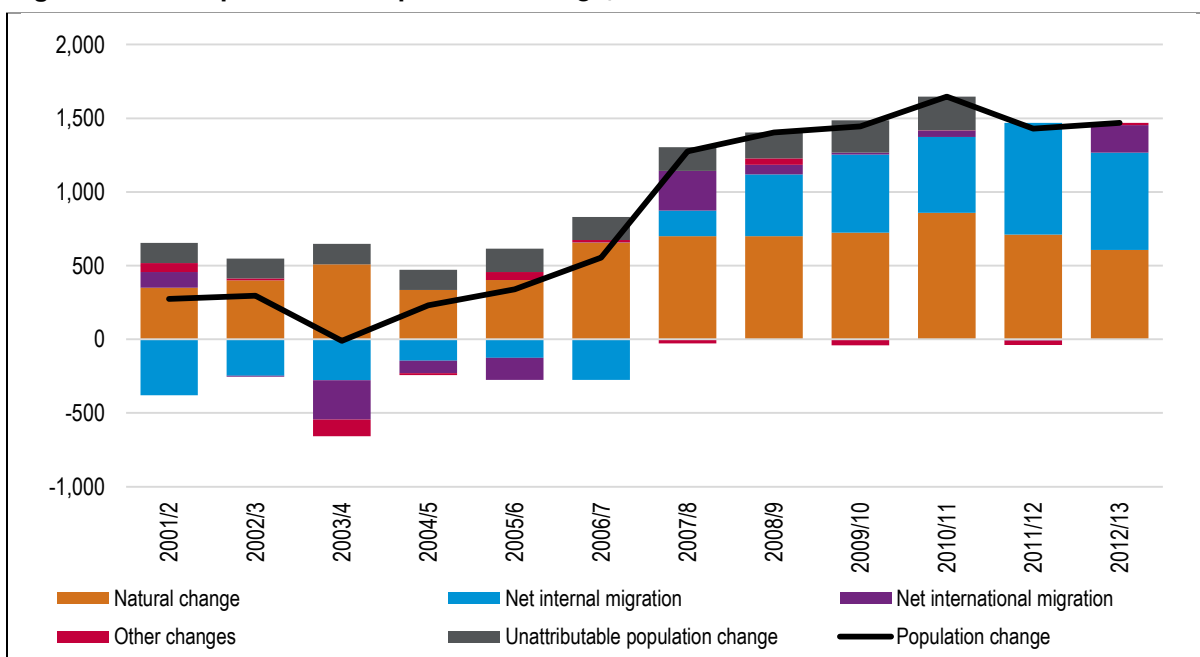
- 4.26 Throughout the analysis we can see that there is a strong and undeniable influence of London be that migration, commuting or house prices. We can therefore conclude that the area forms part of the fringe of the London housing market.
- 4.27 In addition to those strong links with London to the south, we have identified only limited links with Luton and Central Bedfordshire to the north and with Chiltern and Aylesbury to the west. The key question therefore is how far east within Hertfordshire the HMA extends?
- 4.28 In both migratory and commuting terms there are clearly strong links with St Albans. This is particularly the case with Dacorum and Hertsmere. It has an insufficient level of self-containment of migration patterns to be regarded as an HMA in its own right (or with Welwyn Hatfield). ONS define it as within a common Travel to Work Area. It is therefore appropriate to include it within a common HMA to the commissioning authorities. The CURDs Study, VOA Broad Rental Market Areas, and ORS Study for Bedfordshire and surrounding authorities all come to conclusions which support this, lending weight to the conclusions drawn based on the data herein.
- 4.29 In examining Welwyn Hatfield however the local authority has other influences outside of St Albans and the commissioning authorities. These primarily relate to Stevenage and North Hertfordshire. This reflects the A1(M) corridor which links these areas and ratifies the previous Travel to Work Area definitions identified by ONS.

- 4.30 We therefore conclude that the Housing Market Area should be defined as those commissioning authorities as well as St Albans. We recognise that there are external influences on the housing market outside of this area, most notably the strong links to London and the interaction with Welwyn Hatfield. In addition there are also more localised links that have to be considered, these are:
- Tring with Aylesbury Vale;
 - Rickmansworth with Chiltern; and
 - Markyate with Central Bedfordshire and Luton
- 4.31 These cross-boundary influences are two way and occur at the edges of any housing market area. While not sufficient to redraw the boundaries of the HMA these influences along with those with Welwyn Hatfield and the London authorities should be recognised in terms of the focus of duty to cooperate discussions.

APPENDIX B: COMPONENTS OF CHANGE DATA – PAST TRENDS & SNPP SCENARIO

This appendix sets out data regarding the components of population change in the South West Hertfordshire authorities. The analysis shows natural change (the balance of births and deaths) and migration. Past trends are considered first; and then projections of natural change and migration are shown for the SNPP Scenario.

Figure 19: Components of Population Change, mid-2001 to mid-2013 – Dacorum



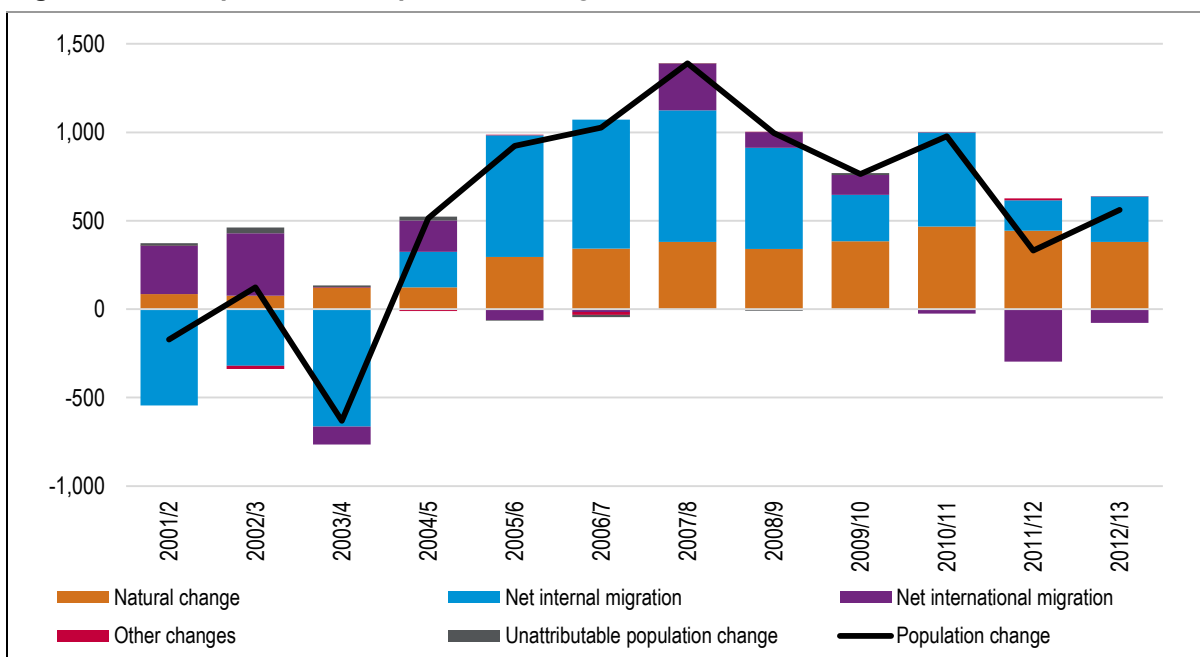
Source: ONS

Table 8: Components of Population Change (2001-13) – Dacorum

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	351	-379	105	62	136	275
2002/3	400	-246	-8	13	136	295
2003/4	509	-278	-267	-113	139	-10
2004/5	335	-144	-86	-12	137	230
2005/6	402	-126	-149	55	158	340
2006/7	657	-276	1	15	157	554
2007/8	699	175	270	-28	159	1,275
2008/9	699	420	65	44	175	1,403
2009/10	724	529	13	-40	220	1,446
2010/11	859	515	43	3	227	1,647
2011/12	711	757	-9	-30	0	1,429
2012/13	606	660	187	16	0	1,469

Source: ONS

Figure 20: Components of Population Change, mid-2001 to mid-2013 – Hertsmere



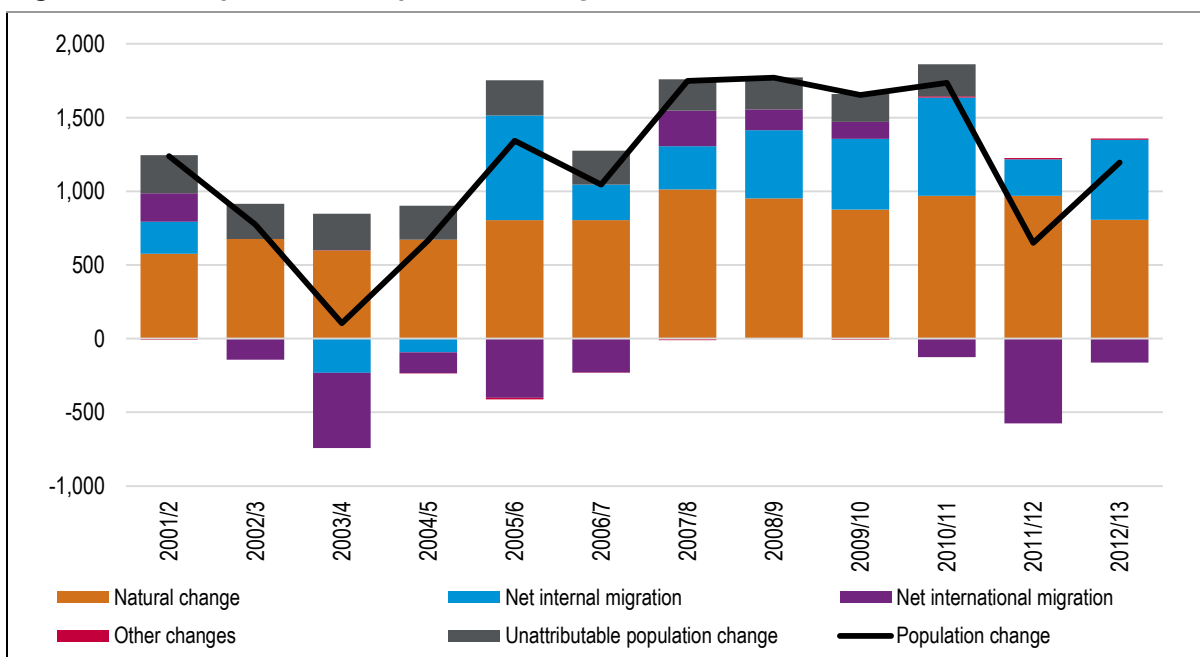
Source: ONS

Table 9: Components of Population Change (2001-13) – Hertsmere

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	85	-544	273	1	14	-171
2002/3	77	-320	352	-18	33	124
2003/4	120	-664	-102	4	11	-631
2004/5	124	201	177	-10	22	514
2005/6	295	688	-62	4	-2	923
2006/7	342	730	-16	-17	-12	1,027
2007/8	381	744	263	1	1	1,390
2008/9	341	572	88	3	-9	995
2009/10	384	263	111	-4	11	765
2010/11	467	532	-25	3	0	977
2011/12	444	171	-296	12	0	331
2012/13	380	257	-78	2	0	561

Source: ONS

Figure 21: Components of Population Change, mid-2001 to mid-2013 – St. Albans



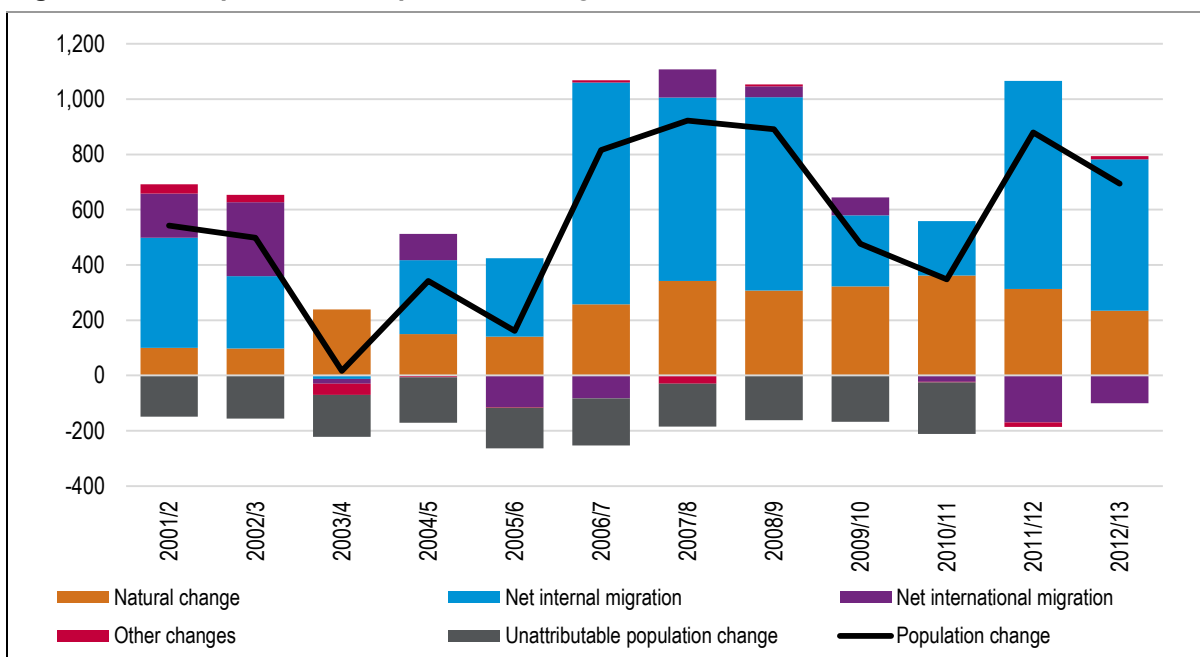
Source: ONS

Table 10: Components of Population Change (2001-13) – St. Albans

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	577	217	192	-7	260	1,239
2002/3	676	0	-143	0	240	773
2003/4	597	-232	-511	4	246	104
2004/5	672	-93	-142	-1	231	667
2005/6	804	711	-402	-9	238	1,342
2006/7	805	240	-229	-2	231	1,045
2007/8	1,012	295	241	-10	212	1,750
2008/9	951	464	141	-2	216	1,770
2009/10	877	479	114	-7	190	1,653
2010/11	970	666	-125	9	217	1,737
2011/12	970	248	-574	7	0	651
2012/13	807	543	-163	8	0	1,195

Source: ONS

Figure 22: Components of Population Change, mid-2001 to mid-2013 – Three Rivers



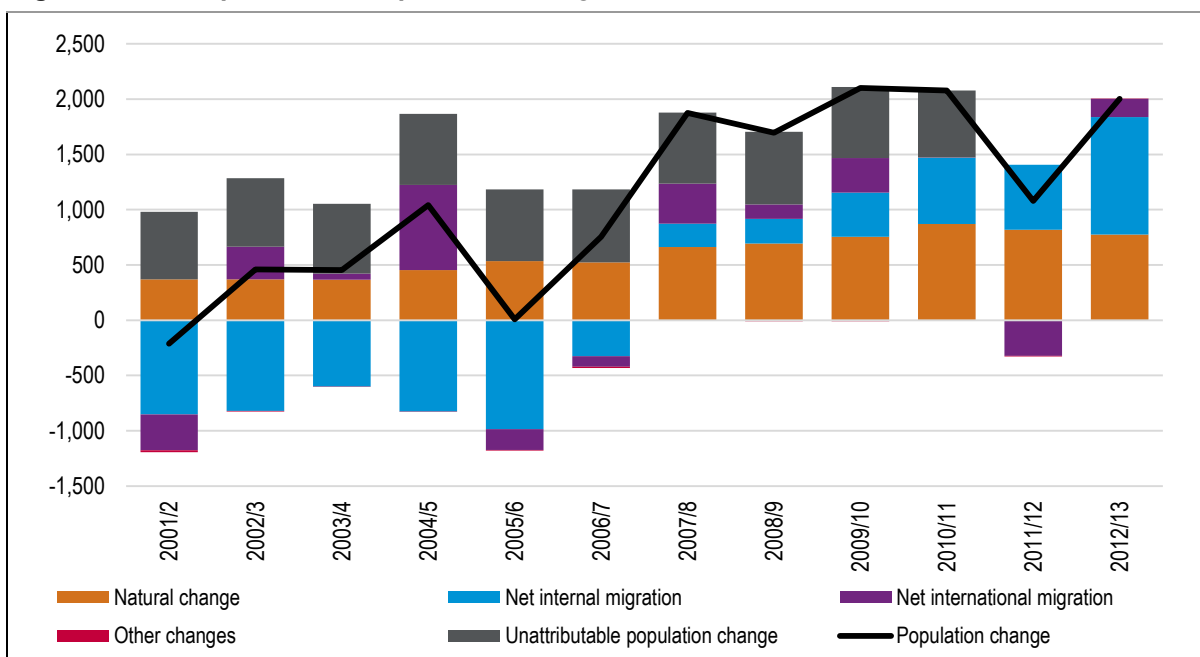
Source: ONS

Table 11: Components of Population Change (2001-13) – Three Rivers

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	100	399	160	33	-149	543
2002/3	98	262	267	27	-156	498
2003/4	239	-12	-18	-40	-152	17
2004/5	150	267	96	-7	-164	342
2005/6	141	284	-114	-2	-148	161
2006/7	258	802	-83	9	-170	816
2007/8	342	664	102	-30	-155	923
2008/9	308	699	40	6	-162	891
2009/10	323	257	64	0	-167	477
2010/11	362	197	-23	-2	-186	348
2011/12	313	753	-170	-16	0	880
2012/13	234	548	-100	12	0	694

Source: ONS

Figure 23: Components of Population Change, mid-2001 to mid-2013 – Watford



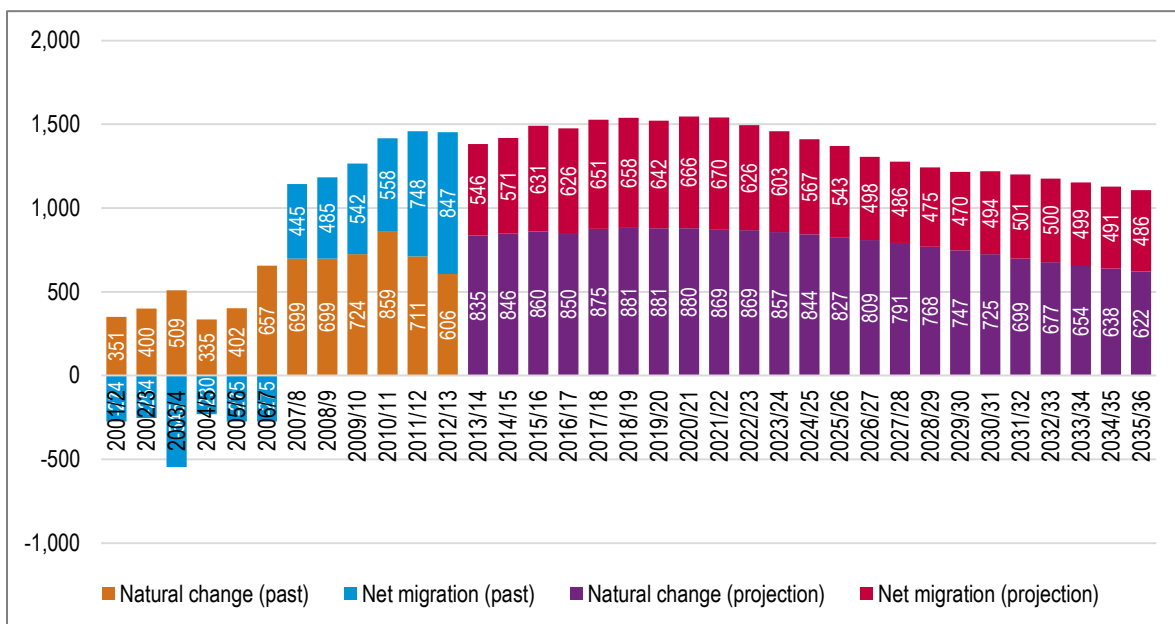
Source: ONS

Table 12: Components of Population Change (2001-13) – Watford

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	369	-852	-325	-16	611	-213
2002/3	369	-820	296	-6	620	459
2003/4	368	-599	54	-1	631	453
2004/5	454	-825	770	-1	643	1,041
2005/6	536	-985	-189	-4	649	7
2006/7	522	-324	-96	-11	663	754
2007/8	662	212	362	-3	644	1,877
2008/9	694	222	131	-10	659	1,696
2009/10	754	402	311	-9	644	2,102
2010/11	872	599	3	-1	606	2,079
2011/12	818	589	-323	-5	0	1,079
2012/13	776	1,062	165	1	0	2,004

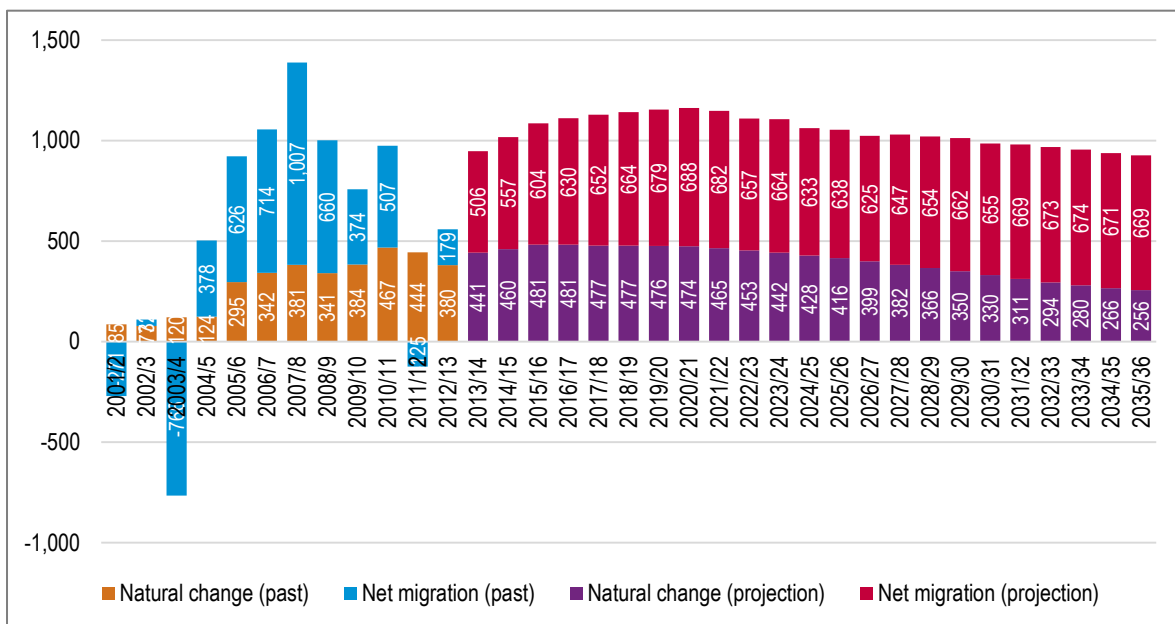
Source: ONS

Figure 24: Components of Population Change, mid-2001 to mid-2036 - Dacorum



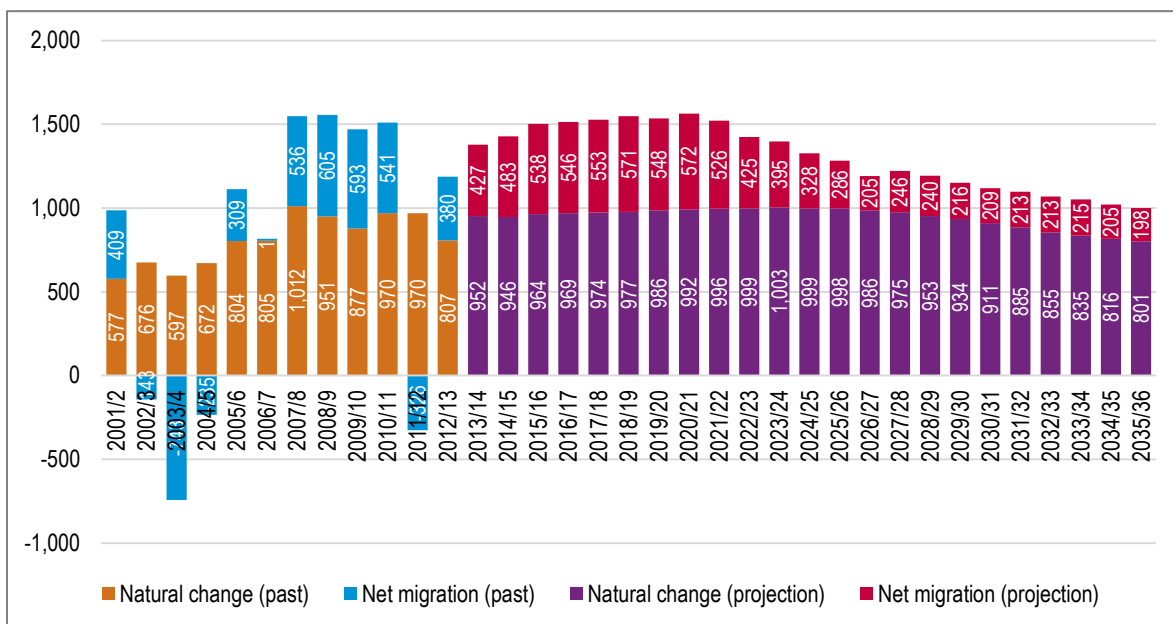
Source: ONS

Figure 25: Components of Population Change, mid-2001 to mid-2036 - Hertsmere



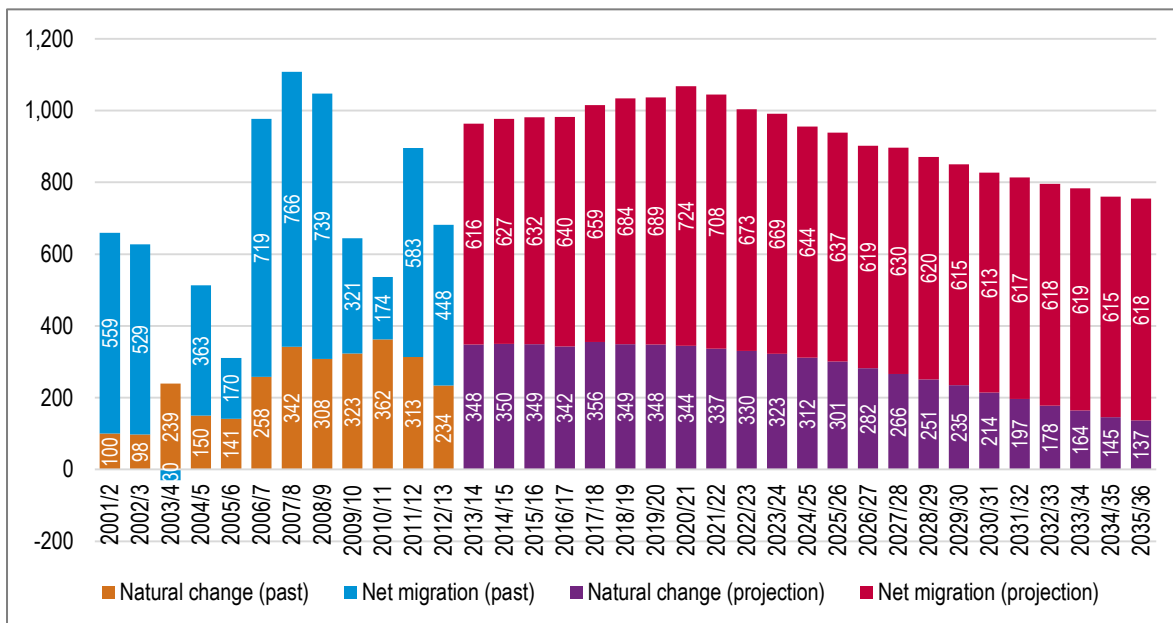
Source: ONS

Figure 26: Components of Population Change, mid-2001 to mid-2036 – St. Albans



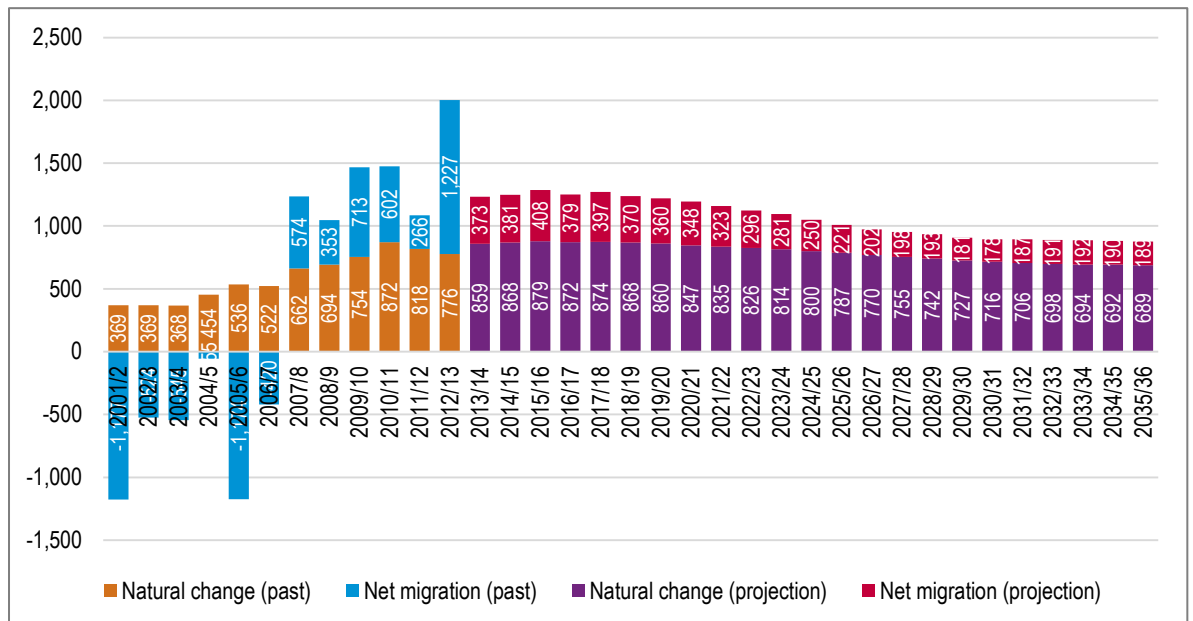
Source: ONS

Figure 27: Components of Population Change, mid-2001 to mid-2036 – Three Rivers



Source: ONS

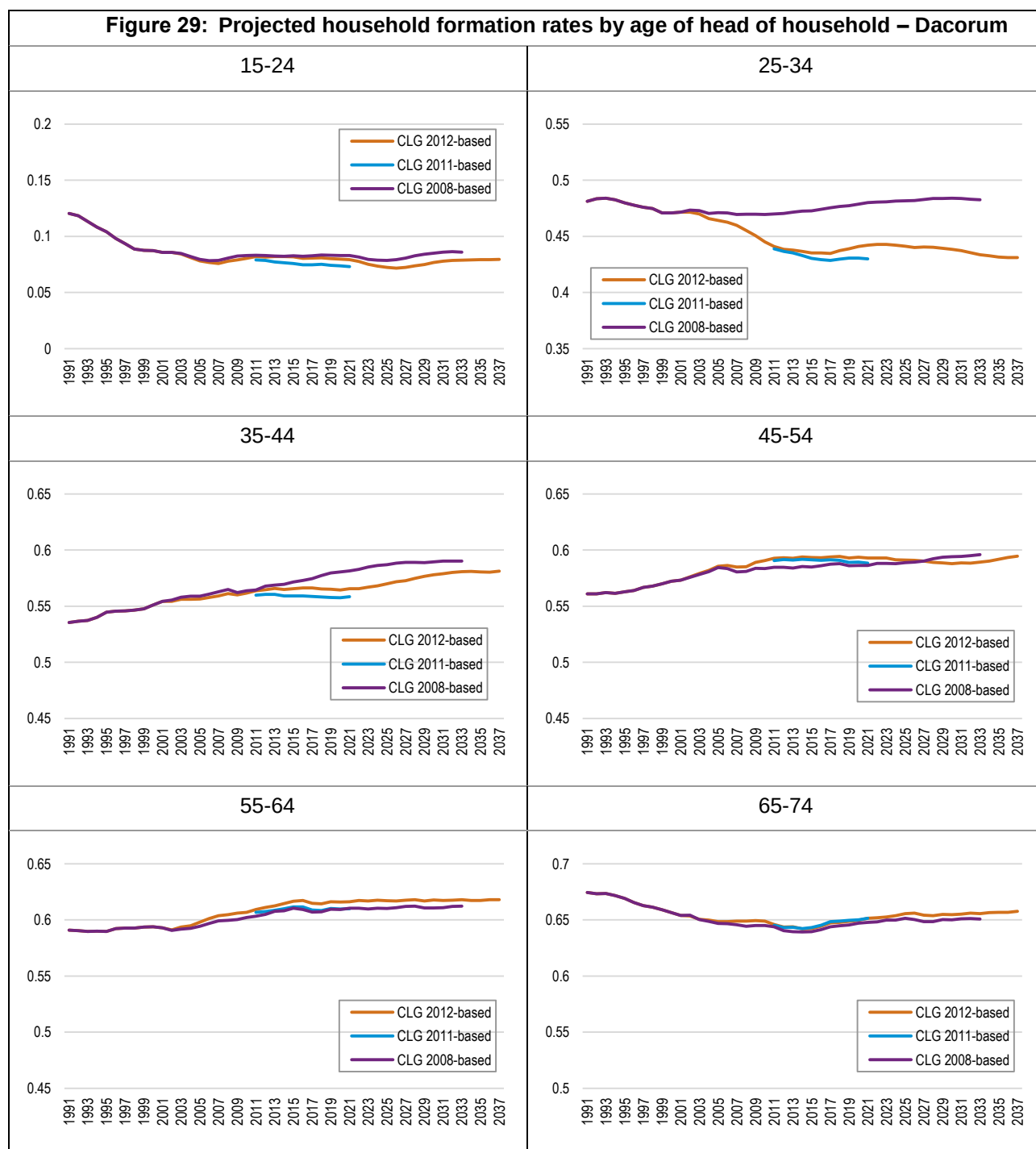
Figure 28: Components of Population Change, mid-2001 to mid-2036 – Watford

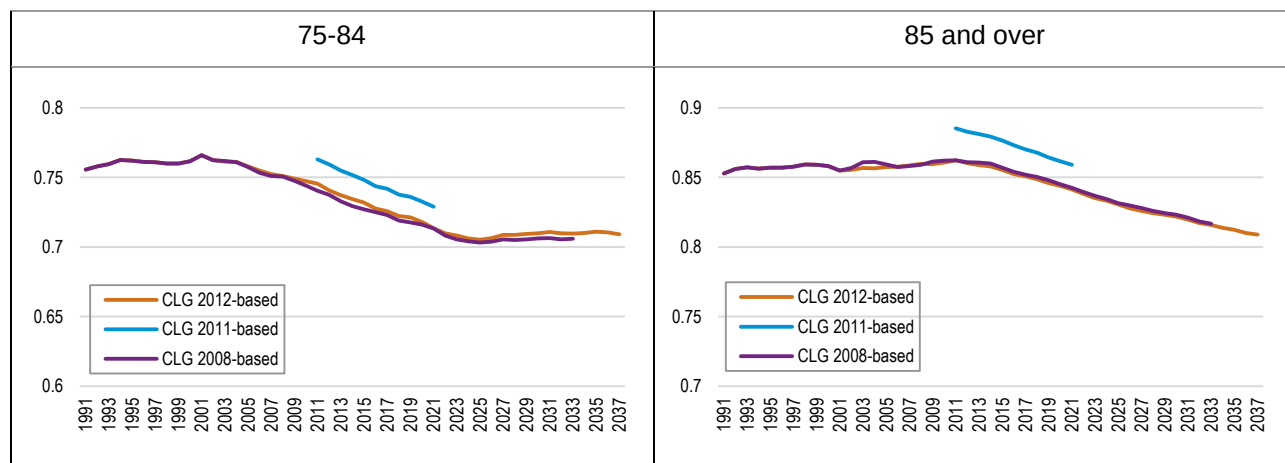


Source: ONS

APPENDIX C: HEADSHIP RATES BY AGE GROUP

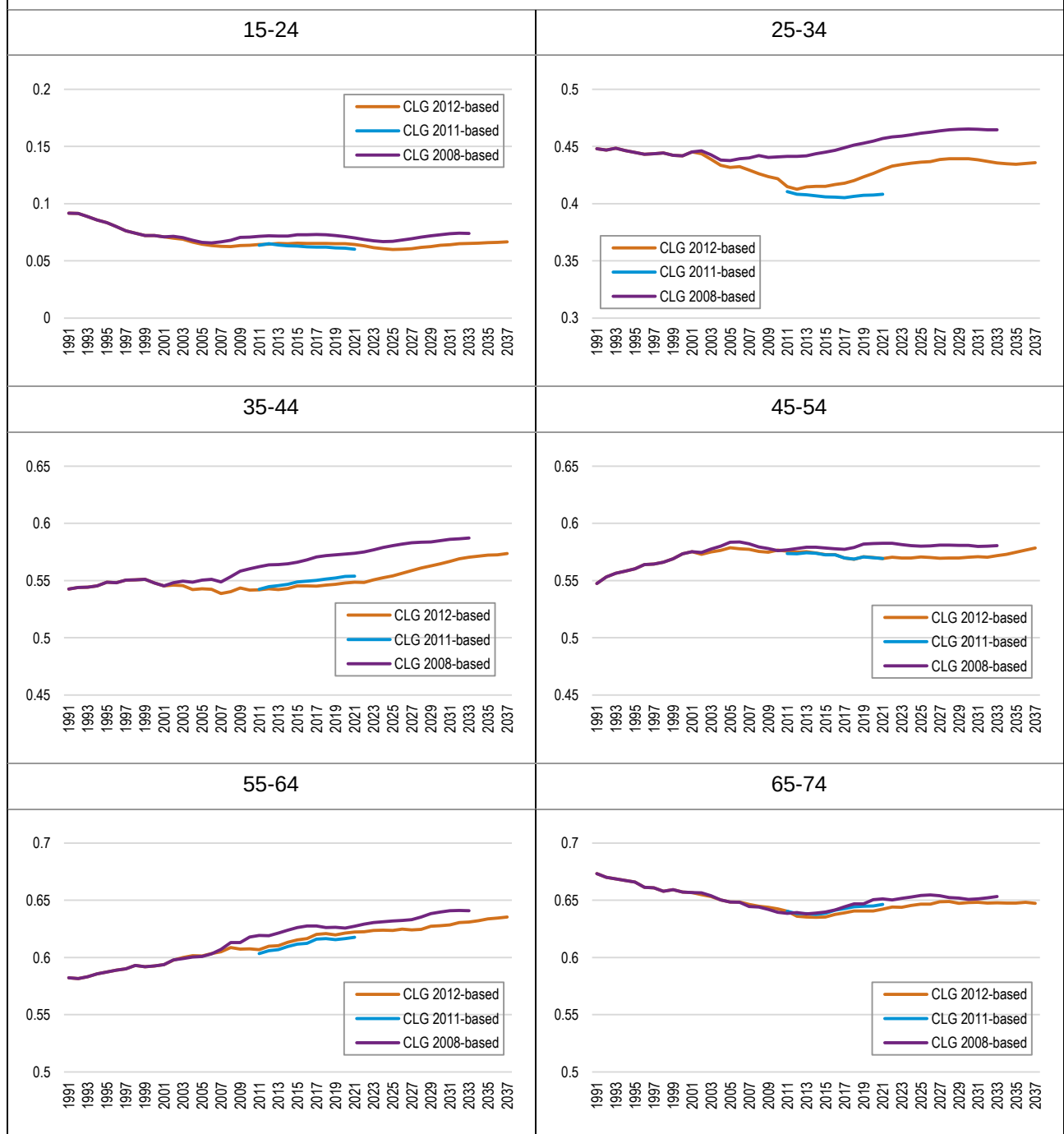
This appendix sets out headship rate trends for each of the South West Hertfordshire authorities based on data from the 2012-based Household Projections.

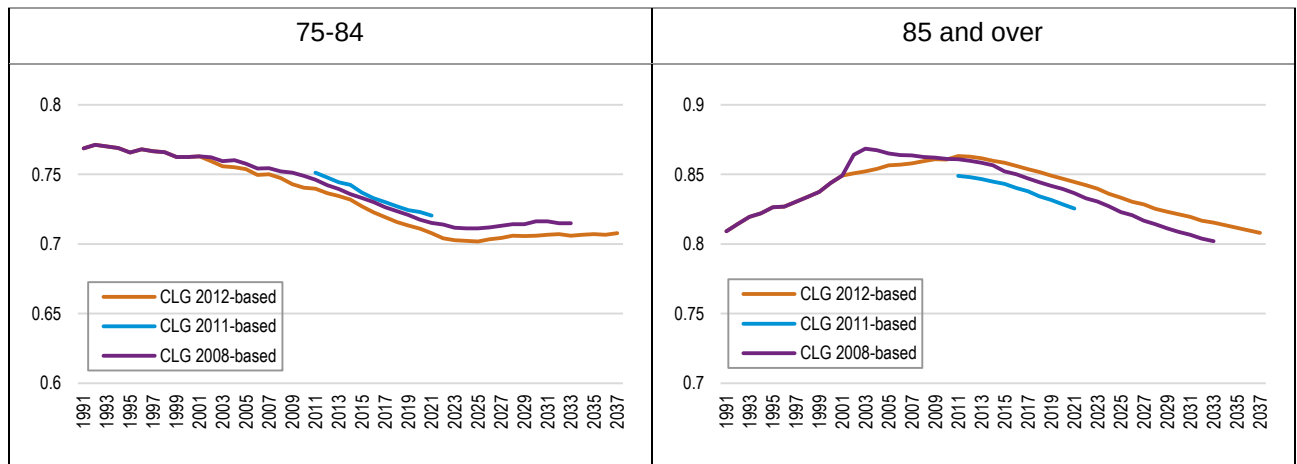




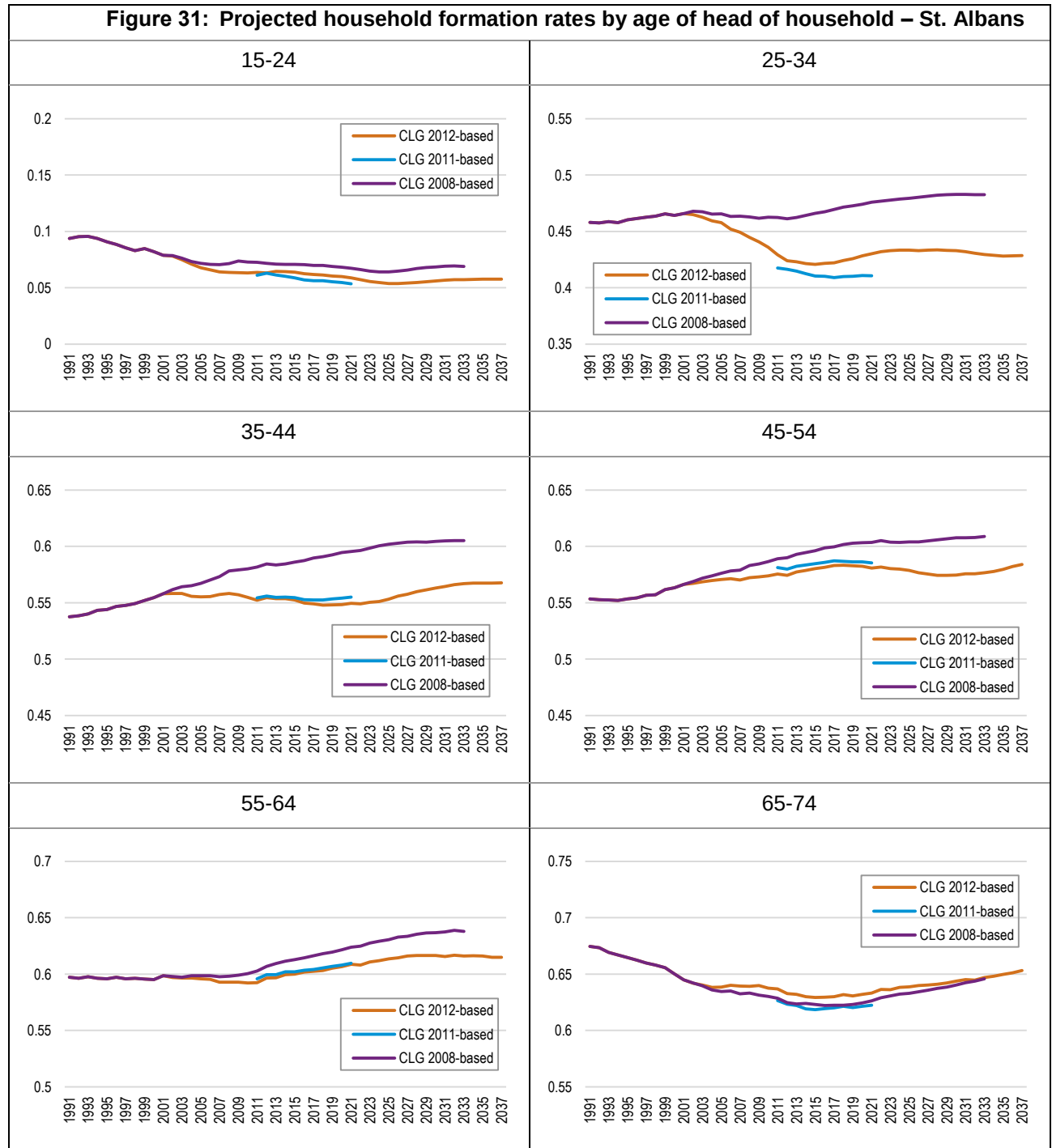
Source: Derived from CLG data

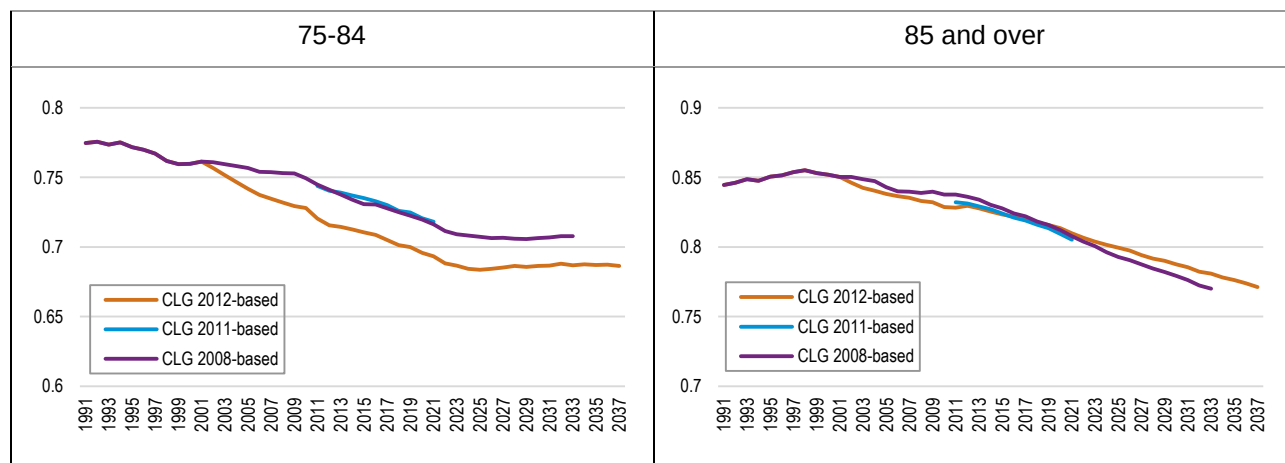
Figure 30: Projected household formation rates by age of head of household – Hertsmere



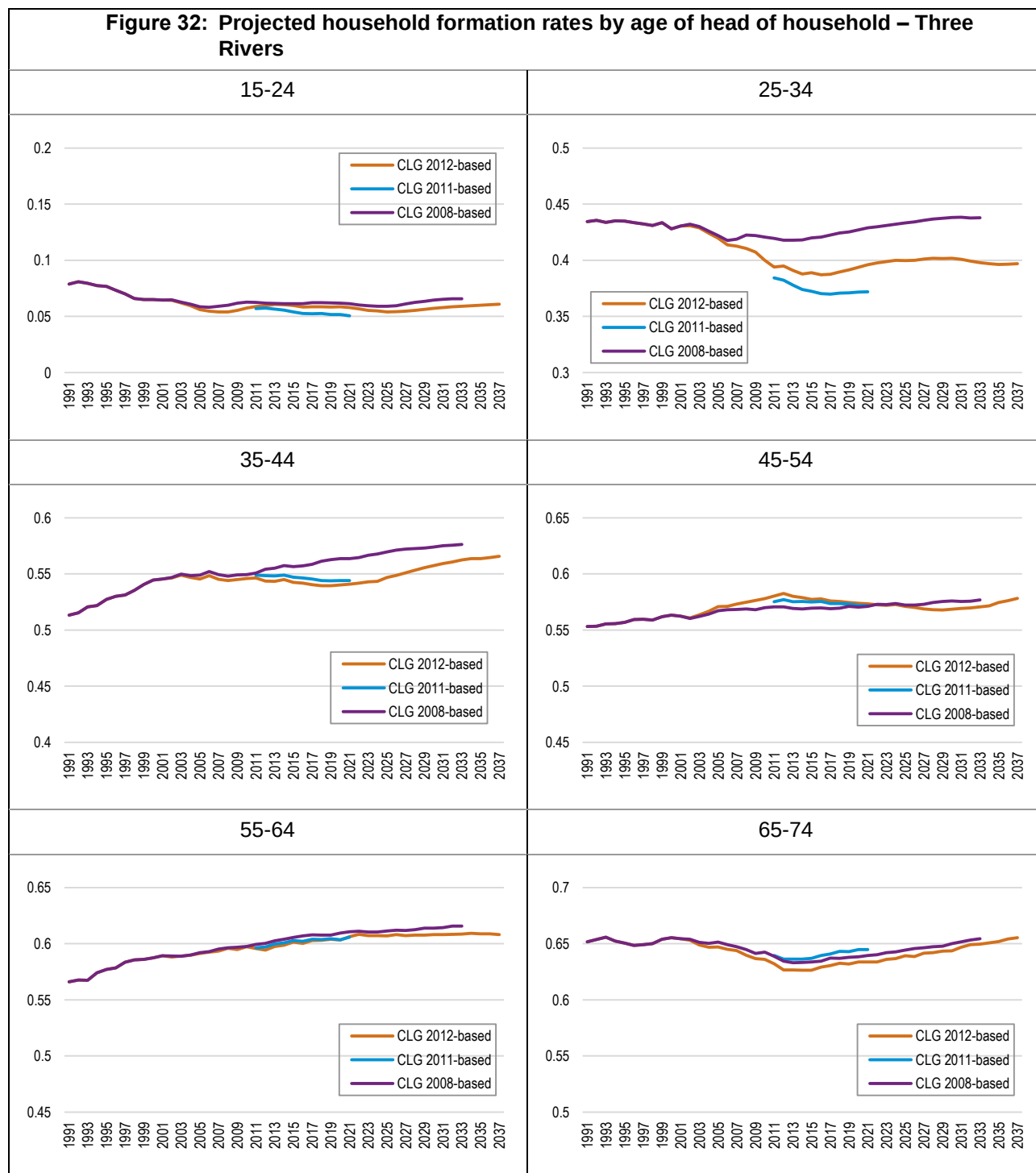


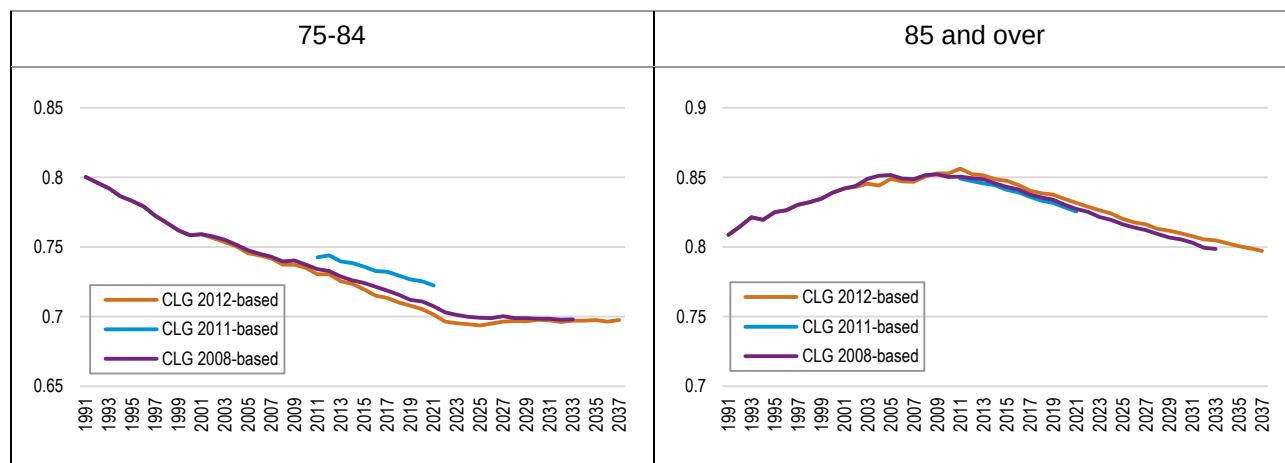
Source: Derived from CLG data



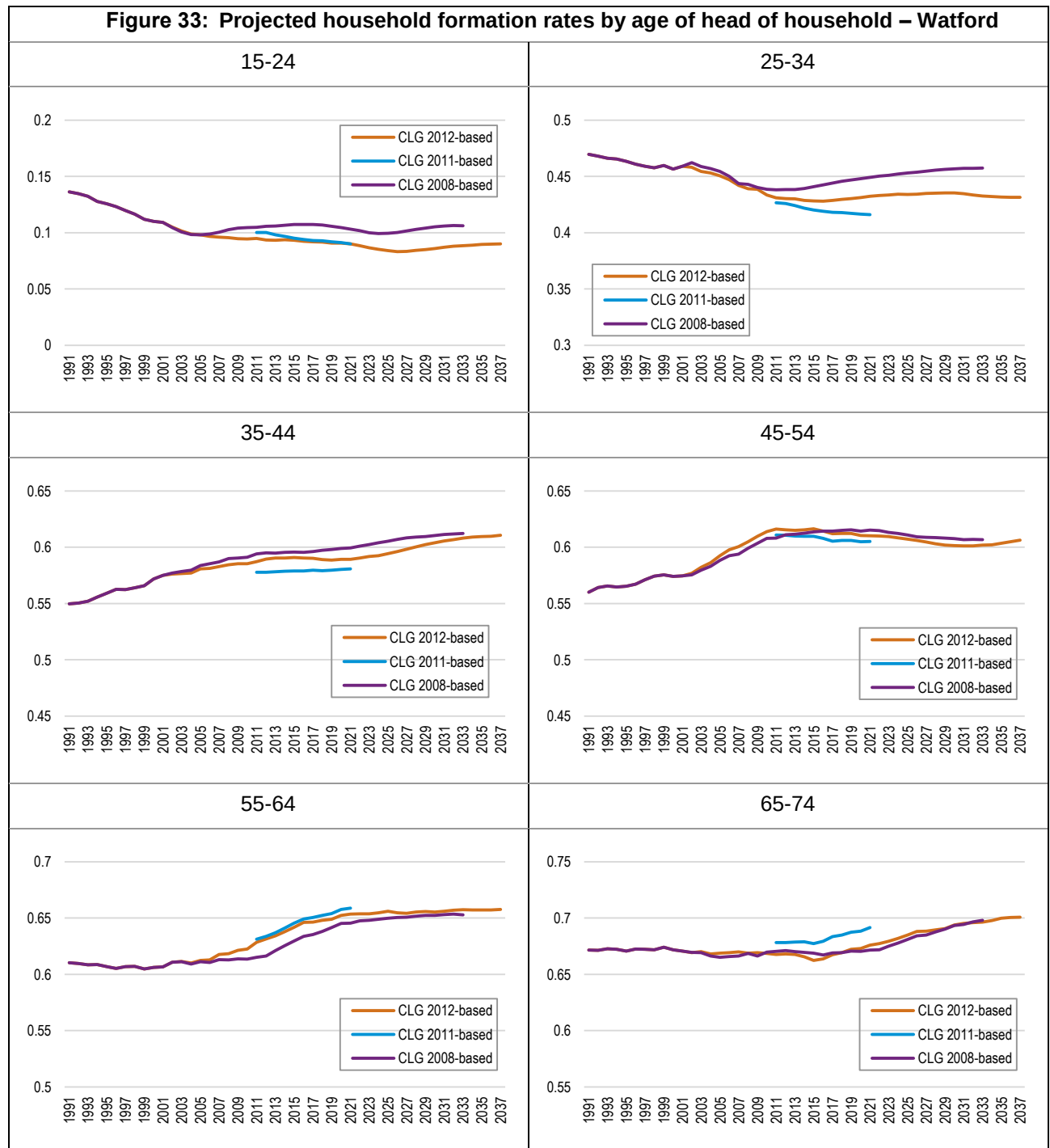


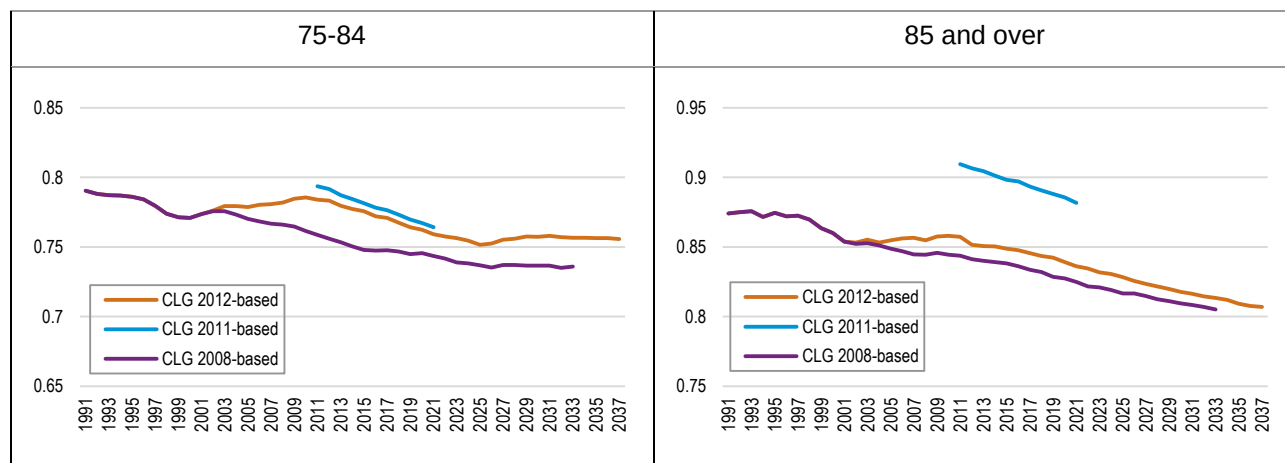
Source: Derived from CLG data





Source: Derived from CLG data





Source: Derived from CLG data

APPENDIX D: AFFORDABLE HOUSING DEFINITIONS

Key definitions used in this report include the following:

- **Affordable housing:** Affordable housing is defined in the NPPF as social rented, affordable rented and intermediate housing provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision.
- **Social rented housing:** social rented housing is owned by local authorities and private registered providers, for which guideline target rents are determined through the national rent regime. It may also be owned by other persons and provided under equivalent rental arrangements to the above, as agreed with the local authorities or with the Homes and Communities Agency.
- **Affordable rented housing:** affordable rented housing is let by local authorities or private registered providers of social housing to households who are eligible for social housing. Affordable Rent is subject to rent controls that require a rent of no more than 80% of the local market rent (including service charges, where applicable).
- **Intermediate housing:** Intermediate housing is homes for sale or rent provided at a cost above social rent, but below market levels subject to the criteria in the affordable housing definition above. These can include shared equity (shared ownership and equity loans), other low cost homes for sale and intermediate rent, but not affordable rented housing.
- **Housing Need:** Housing need refers to the scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period – and should cater for the housing demand of the area and identify the scale of housing supply necessary to meet that demand.
- **Affordable Housing Need:** This describes the number of households who lack their own housing or who live in unsuitable housing and who cannot afford to meet their housing needs in the market.
- **Newly-Arising Need:** Newly-arising (or future) need is a measure of the number of households who are expected to have an affordable housing need at some point in the future. In this assessment we have used trend data from CORE along with demographic projections about the number of new households forming (along with affordability) to estimate future needs. Figures for this are gross, and differ from those set out reflecting total household growth.