



# Public Document Pack

**Jeff Hughes**  
Head of Democratic and Legal  
Support Services

**MEETING** : DISTRICT PLANNING EXECUTIVE PANEL  
**VENUE** : COUNCIL CHAMBER, WALLFIELDS, HERTFORD  
**DATE** : THURSDAY 22 OCTOBER 2015  
**TIME** : 7.00 PM

## **MEMBERS OF THE PANEL**

Councillors L Haysey (Chairman), E Buckmaster and G Jones

All other Members are invited to attend and participate if they so wish.

Members are requested to retain their copy of the agenda and bring it to the relevant Executive and Council meetings.

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## **DISCLOSABLE PECUNIARY INTERESTS**

1. A Member, present at a meeting of the Authority, or any committee, sub-committee, joint committee or joint sub-committee of the Authority, with a Disclosable Pecuniary Interest (DPI) in any matter to be considered or being considered at a meeting:
  - must not participate in any discussion of the matter at the meeting;
  - must not participate in any vote taken on the matter at the meeting;
  - must disclose the interest to the meeting, whether registered or not, subject to the provisions of section 32 of the Localism Act 2011;
  - if the interest is not registered and is not the subject of a pending notification, must notify the Monitoring Officer of the interest within 28 days;
  - must leave the room while any discussion or voting takes place.
2. A DPI is an interest of a Member or their partner (which means spouse or civil partner, a person with whom they are living as husband or wife, or a person with whom they are living as if they were civil partners) within the descriptions as defined in the Localism Act 2011.
3. The Authority may grant a Member dispensation, but only in limited circumstances, to enable him/her to participate and vote on a matter in which they have a DPI.

4. It is a criminal offence to:

- fail to disclose a disclosable pecuniary interest at a meeting if it is not on the register;
- fail to notify the Monitoring Officer, within 28 days, of a DPI that is not on the register that a Member disclosed to a meeting;
- participate in any discussion or vote on a matter in which a Member has a DPI;
- knowingly or recklessly provide information that is false or misleading in notifying the Monitoring Officer of a DPI or in disclosing such interest to a meeting.

(Note: The criminal penalties available to a court are to impose a fine not exceeding level 5 on the standard scale and disqualification from being a councillor for up to 5 years.)

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## **AGENDA**

1. **Apologies**

*To receive apologies for absence.*

2. **Chairman's Announcements**

3. **Minutes** (Pages 5 - 10)

*To approve the Minutes of the meeting of the Panel held on 10 September 2015.*

4. **Declarations of Interests**

*To receive any Member(s)' Declaration(s) of Interest*

5. **West Essex and East Hertfordshire Strategic Housing Market Assessment (SHMA), September 2015** (Pages 11 - 150)

*Note – this item will include a presentation by Opinion Research Services (ORS).*

6. **Economic Evidence to Support the Development of the OAHN for West Essex and East Herts, September 2015** (Pages 151 - 198)

7. **District Plan Transportation – A414, Hertford** (Pages 199 - 236)

8. **Delivery Study, September 2015** (Pages 237 - 444)

9. **Urgent Business**

*To consider such other business as, in the opinion of the Chairman of the meeting, is of sufficient urgency to warrant consideration and is not likely to involve the disclosure of exempt information.*

MINUTES OF A MEETING OF THE  
DISTRICT PLANNING EXECUTIVE PANEL  
HELD IN THE COUNCIL CHAMBER,  
WALLFIELDS, HERTFORD ON THURSDAY  
10 SEPTEMBER 2015, AT 7.00 PM

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PRESENT: Councillor L Haysey (Chairman)  
Councillors E Buckmaster and G Jones.

ALSO PRESENT:

Councillors M Allen, R Brunton, I Devonshire,  
J Goodeve, J Jones, J Kaye, M McMullen,  
P Moore, M Pope, R Standley, N Symonds  
and K Warnell.

OFFICERS IN ATTENDANCE:

Chris Butcher	- Principal Planning Officer
Isabelle Haddow	- Senior Planning Officer
Martin Ibrahim	- Democratic Services Team Leader
Kay Mead	- Principal Planning Officer
George Pavey	- Assistant Planning/Technical Officer
Jenny Pierce	- Principal Planning Officer
Claire Sime	- Planning Policy Manager
Kevin Steptoe	- Head of Planning and Building Control Services

ALSO IN ATTENDANCE:

John Baker	- Peter Brett Associates
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## 1 EAST HERTS GREEN BELT REVIEW AUGUST 2015

The Panel considered a report presenting the findings of the Green Belt Review 2015, which sought approval to use the outcome as part of the evidence base to inform and support the preparation of the District Plan.

John Baker, of Peter Brett Associates, gave a presentation on the Review, explaining the purpose, methodology and findings. He explained the assessment of parcels and sub-parcels which had resulted in four locations as having least importance to the fulfilment of Green Belt purposes and as such, had been identified as “Potential Areas of Search” for development locations. Two further parcels were identified as having moderate suitability and had been identified as “Potential longer-term Areas of Search”. These locations were detailed in the report now submitted.

In response to Members’ comments and questions, Mr Baker stated that consideration of any extensions to the Green Belt were not part of the brief of the Review. He clarified the objectivity of the methodology used, especially in relation to the “green wedges” in Bishop’s Stortford and the role of bypasses in defining Green Belt boundaries.

Officers also reminded Members of the progress of the Strategic Land Availability Assessment (SLAA).

The Panel supported the recommendation now detailed.

**RECOMMENDED** – that the Green Belt Review 2015 be approved as part of the evidence base to inform and support preparation of the East Herts District Plan.

## 2 VILLAGE HIERARCHY STUDY STAGE 1 AUGUST 2015

The Panel gave consideration to a report on the findings of the Village Hierarchy Study Stage 1. This was the first

of two stages in providing important evidence to determine the rural strategy in the District Plan. It was noted that no decisions would be made until Stage 2 of the Study had been completed.

The Panel noted that Stage 1 sought to identify the services and facilities available in the villages, together with an assessment of accessibility and public transport provision. Stage 2 would present a final hierarchy after considering unique issues such as policy constraints, environmental constraints and school capacity, etc.

In response to Members' comments and questions, Officers confirmed that it was anticipated that Stage 2 would be completed by the end of 2015.

The Panel supported the recommendation now detailed.

**RECOMMENDED** – that the Village Hierarchy Study Stage 1 August 2015, be approved as part of the evidence base to inform and support preparation of the East Herts District Plan.

3

### **DUTY TO CO-OPERATE UPDATE REPORT**

The Panel received the notes of the latest round of Member-level meetings with adjoining Local Planning Authorities. Members were reminded of the Duty to Co-Operate and the need to engage constructively with a range of bodies throughout the plan-making process.

The Panel supported the recommendation as now detailed.

**RECOMMENDED** – that the notes of the Member-level meetings held with neighbouring local authorities be received.

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## **BUNTINGFORD TRANSPORT MODEL REPORT AUGUST 2015**

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**The Panel received the findings of the Buntingford Transport Model, comprising a Local Model Validation Report and a Future Scenarios Testing Report. Agreement was sought to receiving the outcome as part of the evidence base to inform and support preparation of the District Plan and for Development Management purposes.**

**The work had been undertaken by Steer Davies Gleave consultants, who had created a micro-simulation model of the existing operation of the road network in and around Buntingford. The second stage of the work used the model to test the effects of various development scenarios and to determine any mitigation measures if required. This had been extended to undertake further model runs of two mitigation options and to provide indicative scheme design layouts for these two alternative options.**

**In response to Members' comments and questions, Officers clarified that they were working closely with Hertfordshire County Council colleagues on costing the mitigation measures and identifying how they could be funded. Existing section 106 funds were limited and competing priorities would need to be considered.**

**The Panel supported the recommendations as now detailed.**

**RECOMMENDED – that (A) the Buntingford Transport Model Report 2015 be approved as part of the evidence base to inform and support preparation of the East Herts District Plan;**

**(B) the Buntingford Transport Model Report 2015 be approved to inform Development Management decisions; and**

(C) the Head of Planning and Building Control, in consultation with the Leader of the Council, be authorised to make non-material amendments to the final Buntingford Transport Model Report 2015, prior to publication.

## **5 AFFORDABLE HOUSING – AMENDMENT TO POLICY**

**The Panel considered a report outlining the recent changes in national planning policy relating to the provision of affordable housing, and their implications for the Council's current Affordable Housing policy.**

**The Panel recalled that in December 2012, the Council had introduced a revised threshold to provide affordable housing and a percentage amount to be sought from development schemes in Category 1 and 2 Villages. This policy had been subsequently amended following new Government policy on the use of section 106 planning obligation agreements.**

**However, following a recent High Court decision, the details of which were set out in the report submitted, the Government had revoked the changes resulting in local planning authorities being able to formulate their own affordable housing thresholds. Therefore, it was proposed that the Council reverted to the 2012 Affordable Housing Policy (HSG3) position.**

**The Panel supported the recommendations as now detailed.**

**RECOMMENDED – that (A) the change in national planning policy through the removal of paragraphs in planning policy guidance related to affordable housing thresholds be noted;**

**(B) the affordable housing thresholds as amended in 2012 under the 2007 Local Plan HSG3 Affordable Housing policy be re-introduced; and**

**(C) the Starter Homes exemption policy, as introduced by Central Government in March 2015, be included as part of the amended 2012 HSG3 policy, as set out in this report.**

## 6 CHAIRMAN'S ANNOUNCEMENTS

The Chairman welcomed Members and the public to the meeting and reminded everyone that the meeting was being webcast.

She expressed her gratitude to former Councillor M Carver, for his enormous contribution to planning policy matters over many years and his wealth of knowledge and expertise in leading the Authority's District Plan preparations.

The Chairman referred to the cancellation of the Panel meeting scheduled for July 2015 and explained that the studies commissioned had not been received in time. She reminded Members that decisions would not be made on the findings of a single study, but the overarching evidence obtained.

The Chairman also referred to recent Government statements, which recognised the difficulties Local Authorities faced in dealing with changing parameters in preparing their District Plans. It was hoped that a more pragmatic approach would be taken by the Inspector at the Examination in Public stage.

Finally, the Panel Chairman advised on forthcoming meetings with parish and town councils and the recommencement of the Member policy support discussion groups.

## 7 MINUTES

**RESOLVED – that the Minutes of the Panel meeting held on 19 March 2015 be approved as a correct record and signed by the Chairman.**

The meeting closed at 8.37 pm

# Agenda Item 5

## EAST HERTS COUNCIL

### DISTRICT PLANNING EXECUTIVE PANEL – 22 OCTOBER 2015

#### REPORT BY THE LEADER OF THE COUNCIL

#### WEST ESSEX AND EAST HERTFORDSHIRE STRATEGIC HOUSING MARKET ASSESSMENT (SHMA), SEPTEMBER 2015

WARD(S) AFFECTED: ALL

#### Purpose/Summary of Report

- This report presents the findings of the West Essex and East Hertfordshire Strategic Housing Market Assessment (SHMA).
- The report seeks agreement to use the SHMA as part of the evidence base to inform and support preparation of the District Plan, and for housing strategy purposes.

#### RECOMMENDATION FOR DISTRICT PLANNING EXECUTIVE

PANEL: That Council, via the Executive, be advised that:

<b>(A)</b>	<b>The West Essex and East Hertfordshire Strategic Housing Market Assessment (SHMA), September 2015, be agreed as part of the evidence base to inform and support preparation of the East Herts District Plan, and for housing strategy purposes.</b>
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#### 1.0 Glossary

1.1 The following report contains a number of acronyms. To assist Members a quick reference glossary is provided below:

- BMRAs: Broad Rental Market Areas
- (D)CLG: (Department) for Communities & Local Government
- DWP: Department for Work and Pensions
- EEFM: East of England Forecasting Model
- EHS: English Housing Survey
- EPOA: Essex Planning Officer Association
- HMA: Housing Market Area

- HMOs: Houses in Multiple Occupation
- LHA: Local Housing Allowance
- NPPF: National Planning Policy Framework
- OAN: Objectively Assessed Need
- ONS: Office for National Statistics
- ORS: Opinion Research Services (the consultant)
- PAS: Planning Advisory Service
- PPG: Planning Practice Guidance
- SHMA: Strategic Housing Market Assessment
- TTWAs: Travel to Work Areas
- VOA: Valuation Office Agency

## 2.0 Background

2.1 Opinion Research Services (ORS) was jointly commissioned last July by the local authorities of West Essex (Epping Forest, Harlow and Uttlesford) and East Herts to undertake a Strategic Housing Market Assessment (SHMA).

2.2 A SHMA is a technical study intended to assist local planning authorities identify the scale and mix of housing and the range of tenures that the population is likely to need over a plan period.

2.3 The requirement to prepare a SHMA is set out at paragraph 159 of the National Planning Policy Framework (NPPF):

*“Local Planning authorities should have a clear understanding of housing needs in their area. They should:*

- *Prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries...”*

2.4 The Council previously prepared a SHMA in 2008. At the time the Council joined with Brentwood, Broxbourne, Epping Forest, Harlow and Uttlesford Council's to form the London Commuter Belt East/M11 Sub Region partnership. ORS was appointed to undertake the work and a report was published in January 2010 and agreed by Council in February 2010. An update report was commissioned in May 2012 and finalised in March 2013.

2.5 New Planning Practice Guidance (PPG) on the assessment of housing and economic development needs was published in March 2014. Previous SHMA Guidance (2007) and related

documents were rescinded at that time.

- 2.6 The SHMA the subject of this report meets the requirements of the PPG and reflects emerging good practice, including advice from the Planning Advisory Service (PAS). This SHMA will replace the Strategic Housing Market Assessment Update 2012 (March 2013).
- 2.7 ORS will be in attendance at the Panel meeting and will be presenting the findings of the SHMA. A full copy of the SHMA is attached at **Essential Reference Paper 'B'**. The report can also be found online at: [www.eastherts.gov.uk/shma](http://www.eastherts.gov.uk/shma).

### 3.0 Report

- 3.1 The SHMA has two key objectives: to identify the functional Housing Market Area (HMA) and to establish the Objectively Assessed Need (OAN) for housing (both market and affordable).
- 3.2 The methodology seeks to:
  - Define the housing market area;
  - Provide evidence of the need and demand for housing based on demographic projections;
  - Consider market signals about the balance between demand for and supply of dwellings;
  - Establish the Objectively Assessed Need (OAN) for housing;
  - Identify the appropriate balance between market and affordable housing;
  - Address the needs for all types of housing, including the private rented sector, people wishing to build their own home, family housing, housing for older people and households with specific needs.
- 3.3 It is important to recognise that the information from the SHMA should not be considered in isolation, but forms part of a wider evidence base for the development of housing policy in the District Plan and, as such, OAN for housing must be considered alongside other factors such as land availability and viability, together with local policy considerations e.g. environmental capacity and infrastructure constraints.

### Duty to Co-operate

- 3.4 The Duty to Co-operate was introduced in the 2011 Localism Act and is a legal obligation. The NPPF sets out an expectation that

public bodies will co-operate with others on issues with any cross boundary impact, in particular in relation to strategic priorities such as “the homes and jobs needed in the area”.

- 3.5 As noted above, the SHMA was jointly commissioned by East Herts, Epping Forest, Harlow and Uttlesford to ensure a consistent evidence base for housing. The emerging SHMA outputs have been discussed with Officers and Members at neighbouring local authorities under the Duty to Co-operate, and further discussions will continue over forthcoming months.
- 3.6 On 22 September 2015, the Co-operation for Sustainable Development Board (*the Board*) noted the updated SHMA and a joint statement was agreed. This is attached for information at **Essential Reference Paper ‘C’**. The statement confirms that:

*‘In accordance with the legal obligations of the Duty to Cooperate the Board will continue to discuss the distribution of proposed housing and jobs growth across the Strategic Housing Market Area/Functional Economic Market Area. This includes ensuring that Strategic Housing Market Area housing needs are met, taking account of availability, viability and deliverability, with the outcomes of any discussions being taken back to the individual authorities for decision making. The Board will work towards the production of a memorandum of understanding to support the joint working and meeting the duty to cooperate.’*

#### Defining the Housing Market Area (HMA)

- 3.7 The NPPF refers to Local Plans meeting the “*full objectively assessed needs for market and affordable housing in the housing market area*” (paragraph 47).
- 3.8 PPG states that a HMA can be defined using three sources of information:
  - House prices and rates of change in house prices;
  - Household migration and search patterns;
  - Contextual data, e.g. Travel to Work Areas<sup>1</sup> (TTWAs).

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<sup>1</sup> The current criteria for defining TTWAs is that generally at least 75% of an 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. For areas with a working population in excess of 25,000, self-containment rates as low as 66.7% are accepted.

- 3.9 A CLG (Department for Communities and Local Government) report published in 2010 on the '*Geography of Housing Market Areas*' recognised the importance of migration patterns and commuting flows when defining HMAs. The report also outlined that no one single approach (or data source) will provide a definitive solution to identifying local housing markets, but by using a range of available data, judgements on appropriate geography can be made.
- 3.10 Advice recently published in the PAS OAN technical advice note also suggests that the main indicators will be migration and commuting and confirms that the CLG report referred to above should provide a starting point for drawing HMAs.
- 3.11 A further source of information available to consider are Broad Rental Market Areas (BRMAs), which are the geographical areas used by the Valuation Office Agency (VOA) to determine the Local Housing Allowance (LHA) paid to Housing Benefit applicants.
- 3.12 Whilst the importance of London must be recognised when considering HMAs in the South-East, PPG recognises that '*it might be the case that housing market areas overlap*'; so whilst acknowledging that London is an important HMA, it is possible that London overlaps with other local housing market areas.
- 3.13 Using all of the evidence available ORS state that it is reasonable to conclude in line with PPG and the PAS OAN technical advice note that the most appropriate functional housing market area should be based on an area including Harlow, most of East Hertfordshire, Epping Forest and Uttlesford.
- 3.14 Whilst this provides the overall 'best fit' for joint working arrangements, they are not the only arrangements possible given the complexities of the functional housing market area in the region. It will also be important for East Herts to maintain a dialogue with Broxbourne, Welwyn Hatfield and other Hertfordshire authorities. Furthermore it will also be necessary to maintain a dialogue with the Mayor of London through the Greater London Authority.

*Demographic Projections (the starting point for Objectively Assessed Need)*

- 3.15 The Objective Assessment of Need (OAN) identifies the quantity of housing required (both market and affordable) in the HMA.
- 3.16 PPG places emphasis on the role of CLG Household projections as the appropriate starting point in determining objectively assessed need. However, the Guidance does allow for the use of sensitivity testing, specific to local circumstances, to determine whether the projections are appropriate.
- 3.17 Figure 26 of the SHMA (reproduced below) sets out the range of household projections that CLG has produced for the study area over the last three rounds of projections.

*CLG Household Projections for West Essex and East Herts: annual average growth (CLG Projections) (Figure 26)*

		East Herts	Epping Forest	Harlow	Uttlesford	TOTAL
		Annual Average (no. of Households)				
2012-based	10 years: 2012-22	820	610	310	520	2,260*
	25 years: 2012-37	770	670	340	480	2,260*
2011-based interim	10 years: 2011-21	770	670	320	480	2,240
	25 years: not published	-	-	-	-	-
2008-based	10 years: 2008-18	700	500	200	400	1,800
	25 years: 2008-33	640	480	240	400	1,760

*\*(NB. Figures are rounded)*

- 3.18 The CLG 2012-based household projections supersede both the 2008-based household projections and the interim 2011-based household projections. For the 22 year period 2011-33, these projections suggest an increase of 49,720 households (2,260 x 22) across the HMA: an average growth of 2,260 households each year.
- 3.19 As set out above the 2012-based projections are the starting point for establishing overall housing need. Differences between the different projections are largely associated with assumed migration rates, which are based on recent trends using 5-year averages. This means that short-term changes in migration patterns can significantly affect the projected population growth.
- 3.20 On balance ORS therefore consider that:

- 5-year trend migration scenarios are less reliable: they have the potential to roll-forward short-term trends that are unduly high or low and therefore are unlikely to provide a robust basis for long-term planning.
- 10-year trend migration scenarios are more likely to capture both highs and lows and are not as dependent on trends that may be unlikely to be repeated.

3.21 Work undertaken for the Essex Planning Officer Association (EPOA)<sup>2</sup> has identified a 10-year migration trend scenario, which provides a useful basis for considering the likely population change over the next 10-20 years as a basis for understanding likely future housing needs. In addition, the SHMA has produced independent population projections based on 10-year migration trends using Census data for the period 2001-11. The Census is recognised as more reliable than any other population estimates at a local level.

3.22 Based on a 10-year migration trend there is a notably lower increase of 36,899 households across the HMA (an average annual growth of 1,677 households per year) with a lower rate of growth projected for all four areas (average annual growth of 603 households in East Herts, 409 in Epping Forest, 216 in Harlow and 449 in Uttlesford).

3.23 Whilst these figures are lower than the CLG 2012-based projections for the same period, the SHMA analysis reflects good practice and provides a stable projection based on the most reliable data.

3.24 ORS therefore conclude that the projected growth of 1,677 households each year provides the most appropriate demographic projection on which to base the OAN for housing.

*Housing Mix and Tenure (establishing the need for market and affordable housing)*

3.25 Demographic projections provide the basis for identifying the OAN for all types of housing, including both market housing and affordable housing. PPG notes that affordable housing need is based on households “*who lack their own housing or live in*

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<sup>2</sup> EPOA represents the twelve local planning authorities in Essex, as well as the two unitary authorities of Southend-on-Sea and Thurrock and Essex County Council. The Association has also extended a welcome to East Herts Council and Welwyn-Hatfield Borough.

*unsuitable housing and who cannot afford to meet their housing needs in the market*" (paragraph 22) and identifies a number of different types of household which may be included (paragraph 23):

- Homeless households or insecure tenure
- Overcrowded households
- Households containing people with social and physical impairment or other specific needs living in unsuitable dwellings which cannot be made suitable in-situ
- Households that lack basic facilities (e.g. kitchen) and those subject to major disrepair or that are unfit for habitation
- Households containing people with particular social needs which cannot be resolved except through a move

3.26 PPG suggests a number of data sources for assessing past trends and recording current estimates for establishing the need for affordable housing (paragraph 24):

- Local Authorities will hold data on the number of homeless households, those in temporary accommodation and extent of overcrowding.
- The Census also provides data on concealed households and overcrowding which can be compared with trends contained in the English Housing Survey<sup>3</sup>.
- Housing registers and local authority and registered social landlord transfer lists will also provide relevant information.

The SHMA considers each of these sources of information in turn.

#### *Local authority data: Homeless Households and Temporary Accommodation*

3.27 In West Essex and East Hertfordshire, the number of households accepted as being homeless and in priority need has seen a downward trend over the period 2002-2011.

3.28 There has also been a downward trend in households living in temporary accommodation. Figure 43 of the SHMA shows there were 619 such households in 2002; however, this had reduced to 229 in 2011, a net reduction of 390 households. Of these 63 households were in temporary accommodation (bed & breakfast or hostels) and 3 were without any temporary accommodation.

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<sup>3</sup> The English Housing Survey is a national survey of people's housing circumstances and the condition and energy efficiency of housing in England.

These households would not be counted by the household projections and so there will be a need to add these households to the overall requirement.

3.29 Many homeless households are now being offered homes in the private rented sector. The introduction of the Localism Act 2010 means that an offer of accommodation in the private rented sector cannot be refused, provided that the offer is reasonable. Whilst this reduces pressure on the social housing stock, an indirect result is that there are further demands for the private rented sector.

#### Census data: Concealed Households and Overcrowding

##### *Concealed Families*<sup>4</sup>

3.30 The number of concealed families living with households in the study area has increased from 961 to 1,695 over the 10-year period 2002-2011, an increase of 734 families (76%). Although many concealed families do not want separate housing, others are forced to live together due to affordability constraints. Concealed families with older family representatives will often be living with another family in order to receive support due to ill health. Concealed families with younger family representatives are more likely to demonstrate un-met need for housing.

3.31 ORS conclude that there are 575 concealed households across the study area (with family representatives aged under 55) that would not be counted by the household projections and will need to be added to the overall requirement.

##### *Sharing Households*

3.32 The number of multi-adult households has increased from 5,407 to 6,590 over the same period, an increase of 1,183 (22%). This indicates a likely (and possibly growing) role for Houses in Multiple Occupation (HMOs).

##### *Overcrowding*

3.33 The Census also provides detailed information about occupancy rates, which provides a measure of whether a household's accommodation is overcrowded or under occupied. In the study area, overcrowding increased from 8,899 to 11,583 households (30%). This is higher than the national increase for England (23%).

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<sup>4</sup> A concealed family is one living in a multi-family household in addition to the primary family, such as a young couple living with parents.

### English Housing Survey (EHS) data

#### *Overcrowding*

3.34 The EHS does not provide information about individual local authorities, but it does provide a useful context in terms of national trends between Census years.

3.35 The measure of overcrowding used by the EHS is based on a 'bedroom standard' which assumes that adolescents aged 10-20 of the same sex will share a bedroom, and only those aged 21 or over are assumed to require a separate bedroom (whereas the approach used by ONS for the Census assumes a separate bedroom for those aged 16 or over).

3.36 By considering the Census and EHS data for England, together with the Census data for the study area, ORS estimate the 3,711 households in the study area were overcrowded in 2011 based on the bedroom standard (1,098 owner occupied, 709 private rented, 1,904 social rented).

#### *Housing Condition and Disrepair*

3.37 The EHS also provides useful information about housing disrepair. The national trend shows that conditions have improved year-on-year, however, there remains a need to improve the quality of housing provided for households living in the private rented sector.

### Housing Register data

3.38 The number of households on the housing register over the period since 2001 has varied from year-to-year. Overall in the study area, the trends show that the number of households registering for affordable housing has increased by around 60% over the last decade. It should be noted, however, that the criteria for joining a housing register has changed following the Localism Act. Only people with a local connection now qualify for the housing register, and people with adequate financial resources are no longer included – so the trends have to be understood in this context and number on the registers are falling.

### Establishing Affordable Housing Need

3.39 PPG sets out the framework for this calculation:

*“This calculation involves adding together the current unmet need and projected future need and then subtracting this from the current supply of affordable housing stock.” (paragraph 022)*

3.40 The SHMA considers both current unmet need and projected future need.

*Current Unmet Need*

3.41 Households assumed to be in current need:

- All households that are currently homeless;
- All those currently housed in temporary accommodation; and
- People in a reasonable preference category<sup>5</sup> on the housing register, where their needs have not already been counted.

3.42 The analysis counts the needs of all of these households when establishing the OAN for affordable housing. The analysis also considers those households currently living in overcrowded housing, together with concealed families in a reasonable preference category (as these are not counted by the CLG household projections).

*Projected Future Need*

3.43 The following components of household change all contribute to the projected level of affordable housing need:

- Newly forming households
- Households migrating into the area
- Household dissolutions following death
- Households migrating out of the area
- Existing households falling into need
- Existing households climbing out of need

3.44 Taking account of current unmet need and projected future need ORS concludes that there will be a need to provide additional affordable housing for 13,291 households over the period 2011-33. This is equivalent to 604 households per year across the study area. This represents 35.1% of the total household growth projected based on demographic trends.

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<sup>5</sup> Reasonable preference categories are defined in the Housing Act, which requires ‘reasonable’ preference for housing to be given to those who are legally homeless; living in unsatisfactory housing; need to move on medical/welfare grounds; or need to move to a particular area to avoid hardship.

### *Need by Local Authority Area*

3.45 Figure 62 of the SHMA (reproduced below) sets out the current unmet need for affordable housing and projected future affordable housing need for the 22-year period 2011-33 for each of the four local authority areas. The SHMA concludes that in East Herts the affordable housing need as a percentage of overall housing need is 31%.

### *Assessing affordable housing need by local authority (Figure 62)*

	Affordable Housing Need (households)				
	East Herts	Epping Forest	Harlow	Uttlesford	TOTAL
<b>Unmet need for affordable housing in 2011</b>					
Total unmet need for affordable housing	<b>1,632</b>	1,171	1,597	818	5,218
Supply of housing vacated	<b>471</b>	544	849	242	2,106
Overall impact of current affordable housing need	<b>1,161</b>	627	748	576	3,112
Future need for affordable housing 2011-33	<b>2,967</b>	2,525	2,541	2,148	10,179
Total need for affordable housing 2011-33	<b>4,128</b>	3,152	3,289	2,724	13,291
Percentage of overall housing need	<b>31%</b>	34%	67%	27%	35%

3.46 Figure 63 of the SHMA (reproduced for East Herts below) sets out the housing mix in terms of property type, size and affordable housing tenure in each of the local authority areas.

### *Assessing affordable housing mix for West Essex and East Hertfordshire by local authority (Figure 63, part)*

		East Herts
<b>AFFORDABLE RENT</b>		
Flat	1 bedroom	720
	2+ bedrooms	400
House	2 bedrooms	1,020
	3 bedrooms	1,130
	4+ bedrooms	270
Sub-total		3,500
% of affordable housing		84%
<b>INTERMEDIATE AFFORDABLE HOUSING</b>		
Flat	1 bedroom	100
	2+ bedrooms	70
House	2 bedrooms	190
	3 bedrooms	280
	4+ bedrooms	40
Sub-total		700
% of affordable housing		16%
<b>TOTAL DWELLINGS</b>		<b>4,200</b>

### Future Policy on Housing Benefit in the Private Rented Sector

3.47 ORS has assumed a neutral position in relation to housing benefit support, i.e. the number of claimants in receipt of housing benefit in the private rented sector will remain constant. It is important to note that private rented housing does not meet the definition of affordable housing; however, many tenants can only afford their housing costs as they receive housing benefit. These households are not counted towards the need for affordable housing, but if housing benefit support was no longer provided, this would then increase the need for affordable housing.

### Establishing the Objectively Assessed Need (OAN) for West Essex and East Herts

3.48 As set out above a key objective of the SHMA is to establish the Objectively Assessed Need (OAN) for housing and, as already discussed, the process for establishing the housing number for the HMA starts with a demographic process to derive housing need from a consideration of population and household projections. However, to this, 'market signals' (e.g. land prices housing affordability) need to be applied in order to ensure an appropriate balance is achieved between the demand for and supply of dwellings.

3.49 The NPPF sets out that '*Plans should take account of market signals, such as land prices and housing affordability*' (paragraph 17) and PPG identifies that '*the housing need number suggested by household projections (the starting point) should be adjusted to reflect market signals*'. The likely consequence of housing affordability problems is an increase in overcrowding, concealed and sharing households, homelessness and the numbers in temporary accommodation. PPG identifies that these indicators '*demonstrate un-met need for housing*' and that '*longer term increase in the number of such households may be a signal to consider increasing planned housing numbers*' (paragraph 19).

#### *Market Signals*

3.50 PPG identifies a range of housing market signals that should be considered when determining the future housing number. Market signals include:

- Land and house prices
- Rents and affordability

- Rate of development
- Overcrowding

3.51 The SHMA considers each of these:

- **House prices:** lower quartile<sup>6</sup> prices are higher than the national average, with a lower quartile price of £200,600 higher than England's £126,250 but lower than Greater London's £230,200.
- **Rents:** for average private sector rents in 2013-14, the study area is higher than England (£911 cf. £720 pcm) but considerably lower than Greater London (£1,461 pcm).
- **Affordability:** is currently 'worse' in the study area than across England as a whole. Furthermore, whilst national affordability ratios have improved since 2008, the ratio has not improved in the study area.
- **Rate of development:** (in terms of increase in dwelling stock over the last 10 years) shows that development has been relatively similar to England (both around 8%).
- **Overcrowding:** (in terms of Census occupancy rates) shows that 6.6% of households in the study area are overcrowded, which is lower than England (8.7%) and much lower than Greater London (21.7%). The proportion of overcrowded households has increased over the last 10 years at a rate which is higher than the national increase for England (+30% cf. +23%);

3.52 On the basis of market signals, ORS conclude that conditions across the HMA suggest that the level of OAN for the HMA should be higher than that suggested by household projections in isolation.

3.53 The analysis for overcrowding has already identified that the overall housing need should be increased by 641 households to take account of concealed families and homeless households<sup>7</sup>. This represents an uplift of 1.7% on the household projections.

---

<sup>6</sup> The lower quartile value is the median of the lower half of the data

<sup>7</sup> 575 concealed households + 63 households in temporary accommodation + 3 without any temporary accommodation

Given the market signals context, however, ORS advises that it would be appropriate to further increase this uplift.

3.54 There is no definitive guidance on what uplift is appropriate, however, a benchmark has been established by the Inspector examining the Eastleigh Local Plan who judged 10% to be reasonable given the market signals identified for that HMA. However, the indicators for the study area identify greater pressure than in Eastleigh, so it would seem reasonable for 10% to be considered a minimum response to market signals. On balance ORS recommend an overall uplift of **20%** which represents an additional 7,676 dwellings over the 22-year period 2011-33.

3.55 The previous analysis already identified that the overall housing need should be increased by a specific uplift of 641 households (667 dwellings) to take account of concealed families and homeless households that would not be captured by the household projections. This adjustment has already been incorporated as a response to the identified un-met need for housing; however, it is appropriate for it to be considered as part of the response to market signals. An additional increase of 7,009 dwellings is therefore needed to deliver the overall uplift of 7,676 dwellings identified in response to market signals.

#### *Employment Trends*

3.56 While demographic trends and market signals are key to the assessment of OAN, it is also important to consider current employment trends and how the projected growth of the economically active population fits with the future changes in job numbers.

3.57 Forecasts of jobs growth are regularly produced for each local authority in the East of England from the East of England Forecasting Model (EEFM). The most recent outputs were published in January 2015 and the baseline forecast suggested that total employment in the study area would increase from 210,000 jobs in 2011 to 243,700 jobs in 2031.

3.58 Further economic evidence prepared by Hardisty Jones Associates (see Agenda Item 6) has concluded that the overall increase in employment (taking account of growth of Stansted Airport) is likely to yield 41,700 further jobs growth, over the 22-year period 2011-33.

- 3.59 When all factors are considered (including out-commuting (38.3%), in-commuting (28.7%) and 'double jobbing' (i.e. where employed individuals have a second job) (12.9% of workers)) ORS concludes that the demographic projections (without any uplift for market signals) would provide 18,600 extra workers locally whereas 26,400 extra workers would be needed. There is therefore a shortfall of 7,800 workers based on the increase of jobs currently forecast.
- 3.60 An extra 7,800 workers would need a further 5,600 dwellings to be provided over the 22-year period 2011-33, increasing the housing need from 38,400 dwellings to 44,000 dwellings (equivalent to an uplift of 14.6%).

### OAN Summary/Conclusions

- 3.61 The "*starting point*" estimate for OAN is the CLG household projections, and the latest published data is the 2012-based projections for the period 2012-37. These projections suggest that household numbers across the study area will increase by 49,720 over the 22-year period 2011-33, an average of 2,260 per year. However, the future projections are particularly sensitive to the period on which migration trends are based, and PAS advice to Local Authorities suggests that the official projections are "*very unstable*" and it is more appropriate to adopt a longer base period to establish robust migration trends.
- 3.62 Given this context, the SHMA has developed independent household projections using a 10-year migration trend based on Census data. On the basis of 10-year migration trends, household numbers across the study area are projected to increase by 36,899 households over the 22-year period 2011-33, an average of 1,677 households per year.
- 3.63 The SHMA identifies that the baseline household projections should be increased by 641 households to take account of concealed families and homeless households that would otherwise not be captured. On this basis, the demographic projections identify a total increase of 37,540 households over the 22-year period 2011-33. This adjustment responds to identified un-met need for affordable housing and also addresses suppressed household formation rates. Providing for an increase of 37,540 households yields a baseline housing need of 39,049 dwellings over the 22-year period 2011-33, equivalent to an average of 1,775 dwellings per year.

3.64 While demographic projections form the starting point for OAN calculations, it is necessary to consider whether a higher rate of housing delivery may be needed to help address housing market pressures. Further adjustments may be needed in response to balancing jobs and workers, market signals or any backlog of housing provision. However, it is important to recognise that these adjustments are not necessarily cumulative: it is necessary to consider them collectively.

3.65 The evidence from planned jobs and workers identifies a need to increase housing delivery by 5,600 dwellings to provide enough workers for the likely increase in jobs in the area (taking account of the likely expansion of Stanstead Airport).

3.66 An uplift of 7,676 dwellings is proposed as an appropriate response to the market signal indicators. The overall housing need has already been increased by 667 dwellings to take account of concealed families and homeless households not captured by the household projections, and this should be considered as part of the response to market signals; but an additional increase of 7,009 dwellings is needed to deliver the overall uplift of 7,676 dwellings that has been identified.

3.67 As the SHMA has fully considered the unmet needs of homeless and other households living in unacceptable accommodation that will exist at 2011 and identified all needs arising over the 22-year period 2011-33, there will be no 'backlog' of additional unmet need for housing to be counted at the start of new Plan periods that start in 2011.

3.68 On this basis, the baseline housing need of 39,049 dwellings is increased by 7,009 dwellings based on the additional uplift needed in response to market signals. This will also provide sufficient housing to balance future jobs and workers. This yields an overall total of 46,058 dwellings over the 22-year period 2011-33. This represents an uplift of 20.0% on the baseline household projections.

3.69 Figure 75 of the SHMA (reproduced below) summarises each of the stages for establishing the Full OAN:

*Full OAN for Housing across West Essex and East Hertfordshire HMA 2011-33 (Figure 75)*

Stage	Households	Dwellings
<b>Demographic starting point</b> CLG household projections 2011-33	49,638	-
<b>Adjustment for long-term migration trends</b> 10-year migration trend 2001-11	-12,739	-
<b>Baseline household projections taking account of local circumstances</b>	36,899	38,382
<b>Adjustment for suppressed household formation rates</b> Concealed families and homeless households	+641	+667
	37,540	<b>39,049</b>
<b>Further adjustments needed...</b>	<b>In response to balancing jobs and workers</b> Projected growth in workers exceeds forecast jobs growth and planned jobs growth therefore no further adjustment needed	-
	<b>In response to market signals</b> 7,009 dwellings needed (in addition to the 667 dwellings for concealed families and homeless households) to deliver the overall uplift of 7,676 dwellings proposed	-
<b>Combined impact of the identified adjustments</b>	-	+7,009
<b>Full Objectively Assessed Need for Housing 2011-33</b>	-	<b>46,058</b>

3.70 It is important to remember that “*establishing future need for housing is not an exact science*” (PPG paragraph 14). The SHMA therefore identifies the Full Objectively Assessed Need for Housing in West Essex and East Hertfordshire to be **46,100** dwellings over the 22-year period 2011-33, equivalent to an average of 2,095 dwellings per year. This includes the Objectively Assessed Need of Affordable Housing for 13,600 dwellings (based on 13,291 households) over the same period, equivalent to an average of 618 per year.

3.71 Given the needs in each local authority area, the SHMA concludes that the OAN for housing over the 22-year period 2011-2033 is as follows:

- **East Herts:** **16,400 dwellings (745 per year)**

- Epping Forest: 11,300 dwellings (514 per year)
- Harlow: 5,900 dwellings (268 per year)
- Uttlesford: 12,500 dwellings (568 per year)

3.72 This is the average number of dwellings needed every year over the period 2011-33 and represents a 1.1% increase in the dwelling stock each year across the study area (consistent with the 1.1% growth required across England to deliver 253,600 dwellings annually).

3.73 The SHMA also sets out the mix of market and affordable housing need by dwelling type and size. Most of the market housing need is for housing (28,500 dwellings over the 22-year period) with a need for 2,600 flats also identified (around 8%). The need for affordable housing is also predominantly for housing (around 10,000 dwellings) with a need for around 3,600 flats (around 26%). In East Herts the requirements are as follows:

*Market and affordable housing mix (Figure 76, part) (Note: figures may not sum due to rounding)*

		<b>East Herts</b>
<b>MARKET HOUSING</b>		
Flat	1 bedroom	710
	2+ bedrooms	810
House	2 bedrooms	1,510
	3 bedrooms	5,640
	4 bedrooms	2,740
	5+ bedrooms	770
<b>Total Market Housing</b>		<b>12,200</b>
<b>AFFORDABLE HOUSING</b>		
Flat	1 bedroom	820
	2+ bedrooms	470
House	2 bedrooms	1,210
	3 bedrooms	1,410
	4+ bedrooms	310
<b>Total Affordable Housing</b>		<b>4,200</b>
<b>TOTAL</b>		<b>16,400</b>

#### Housing Requirements – other identified housing need

3.74 The SHMA also addresses the housing needs of older people, households with specific needs and people wishing to build their own home.

#### *Older People*

3.75 It is important to recognise that the identified OAN of 46,100 dwellings does not include the projected increase of institutional population, which represents a growth of 1,773 persons over the 22-year period 2011-33. This increase in institutional population is a consequence of the CLG approach to establishing the household population, which assumes “*that the share of the institutional population stays at 2011 levels by age, sex and relationship status for the over 75s*” on the basis that “*ageing population will lead to greater level of population aged over 75 in residential care homes*”.

3.76 Nevertheless, older people are living longer, healthier lives, and the specialist housing offered today may not be appropriate in future years and the Government’s reform of Health and Adult Social Care is underpinned by a principle of sustaining people at home for as long as possible. Therefore, despite the ageing population, current policy means that the number of care homes and nursing homes may actually decline, as people are supported to continue living in their own homes for longer.

3.77 On this basis, if fewer older people are expected to live in communal establishments than is currently projected, the needs of any additional older people in the household population would need to be counted in addition to the assessed OAN.

#### *Households with Specific Needs*

3.78 Paragraph 50 of the NPPF identifies that local planning authorities should plan for people with specific needs. The Government’s reform of Health and Adult Social Care was reflected in the recent changes to building regulations relating to adaptations and wheelchair accessible homes that were published in the 2015 edition of Approved Document M: Volume 1 (Access to and use of dwellings). This introduces three categories of dwellings:

- Category 1: Visitable dwellings – mandatory, about accessibility to all properties
- Category 2: Accessible and adaptable dwellings – optional, similar to Lifetime Homes
- Category 3: Wheelchair user dwellings – optional, equivalent to wheelchair users standard

3.79 Demographic projections show that in the study area the number of people aged over 65 is projected to increase by around 47,200 persons, almost 73% of the overall growth. Most of these older people will already live in the area and many will not move from

their current home; however those that do move home are likely to need accessible housing. Given this context, ORS conclude that the evidence supports the need for all dwellings to meet category 2 requirements, providing that this does not compromise viability.

3.80 The CLG guide to available disability data shows that currently around 1-in-30 households in England (3.3%) have at least one wheelchair user, although the rate is notably higher for households living in affordable housing (7.1%). These proportions are also likely to increase in the context of larger numbers of older people projected to live in the area. ORS therefore concludes that the evidence supports the need for 10% of market housing and 15% of affordable housing to meet Category 3 requirements.

*People Wishing to Build their Own Homes*

3.81 Paragraph 50 of the NPPF also identifies that local planning authorities should plan for people wishing to build their own homes. Over half of the population say they would consider building their own home.

3.82 The Self-Build and Custom Housebuilding Act 2015 places a duty on local planning authorities to:

- Keep a register (and publicise this) of eligible prospective individuals, community groups and developers;
- Plan to bring forward sufficient serviced plots of land to meet the need on the register and offer these plots to those on the register at market value; and
- Allow developers working with housing associations to include self-build and custom-build as contributing towards their affordable housing contribution.

3.83 It is unlikely that self-build will make a significant contribution locally to meeting housing need, however, arrangements will need to be put in place to comply with the 2015 Act.

*Overall Conclusion*

3.84 The housing figures included within the SHMA constitute an objective assessment of housing need in line with the requirements of the NPPF and PPG. The NPPF and PPG however make it clear that an authority's OAN does not necessarily equal the housing provision target in its Plan.

3.85 Two additional factors need to be considered when establishing the housing target. The first is the area's deliverable and sustainable supply capacity, defined with reference to constraints recognised in the NPPF. The second factor is the requirement to consider cross-boundary unmet need, which the area should accept if it is possible, sustainable and reasonable. These are factors which the Council will need to consider through on-going work on the District Plan.

### 3.0 Implications/Consultations

3.1 Information on any corporate issues and consultation associated with this report can be found within **Essential Reference Paper 'A'**.

### Background Papers

- National Planning Policy Framework (NPPF) (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>)
- Planning Practice Guidance (PPG) (<http://planningguidance.planningportal.gov.uk/>)
- West Essex and East Hertfordshire Strategic Housing Market Assessment, August 2015, (ORS) ([www.eastherts.gov.uk/shma](http://www.eastherts.gov.uk/shma))
- Economic Evidence to Support the Development of the OAHN for West Essex and East Herts, July 2015, (Hardisty Jones Associates) ([www.eastherts.gov.uk/technicalstudies](http://www.eastherts.gov.uk/technicalstudies))

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## ESSENTIAL REFERENCE PAPER 'A'

### IMPLICATIONS/CONSULTATIONS

Contribution to the Council's Corporate Priorities/ Objectives (delete as appropriate):	<p><b>People – Fair and accessible services for those that use them and opportunities for everyone to contribute</b></p> <p>This priority focuses on delivering strong services and seeking to enhance the quality of life, health and wellbeing, particularly for those who are vulnerable.</p> <p><b>Place – Safe and Clean</b></p> <p>This priority focuses on sustainability, the built environment and ensuring our towns and villages are safe and clean.</p> <p><b>Prosperity – Improving the economic and social opportunities available to our communities</b></p> <p>This priority focuses on safeguarding and enhancing our unique mix of rural and urban communities, promoting sustainable, economic opportunities and delivering cost effective services.</p>
Consultation:	None
Legal:	None
Financial:	The Council has contributed towards the preparation of the Strategic Housing Market Assessment (SHMA) along with the other authorities in the Housing Market Area (Epping Forest, Harlow and Uttlesford). The cost of this has been met from existing budgets.
Human Resource:	None
Risk Management:	The preparation of the SHMA is a key piece of evidence to demonstrate that the Council is making adequate provision for housing as part of the District Plan. Failure to have an up-to-date SHMA would represent a significant risk that the District Plan would be found unsound.
Health and wellbeing – issues and impacts:	The link between planning and health has been long established. The built and natural environments are major determinants of health and wellbeing.

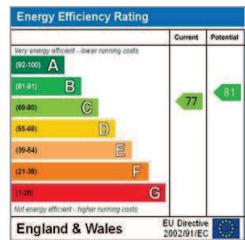
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Excellent research for the public, voluntary and private sectors

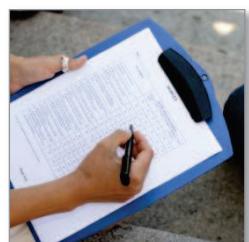
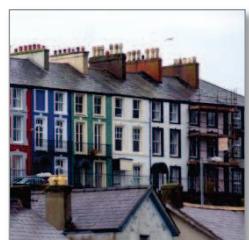


# West Essex and East Hertfordshire Strategic Housing Market Assessment



## Report of Findings

September 2015





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# 1. Introducing the Study

## Background to the project and wider policy context

- <sup>1.1</sup> Opinion Research Services (ORS) was jointly commissioned by the local authorities of West Essex (Epping Forest, Harlow and Uttlesford) and East Hertfordshire to undertake a Strategic Housing Market Assessment to identify the functional Housing Market Area and establish the Objectively Assessed Need for housing.
- <sup>1.2</sup> The study adheres to the requirements of the National Planning Policy Framework published in 2012 and Planning Practice Guidance (March 2014). The methodology was also mindful of emerging good practice and outcomes from Examinations, as well as the technical advice note about Objectively Assessed Need and Housing Targets that was first published by the Planning Advisory Service (PAS) in June 2014 and an updated second edition was published in July 2015.
- <sup>1.3</sup> The purpose of the study is to support the local authorities in objectively assessing and evidencing the need for housing (both market and affordable) and to provide other evidence to inform local policies, plans and decision making.

### Government Policy

- <sup>1.4</sup> The National Planning Policy Framework (NPPF) contains a presumption in favour of sustainable development, and states that Local Plans should meet the full, objectively assessed needs for market and affordable housing in the housing market area. Given that Regional Spatial Strategies are now revoked, the responsibility for establishing the level of future housing provision required rests with the local planning authority.

*At the heart of the National Planning Policy Framework is a **presumption in favour of sustainable development**, which should be seen as a golden thread running through both plan-making and decision-taking.*

*Local planning authorities should positively seek opportunities to meet the development needs of their area.*

*Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.*

**National Planning Policy Framework (NPPF), paragraph 14**

*To boost significantly the supply of housing, local planning authorities should use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area.*

**National Planning Policy Framework (NPPF), paragraph 47**

<sup>1.5</sup> Given this context, Strategic Housing Market Assessments (SHMAs) primarily inform the production of the Local Plan (which sets out the spatial policy for a local area). Their key objective is to provide the robust and strategic evidence base required to establish the Objectively Assessed Need (OAN) for housing in the Housing Market Area (HMA) and provide information on the appropriate mix of housing and range of tenures needed.

*Local planning authorities should have a clear understanding of housing needs in their area.*

*They should prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The Strategic Housing Market Assessment should identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which:*

- » *meets household and population projections, taking account of migration and demographic change;*
- » *addresses the need for all types of housing, including affordable housing and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes); and*
- » *caters for housing demand and the scale of housing supply necessary to meet this demand;*

**National Planning Policy Framework (NPPF), paragraph 159**

<sup>1.6</sup> Modelling future housing need requires a consideration of the housing market from a high-level, strategic perspective; in this way an understanding of how key drivers and long-term trends impact on the structure of households and population over the full planning period can be delivered.

<sup>1.7</sup> Planning Practice Guidance (PPG) on the assessment of housing and economic development needs was published in March 2014. Previous SHMA Guidance (2007) and related documents were rescinded at that time, so the approach taken in preparation of this report is focussed on meeting the requirements of PPG. In addition, it reflects emerging good practice and the PAS OAN technical advice notes.

## Overview of the SHMA

<sup>1.8</sup> The objective of this SHMA was to identify the functional HMA and establish the OAN for housing (both market and affordable), ensuring that this was fully compliant with the requirements of the NPPF and PPG and mindful of good practice.

<sup>1.9</sup> The methodology was based on secondary data, and sought to:

- » Define the housing market area;
- » Provide evidence of the need and demand for housing based on demographic projections;
- » Consider market signals about the balance between demand for and supply of dwellings;
- » Establish the Objectively Assessed Need for housing;
- » Identify the appropriate balance between market and affordable housing; and
- » Address the needs for all types of housing, including the private rented sector, people wishing to build their own home, family housing, housing for older people and households with specific needs.

<sup>1.10</sup> It is important to recognise that the information from the SHMA should not be considered in isolation, but forms part of a wider evidence base to inform the development of housing and planning policies. The SHMA does not seek to determine rigid policy conclusions, but instead provides a key component of the evidence base required to develop and support a sound policy framework.

## Duty to Co-operate

<sup>1.11</sup> The Duty to Co-operate was introduced in the 2011 Localism Act and is a legal obligation.

<sup>1.12</sup> The NPPF sets out an expectation that public bodies will co-operate with others on issues with any cross-boundary impact, in particular in relation to strategic priorities such as “the homes and jobs needed in the area”.

*Public bodies have a duty to cooperate on planning issues that cross administrative boundaries, particularly those which relate to the **strategic priorities** set out in paragraph 156. The Government expects joint working on areas of common interest to be diligently undertaken for the mutual benefit of neighbouring authorities.*

*Local planning authorities should work collaboratively with other bodies to ensure that strategic priorities across local boundaries are properly coordinated and clearly reflected in individual Local Plans. Joint working should enable local planning authorities to work together to meet development requirements which cannot wholly be met within their own areas – for instance, because of a lack of physical capacity or because to do so would cause significant harm to the principles and policies of this Framework. As part of this process, they should consider producing joint planning policies on strategic matters and informal strategies such as joint infrastructure and investment plans.*

**National Planning Policy Framework (NPPF), paragraphs 178-179**

<sup>1.13</sup> This co-operation will need to be demonstrated as sound when plans are submitted for examination. One key issue is how any unmet development and infrastructure requirements can be provided by co-operating with adjoining authorities (subject to tests of reasonableness and sustainability). The NPPF sets out that co-operation should be “*a continuous process of engagement*” from “*thinking through to implementation*”.

*Local planning authorities will be expected to demonstrate evidence of having effectively cooperated to plan for issues with cross-boundary impacts when their Local Plans are submitted for examination. This could be by way of plans or policies prepared as part of a joint committee, a memorandum of understanding or a jointly prepared strategy which is presented as evidence of an agreed position. Cooperation should be a continuous process of engagement from initial thinking through to implementation, resulting in a final position where plans are in place to provide the land and infrastructure necessary to support current and projected future levels of development.*

**National Planning Policy Framework (NPPF), paragraph 181**

<sup>1.14</sup> As previously noted, the SHMA was jointly commissioned by East Hertfordshire, Epping Forest, Harlow and Uttlesford to ensure that they shared a consistent evidence base for housing across their HMA. The emerging SHMA outputs have also been discussed with officers and members at neighbouring local authorities under the Duty to Co-operate, and their feedback has been taken into account.

## 2. Defining the Housing Market Area

### An evidence base to identify functional housing markets

2.1 The NPPF refers to Local Plans meeting the “*full objectively assessed needs for market and affordable housing in the housing market area*” (paragraph 47, emphasis added).

#### Functional Housing Market Areas

2.2 The definition of a functional housing market area is well-established as being “*...the geographical area in which a substantial majority of the employed population both live and work and where those moving house without changing employment choose to stay*” (MacLennan et al, 1998)<sup>1</sup>.

#### Planning Practice Guidance

2.3 Planning Practice Guidance (PPG)<sup>2</sup> on the Assessment of housing and economic development needs (March 2014) reflects this existing concept, confirming that the underlying principles for defining housing markets are concerned with the functional areas in which people both live and work:

*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 cooperate.*

**Planning Practice Guidance (March 2014), ID 2a-010**

2.4 Therefore, PPG requires an understanding of the housing market area and says this can be defined using three different sources of information:

- » House prices and rates of change in house prices
- » Household migration and search patterns
- » Contextual data (e.g. travel to work area boundaries, retail and school catchment areas)

2.5 These sources are consistent with those identified in the CLG advice note “*Identifying sub-regional housing market areas*” published in 2007<sup>3</sup>.

<sup>1</sup> Local Housing Systems Analysis: Best Practice Guide. Edinburgh: Scottish Homes

<sup>2</sup> <http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/>

<sup>3</sup> Identifying sub-regional housing market areas (CLG, March 2007); paragraph 1.6

## Geography of Housing Market Areas (NHPAU/CURDS)

<sup>2.6</sup> CLG also published a report on the “*Geography of Housing Market Areas*” in 2010<sup>4</sup> which was commissioned by the former National Housing and Planning Advice Unit (NHPAU) and undertaken by the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University. This study explored a range of potential methods for calculating housing market areas for England and applied these methods to the whole country to show the range of housing markets which would be generated. The report also proposed three overlapping tiers of geography for housing markets:

- » **Tier 1:** framework housing market areas defined by long distance commuting flows and the long-term spatial framework with which housing markets operate;
- » **Tier 2:** local housing market areas defined by migration patterns that determine the limits of short term spatial house price arbitrage;
- » **Tier 3:** sub-markets defined in terms of neighbourhoods or house type price premiums.

<sup>2.7</sup> The report recognised that migration patterns and commuting flows were the most relevant information sources for identifying the upper tier housing market areas, with house prices only becoming relevant at a more local level and when establishing housing sub-markets. The report also outlined that no one single approach (nor one single data source) will provide a definitive solution to identifying local housing markets; but by using a range of available data, judgements on appropriate geography can be made.

<sup>2.8</sup> Advice published in the PAS OAN technical advice note<sup>5</sup> also suggests that the main indicators will be migration and commuting (second edition, paragraph 5.4).

*“The PPG provides a long list of possible indicators, comprising house prices, migration and search patterns and contextual data including travel-to-work areas, retail and school catchments. In practice, the main indicators used are migration and commuting.”*

<sup>2.9</sup> The PAS OAN technical advice note also suggests that analysis reported in the CLG report “*Geography of Housing Market Areas*” (CLG, November 2010) should provide a starting point for drawing HMAs (Figure 1). This suggests that the study areas simply form part of the London housing market area. Nevertheless, the PAS OAN technical advice note also notes (second edition, paragraph 5.9):

*“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.”*

<sup>2.10</sup> Figure 2 illustrates the output for the proposed two-tier geography based on 50% migration containment within 77.5% commuting containment. This analysis also suggests that the study area sits within the London HMA, although the boundary for this area is fundamentally different to the London HMA shown on the “starting point” map. Four separate sub-areas are also identified based on migration patterns, each covering parts of the study area. However, on balance, these sub-areas also look “unconvincing”.

<sup>2.11</sup> It is important to note that the analysis of migration and commuting for the “starting point” CLG study was based on data from the 2001 Census. Given this context, the PAS OAN technical advice note recognises that “*more recent data should always ‘trump’ this geography*” (first edition, paragraph 4.9). Due to the complexities of the geographies in this area, a more fundamental analysis of the data is needed.

<sup>4</sup> Geography of Housing Market Areas (CLG, November 2010); paragraph 1.6

<sup>5</sup> <http://www.pas.gov.uk/documents/332612/6549918/OANupdatedadvicenote/f1bfb748-11fc-4d93-834c-a32c0d2c984d>

Figure 1: NHPAU Study - PAS OAN technical advice note "Starting Point"

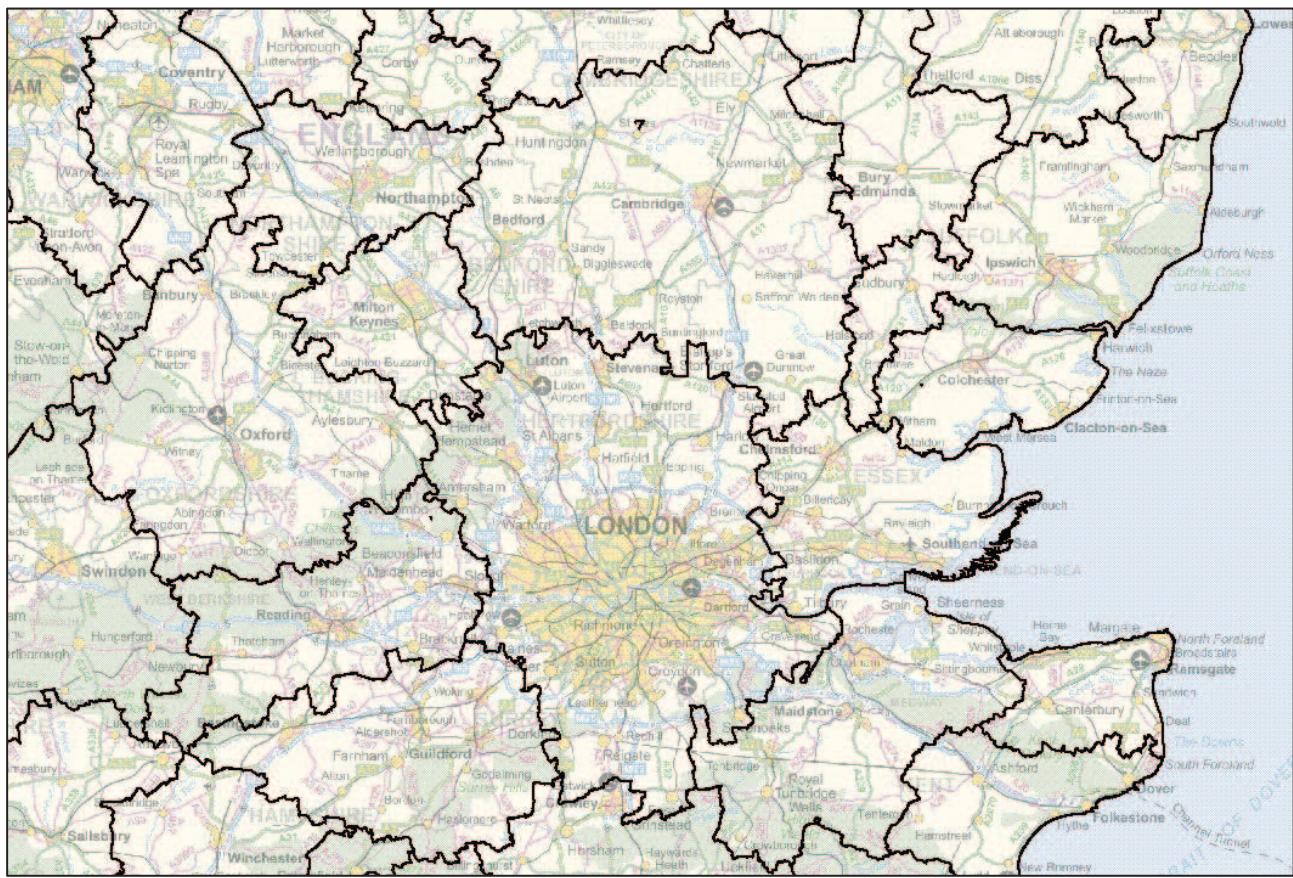
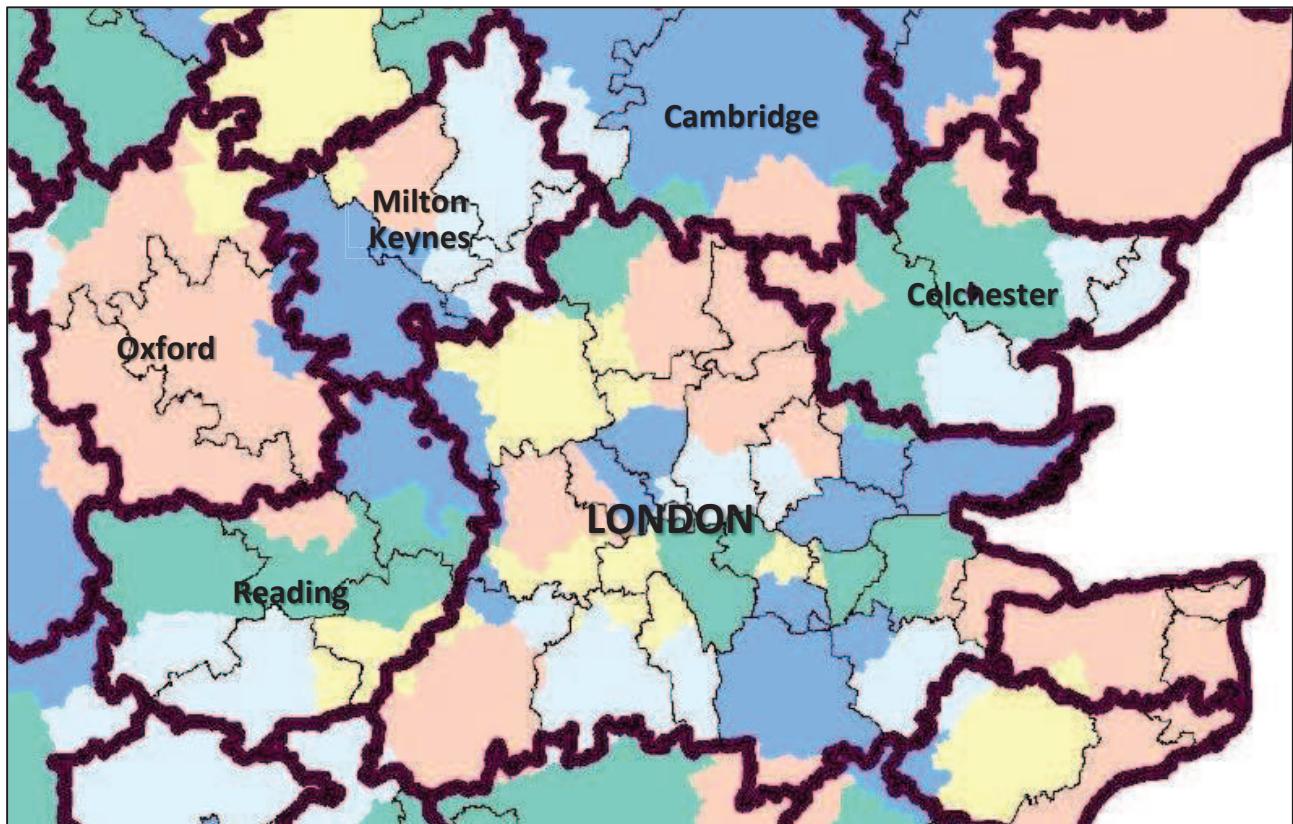


Figure 2: NHPAU Study - Lower tier based on migration (50%) within commuting-based upper tier (77.5%)



## Identifying Travel to Work Areas

2.12 Housing market areas reflect “*the key functional linkages between places where people live and work*” (PPG March 2014, ID 2a-010) and therefore it is important to consider travel to work patterns within the identified area alongside the migration patterns. PPG states:

*Travel to work areas can provide information about commuting flows and the spatial structure of the labour market, which will influence household price and location. They can also provide information about the areas within which people move without changing other aspects of their lives (e.g. work or service use).*

Planning Practice Guidance (March 2014), ID 2a-011

2.13 One of the PPG suggested data sources is the Office for National Statistics travel to work areas (TTWAs). Figure 3 shows the ONS TTWAs based on the origin-destination data from the 2001 Census (published in 2007) and TTWAs based on commuting flow data from the 2011 Census (published in 2015).

2.14 The TTWAs based on 2001 Census data identified a Travel to Work Area for Harlow & Bishop Stortford; with Cambridge to the North, Chelmsford & Braintree to the East, Stevenage to the West and London to the South.

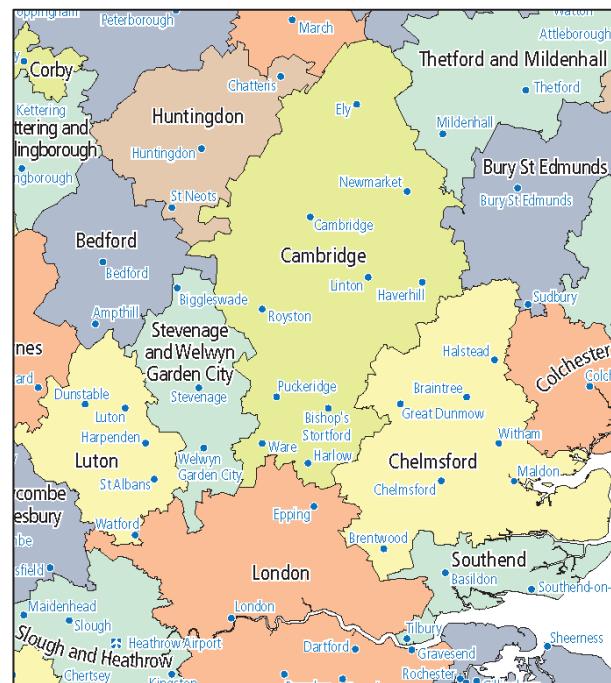
2.15 Based on 2011 Census data, the former Harlow & Bishop Stortford TTWA did not have sufficient self-containment (in terms of the proportion of workers that both lived and worked in the area) mainly due to the number commuting to London. Nevertheless, despite the strong commuting relationship with London, the ONS analysis has reassigned most of this TTWA to the Cambridge TTWA. Once again, given the complexities of the geographies in this area, a more fundamental analysis of the data is needed.

Figure 3: ONS Travel To Work Areas (Source: ONS 2007; ONS 2015)

ONS TTWAs based on 2001 Census data



ONS TTWAs based on 2011 Census data



## Commuting Flow Analysis Based on 2011 Census Data

<sup>2.16</sup> The ONS has published detailed commuting flow data from the 2011 Census. This data enables us to further understand the relationships that exist between where people live and work, which is a key element of the housing market area definition. When defining housing market areas, it is important that functional housing markets are not constrained to local authority boundaries. Further, there is a need to use evidence to build up the housing market area from a lower level of geography; essentially, to use smaller geographic areas as the basic “building block”.

<sup>2.17</sup> In considering HMAs for West Essex and East Hertfordshire, our initial analysis is based on commuting patterns across the geographic area from Corby in the north to Staines the south, and from Oxford in the west to Ipswich in the east. This approach ensures that functional relationships are properly identified without unduly focussing on the local planning authorities within the study area. Nevertheless, the analysis only seeks to identify the full extent of those HMAs situated entirely within this area; neighbouring areas will only be identified as far as is necessary to establish the most appropriate boundary between them and the HMAs being identified within the study area.

<sup>2.18</sup> Given that our analysis initially focuses on commuting flows, the areas established will be travel to work areas rather than HMAs. Nevertheless, as previously outlined, the *“key functional linkages between places where people live and work”* is a critical part of the PPG definition of housing market areas and therefore travel to work areas will form an important part of the evidence needed for establishing the most appropriate functional HMAs.

## Analysis Method and Framework

<sup>2.19</sup> The key steps in the initial analysis are:

- » **Step 1:** Each Middle Layer Super Output Area (MSOA) within the geographic area was identified where all of the constituent Census Output Areas have been classified as being “urban” under the 2011 Rural Urban Classification<sup>6</sup>. The 2011 Rural Urban Classification is used to distinguish between rural and urban areas; an area is classified as rural if it falls outside of a settlement with more than 10,000 residents.
- » **Step 2:** We grouped together any contiguous urban MSOAs and each formed a single seed point, except for the contiguous urban area for London (Figure 4). Note that the London urban area is excluded from step 2 as this would create a single seed point covering the whole of London at the outset of the analysis process. Whilst London will clearly be an important housing market, this cannot be based simply on it being a contiguous urban area. London MSOAs are introduced into the process from step 3 onwards.
- » **Step 3:** MSOAs within the geographic area (including those in the London contiguous urban area) were identified where the commuting ratio that was less than 1.0; i.e. those MSOAs where the workplace population is larger than the resident population (Figure 5).
- » **Step 4:** These MSOAs with concentrations of employment are associated with the existing seed point with which they have the strongest relationship. Where these MSOAs are not contiguous with an urban area (including all MSOAs in Greater London) and have only weak relationships with the existing seed points, employment MSOAs form a new independent seed point (Figure 6).

<sup>6</sup> Department for Environment, Food and Rural Affairs, Rural Urban Classification ; [www.gov.uk](http://www.gov.uk), 2014; paragraph 3.3

Figure 4: Urban Areas based on DEFRA Classification

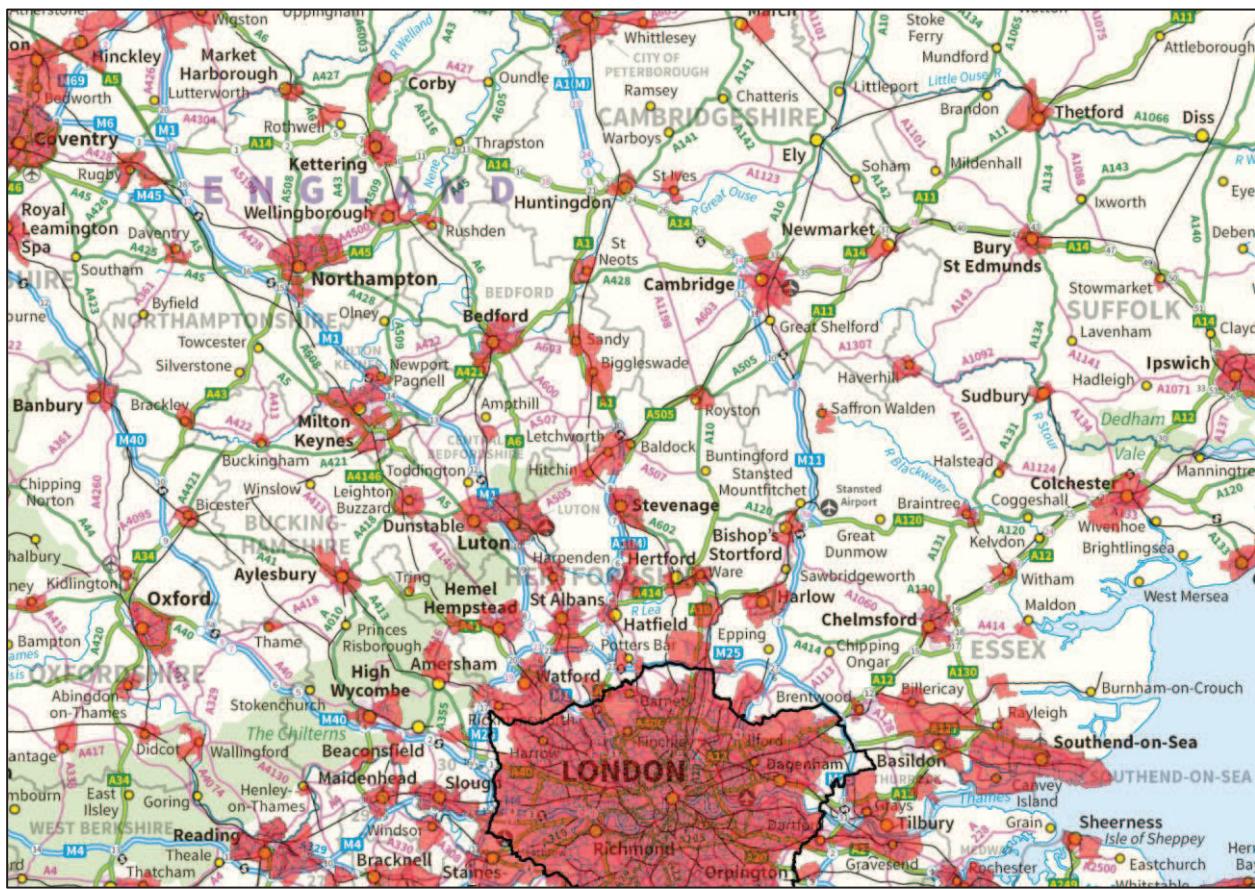
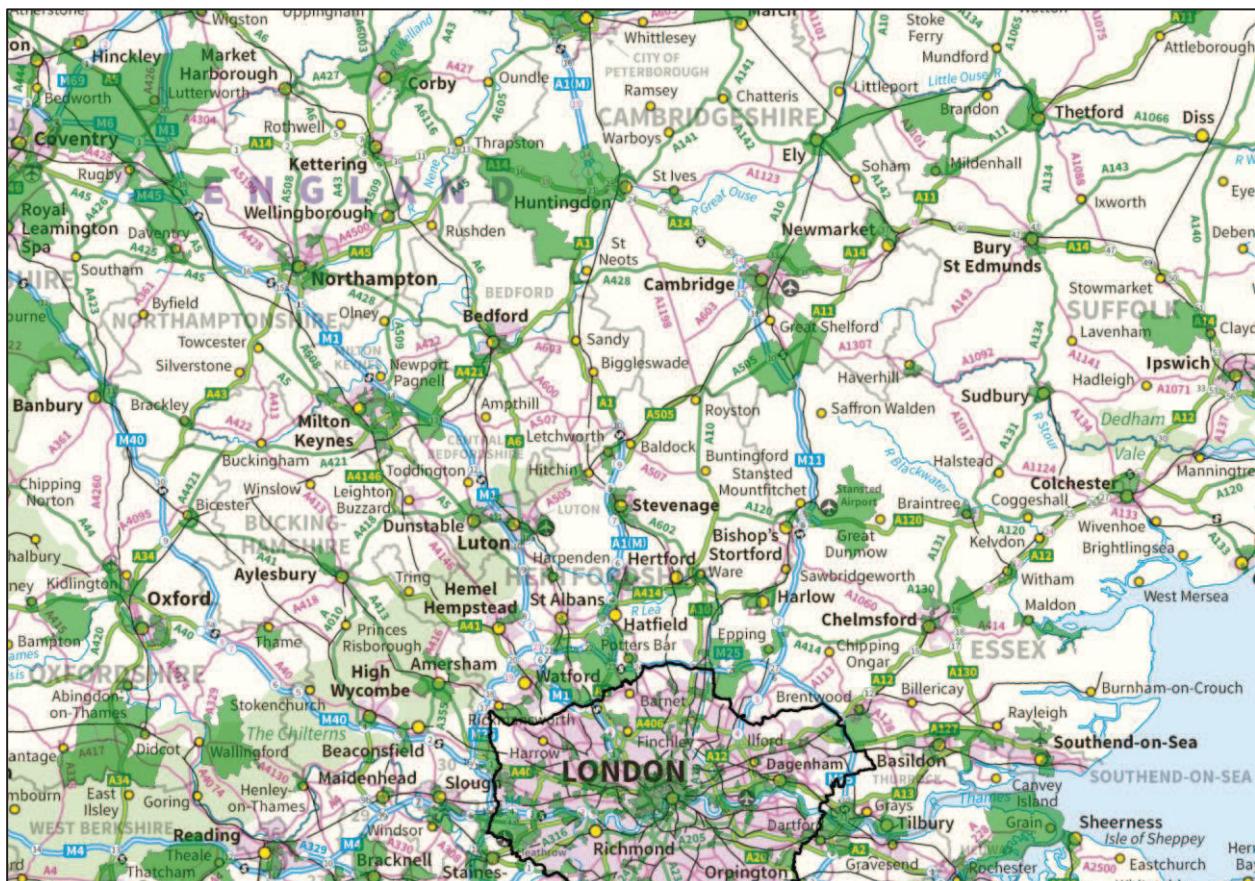
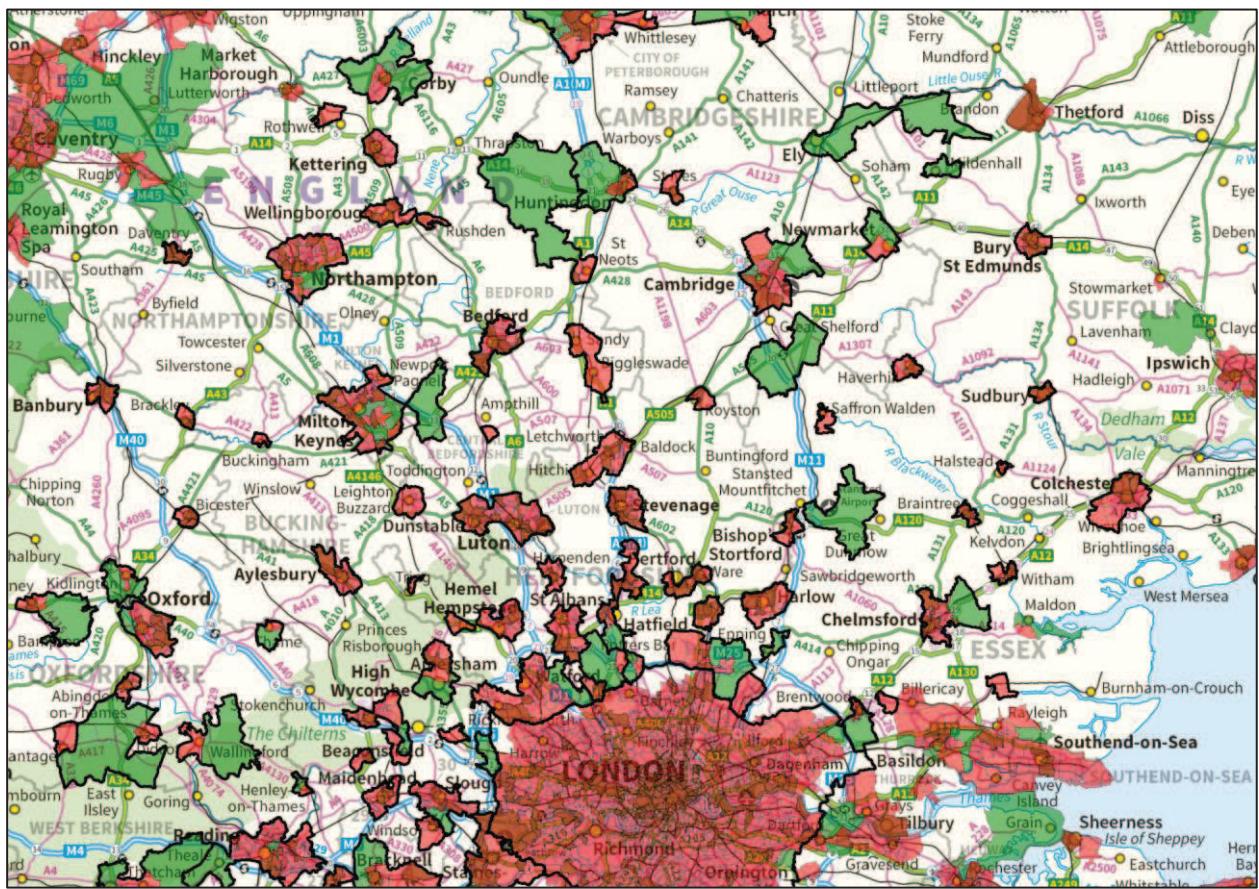


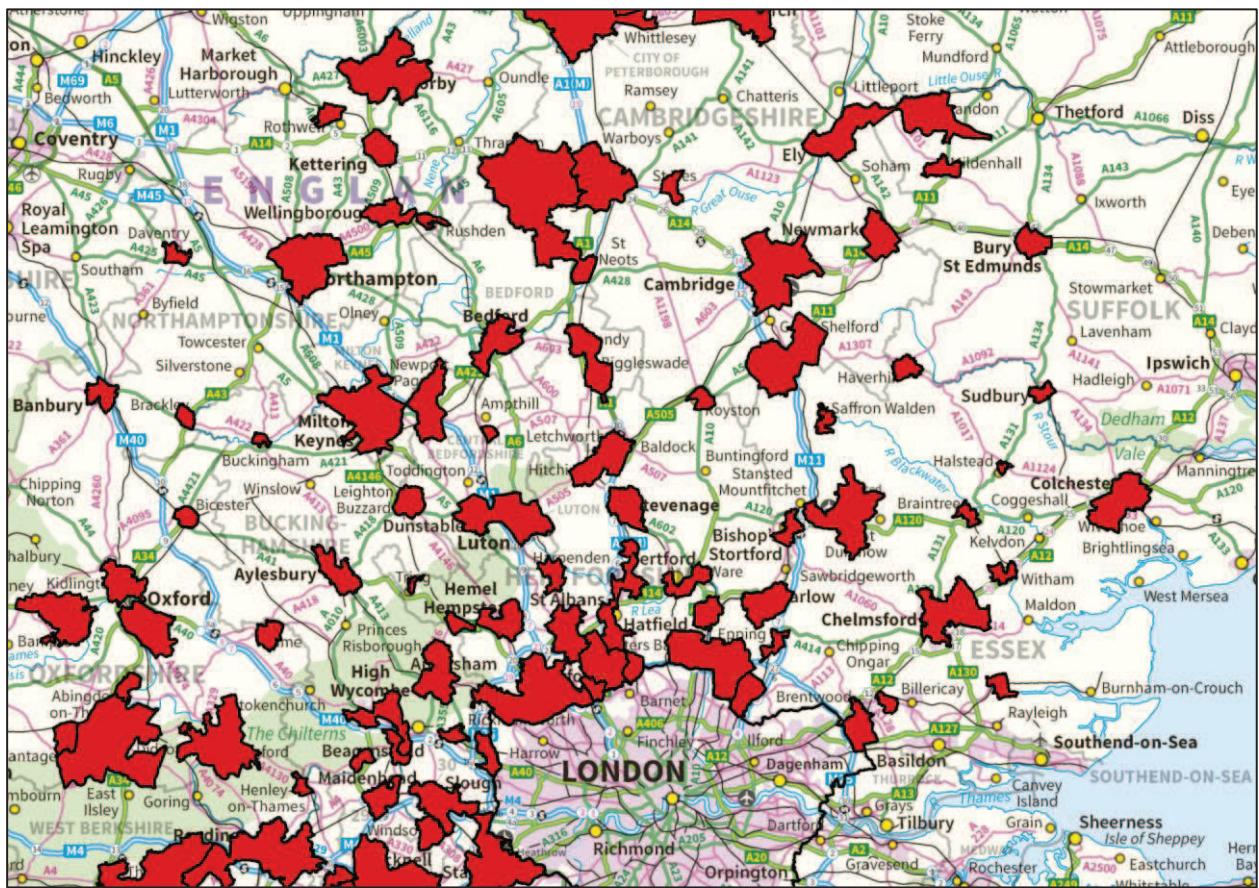
Figure 5: Areas with Commuting Ratio less than 1.0



**Figure 6: Urban Areas outside London and Employment Areas**



**Figure 7: 'Seeds' for Housing Market Areas**



<sup>2.20</sup> Figure 7 shows the final seeds that were then used for the subsequent stages of the analysis process:

- » **Step 5:** For every MSOA in the geographic area, we associate it with the seed point (or seed point cluster) that has the largest number of workers resident in that MSOA.
- » **Step 6:** Based on the MSOAs associated with each seed point (or seed point cluster) at Step 5, we calculate the proportion of the resident population that work in the area and the proportion of the workplace population that live in the area to establish a self-containment ratio.
- » **Step 7:** If all seed points (or seed point clusters) had an acceptable self-containment ratio, the process stops; otherwise for the seed point with the lowest self-containment ratio, the seed point with which it has the strongest relationship (based on the commuting flows and distance between the two seed points) is identified and the two seed points are clustered together. Where the seed point with the lowest self-containment ratio is already formed of a cluster of seed points, the cluster is separated and the strongest relationship identified for each of the original seed points before new clusters are formed.

<sup>2.21</sup> The process from Step 5 to Step 7 was then repeated to achieve increasing levels of self-containment across all seed points (or seed point clusters).

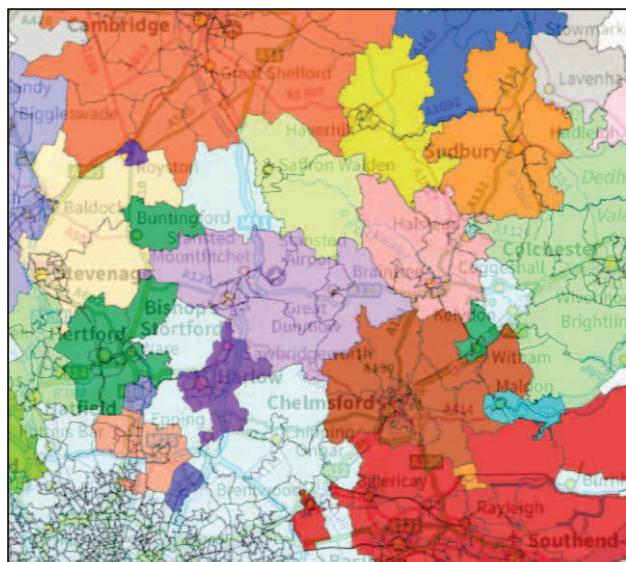
<sup>2.22</sup> The final distribution of areas depends on the level at which the self-containment ratio is considered to be acceptable. The higher that the self-containment ratio is required to be, the larger (and more strategic) the identified areas will become – as smaller areas will tend to have lower levels of self-containment. The ONS have a **75% target for Travel to Work areas**, but it is worth noting that **their threshold is 66.7%** (for areas that have a working population in excess of 25,000 workers) and this provides a useful framework.

## Analysis Outcomes based on 2011 Census Data

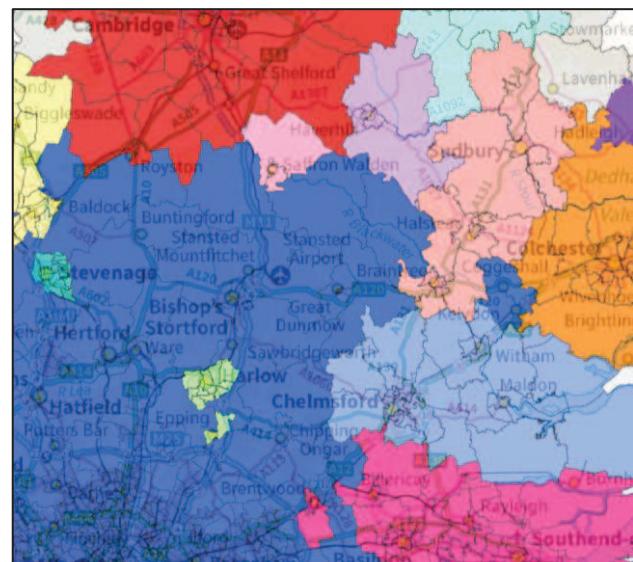
<sup>2.23</sup> Figure 8 shows the outcome of this process at 40% and 50% self-containment. At the initial level of 40% self-containment, there are a large number of distinct areas visible; but at 50% self-containment, the number of distinct areas is substantially reduced as it starts to become apparent that the strongest link for many of the seeds (or seed point clusters) is to London.

Figure 8: Initial model outputs at 40% and 50% containment thresholds

40% Containment



50% Containment



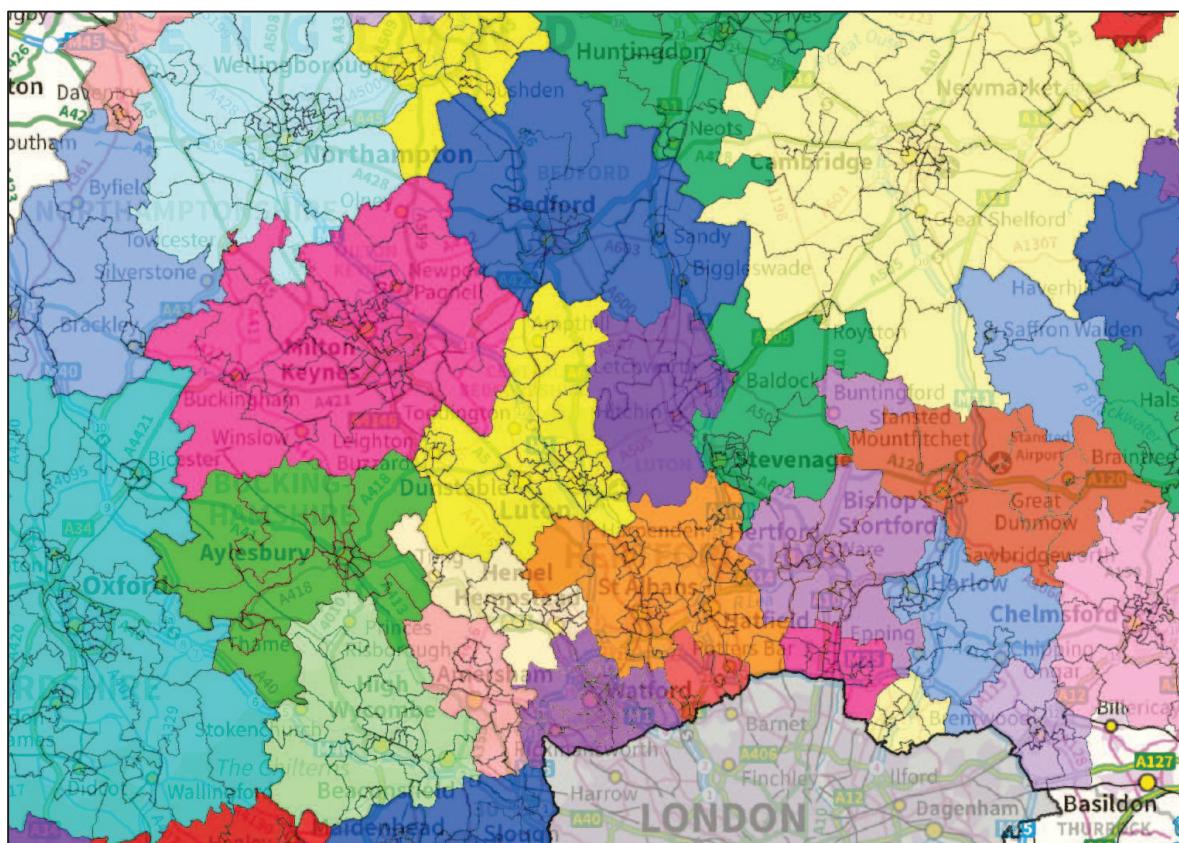
## Further Modelling restricting the growth of Greater London

<sup>2.24</sup> The importance of London must be recognised when considering housing markets areas across the wider South East, given the number of workers that commute to London and the number of people that move from London to these areas each year. However, it is also useful to gain an understanding of other housing market areas at a more local level. The PPG recognises that *“it might be the case that housing market areas overlap”*; so whilst acknowledging that London is an important housing market area, it is also possible that London overlaps with other housing market areas.

<sup>2.25</sup> Given this context, the latter part of the analysis (steps 5-7) was repeated; however this time when the seed (or seed cluster point) with the weakest self-containment was joined to the seed to which it had the strongest links, seed point within the Greater London region were excluded from the process. In other words, London could not “grow”.

<sup>2.26</sup> At 60% self-containment (Figure 9), various local travel to work areas are starting to emerge – including Bedford, Bishop’s Stortford, Brentwood, Cambridge, Chelmsford, Epping, Harlow, Hertford, Letchworth, Potters Bar, Saffron Walden, St Albans, Stevenage and Watford.

**Figure 9: Model outputs with restricted growth of Greater London at 60% containment threshold**



<sup>2.27</sup> At 70% self-containment (Figure 10), a number of realignments have occurred where some of the smaller seeds have merged with other seeds to which they have the strongest link. Notably, Letchworth has now merged with Stevenage, the Epping and Stansted areas have merged with Harlow, and Potters Bar has joined with St Albans and Hatfield.

<sup>2.28</sup> At 72% self-containment (Figure 11), the smaller seeds have all merged with larger areas, and it is evident that some of these larger areas have merged too. For example, Aylesbury has merged with High Wycombe; Hemel Hempstead, Watford and St Albans have combined together; and Hertford has joined with Harlow.

Figure 10: Model outputs with restricted growth of Greater London at 70% containment threshold

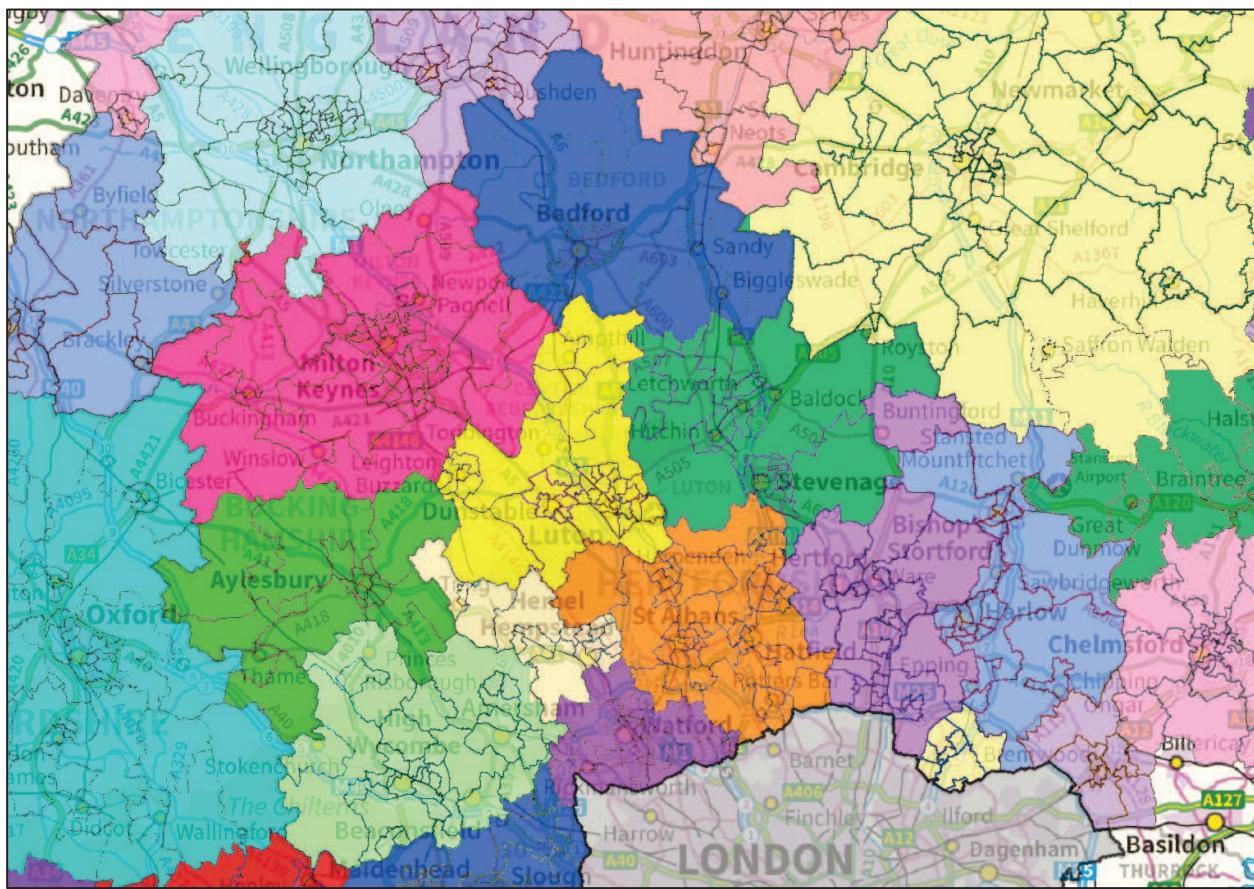
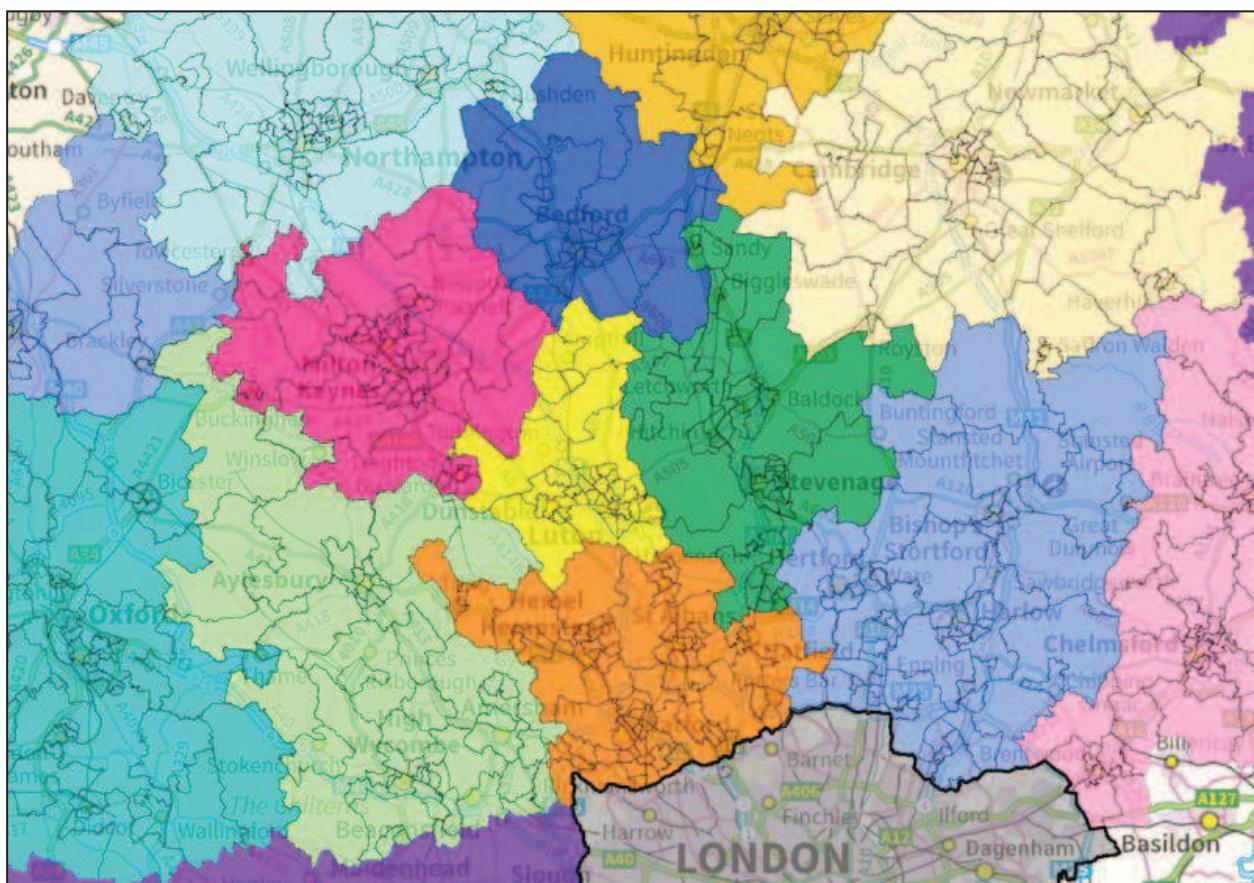


Figure 11: Model outputs with restricted growth of Greater London at 72% containment threshold



## Further Modelling based on Finer Grain Geographies

<sup>2.29</sup> The analysis to define the commuting zone clusters was developed using the MSOA statistical geography. Whilst these areas are smaller than local authority areas, they each cover a relatively large population: a minimum of 2,000 households and an average of 3,000 households in each MSOA. Therefore, some MSOAs cover relatively large geographic areas, in particular those outside urban centres. This means that the boundaries that have been identified for the commuting zones are likely to be relatively imprecise, especially in areas that are currently less populated.

<sup>2.30</sup> To refine the identified boundaries, the modelling was re-run using Census Output Areas (COA): the smallest statistical geographies available, covering a minimum of 40 households with a target of 125 households in each COA. In considering this finer grained geography, the modelling is revised using COA based on the final seed clusters (excluding those smaller settlements that had been “unseeded”).

<sup>2.31</sup> The following maps show the strongest relationship for each COA. Figure 12 shows the areas where an absolute majority of workers (that is over 50%) travel to or from the COA to the identified area. At 50% absolute self-containment, the “core” of each travel to work area can be identified.

<sup>2.32</sup> Figure 13 shows the outcome of the same analysis based on a simple majority of workers (that is the largest number) excluding the flows to Greater London, whereas Figure 14 also shows those COAs where the greatest flow is to Greater London. There are clearly some parts of Epping Forest and Uttlesford where the largest flows are to Greater London.

Figure 12: COAs with absolute majorities (over 50%) of workers travelling to and from the area

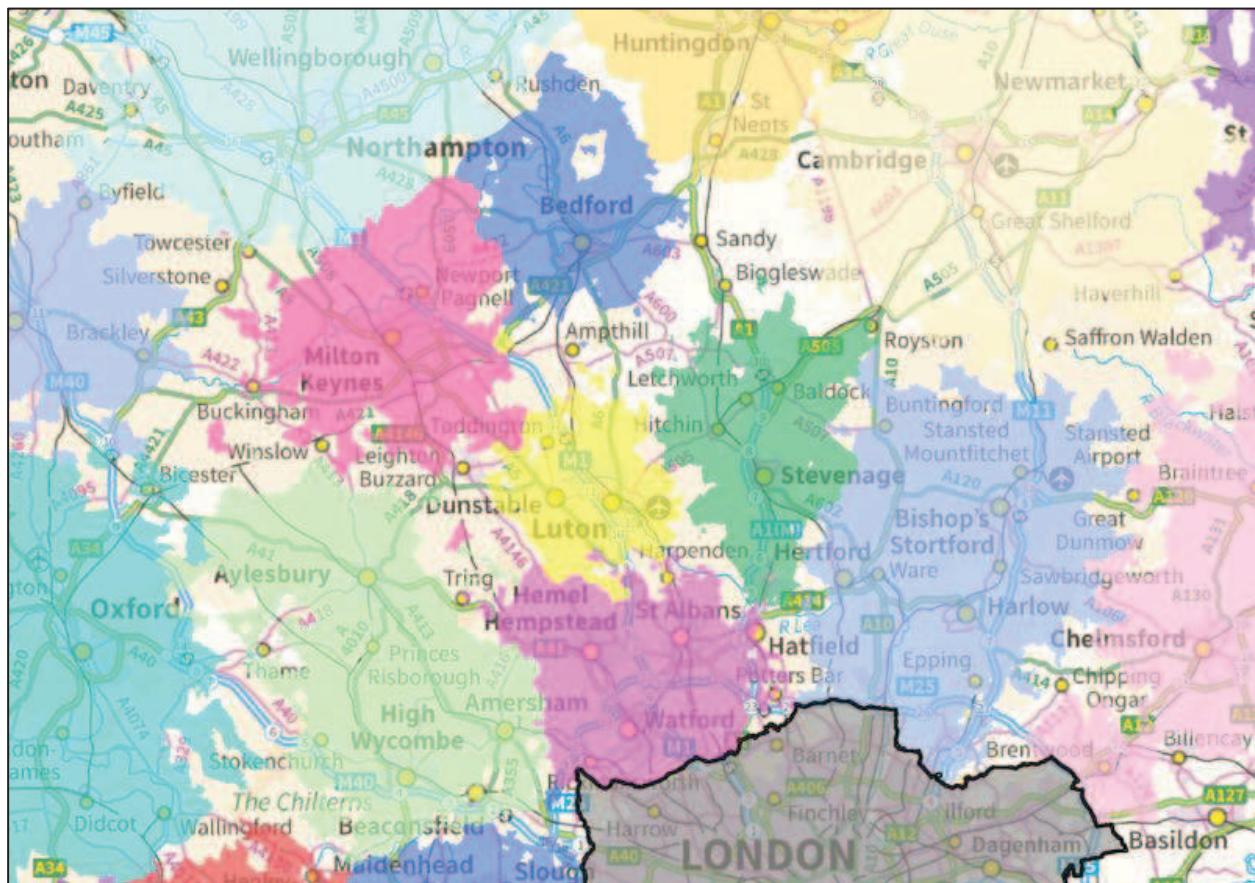


Figure 13: COAs based on simple majorities of workers travelling to or from the area

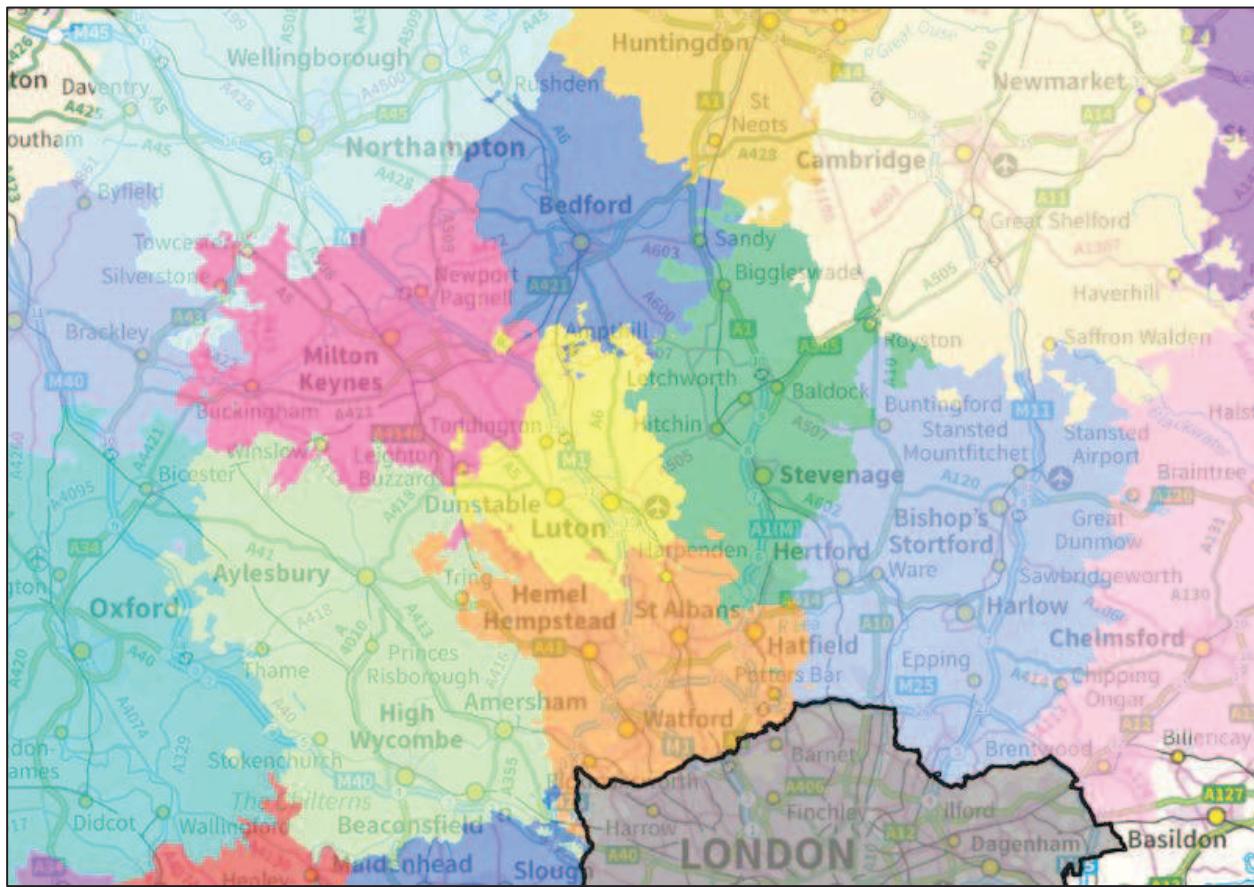
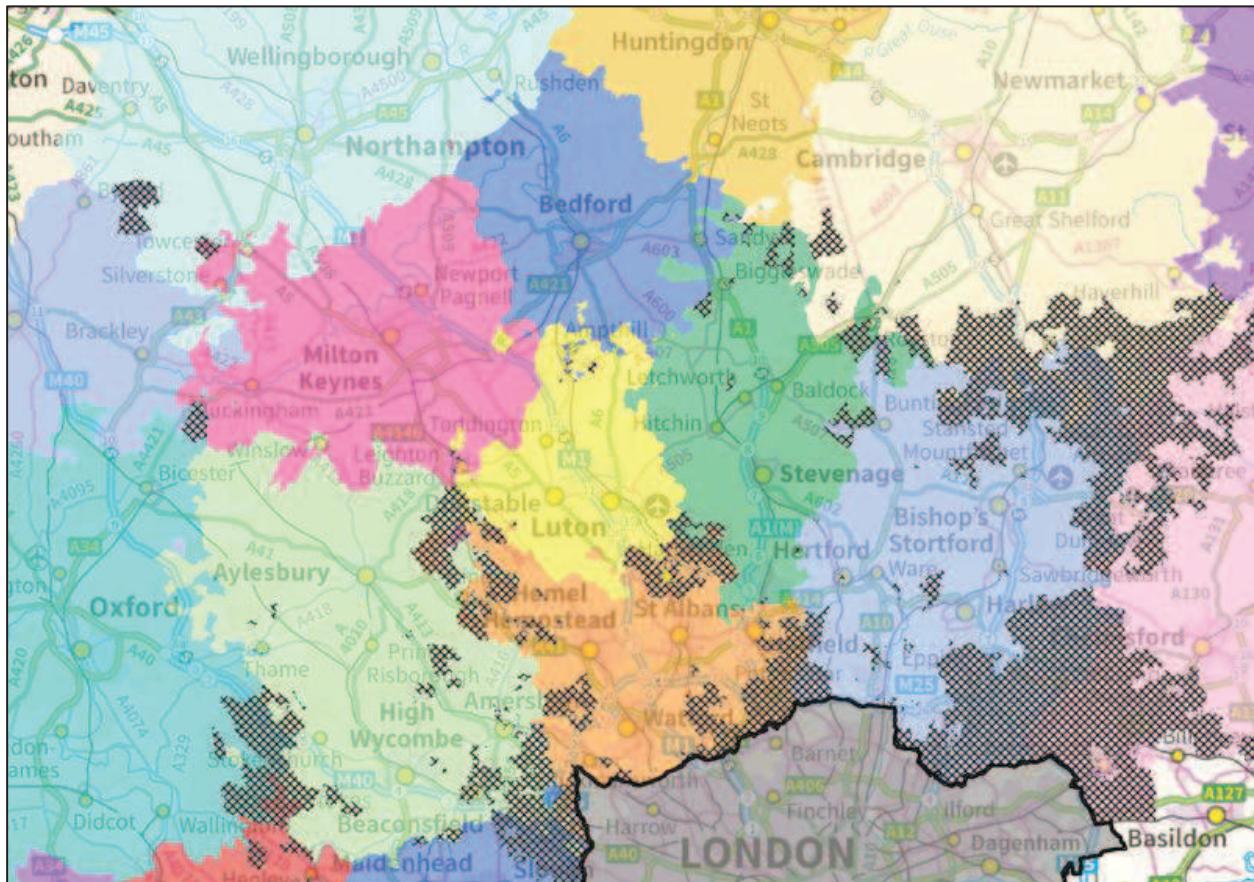


Figure 14: COAs based on simple majorities of workers travelling to or from the area, including Greater London (hatched)



2.33 Greater London is evidently important when considering HMAs in this wider area. The modelling analysis has clearly shown that the commuting “pull” from Central London is often stronger than from more local employment centres, and it would be possible to define a Greater London travel to work area that included many areas outside the region boundary.

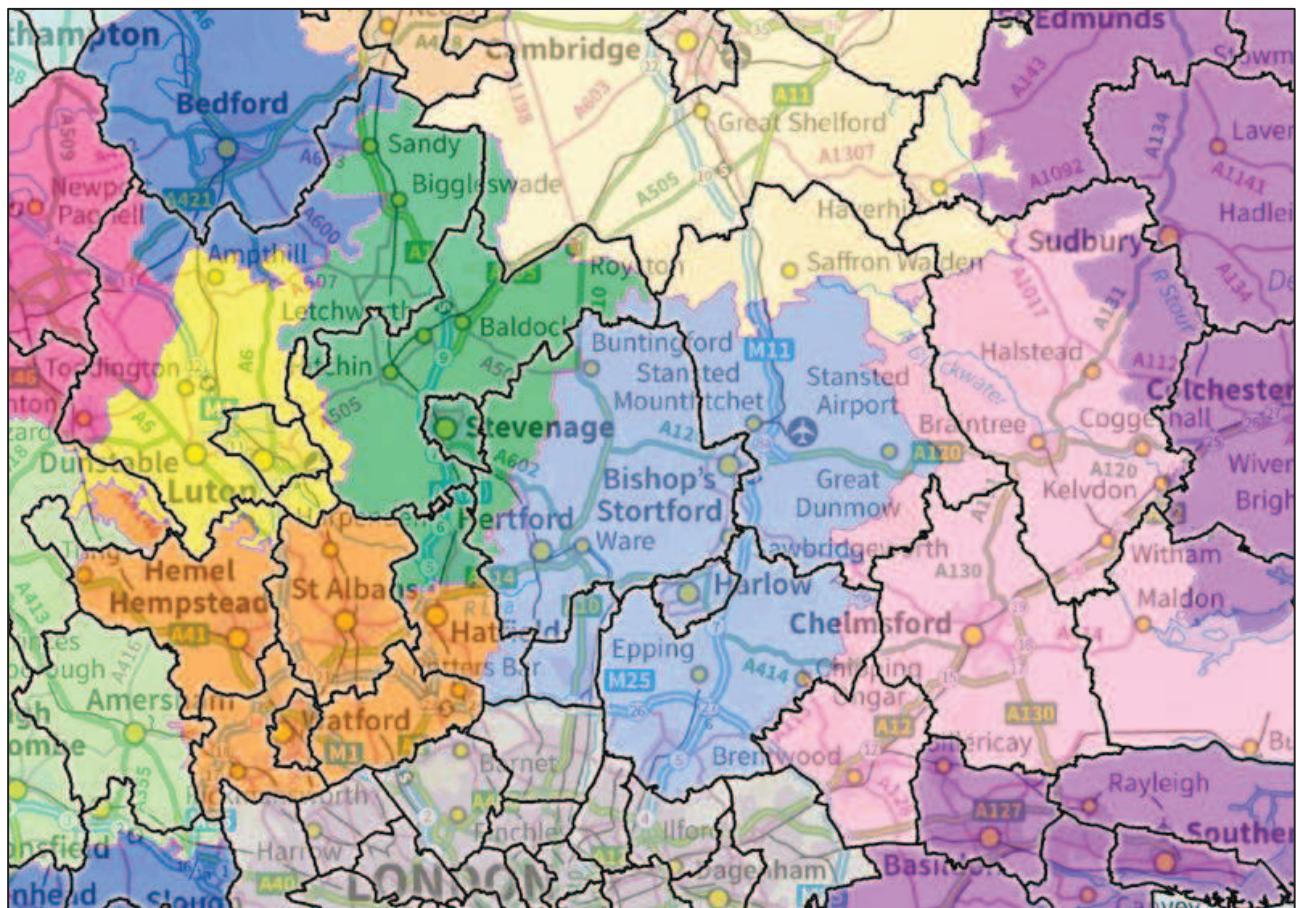
2.34 Whilst the functional relationships with London are important, the Mayor of London and the Greater London Authority are responsible for the London Plan and this is based on the administrative boundary for the region. Therefore, on balance, it is pragmatic and appropriate to define Greater London using the administrative boundary and then separately consider the commuting flows outside the region.

2.35 On this basis, our proposed commuting zones are based on the final iteration of the modelling analysis that excluded Greater London.

## Proposed Commuting Zones

2.36 Figure 15 shows the proposed commuting zones together with the local authority administrative boundaries. While this study has clearly defined the boundaries for these commuting zones inside the study area, the boundaries outside of this area should be treated with caution given the geographic area that was included within the modelling analysis. This would not affect the boundaries or distribution within the area which is the focus of the study.

Figure 15: Proposed Commuting Zones showing Local Authority administrative boundaries



2.37 Figure 16 sets out the key statistics for these final commuting zones, presented in descending order of containment score. The table also shows the overall commuting flows (including flows to and from Greater London) and highlights those that reach the ONS target of 75% and the ONS threshold of 66.7% in green

(dark green and light green respectively), with the remaining flows (that fail to reach the ONS threshold of 66.7%) highlighted in red.

<sup>2.38</sup> In terms of workplace population, the data shows that the commuting zone centred on Harlow has 72.9% of workers resident inside the HMA. The proportions for the resident population are lower due to the impact of a high number of people living in the area working in London, but if those residents who travel to work in London are excluded then 84.7% of residents in the HMA work inside of the area.

**Figure 16: Statistics for Proposed Commuting Zones (Source: 2011 Census; Note: Dark green cells meet the ONS TTWA target of 75%; light green cells meet the ONS TTWA threshold of 66.7%, red cells do not meet the ONS TTWA threshold)**

	Living and Working in area	Workplace Population		Resident Population				Containment Score	
				All workers		Exc. Central London			
		Total workers	% living in area	Total workers	% working in area	Total workers	% working in area	Overall	Exc. Central London
Cambridge	195,200	242,000	80.6%	235,300	83.0%	226,700	86.1%	81.8%	83.3%
Harlow	154,600	212,100	72.9%	245,200	63.0%	182,500	84.7%	67.6%	78.4%
Chelmsford	147,800	194,100	76.2%	223,900	66.0%	187,000	79.0%	70.7%	77.6%
Stevenage	111,900	153,400	72.9%	172,700	64.8%	154,100	72.6%	68.6%	72.8%

<sup>2.39</sup> Figure 17 details the distribution of the resident population for these commuting zones by local authority area. It is evident that the Harlow commuting zones covers the entire population of Broxbourne and Harlow local authority areas, and the substantial majority of the population of Epping Forest (99.5%) and East Hertfordshire (93.9%).

<sup>2.40</sup> The Uttlesford population is split between the Harlow, Cambridge and Chelmsford commuting zones; however more than half of the residents are in the Harlow commuting zone (58.9%) which is almost double the number in the Cambridge zone (32.9%) which has the next largest share. The Welwyn Hatfield population is also split between three commuting zones: Harlow, Stevenage and Watford. The largest proportion of residents live in the Stevenage zone (52.1%) however the proportion living in Watford is also substantial (42.9%) with only a small percentage in the Harlow commuting zone (5.1%).

**Figure 17: Proposed Commuting Zones Resident Population by Local Authority Area (Source: 2011 Census. Note: Population rounded to nearest 100. Figures may not sum due to rounding)**

Local Authority Area	Proposed Commuting Zone									
	Cambridge		Harlow		Chelmsford		Stevenage		Watford	
	N	%	N	%	N	%	N	%	N	%
Broxbourne	-	-	93,600	100.0%	-	-	-	-	-	-
East Hertfordshire	-	-	129,300	93.9%	-	-	8,400	6.1%	-	-
Epping Forest	-	-	124,000	99.5%	600	0.5%	-	-	-	-
Harlow	-	-	81,900	100.0%	-	-	-	-	-	-
Uttlesford	26,100	32.9%	46,800	58.9%	6,600	8.3%	-	-	-	-
Welwyn Hatfield	-	-	5,600	5.1%	-	-	57,600	52.1%	47,400	42.9%
Elsewhere	355,700	-	-	-	346,800	-	283,600	-	562,000	-
<b>TOTAL</b>	<b>381,800</b>	-	<b>481,200</b>	-	<b>354,000</b>	-	<b>349,500</b>	-	<b>609,400</b>	-

## Migration

2.41 Whilst commuting flow data helps identify “*the key functional linkages between places where people live and work*”, PPG also suggests that migration patterns should be considered when defining functional housing market areas:

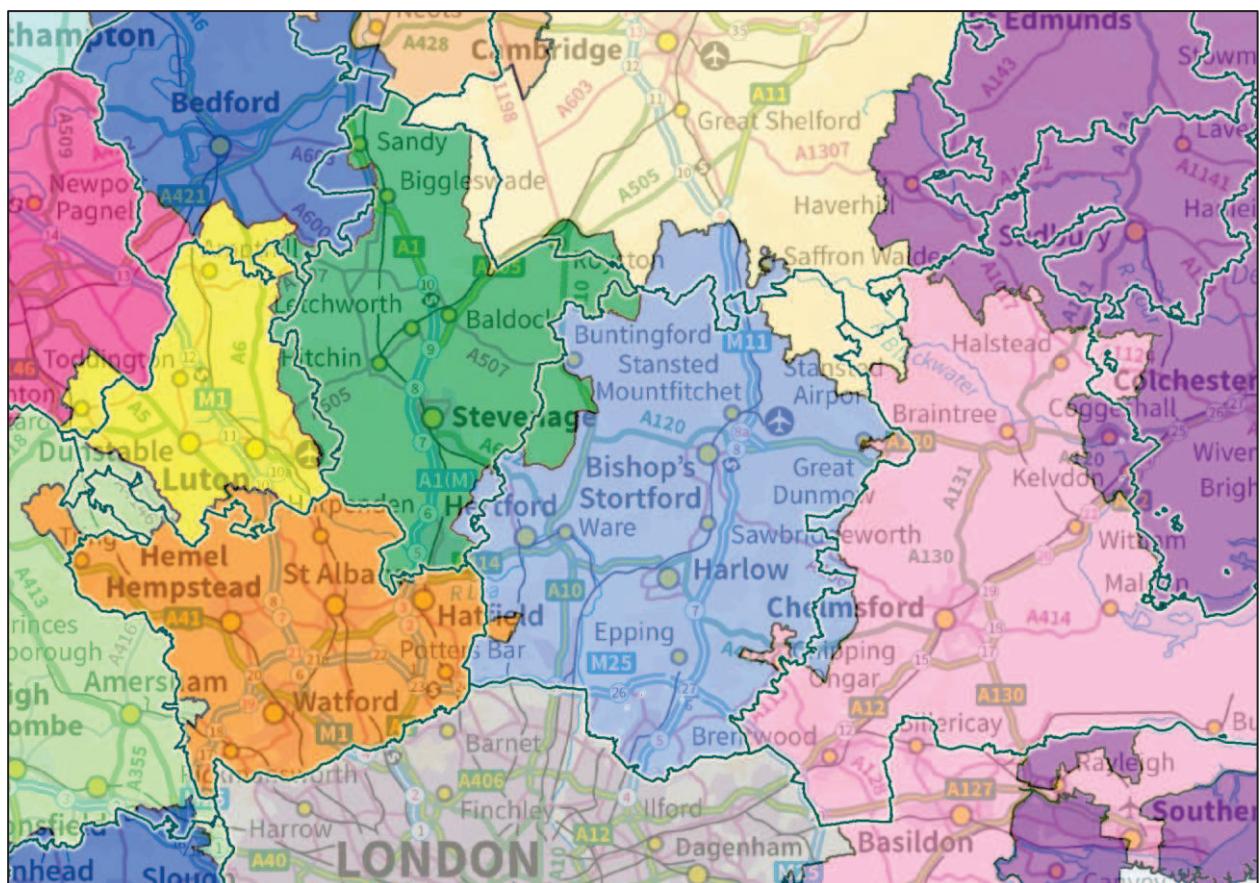
*Migration flows and housing search patterns reflect preferences and the trade-offs made when choosing housing with different characteristics. Analysis of migration flow patterns can help to identify these relationships and the extent to which people move house within an area. The findings can identify the areas within which a relatively high proportion of household moves (typically 70 per cent) are contained. This excludes long distance moves (eg those due to a change of lifestyle or retirement), reflecting the fact that most people move relatively short distances due to connections to families, friends, jobs, and schools.*

Planning Practice Guidance (March 2014), ID 2a-011

2.42 Analysis of Census migration flow data shows the strongest relationships in terms of migration flows mirror exactly the strongest relationships in terms of commuting flow data.

2.43 Figure 18 shows the strongest relationships in terms of migration flows between each MSOA and the identified seed clusters. It is evident that the migration patterns largely reflect the travel to work patterns previously illustrated by the commuting zone analysis, although there are some notable differences. In particular, the Harlow migration zone extends into the south of the Cambridge commuting zone and includes Saffron Walden.

Figure 18: MSOAs with the strongest migration links to the final seed clusters, showing commuting zone boundaries



2.44 PPG identifies that a “*relatively high proportion of household moves*” will be contained within a housing market area, and suggests that this will be “*typically 70%*” or more; however this “*excludes long-distance moves*” (ID 2a-011).

2.45 As the PAS OAN technical advice note confirms, “*what counts as a long-distance move is a matter of judgment*” (second edition, paragraph 5.16). Data from the English Housing Survey 2013-14 household report<sup>7</sup> (figure 6.4) shows that over 7 in every 8 moves in the UK involved distances of less than 50 miles, with almost 5 in every 6 involving distances of less than 20 miles. It would therefore seem appropriate for long-distance moves to include all moves of at least 50 miles, and for moves of 20 miles or more to also be considered.

2.46 Figure 19 illustrates the relevant catchment areas based on distances of both 50 miles and 20 miles beyond the Harlow migration zone. It is evident that the 20 mile zone covers most of Greater London together with other settlements in the surrounding area such as Basildon, Bedford, Cambridge, Chelmsford, Hemel Hempstead, Luton, Stevenage, Southend-on-Sea and Watford. The 50 mile zone covers most of the wider south east.

**Figure 19: Catchment area for moves to and from Harlow migration zone, excluding long-distance moves (Note: Inner circle based on moves of up to 20 miles; outer circle based on moves of up to 50 miles)**



<sup>7</sup> <https://www.gov.uk/government/statistics/english-housing-survey-2013-to-2014-household-report>

<sup>2.47</sup> The concept of excluding “*long-distance moves*” relates back to the early definition of a functional housing market area that was set out at the start of this chapter. That definition focused on “*those moving house without changing employment*”, and long-distance moves will generally involve a change of job or other change of lifestyle (such as retirement). On balance, it seems unlikely that many people would move more than 20 miles in this part of the country without a change of job; so it would seem reasonable to consider moves of over 20 miles as being “*long-distance*” in the context of this specific area.

<sup>2.48</sup> Figure 20 sets out these key statistics for the Harlow migration zone based on the two migration containment ratios set out in the PAS OAN technical advice note (second edition, paragraph 5.15):

*“Supply side (origin); moves within the area divided by all moves whose origin is in the area, excluding long-distance moves”*

*“Demand side (destination): moves within the area divided by all moves whose destination is in the area, excluding long-distance moves.”*

Figure 20: Statistics for Harlow Migration Zone (Source: 2001 Census)

		Supply side (origin)	Demand side (destination)
Moved within area		25,550	25,550
Moved from elsewhere	Moves of up to 20 miles	6,003	9,451
	Moves of between 20 and 50 miles	4,271	3,342
	Moves of at least 50 miles	6,421	9,297
<b>Total moves</b>		<b>42,245</b>	<b>47,670</b>
Moves within area as...	% of all moves	60.5%	53.4%
	% of moves up to 50 miles	71.3%	66.6%
	% of moves up to 20 miles	81.0%	73.0%

<sup>2.49</sup> On the supply side (i.e. moves originating in the area); it is evident that more than 70% of migrants moving within wider south east England (moves of up to 50 miles) stayed within the identified area.

<sup>2.50</sup> On the demand side (i.e. moves whose destination is in the area) the proportions are lower; however around two thirds (66.6%) of those moving within the wider south east (moves of up to 50 miles) and almost three quarters (73.0%) of those moving within a 20 mile catchment (covering most of Greater London and many other surrounding settlements) originated within the identified area.

<sup>2.51</sup> Based on the statistics, it is reasonable to conclude that a “*relatively high proportion of household moves*” are contained within the migration zone identified for Harlow, and therefore this functional area meets the requirements of PPG in this regard.

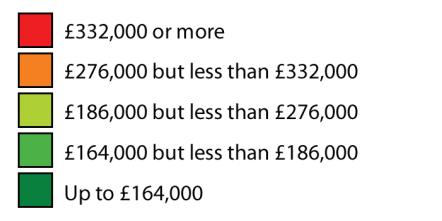
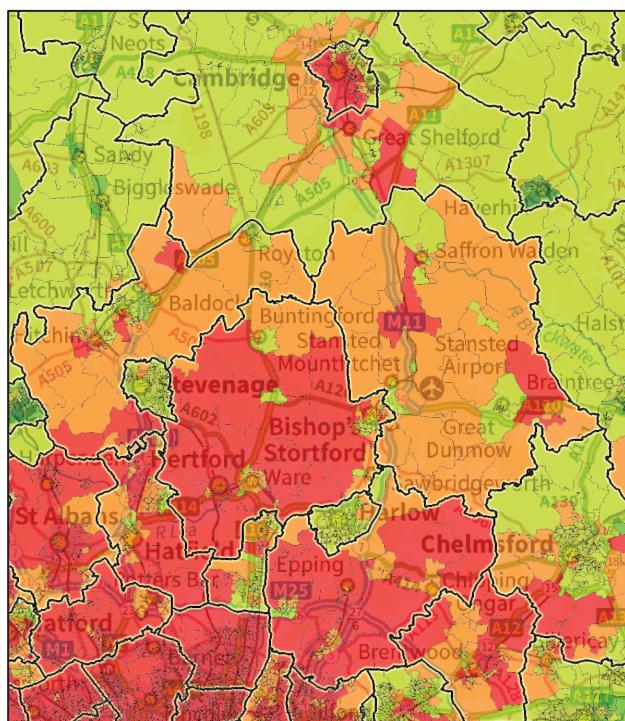
## House Prices

2.52 As previously noted, CLG research and the PAS OAN technical advice note have both suggested that house prices are less relevant when defining upper-tier housing market areas but can provide a useful context for identifying housing sub-markets. Figure 21 shows current shows mix-adjusted average house prices relative to the average for the overall area, alongside the relative change in average house prices over the last 10 years.

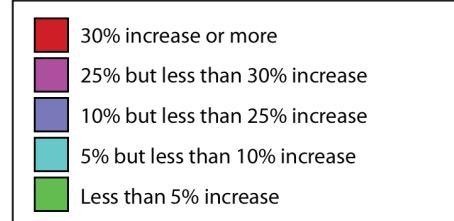
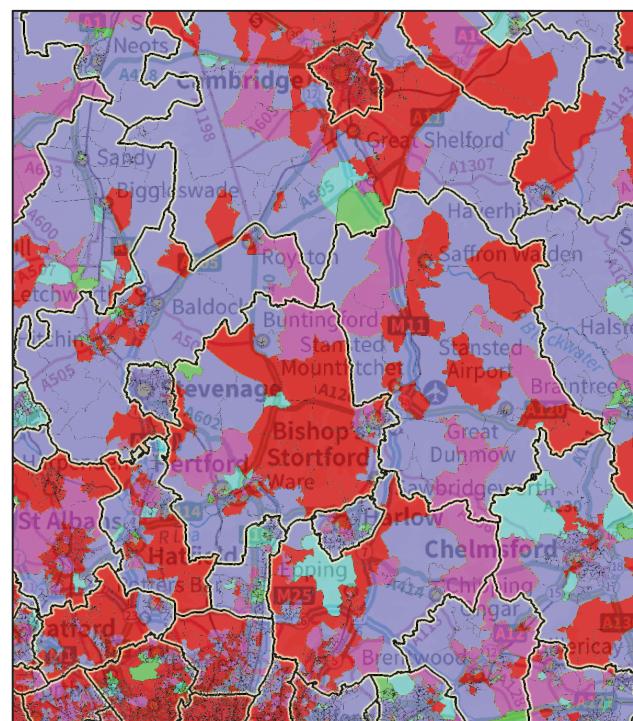
2.53 House prices are generally higher to the south and lower to the north of the area, but there are pockets of higher and lower prices in contrast to this trend.

**Figure 21: Mix adjusted average house prices and 10-year change by MSOA (Source: HM Land Registry)**

### Current average house prices



### 10-year change in average house prices



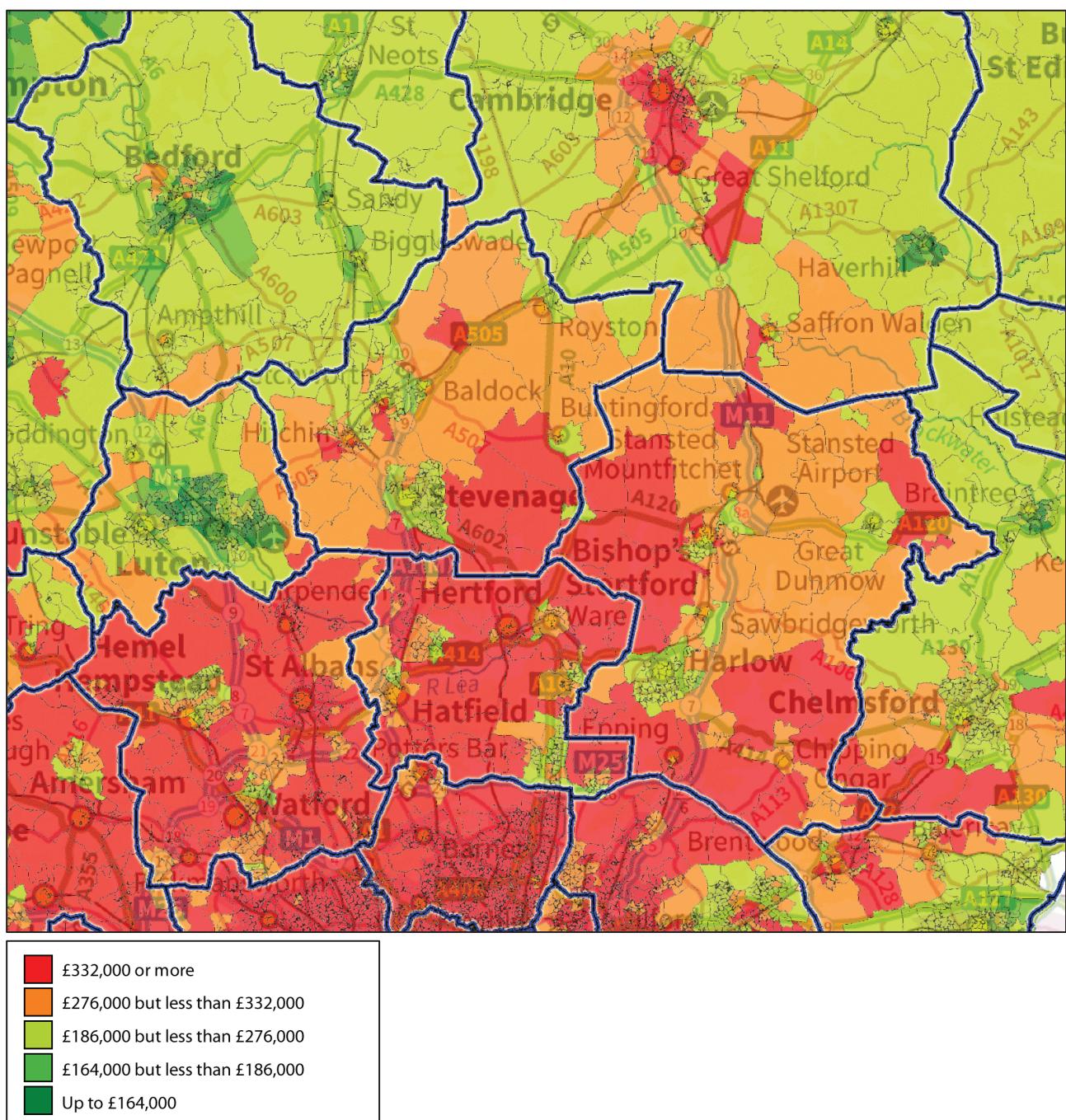
2.54 Neither the geographic spread of areas with higher and lower house prices nor the geographic spread of average house price changes would appear to provide a clear basis on which to define housing market areas. However, when this information is considered within the framework of the Valuation Office Agency (VOA) Broad Rental Market Area (BRMA) boundaries, some patterns do emerge (Figure 22).

2.55 BRMAs are the geographical area used by the Valuation Office Agency (VOA) to determine the Local Housing Allowance (LHA), the allowance paid to Housing Benefit applicants. The BRMA area takes into account local house prices and rents, and is based on where a person could reasonably be expected to live taking into account access to facilities and services.

<sup>2.56</sup> Figure 22 clearly shows that mix-adjusted average house prices (and consequently market rents) are highest in and around North London:

- » South East Herts BRMA and South West Herts BRMA generally cover areas in the highest price band outside London, in particular those MSOAs covering areas outside the main urban centres;
- » There is a greater mix of areas in the top two bands covering Harlow & Stortford BRMA and Stevenage & North Herts BRMA;
- » Bedford BRMA and Luton BRMA generally cover areas with lower house prices; and
- » The situation in the Cambridge BRMA differs from the BRMAs surrounding London: the highest house prices tend to be in the main urban centre with most other areas in the middle price band.

**Figure 22: Mix adjusted average house prices by MSOA with Valuation Office Agency Broad Rental Market Area Boundaries (Source: HM Land Registry)**



<sup>2.57</sup> The Rent Officer Handbook: Broad Rental Market Areas (Local Reference Rent)<sup>8</sup> identifies that:

**"A BRMA (LRR) is an area: within which a tenant of the dwelling could reasonably be expected to live having regard to facilities and services for the purposes of health, education, recreation, personal banking and shopping, taking account of the distance of travel, by public and private transport, to and from those facilities and services**

*The BRMA (LRR) is subject to two conditions.*

*Firstly it must contain: residential premises of a variety of types, including such premises held on a variety of tenures.*

*Secondly, a BRMA (LRR) must contain sufficient privately rented residential premises, to ensure that, in the rent officer's opinion, the local reference rents for tenancies in the area are representative of the rents that a landlord might reasonably be expected to obtain in that area."*

<sup>2.58</sup> The boundaries of a BRMA do not have to match the boundaries of a local authority and BRMAs will often fall across more than one local authority area. Housing Market Areas (HMAs) and Broad Rental Market Areas (BRMAs) therefore both define areas based on housing along with the need to travel for work or to access services.

<sup>2.59</sup> Bringing this together, it can be seen that HMAs are defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work; while BRMAs are areas within which a tenant of the dwelling could reasonably be expected to live having regard to facilities and services. Given that BRMAs should include residential premises of a variety of types, including such premises held on a variety of tenures, it is evident that the two definitions will tend to identify similar geographic areas in that they will be large enough to contain sufficient properties to be a market area, but limited in size by the need to travel for work or to access services. Travel, either for work or to access services is a key element of both definitions.

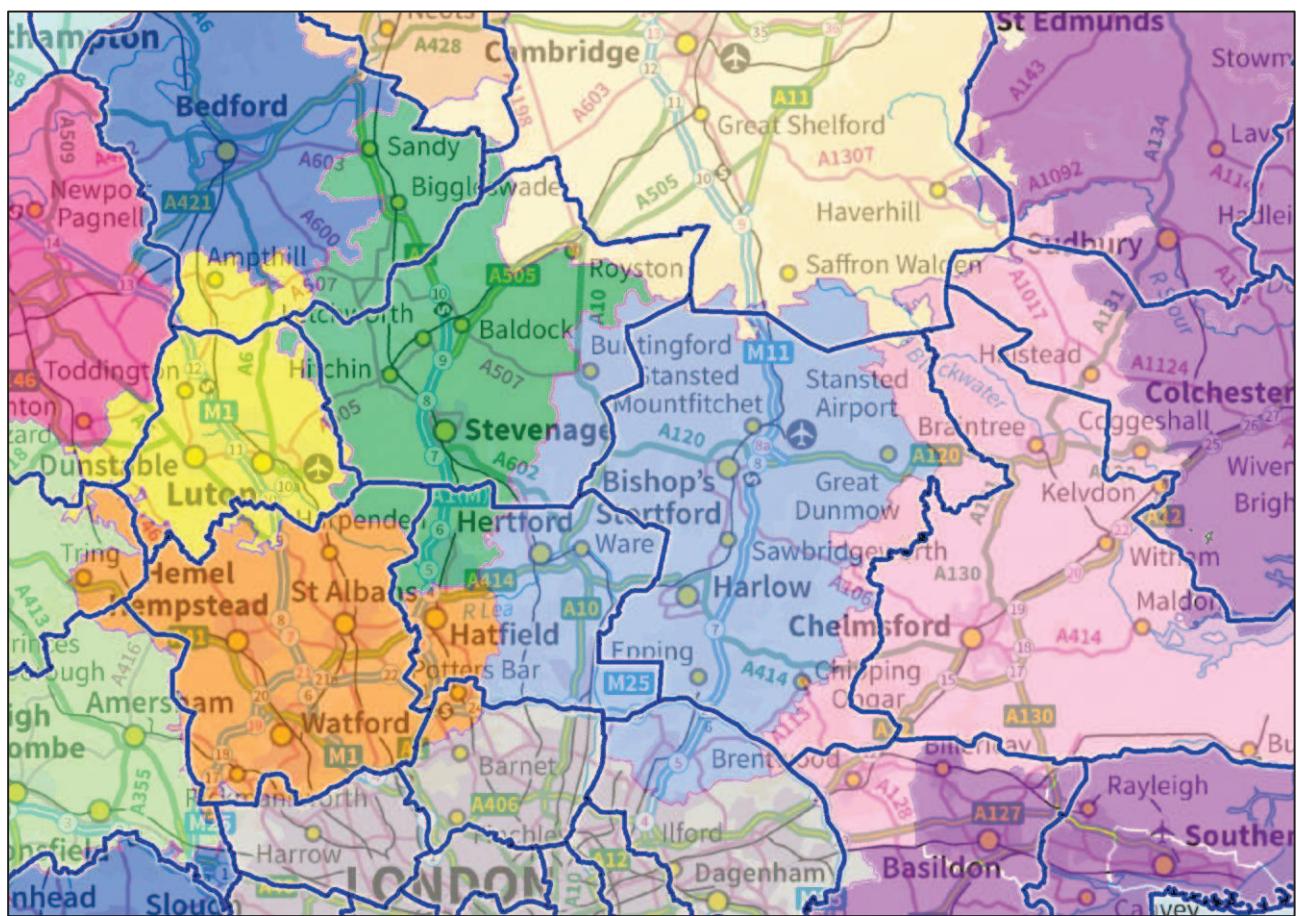
<sup>2.60</sup> Both HMAs and BRMAs are based on *functional linkages* between where people live and work or where they live and access services. Places of work and services such as *health, education, recreation, personal banking and shopping* are predominantly based in larger settlements, becoming increasingly less common in smaller settlements and rural areas. Because of this, the definitions of HMAs and BRMAs in any area will tend to be centred around those urban centres, or on collections of settlements in rural areas without a major urban centre.

<sup>2.61</sup> On this basis, it is helpful to review the previously identified commuting zones and migration zones (which both showed very similar patterns) with the BRMAs to understand the ways in which they are consistent and where they may differ.

<sup>2.62</sup> Figure 23 shows the BRMA boundaries overlaid on the commuting zones previously identified. It is evident that there are many similarities between the two geographies. Whilst the precise boundaries may differ, each of the commuting zones generally corresponds with an equivalent BRMA: Bedford, Cambridge, Chelmsford, Harlow, Luton, Stevenage and Watford were all identified as commuting zones and there is a BRMA equivalent for each. Nevertheless, the South East Herts BRMA (covering Broxbourne, Hatfield, Hertford, and Welwyn Garden City) does not have an equivalent commuting zone

<sup>8</sup> <http://manuals.voa.gov.uk/corporate/publications/Manuals/RentOfficerHandbook/HousingBenefitReferral/Determination/b-roh-broad-rental-market-areas-LRR.html>

Figure 23: Final commuting zones with VOA Broad Rental Market Area Boundaries



## Administrative Boundaries and Housing Market Areas

<sup>2.63</sup> The NPPF recognises that housing market areas may cross administrative boundaries, and PPG emphasises that housing market areas reflect functional linkages between places where people live and work. The previous 2007 CLG advice note<sup>9</sup> also established that functional housing market areas should not be constrained by administrative boundaries, nevertheless it suggested the need for a “best fit” approximation to local authority areas for developing evidence and policy (paragraph 9):

*“The extent of sub-regional functional housing market areas identified will vary and many will in practice cut across local authority administrative boundaries. For these reasons, regions and local authorities will want to consider, for the purposes of developing evidence bases and policy, using a pragmatic approach that groups local authority administrative areas together as an approximation for functional sub-regional housing market areas.”*

<sup>2.64</sup> This “best fit” approximation has also been suggested by the PAS OAN technical advice note, which suggests (second edition, paragraph 5.9):

*“boundaries that straddle local authority areas are usually impractical, given that planning policy is mostly made at the local authority level, and many kinds of data are unavailable for smaller areas.”*

<sup>9</sup> Identifying sub-regional housing market areas (CLG, March 2007)

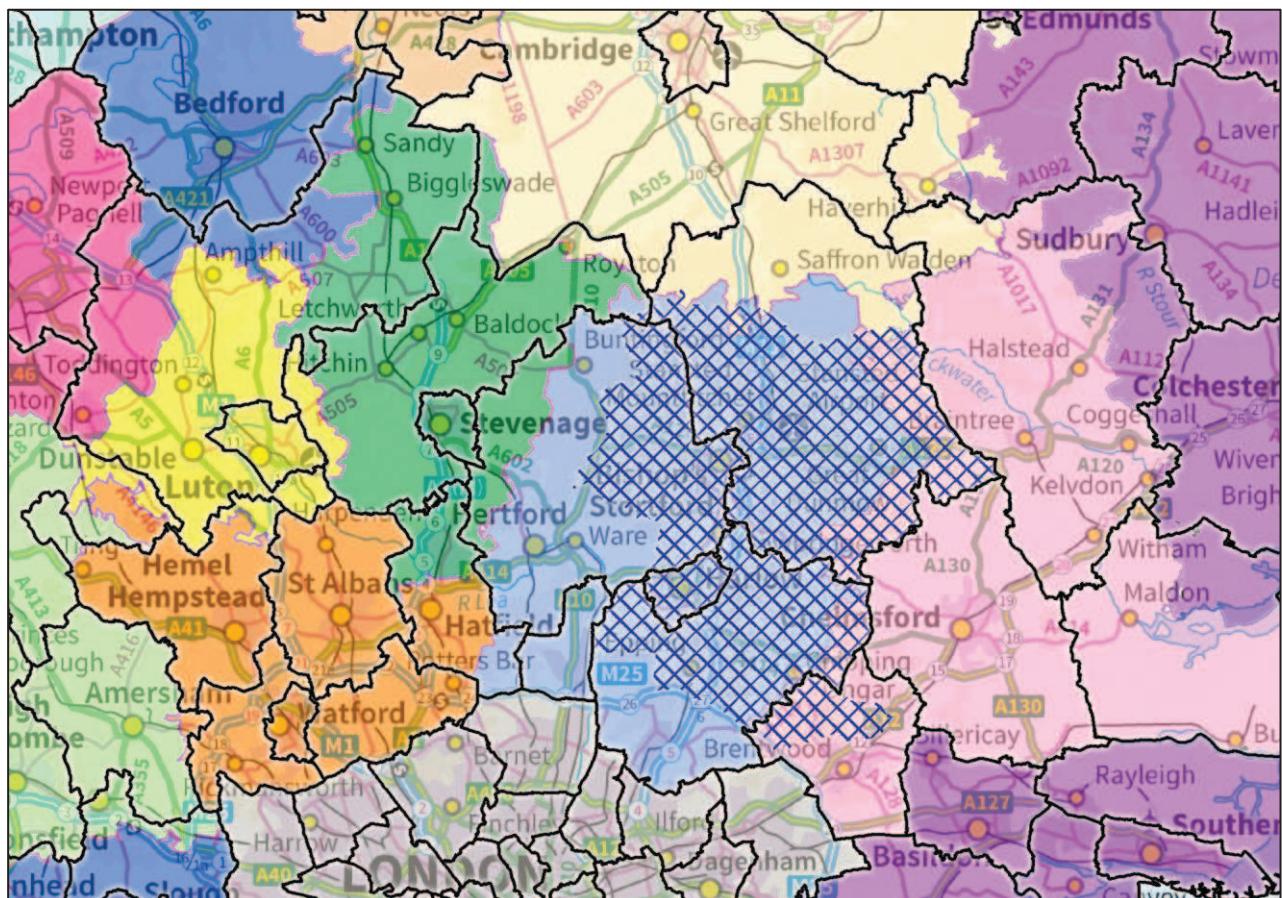
2.65 This means there is a need for balance in methodological approach:

- » On the one hand, it is important that the process of **analysis and identification of the functional housing market areas should not be constrained by local authority boundaries**. This allows the full extent of each functional housing market to be properly understood and ensures that all of the constituent local planning authorities can work together under the duty to cooperate, as set out in Guidance (PPG, paragraph 10).
- » On the other hand, and as suggested by the PAS OAN technical advice note (and the previous CLG advice note), **it is also necessary to identify a “best fit” for each functional housing market area that is based on local planning authority boundaries**. This “best fit” area provides an appropriate basis for analysing evidence and drafting policy, and would normally represent the group of authorities that would take responsibility for undertaking a Strategic Housing Market Assessment.

2.66 **In summary, therefore, the approach to defining housing market areas needs to balance robust analysis with pragmatic administrative requirements.**

2.67 In establishing the most appropriate functional housing market areas, it is necessary to consider all of the evidence based on commuting zones, migration zones and house prices (based on Broad Rental Market Areas). We have previously identified clear similarities between the commuting zones and migration zones; albeit that the direction of travel is reversed – net commuting flows tend to be towards London, whilst net migration flows tend to be away from London. Figure 24 illustrates how the final commuting zones and the Harlow & Stortford BRMA coordinate with local authority boundaries.

**Figure 24: Final Commuting Zones and Harlow & Stortford BRMA with Local Authority Boundaries (Note: Coloured areas show commuting zones; hatched area denotes Harlow & Stortford BRMA)**



<sup>2.68</sup> It is evident that there is substantial overlap between the Harlow commuting zone and the Harlow & Stortford BRMA across East Hertfordshire, Epping Forest and Uttlesford, as well as Harlow. Whilst the Harlow migration zone extends into Broxbourne, this area is in the South East Herts BRMA (together with Welwyn Hatfield and part of East Hertfordshire). Conversely, the Harlow & Stortford BRMA extends into Brentwood whereas this area is part of the Chelmsford commuting zone. On balance, we would suggest that the starting point for determining the most appropriate functional housing market area is the intersection between the commuting zone and the BRMA.

<sup>2.69</sup> Although commuting patterns suggest that Broxbourne should also be considered as part of the functional HMA, the Rent Officer has concluded that this area should be considered separately. Whilst this decision is based primarily on rental values, it also takes into account other factors such as public transport infrastructure and social and cultural networks, which are also relevant when considering housing market areas. Therefore, we would suggest that Broxbourne is not included as part of the functional HMA.

<sup>2.70</sup> On the same basis, given that part of Brentwood is included in the Harlow & Stortford BRMA, it would be reasonable for this to also be included as part of the functional HMA. Nevertheless, whilst Broxbourne was entirely within the South East Hertfordshire BRMA, Brentwood is divided between the Harlow, South West Essex and Chelmsford BRMAs. The commuting zone and migration zone analysis both concluded that Brentwood should be included within the Chelmsford zone. The geography of housing markets in this area is evidently complex, but given that the borough is covered by three different BRMAs and the migration and commuting data both show stronger links with Chelmsford, on balance we would suggest that Brentwood is not included as part of the functional HMA.

## Conclusions

2.71 The area of West Essex and East Hertfordshire is strongly linked to London through commuting and migration patterns. Excluding the impact of London, it is possible to derive a commuting zone centred on Harlow, which also includes the local authority area of Broxbourne, along with most of East Hertfordshire and Epping Forest and Uttlesford. The equivalent migration zone confirms this conclusion, with a marginally larger proportion of Uttlesford residents included.

2.72 Data from the BRMAs derived by the VOA suggests Broxbourne is outside the area and can be seen to align more reasonably with Welwyn Hatfield. Whilst the VOA data also suggests that Brentwood should also be considered; this borough is covered by three different BRMAs and the migration and commuting data both show stronger links with Chelmsford.

2.73 Using all of the evidence available it is reasonable to conclude in line with PPG and PAS OAN technical advice note that the most appropriate functional housing market area should be based on Harlow, with most of East Hertfordshire, Epping Forest and Uttlesford. Based on a detailed analysis of the evidence, we would therefore recommend to the West Essex and East Hertfordshire councils that **East Hertfordshire, Epping Forest, Harlow and Uttlesford represent the most appropriate “best fit” for West Essex and East Hertfordshire HMA.**

2.74 These “best fit” groupings do not change the actual geography of the functional housing market areas that have been identified – they simply provides a pragmatic arrangement for the purposes of establishing the evidence required and developing local policies, as suggested by the CLG advice note and reaffirmed by the PAS technical advice note.

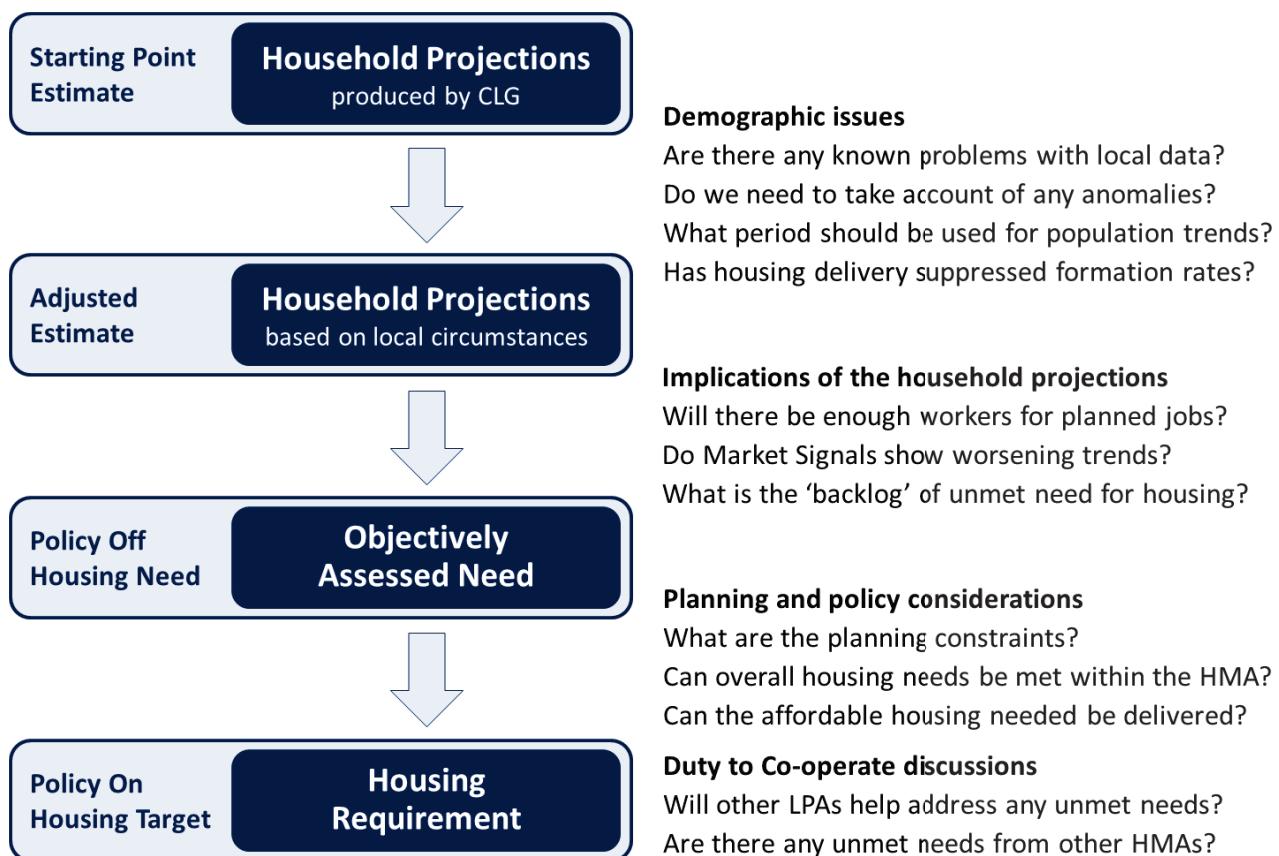
2.75 Whilst we believe that the proposed groupings for the West Essex and East Hertfordshire HMA provides the overall “best fit” for joint working arrangements on the basis of the available evidence, they are not the only arrangements possible given the complexities of the functional housing market areas in the region. Regardless of the final groupings, the more important issue will be the need for East Hertfordshire to maintain dialogue with Broxbourne, Welwyn Hatfield and other Hertfordshire authorities; for Epping Forest to also maintain dialogue with Broxbourne as well as Chelmsford and other Essex authorities; and for Uttlesford to also maintain dialogue with Chelmsford as well as Braintree, South Cambridgeshire and Cambridge. Furthermore, all four authorities will need to maintain dialogue with each other and the boroughs to the North and East of London, as well as with the Mayor of London through the Greater London Authority.

# 3. Demographic Projections

## The starting point for Objectively Assessed Need

- 3.1 The Objective Assessment of Need identifies the quantity of housing needed (both market and affordable) in the Housing Market Area over future plan periods. This evidence assists with the production of the Local Plan (which sets out the spatial policy for a local area).
- 3.2 Figure 25 sets out the process for establishing the housing number for the Housing Market Area. It starts with a demographic process to derive housing need from a consideration of population and household projections. This chapter therefore considers the most appropriate demographic projection on which to base future housing need.
- 3.3 To establish the Objectively Assessed Need (OAN), external market and macro-economic constraints are applied to the demographic projections ('Market Signals') in order to ensure that an appropriate balance is achieved between the demand for and supply of dwellings. Nevertheless, it is important to recognise that the OAN does not take account of any possible constraints to future housing supply. Such factors should subsequently be considered by the local planning authorities as part of the plan-making process in order to establish the appropriate Housing Requirement and planned housing number.

Figure 25: Process for establishing the housing number for the HMA (Source: ORS based on NPPF and PPG)



## Official Household Projections

3.4 Planning Practice Guidance published in March 2014 places emphasis on the role of **CLG Household Projections** as the appropriate starting point in determining objectively assessed need. PPG was updated in February 2015 following the publication of the 2012-based Household Projections.

*Household projections published by the Department for Communities and Local Government should provide the starting point estimate of overall housing need.*

*The household projections are produced by applying projected household representative rates to the population projections published by the Office for National Statistics.*

**Planning Practice Guidance (March 2014), ID 2a-015**

*The 2012-2037 Household Projections were published on 27 February 2015, and are the most up-to-date estimate of future household growth.*

**Planning Practice Guidance (February 2015), ID 2a-016**

3.5 Given this context, Figure 26 sets out the 2012-based **household** projections together with previous household projections that CLG has produced for the area. The projections have varied over time, with the most recent set of projections showing the highest projected rates of growth. Each set of household projections will be influenced by a wide range of underlying data and trend-based assumptions, and it is important to consider the range of projected growth and not simply defer to the most recent data.

**Figure 26: CLG Household Projections for West Essex and East Hertfordshire: annual average growth (Source: CLG Household Projections. Note: Figures are rounded to the nearest 10 households)**

	2012-based		2011-based interim		2008-based	
	10 years 2012-22	25 years 2012-37	10 years 2011-21	25 years Not published	10 years 2008-18	25 years 2008-33
East Hertfordshire	820	770	770	-	700	640
Epping Forest	610	670	670	-	500	480
Harlow	310	340	320	-	200	240
Uttlesford	520	480	480	-	400	400
<b>TOTAL</b>	<b>2,260</b>	<b>2,260</b>	<b>2,240</b>	<b>-</b>	<b>1,800</b>	<b>1,760</b>

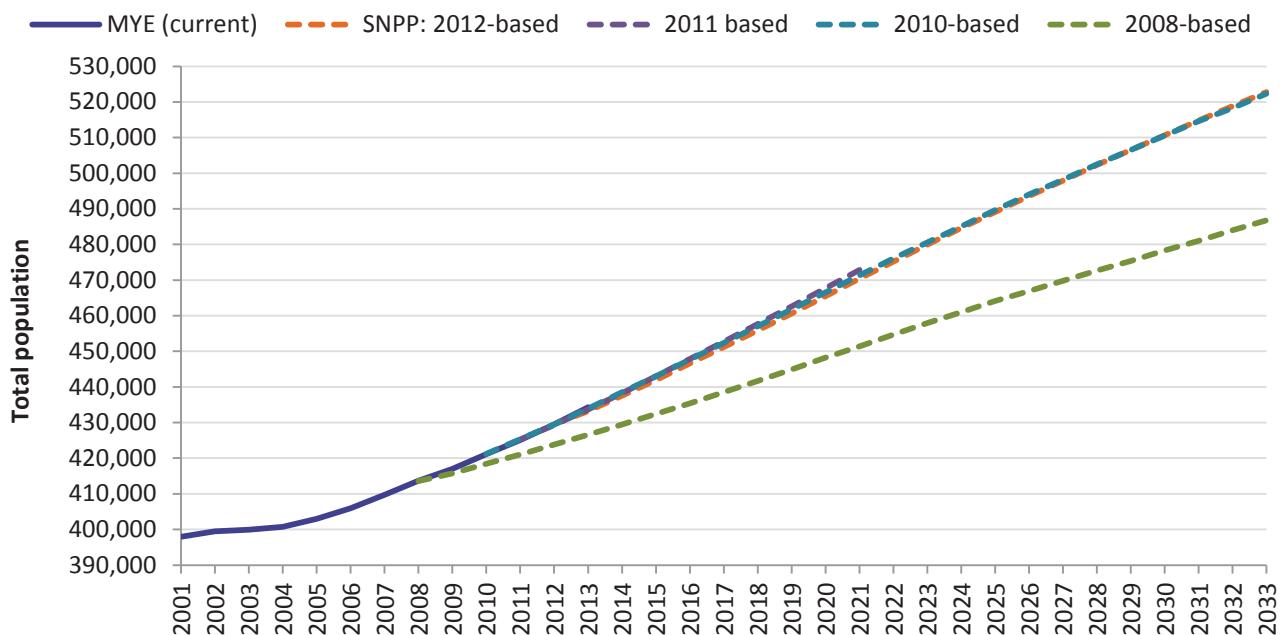
3.6 The CLG 2012-based household projections show an increase of 2,260 households each year over the 25-year period 2012-37, and the same rate of growth for the initial 10-year period. These figures project forward over the normal 25-year period and supersede both the 2008-based household projections (which projected a household growth of 1,760 per year from 2008-33) and the interim 2011-based household projections (which projected growth of 2,240 per year from 2011-21). The differences are largely due to changes in the ONS population projections (Figure 27) on which the CLG household projections are based; although there have also been changes to household representative rates (considered later in this chapter).

3.7 Given that the 2012-based household projections show an increase from 175,189 to 224,827 households in West Essex and East Hertfordshire over the 22-year period 2011-33, we can establish that the “*starting point estimate of overall housing need*” for the Plan period should be based on an overall growth of 49,638 households, equivalent to an average of around 2,256 households per year (779 in East Hertfordshire, 653 in Epping Forest, 326 in Harlow and 498 in Uttlesford).

## Official Population Projections

3.8 Figure 27 shows the outputs from the latest (2012-based) ONS Sub National **Population** Projections together with the previous projections that have informed the various CLG household projections (though note that CLG did not produce household projections based on the 2010-based SNPP). It is evident that the 2012-based projections follow a similar trajectory to the 2010-based and 2011 based projections.

**Figure 27: ONS Mid-Year Estimates and Sub-National Population Projections for West Essex and East Hertfordshire Study Area**  
(Source: ONS. Note: Household projections were not produced for the 2010-based SNPP)



3.9 Differences in the projected increase in population between the different projections are largely associated with the **assumed migration rates**, which are based on recent trends using 5-year averages – so short-term changes in migration patterns can significantly affect the projected population growth. There were also methodological changes to the migration assumptions between the 2008-based and 2010-based figures.

## Population Projections based on Local Circumstances

3.10 Whilst PPG identifies CLG household projections as the starting point for establishing housing need, it also recognises the need to consider sensitivity testing this data and take account of local evidence.

*Plan makers may consider sensitivity testing, specific to their local circumstances, based on alternative assumptions in relation to the underlying demographic projections and household formation rates ... Any local changes would need to be clearly explained and justified on the basis of established sources of robust evidence.*

Planning Practice Guidance (March 2014), ID 2a-017

## Components of Population Change

<sup>3.11</sup> Changes in the population can be broadly classified into two categories:

- » Natural change in the population (in terms of births and deaths); and
- » Changes due to migration, both in terms of international migration and also moves within the UK.

<sup>3.12</sup> Figure 28 and Figure 29 illustrate the annual components of change data for each local authority area over the period since 1991. The trend-based data is based on the change in population recorded by the ONS Mid-Year Estimates (MYE) and the future data is based on the change in population projected by the SNPP data previously discussed.

<sup>3.13</sup> Figure 28 shows natural growth (the number of births minus the number of deaths) and Figure 29 shows net migration and other changes (the number of people moving to the area minus the number of people moving away from the area). In both figures:

- » the bars show the annual data recorded by the MYE and the solid lines are based on a 10-year rolling average of this data;
- » the dotted lines show the average annual change between the 2001 and 2011 Census; and
- » the dashed lines show the change projected by the 2012-based SNPP.

<sup>3.14</sup> It is evident that the MYE trends for natural growth (i.e. births and deaths) are relatively stable (Figure 28), with gradual changes from year-to-year in each area. The SNPP projections for natural growth are consistent with the MYE data, with the trends already established projected to continue into the future.

<sup>3.15</sup> Nevertheless, the MYE data for net migration is more erratic from year-to-year (Figure 29). This is partly due to the migration flows actually fluctuating each year, but also due to difficulties associated with estimating the number of people moving in and out of local authority areas (especially migrants from overseas, where the estimates are largely based on the International Passenger Survey). The ONS recognise the difficulties associated with these estimates, and the data is revised following the Census.

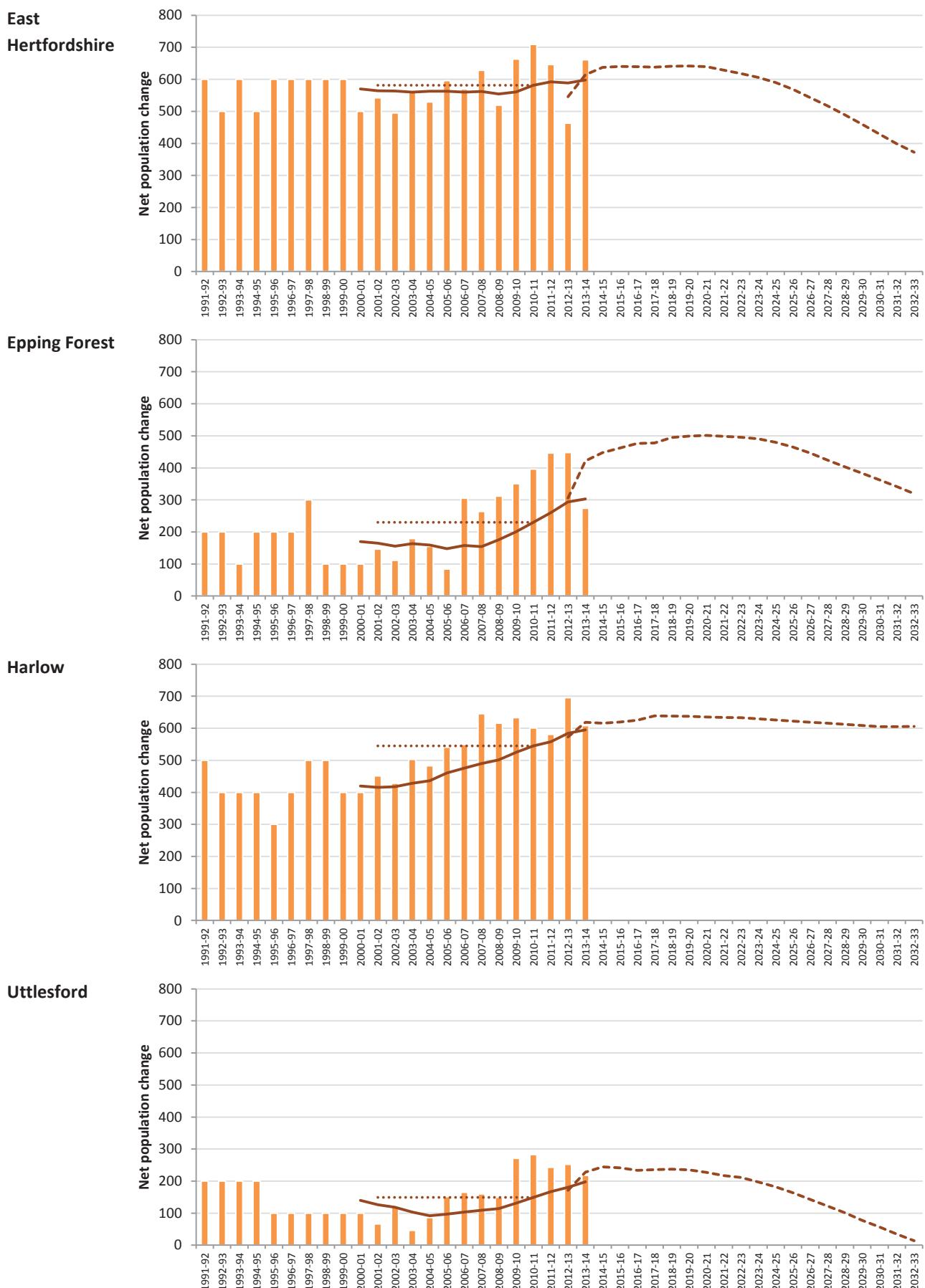
## Unattributable Population Change

<sup>3.16</sup> Given that the ONS consider the population estimates in 2001 and 2011 to be more robust than the component of change data from year-to-year, an “accountancy” adjustment is factored in to the components of change to correct this data and ensure that it reconciles with the population estimates for the two Census years. Therefore, in addition to the known population flows, an element of “**Unattributable Population Change**” (UPC) is included in these figures.

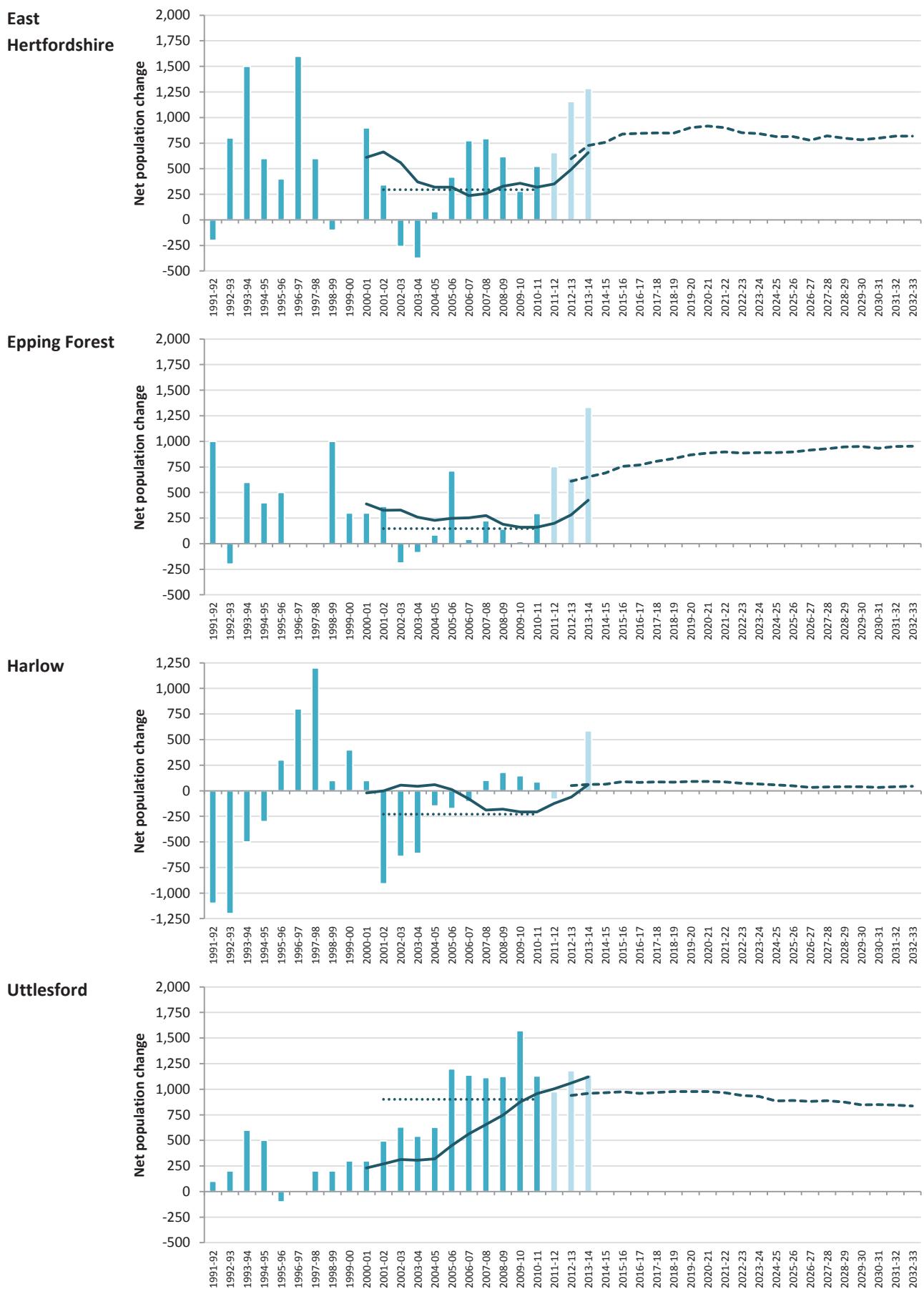
<sup>3.17</sup> The MYE component of change data for the period 2001-02 to 2010-11 has been corrected by the ONS following the 2011 Census, and this correction is incorporated into the estimates for “net migration and other changes”. Overall, the ONS concluded that the original component of change data for West Essex and East Hertfordshire overestimated population growth by almost 2,000 persons over the period 2001-11. The correction means that the data for these years is far more reliable than data for more recent years, which will not be validated until after the 2021 Census.

<sup>3.18</sup> Nevertheless, over half of the adjustment for West Essex and East Hertfordshire was applied to estimates for the final three years of the period (2008-11), with almost quarter of the total correction (486 persons) being applied in the final year – so the original component of change data for the most recent years was the least reliable across the area as a whole.

**Figure 28: ONS Mid-Year Estimates and Sub-National Population Projections by LA: Natural Growth (Note: Solid line shows MYE 10-yr rolling average, dotted line shows change between 2001 and 2011 Census, dashed line shows future projection)**



**Figure 29: ONS Mid-Year Estimates and Sub-National Population Projections by LA: Net Migration (Note: Solid line shows MYE 10-yr rolling average, dotted line shows change between 2001 and 2011 Census, dashed line shows future projection)**



<sup>3.19</sup> Whilst the SNPP projections for natural growth are consistent with past trends, there is more variability when we consider the projections for net migration:

- » East Hertfordshire gained 3,000 migrants between the 2001 and 2011 Census (an average of 300 per year), however the 2012-based SNPP project a net gain of 600 migrants in 2012-13 climbing to 920 by 2020-21, with an average gain of 810 each year over the 25-year projection period;
- » Epping Forest gained 1,500 migrants between the 2001 and 2011 Census (an average of 150 per year), however the 2012-based SNPP project a net gain of 600 migrants in 2012-13 climbing to 970 by 2032-33, with an average gain of 870 each year over the 25-year projection period;
- » Harlow had a net outflow of 2,300 migrants between the 2001 and 2011 Census (an average loss of 230 per year), however the 2012-based SNPP project an average gain of 60 migrants each year over the 25-year projection period; and
- » Uttlesford gained 9,000 migrants between the 2001 and 2011 Census (an average of 900 per year), which is consistent with the 2012-based SNPP which also project an average gain of 900 migrants each year over the 25-year projection period.

<sup>3.20</sup> The differences between the reliable long-term trends in migration based on Census data and the future levels of migration that are projected are significant. As previously noted, this is partly due to the ONS SNPP projecting UK migration based on relatively short-term trends but also partly due to the projections not taking account of the corrections that ONS make to reconcile the MYE component of change data with the Census.

## Considering Alternative Population Projections

<sup>3.21</sup> Whilst the ONS SNPP provides a useful benchmark, having reviewed the data for this area it is appropriate to also consider other demographic projections based on different assumptions. The Essex Planning Officers Association commissioned Edge Analytics to review the available evidence and establish appropriate assumptions for future demographic projections that can inform a wide range of policy areas, including planning for housing.

<sup>3.22</sup> Edge Analytics derived a range of potential population projections based upon different scenarios which adopt both standard and bespoke inputs that have been derived as part of the analysis as set out below;

- » '**PG-5Yr- » '**PG-10Yr- » '**Natural Change- » '**Net Nil- » '**Jobs- » '**Employed people************

<sup>3.23</sup> It is important to recognise that no one scenario will provide a definitive assessment of the future population; but taken collectively the different scenarios can help determine the most likely range of projections. SHMA Practice Guidance recognises that a variety of approaches to deliver a robust SHMA are possible and so is not prescriptive as to the methodology to be followed and the data to be used:

*There is no one methodological approach or use of a particular dataset(s) that will provide a definitive assessment of development need.*

Planning Practice Guidance (March 2014), ID 2a-005

<sup>3.24</sup> Clearly some of the scenarios derived by Edge Analytics (such as natural Change and Net Nil migration) are not designed to derive OAN. However, there is clearly the potential to consider a range of migration or jobs led scenarios which can be used to help derive the OAN figure. Migration-led scenarios represent the most stable and accurate projections and jobs-led scenarios can subsequently be used to consistency check migration-led scenarios.

<sup>3.25</sup> Given that the demographic projections are trend-based, one of the most critical factors is the period over which those trends are based. The PAS OAN technical advice note considers this issue in relation to the ONS population projections (first edition, paragraphs 5.12-5.13):

*"To predict migration between local authorities within the UK, the ONS population projections carry forward the trends of the previous five years. This choice of base period can be critical to the projection, because for many areas migration has varied greatly over time. ... The results of a demographic projection for (say) 2011-31 will be highly sensitive to the reference period that the projection carries forward."*

<sup>3.26</sup> This issue has also been reinforced in PAS advice to Local Authorities<sup>10</sup>, where it has been emphasised that whilst the CLG household projections provide the starting point, these official projections can be very unstable given that they are based on migration trends covering only five years:

*"For migration the base period is only five years:*

- *Makes the official projections very unstable*
- *And recent projections lock in the recession"*

<sup>3.27</sup> The second edition of the PAS OAN technical advice note (July 2015)<sup>11</sup> has also strengthened the recommendation on the relevant period for assessing migration (second edition, paragraph 6.24):

*"In assessing housing need it is generally advisable to test alternative scenarios based on a longer reference period, probably starting with the 2001 Census (further back in history data may be unreliable). Other things being equal, a 10-to-15 year base period should provide more stable and more robust projections than the ONS's five years. But sometimes other things will not be equal, because the early years of this long period included untypical one-off events as described earlier. If so, a shorter base period despite its disadvantages could be preferable."*

<sup>10</sup> "SHLAA, SHMA and OAN aka 'Pobody's Nerfect'", PAS presentation at Urban Design London (July 2015)

<http://learningspace.urbandesignlondon.com/course/view.php?id=339>

<sup>11</sup> <http://www.pas.gov.uk/documents/332612/6549918/OANupdatedadvisenote/f1bfb748-11fc-4d93-834c-a32c0d2c984d>

<sup>3.28</sup> The relevant period for assessing migration trends was considered by an article by Ludi Simpson (Professor of Population Studies at the University of Manchester) and Neil MacDonald (previously Chief Executive of the National Housing and Planning Advice Unit) published in Town and Country Planning (April 2015)<sup>12</sup>.

*"The argument for using a five-year period rather than a longer one is that the shorter the period, the more quickly changes in trends are picked up. The counter-argument is that a shorter period is more susceptible to cyclical trends, an argument that has particular force when the five-year period in question – 2007-12 – neatly brackets the deepest and longest economic downturn for more than a generation. ... A large number of local authority areas are affected by this issue. For 60% of authorities the net flow of migrants within the UK in 2007-12 was different by more than 50% from the period 2002-07. While this is comparing a boom period with a recession, it serves to indicate the impact of the choice of reference period for trend projections."*

<sup>3.29</sup> The issue has also been referenced by Inspectors examining numerous Local Plans, for example the following comments provided by the Cornwall Inspector in the letter setting out his preliminary findings (June 2015)<sup>13</sup>:

*"3.6 Migration. The demographic model used in the SHMNA and the more recent ONS projection uses migration flows from the previous 5 years only. Given the significance of migration as a component of change for Cornwall and to even-out the likely effect of the recent recession on migration between 2008-2012 a longer period than 5 years would give a more realistic basis for projecting this component. A period of 10-12 years was suggested at the hearing and I consider that this would be reasonable, rather than the 17 year period used in ID.01.CC.3.3. I also consider that the ONS' Unattributable Population Change component should be assigned to international migration for the reasons given by Edge Analytics in ID.01.CC3.3. This approach was not disputed at the hearing."*

<sup>3.30</sup> On balance, we consider that:

- » 5-year trend migration scenarios are less reliable: they have the potential to roll-forward short-term trends that are unduly high or low and therefore are unlikely to provide a robust basis for long-term planning.
- » 10-year trend migration scenarios are more likely to capture both highs and lows and are not as dependent on trends that may be unlikely to be repeated. **Therefore, we favour using 10-year migration trends as the basis for our analysis.**

<sup>3.31</sup> The EPOA 10-year migration trend scenario is based on MYE data for the period 2002-12 and the analysis takes account of the ONS correction applied to the first nine years of this period; so this provides a useful basis for considering the likely population change over the next 10-20 years as a basis for understanding likely future housing needs. However, whilst the EPOA data provides a useful framework for considering the range of population growth scenarios, the SHMA has further reviewed the migration assumptions that have informed this scenario.

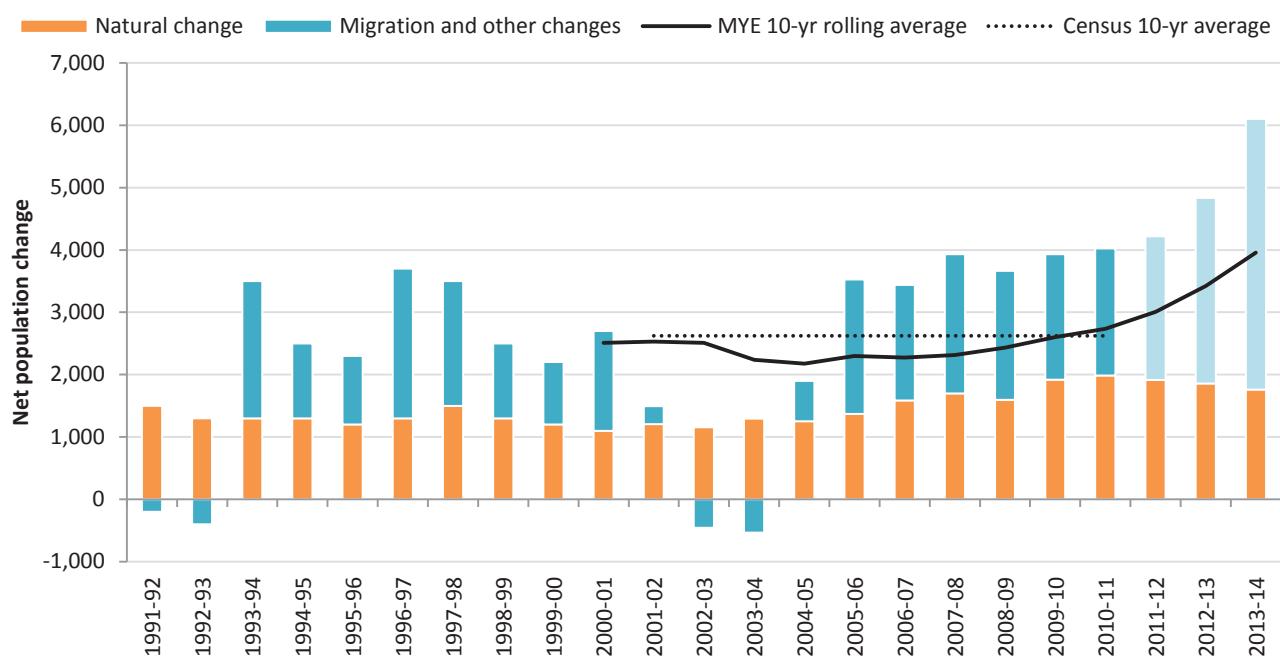
<sup>12</sup> "Making sense of the new English household projections", Town and Country Planning (April 2015)

<sup>13</sup> <https://www.cornwall.gov.uk/media/12843214/ID05-Preliminary-Findings-June-2015-2.pdf>

## Considering Migration Assumptions

<sup>3.32</sup> Figure 30 considers the trends across the West Essex and East Hertfordshire area as a whole. Whilst the level of migration recorded still fluctuates from year-to-year, it is evident that 10-year trends (illustrated by the solid line on the chart) remained relatively stable for the periods 1991-2001 through to 2001-2011. These were also broadly consistent with the average rate of growth based on the routinely more reliable Census data for the period 2001-2011 (illustrated by the dotted line). Nevertheless, it is important to recognise that the trends for the most recent 10-year periods are higher than previously recorded, mainly due to the component of change data for the last three years being higher than recorded in previous years. However, this more recent data is based exclusively on the estimated components of population change, whereas data for previous years is also informed by Census data.

**Figure 30: ONS Mid-Year Estimates and Sub-National Population Projections for West Essex and East Hertfordshire (Note: Solid line shows MYE 10-yr rolling average, dotted line shows change between 2001 and 2011 Census. Note: Migration and other changes for data from 2011-12 onwards has not been reconciled to Census data; ONS will reissue this data following the next Census)**



<sup>3.33</sup> As previously noted (para 3.18), the component of change data for the period 2008-11 was the least reliable of the intercensal period, and these years accounted for half of the ONS correction for the decade. Given that there have been no changes to the way in which the ONS estimates migration since 2011, any systematic problems in the methodology for capturing recent migration trends are likely to persist and such problems would also affect the accuracy of the population estimates for the period 2011-14. Therefore, whilst there has been a moderate increase in long-term trends from an average annual growth of 2,200 persons over the period 1995-2005 to an average of 2,600 persons over the period 2001-2011, it is unlikely that the average growth was actually 4,000 persons each year over the period 2004-2014 – there are likely to be data quality issues.

<sup>3.34</sup> On balance, data for the most recent intercensal period provides the most reliable basis for future population projections. Whilst the data suggests that migration rates may have recently increased, given the consistency in population growth recorded between 1991-2001 and 2001-2011 (both periods based on population estimates which take full account of Census data), the data suggests that these rates represent long-term norms.

<sup>3.35</sup> The SHMA has therefore produced independent population projections based on 10-year migration trends using Census data for the most recent inter-censal period: 2001-11. This is consistent with our standard approach when establishing OAN which recognises that Census data is inherently more reliable than any other population estimates at a local level, a view echoed by the Public Administration Select Committee<sup>14</sup>:

*"The International Passenger Survey does not provide accurate estimates of international migration in local areas. The Census provides the most accurate data on the number and characteristics of migrants at the local level... As the only reliable source of data on migrant populations in local areas, the potential loss of the Census is a concern."*

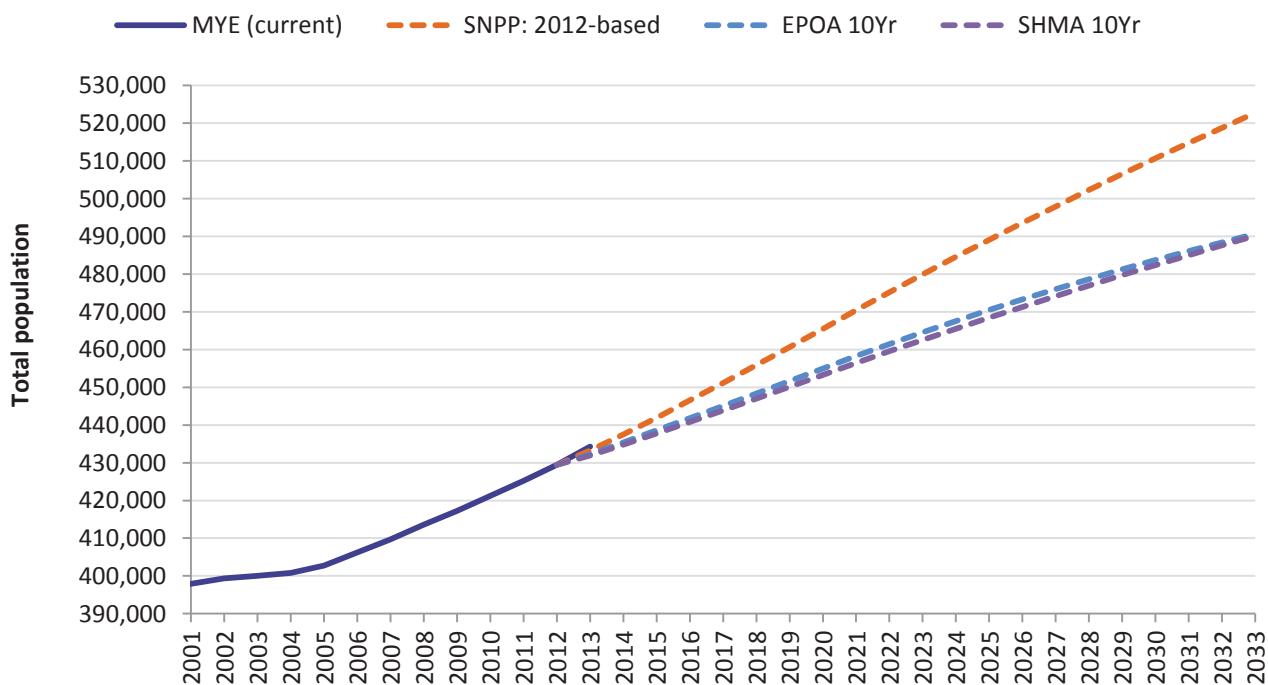
<sup>3.36</sup> We have adopted this approach systematically across all assessments that we have undertaken since the publication of the NPPF, and the approach was supported by the Inspector examining the Core Strategy for Bath and North East Somerset. His report<sup>15</sup> concluded (paragraphs 42-43):

*"Given the uncertainties inherent in some of the data, particularly for flows of migrants internationally, a 10 year period is a reasonable approach ... The inter-censal period provides a readily understandable and robust check on the reasonableness of the average of about 550 per year for migration and other change used in the ORS model. Thus I consider that the ORS mid-trend population projection is a reasonable demographic projection."*

<sup>3.37</sup> We have therefore considered the EPOA 10-year migration trend scenario alongside the separate SHMA population projections as a basis for establishing demographic projections based on local circumstances.

<sup>3.38</sup> Figure 31 compares the 2012-based SNPP with the two separate population projections based on 10-year migration trends – the EPOA scenario based on migration trends from MYE data for the period 2002-12 and the SHMA projection based on migration trends from Census data for the period 2001-11.

**Figure 31: Projected Population Growth for West Essex and East Hertfordshire based on SNPP and 10 year Trend Migration Scenarios (Source: ONS, Edge Analytics, SHMA)**



<sup>14</sup> House of Commons Public Administration Select Committee Migration Statistics (HC 523, July 2013)

<sup>15</sup> Report on the Examination into Bath and North East Somerset Council's Core Strategy (June 2014)

<sup>3.39</sup> Whilst the 2012-based SNPP suggest that the population is likely to increase to almost 523,000 persons by 2033, both projections based on 10-year migration trends suggest that the overall population for the study area will increase to around 490,000 persons over the same period (over 30,000 fewer people). Nevertheless, there are notable differences between the figures for each local authority (Figure 32). It is clear that the period adopted for migration trends has a significant impact on the likely future population. However, the 10-year migration trend scenario provides a realistic starting point for projecting the future population growth in the study areas than shorter term migration scenarios which are subject to volatility.

**Figure 32: Population projections for West Essex and East Hertfordshire by LA (Source: ONS, Edge Analytics, SHMA)**

	East Herts	Epping Forest	Harlow	Uttlesford	TOTAL
<b>Total Change 2011-33</b>					
2012-based Sub-National Population Projections	30,276	28,297	14,811	24,120	<b>97,504</b>
EPOA 10-year migration trend scenario (MYE 2002-12)	20,016	16,534	9,899	18,977	<b>65,425</b>
SHMA 10-year migration trend (Census 2001-11)	20,483	14,540	8,770	21,157	<b>64,950</b>
<b>Annual Average</b>					
2012-based Sub-National Population Projections	1,376	1,286	673	1,096	<b>4,432</b>
EPOA 10-year migration trend scenario (MYE 2002-12)	910	752	450	863	<b>2,974</b>
SHMA 10-year migration trend (Census 2001-11)	931	661	399	962	<b>2,952</b>

**Figure 33: Population projections 2011-33 for West Essex and East Hertfordshire by gender and 5-year age cohort based on SNPP and 10-year migration trends**

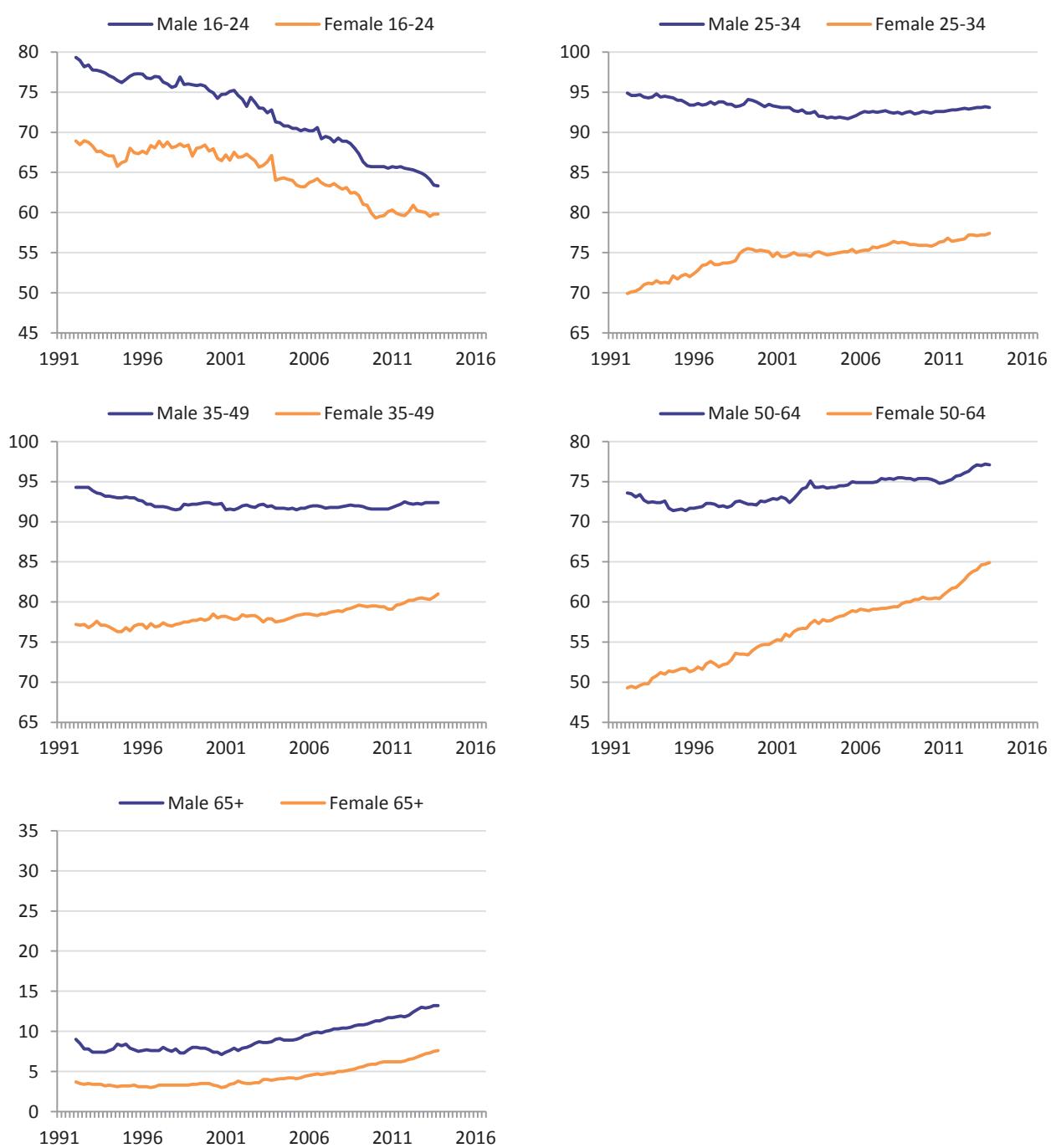
Age	2011			2033					
				2012-based SNPP			SHMA 10-year migration trend (Census 2001-11)		
	M	F	Total	M	F	Total	M	F	Total
Aged 0-4	13,644	12,888	<b>26,532</b>	15,241	14,435	<b>29,676</b>	13,958	13,210	<b>27,168</b>
Aged 5-9	12,807	12,277	<b>25,084</b>	16,361	15,443	<b>31,804</b>	15,090	14,214	<b>29,304</b>
Aged 10-14	13,568	12,810	<b>26,378</b>	17,002	16,080	<b>33,082</b>	15,850	14,941	<b>30,791</b>
Aged 15-19	13,611	12,903	<b>26,514</b>	15,745	14,601	<b>30,346</b>	14,831	13,682	<b>28,513</b>
Aged 20-24	10,896	10,877	<b>21,773</b>	11,562	11,130	<b>22,692</b>	10,750	10,218	<b>20,968</b>
Aged 25-29	11,528	12,030	<b>23,558</b>	13,161	13,065	<b>26,226</b>	12,181	11,923	<b>24,104</b>
Aged 30-34	12,891	13,545	<b>26,436</b>	13,620	13,887	<b>27,507</b>	12,552	12,644	<b>25,195</b>
Aged 35-39	14,069	15,045	<b>29,114</b>	16,191	16,373	<b>32,564</b>	14,894	14,942	<b>29,836</b>
Aged 40-44	16,263	17,391	<b>33,654</b>	17,622	18,135	<b>35,757</b>	16,286	16,665	<b>32,951</b>
Aged 45-49	16,948	17,562	<b>34,510</b>	17,036	18,009	<b>35,045</b>	15,827	16,730	<b>32,558</b>
Aged 50-54	14,828	15,213	<b>30,041</b>	16,651	17,502	<b>34,153</b>	15,618	16,491	<b>32,108</b>
Aged 55-59	12,684	12,655	<b>25,339</b>	14,998	15,367	<b>30,365</b>	14,181	14,631	<b>28,812</b>
Aged 60-64	12,778	13,170	<b>25,948</b>	15,402	16,318	<b>31,720</b>	14,716	15,654	<b>30,370</b>
Aged 65-69	9,915	10,556	<b>20,471</b>	15,252	16,300	<b>31,552</b>	14,644	15,688	<b>30,332</b>
Aged 70-74	7,364	8,354	<b>15,718</b>	13,066	14,131	<b>27,197</b>	12,605	13,655	<b>26,260</b>
Aged 75-79	6,199	7,546	<b>13,745</b>	10,189	11,293	<b>21,482</b>	9,871	10,947	<b>20,818</b>
Aged 80-84	4,512	6,102	<b>10,614</b>	7,930	9,407	<b>17,337</b>	7,698	9,128	<b>16,825</b>
Aged 85+	3,236	6,579	<b>9,815</b>	9,908	14,331	<b>24,239</b>	9,540	13,741	<b>23,281</b>
<b>Total</b>	<b>207,741</b>	<b>217,503</b>	<b>425,244</b>	<b>256,937</b>	<b>265,807</b>	<b>522,744</b>	<b>241,092</b>	<b>249,102</b>	<b>490,194</b>

## Economic Activity

3.40 Forecasting future economic activity rates is a challenge: the analysis is inherently complex and dependent on a range of demographic, socio-economic and structural changes in the labour market. However, the performance of the labour market in future years (and especially the impact of changing employment patterns) is an important factor which affects demand for housing.

3.41 The **Labour Force Survey (LFS)** is a continuous survey of the employment circumstances of the nation's population: it provides the official measures of employment and unemployment. Figure 34 shows economic activity rates (EAR) by age and gender for the UK since 1991, based on LFS data. It is evident that EAR rates are unlikely to remain constant in future as illustrated by past trends.

**Figure 34: Economic Activity Rate long-term UK trends (Source: Labour Market Statistics based on Labour Force Survey)**



<sup>3.42</sup> There are a number of notable trends evident:

- » Economic activity rates for people aged under 25 have steadily declined, primarily as a consequence of the increased numbers remaining in full-time education;
- » Economic activity rates for women in all groups aged 25+ have tended to increase, in particular those aged 50-64 where the rate has increased by almost a third (from 49% to 65%); and
- » Economic activity rates for men and women aged 50+ have tended to increase, in particular over the period since 2001.

<sup>3.43</sup> These changes in participation identified by the Labour Force Survey have been confirmed by Census data, which also shows that national trends are typically reflected at a local level.

<sup>3.44</sup> The most recent economic activity rate projections produced by ONS were published in January 2006 and covered the period to 2020<sup>16</sup>; however these figures suggested substantially lower changes in activity rates than actually experienced over the last decade. However, the performance of the labour market is important for national government, particularly in terms of forecasting the long term sustainability of tax revenues. As part of their scrutiny of Government finances, the Office for Budget Responsibility (OBR) provide an independent and authoritative analysis of the UK's public finances for Government, which includes detailed analysis of past and future labour market trends<sup>17</sup>.

## Labour Market Participation Projections

<sup>3.45</sup> The labour market participation projections produced by the OBR are based on historic profiles of different cohorts of the overall population – subsets that are grouped by year of birth and gender. Their analysis is not based on simplistic trends but is designed to capture dynamics that are specific to particular ages and those that cut across generations:

*"We project each cohort into the future using age-specific labour market entry and exit rates as they age across time. These exit and entry rates are generally held constant, although we adjust entry rates for younger cohorts (discussed further below), and exit rates for people approaching the State Pension age (SPA), since the SPA rises over our projection period."*

<sup>3.46</sup> Their analysis concludes:

- » **Older people;** economic activity rates of older people will increase in future years, mainly from a combination of factors including changes to State Pension age, less generous final salary pensions and increasing healthy longevity;
- » **Female participation;** in addition to changes to state pension age, economic activity rates for women will also increase due to cohort change: more women born in the 1980s will work compared to those born in the 1970s across all comparable ages, and the rates for women born in the 1970s will be higher than for those born in the 1960s and so on; and
- » **Young people;** economic activity rates of younger people will stop declining, although young people will continue to stay longer in education and the lower participation rates recently observed are not assumed to increase in future.

<sup>16</sup> Projections of the UK labour force, 2006 to 2020 by Vassilis Madouros; published in ONS Labour Market Trends, January 2006

<sup>17</sup> OBR Fiscal Sustainability Report, July 2014: <http://cdn.budgetresponsibility.org.uk/41298-OBР-accessible.pdf>

## Older People

<sup>3.47</sup> Recent increases in State Pension age (SPA) are expected to prompt a labour market response as people retiring at an older age will exit the labour market later. Recent research from the Institute for Fiscal Studies (IFS) and University College London<sup>18</sup> concluded that:

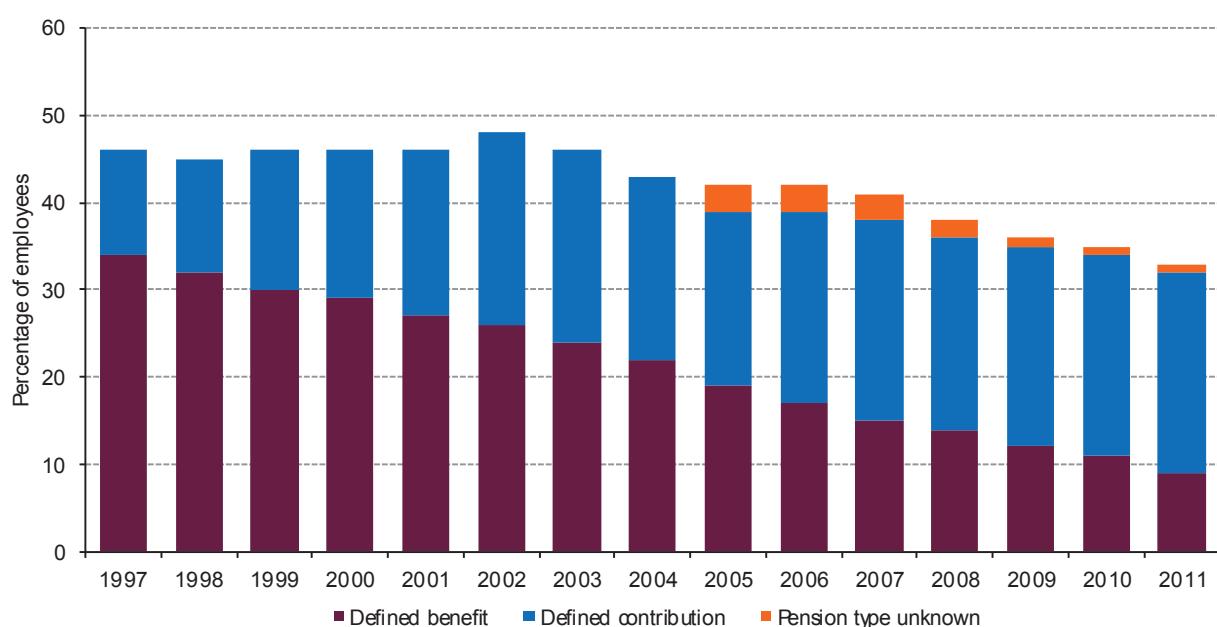
*“Future increases in the state pension age will lead to a substantial increase in employment”.*

<sup>3.48</sup> However, the issue is complex: most people do not retire at the SPA precisely, and other factors influence retirement decisions:

- » **Health:** longer, healthier lives mean people spend longer in employment;
- » **Education:** higher levels of education are associated with working for longer and service sector expansion (including new technology and self-employment) give new options for some people to work for longer;
- » **Family circumstances:** evidence suggests couples make joint retirement decisions, choosing to retire at similar points in time;
- » **Financial considerations:** expectations of post-retirement incomes are changing as people (especially women) have to wait longer before receiving their State Pension and defined benefit pensions continue to decline; and
- » **Compulsory retirement age:** the default retirement age (formerly 65) has been phased out – most people can now work for as long as they want to. Retirement age, therefore, is when an employee chooses to retire. Most businesses don't set a compulsory retirement age for their employees<sup>19</sup>.

<sup>3.49</sup> Nevertheless, financial drivers are particularly important in the decision of when to retire, and changes to the State Pension age coupled with reduced membership of private schemes (Figure 35) will inevitably lead to higher economic activity rates amongst the older population.

**Figure 35: National membership of private sector defined benefit and defined contribution schemes (Source: NAO)**

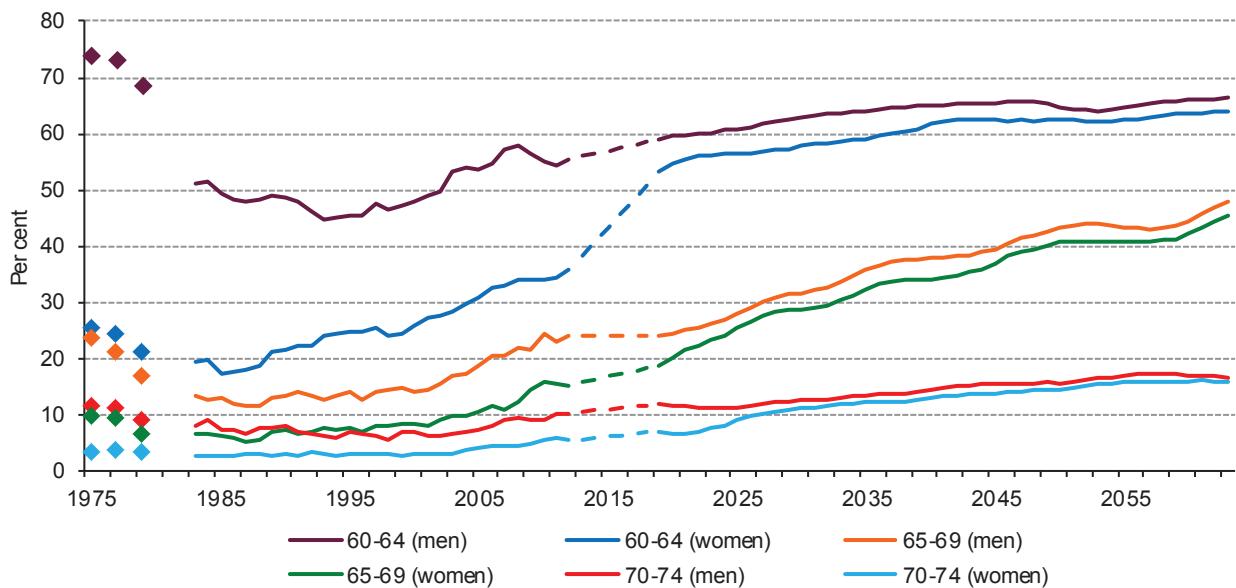


<sup>18</sup> [http://www.ifs.org.uk/pr/spa\\_pr\\_0313.pdf](http://www.ifs.org.uk/pr/spa_pr_0313.pdf)

<sup>19</sup> <https://www.gov.uk/retirement-age>

<sup>3.50</sup> Figure 36 shows the long-term trends in employment rates for men and women aged 60-74 together with the OBR short-term and longer-term projections.

**Figure 36: National employment rates for 60-74 yr olds (Source: ONS, OBR. Note: Prior to 1983, the Labour Force Survey does not contain an annual series for these indicators, so only available years are shown. The OBR medium-term forecast to 2018 is produced top-down, not bottom-up, so the dotted lines for that period are a simple linear interpolation)**



<sup>3.51</sup> In summary, for those:

- » **Aged 60-64:** employment rates for women are projected to continue increasing rapidly over the short-term as the SPA is equalised. Rates for both men and women are then projected to increase more marginally over the longer-term, although the projected rates for men remain notably lower than those actually observed in the late 1970s;
- » **Aged 65-69:** the gap between rates for men and women is projected to reduce over the short-term, with rates for both expected to increase progressively over the longer-term; and
- » **Aged 70-74:** the rates for these older men and women are projected to converge, although only marginal increases in the rates are otherwise expected – fewer than 1-in-8 people in this age group are expected to be working until at least the 2030s.

## Female Participation

<sup>3.52</sup> Women's participation in the labour force has increased, particularly since the 1970s, for a complex range of societal and economic reasons:

- » **Childbirth:** decisions regarding children are changing. More women choose childlessness, or childbirth is delayed until women are in their 30s or 40s. Post childbirth decisions on return to the workforce are also influenced by a variety of factors (e.g. childcare arrangements, tax implications for second incomes, family circumstances);
- » **Lone parents:** employment rates for lone parents lag behind mothers with partners, but this gap has been closing;
- » **Support services for women in work:** an increase in available options to support women in work (e.g. childcare services, flexible working arrangements);

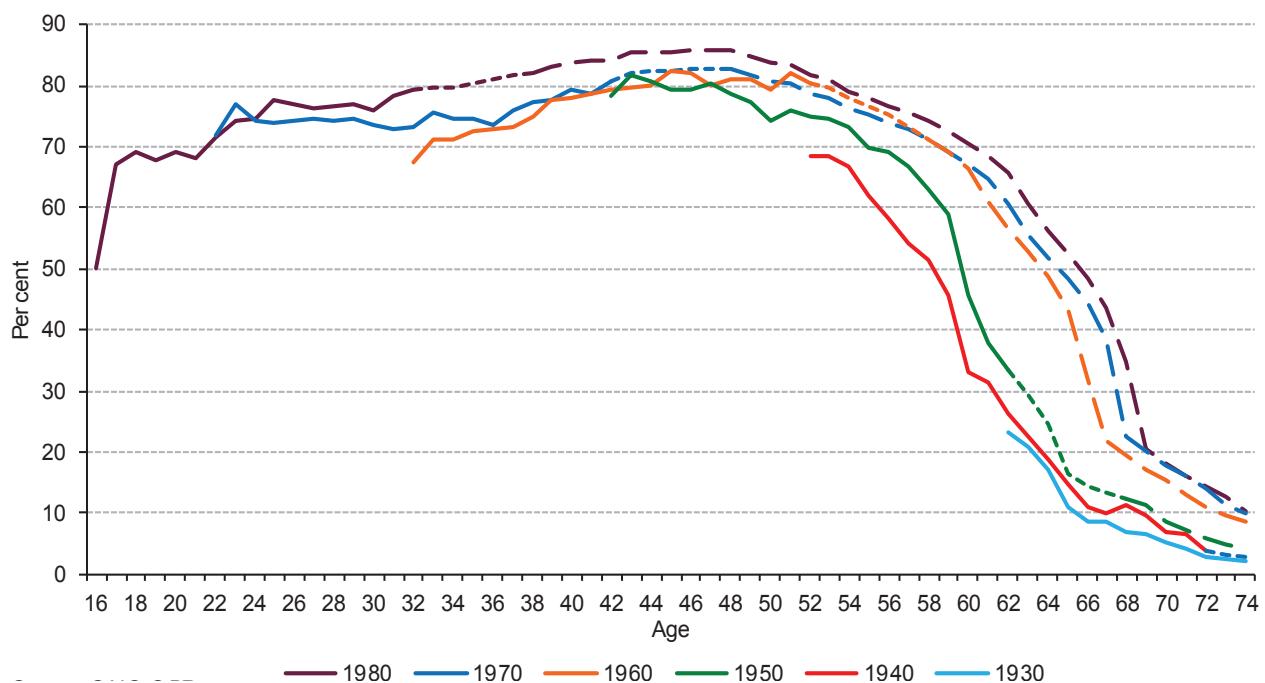
- » **Equal pay:** the gender wage differential has been narrowing (although still exists) giving women higher rewards for work; and
- » **Education:** higher levels of education have opened new career opportunities outside historically traditional female sectors.

<sup>3.53</sup> National policy still aspires to encourage more women into work. The Government is seeking to “*incentivise as many women as possible to remain in the labour market*”<sup>20</sup> and the Autumn Statement in 2014 included plans for more support for childcare (for example, Tax Free Childcare; Childcare Business Grant) and an ambition to match countries with even higher employment rates for women. The July 2015 Budget expanded free childcare for working families with 3 and 4 year old children from 15 hours to 30 hours from September 2017.

<sup>3.54</sup> Historic data clearly shows that women born in the 1950s (who are now approaching retirement) have been less likely to be economically active than those born more recently, based on the comparison of data for individual ages. Participation rates for women have progressively increased over time: women born in the 1960s had higher rates than those born in the 1950s, women born in the 1970s had higher rates again, and women born in the 1980s have had the highest rates. The OBR projections take account of these historic differences between cohorts, but they do not assume that female cohorts yet to enter the labour market have even higher participation rates.

<sup>3.55</sup> Figure 37 shows the trends in female economic participation rates by year of birth together with the OBR projections, which show how this cohort effect is likely to contribute towards higher economic activity rates in future.

**Figure 37: National female participation rates by Cohort (Source: ONS, OBR)**



<sup>20</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/371955/Women\\_in\\_the\\_workplace\\_Nov\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/371955/Women_in_the_workplace_Nov_2014.pdf)

## Young People

<sup>3.56</sup> The key issue for young people is at what age they enter the labour market. There has been a pronounced fall in economic participation rates for 16 and 17 year olds over time, but this fall in economic activity complements an increase in academic activity as young people stay longer in education<sup>21</sup>. There have been similar (though less pronounced) declining trends for 18-20 year olds.

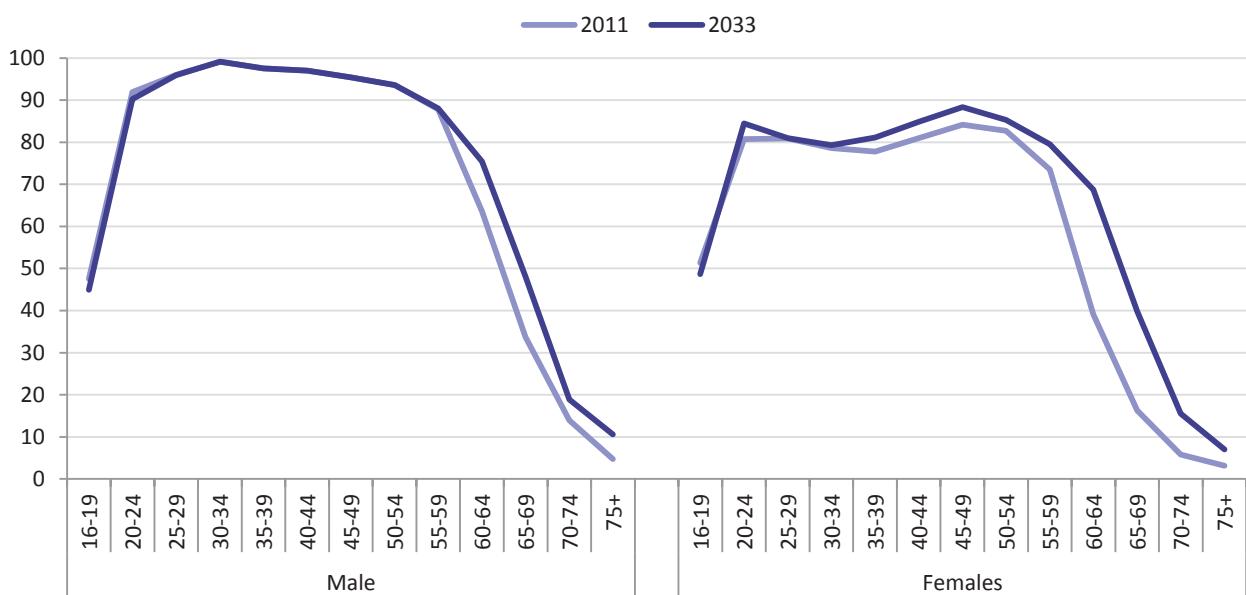
<sup>3.57</sup> National policy is also changing. The school leaving age rises to 18 in 2015 and the Government has removed the cap on student numbers attending higher education<sup>22</sup>.

<sup>3.58</sup> The policy changes indicate it is unlikely that economic participation rates will increase for these younger age groups. However, it should be noted that OBR projections expect these lower participation rates to stabilise at the current level rather than continue to decline. Further, the projections assume that this increased academic activity will not reduce economic activity rates as individuals get older. For example, entry rates into the labour market for people in their twenties are assumed to be higher than previously observed to take account of those who have deferred economic activity due to academic study.

## Projecting Future Economic Activity for West Essex and East Hertfordshire

<sup>3.59</sup> Figure 38 shows the estimated economic activity rates for 2011 and the projected rates for 2033 based on Census data for East Hertfordshire, Epping Forest, Harlow and Uttlesford, and the OBR labour market participation projections.

**Figure 38: Economic activity rates in 2011 and 2033 for West Essex and East Hertfordshire by age and gender based on OBR Labour Market Participation Projections**



<sup>3.60</sup> Participation rates for men under 60 are not projected to change, except for a very small decline in activity for those aged 16-19. There is increased in participation projected for men aged 60 and over, but these changes are only relatively marginal.

<sup>21</sup> <http://www.hefce.ac.uk/pubs/year/2015/201503/>

<sup>22</sup> <http://www.bbc.co.uk/news/education-25236341>

<sup>3.61</sup> Participation rates for women are projected to change due to the cohort effects previously discussed. The rates for those aged under 35 are relatively stable (as there is no increased participation assumed for women born after the 1980s), but there are increased participation rates projected for all older age groups.

<sup>3.62</sup> Figure 39 shows the estimated economically active population for the West Essex and East Hertfordshire HMA in 2011 and the projected economically active population in 2033 based on the population projections previously produced based on 10-year migration trends.

**Figure 39: Projected economically active population 2011-33 for West Essex and East Hertfordshire (Note: All figures presented unrounded for transparency)**

Age	2011			2033			Net change 2011-33		
	M	F	Total	M	F	Total	M	F	Total
Aged 16-19	5,138	5,207	<b>10,345</b>	5,215	5,178	<b>10,394</b>	+78	-29	+49
Aged 20-24	10,013	8,783	<b>18,796</b>	9,706	8,629	<b>18,335</b>	-308	-154	-462
Aged 25-29	11,068	9,733	<b>20,802</b>	11,692	9,655	<b>21,347</b>	+624	-78	+545
Aged 30-34	12,781	10,652	<b>23,433</b>	12,447	10,030	<b>22,478</b>	-334	-622	-955
Aged 35-39	13,721	11,703	<b>25,424</b>	14,528	12,124	<b>26,652</b>	+807	+421	+1,228
Aged 40-44	15,776	14,079	<b>29,856</b>	15,805	14,146	<b>29,952</b>	+29	+67	+96
Aged 45-49	16,177	14,777	<b>30,953</b>	15,110	14,785	<b>29,894</b>	-1,067	+8	-1,059
Aged 50-54	13,874	12,588	<b>26,462</b>	14,614	14,067	<b>28,681</b>	+739	+1,479	+2,218
Aged 55-59	11,142	9,304	<b>20,446</b>	12,487	11,642	<b>24,128</b>	+1,345	+2,337	+3,682
Aged 60-64	8,122	5,152	<b>13,273</b>	11,104	10,763	<b>21,867</b>	+2,983	+5,611	+8,594
Aged 65-69	3,341	1,722	<b>5,063</b>	7,039	6,247	<b>13,287</b>	+3,699	+4,525	+8,224
Aged 70-74	1,023	481	<b>1,505</b>	2,374	2,122	<b>4,496</b>	+1,350	+1,641	+2,991
Aged 75+	294	234	<b>528</b>	1,046	770	<b>1,816</b>	+752	+536	+1,288
<b>Total</b>	<b>122,471</b>	<b>104,415</b>	<b>226,886</b>	<b>133,167</b>	<b>120,158</b>	<b>253,325</b>	<b>+10,697</b>	<b>+15,743</b>	<b>+26,439</b>

<sup>3.63</sup> The economically active population is projected to increase by around 26,400 people over the 22-year period 2011-33, equivalent to an average increase of 1,200 additional workers each year.

## Establishing Household Projections for West Essex and East Hertfordshire

### Household Population and Communal Establishment Population

<sup>3.64</sup> Prior to considering household projections, it is necessary to identify the household population and separate out the population assumed to be living in Communal Establishments (institutional population). The methodology used by the SHMA is consistent with the CLG approach<sup>23</sup> (page 12):

*"For the household projections, the assumption is made that the institutional population stays constant at 2011 levels by age, sex and marital status for the under 75s and that the share of the institutional population stays at 2011 levels by age, sex and relationship status for the over 75s. The rationale here is that ageing population will lead to greater level of population aged over 75 in residential care homes that would not be picked up if levels were held fixed but holding the ratio fixed will."*

<sup>3.65</sup> The 2011 Census identified 4,502 persons living in Communal Establishments in the study area (1,925 in East Hertfordshire, 1,036 in Epping Forest, 393 in Harlow and 1,148 in Uttlesford). This is broadly consistent with the 4,548 persons identified by the CLG 2012-based household projections for 2011. Figure 40 shows the breakdown between the household and institutional population.

**Figure 40: Population projections 2011-33 for West Essex and East Hertfordshire by gender and 5-year age cohort**  
 (Note: Communal Establishment population held constant for population aged under 75 (light blue cells), and held proportionately constant for each relationship status for population aged 75 or over (orange cells))

Age	2011			2033			Net change 2011-33		
	HH	CE	Total	HH	CE	Total	HH	CE	Total
Aged 0-4	26,514	18	<b>26,532</b>	27,150	18	<b>27,168</b>	+636	0	<b>+636</b>
Aged 5-9	25,065	19	<b>25,084</b>	29,285	19	<b>29,304</b>	+4,220	0	<b>+4,220</b>
Aged 10-14	26,096	282	<b>26,378</b>	30,509	282	<b>30,791</b>	+4,413	0	<b>+4,413</b>
Aged 15-19	25,584	930	<b>26,514</b>	27,583	930	<b>28,513</b>	+1,999	0	<b>+1,999</b>
Aged 20-24	21,522	251	<b>21,773</b>	20,717	251	<b>20,968</b>	-805	0	<b>-805</b>
Aged 25-29	23,394	164	<b>23,558</b>	23,940	164	<b>24,104</b>	+546	0	<b>+546</b>
Aged 30-34	26,311	125	<b>26,436</b>	25,070	125	<b>25,195</b>	-1,241	0	<b>-1,241</b>
Aged 35-39	29,023	91	<b>29,114</b>	29,745	91	<b>29,836</b>	+722	0	<b>+722</b>
Aged 40-44	33,555	99	<b>33,654</b>	32,852	99	<b>32,951</b>	-703	0	<b>-703</b>
Aged 45-49	34,422	88	<b>34,510</b>	32,470	88	<b>32,558</b>	-1,952	0	<b>-1,952</b>
Aged 50-54	29,967	74	<b>30,041</b>	32,034	74	<b>32,108</b>	+2,067	0	<b>+2,067</b>
Aged 55-59	25,247	92	<b>25,339</b>	28,720	92	<b>28,812</b>	+3,473	0	<b>+3,473</b>
Aged 60-64	25,853	95	<b>25,948</b>	30,275	95	<b>30,370</b>	+4,422	0	<b>+4,422</b>
Aged 65-69	20,382	89	<b>20,471</b>	30,243	89	<b>30,332</b>	+9,861	0	<b>+9,861</b>
Aged 70-74	15,573	145	<b>15,718</b>	26,115	145	<b>26,260</b>	+10,542	0	<b>+10,542</b>
Aged 75-79	13,539	206	<b>13,745</b>	20,490	327	<b>20,818</b>	+6,951	+121	<b>+7,073</b>
Aged 80-84	10,207	407	<b>10,614</b>	16,230	595	<b>16,825</b>	+6,023	+188	<b>+6,211</b>
Aged 85+	8,442	1,373	<b>9,815</b>	20,443	2,837	<b>23,281</b>	+12,002	+1,464	<b>+13,466</b>
<b>Total</b>	<b>420,696</b>	<b>4,548</b>	<b>425,244</b>	<b>483,873</b>	<b>6,322</b>	<b>490,194</b>	<b>+63,177</b>	<b>+1,773</b>	<b>+64,950</b>
East Herts	136,215	1,940	<b>138,155</b>	156,169	2,469	<b>158,638</b>	+19,954	+529	<b>+20,483</b>
Epping Forest	123,833	1,047	<b>124,880</b>	137,839	1,582	<b>139,420</b>	+14,006	+535	<b>+14,540</b>
Harlow	81,780	397	<b>82,177</b>	90,382	565	<b>90,947</b>	+8,602	+168	<b>+8,770</b>
Uttlesford	78,868	1,164	<b>80,032</b>	99,483	1,706	<b>101,189</b>	+20,615	+542	<b>+21,157</b>

<sup>23</sup> Household Projections 2012-based: Methodological Report, Department for Communities and Local Government, February 2015

<sup>3.66</sup> It will be important to recognise the projected growth of population aged 75 or over living in communal establishments when establishing the overall housing requirement.

<sup>3.67</sup> Given that the population projections have already established the total population aged 75 or over, a consequence of the assumed increase in institutional population for these age groups is fewer older people being counted in the household population. This affects the projected household growth for the area. It is therefore necessary to plan for the increase in institutional population, as this will be additional to the projected household growth; although the councils will need to consider the most appropriate types of housing in the context of future plans for delivering care and support for older people.

## Household Representative Rates

<sup>3.68</sup> Household Representative Rates (HRRs) are a demographic tool used to convert population into households and are based on those members of the population who can be classed as "household representatives" or "heads of household". The HRRs used are key to the establishment of the number of households and, further, the number of households is key to the number of homes needed in future.

<sup>3.69</sup> The proportion of people in any age cohort who will be household representatives vary between people of different ages, and the rates also vary over time. HRRs are published as part of the household projections produced by CLG. The 2011 Census identified that the CLG 2008-based household projections had significantly overestimated the number of households. Nevertheless, this had been anticipated and the methodology report published to accompany the 2008-based projections acknowledged (page 10):

*"Labour Force Survey (LFS) data suggests that there have been some steep falls in household representative rates for some age groups since the 2001 Census ... this can only be truly assessed once the 2011 Census results are available."*

<sup>3.70</sup> The CLG 2012 based household projections technical document confirmed the findings (page 24):

*"At the present time the results from the Census 2011 show that the 2008-based projections were overestimating the rate of household formation and support the evidence from the Labour Force Survey that household representative rates for some (particularly younger) age groups have fallen markedly since the 2001 Census."*

<sup>3.71</sup> Whilst Inspectors have been keen to avoid perpetuating any possible "recessionary impact" associated with the lower formation rates suggested by the interim 2011-based data, the CLG household projections are based on much longer-term trends. Ludi Simpson (Professor of Population Studies at the University of Manchester and the originator and designer of the PopGroup demographic modelling software) recently considered the CLG households projections in an article published in Town and Country Planning (December 2014):

*"Although it is sometimes claimed that the current household projections are based on the experience of changes between 2001 and 2011, this is true only of the allocation of households to household types in the second stage of the projections. The total numbers of households in England and in each local authority are projected on the basis of 40 years of trends in household formation, from 1971 to 2011."*

<sup>3.72</sup> The 2012-based household projections published in February 2015 incorporate far more data from the 2011 Census than was available for the interim 2011-based household projections, and these projections provide data for the 25-year period 2012-37 based on long-term demographic trends. The household

representative projections use a combination of two fitted trends through the available Census points (1971, 1981, 1991, 2001 and 2011).

<sup>3.73</sup> The second edition of the PAS OAN technical advice note confirms (paragraph 6.39-43):

*"The CLG 2012 projection provides a new set of HRRs, which are generally higher than the interim 2011 rates, though still below the 2008 rates. ... Housing needs studies should now use as a starting point the CLG 2012 HRRs, leaving aside earlier scenarios. ... Indexed and return-to-trend projections, which previously attempted to do this, have been rendered out of date by the CLG 2012 projection."*

<sup>3.74</sup> It is possible to understand the impact of the new household representative rates through applying the 2012-based rates and the 2008-based and interim 2011-based rates to the same population. Using the household population data in the 2012-based projections for the 10-year period 2011-2021 (the only years where household representative rates are available from all three projections), the 2012-based rates show an annual average growth of 218,600 households across England. This compares to 241,600 households using the 2008-based rates and 204,600 households using the interim 2011-based rates. Therefore, the 2012-based rates yield household growth that is 7% higher than the interim 2011-based rates and only 10% lower than the 2008-based rates. At a local level, a third of local authorities have 2012-based rates that are closer to 2008-based rates than the interim 2011-based rates.

<sup>3.75</sup> The 2012-based projections supersede both the 2008-based household projections and the interim 2011-based household projections. The changes since 2008 were anticipated and these reflect real demographic trends, and therefore we should not adjust these further; although the extent to which housing supply may have affected the historic rate is one of the reasons that we also consider market signals when determining the OAN for housing.

## Household Projections

<sup>3.76</sup> Using the CLG 2012-based household representative rates, we can establish the projected number of additional households. The projected increase in households across the West Essex and East Hertfordshire HMA is summarised in Figure 41.

<sup>3.77</sup> Figure 41 also provides an estimate of dwelling numbers, which takes account of vacancies and second homes based on the proportion of dwellings without a usually resident household identified by the 2011 Census. This identified a rate of 3.0% for East Hertfordshire, 4.5% for Epping Forest, 3.2% for Harlow and 4.7% for Uttlesford. The rate was 3.8% across the West Essex and East Hertfordshire HMA as a whole.

**Figure 41: Projected households and dwellings over the 22-year period 2011-33 for West Essex and East Hertfordshire**  
 (Note: Dwelling numbers derived based on proportion of dwellings without a usually resident household in the 2011 Census. Data may not sum due to rounding)

Scenario	Households				Dwellings			
	2011	2033	Net change 2011-33	Average annual change	2011	2033	Net change 2011-33	Average annual change
East Hertfordshire	56,813	70,086	13,272	603	58,600	72,290	13,690	622
Epping Forest	52,093	61,089	8,996	409	54,540	63,958	9,418	428
Harlow	34,701	39,455	4,754	216	35,835	40,745	4,910	223
Uttlesford	31,579	41,456	9,877	449	33,138	43,503	10,365	471
<b>TOTAL</b>	<b>175,186</b>	<b>212,086</b>	<b>36,899</b>	<b>1,677</b>	<b>182,113</b>	<b>220,495</b>	<b>38,382</b>	<b>1,745</b>

## Conclusions

<sup>3.78</sup> PPG identifies that the starting point for estimating housing need is the CLG 2012-based household projections. For the 22-year period 2011-33, these projections suggest an increase of 49,638 households across the West Essex and East Hertfordshire HMA: an average growth of 2,256 households each year, comprised of 779 in East Hertfordshire, 653 in Epping Forest, 326 in Harlow and 498 in Uttlesford.

<sup>3.79</sup> However, the future projections are particularly sensitive to the period on which migration trends are based, and PAS advice to Local Authorities suggests that the official projections are “*very unstable*” and it is more appropriate to adopt a longer base period to establish robust migration trends. This view is echoed by academics and has been promoted by Planning Inspectors at numerous Local Plan Examinations. Furthermore, the Public Administration Select Committee has identified the Census as “*the only reliable source of data on migrant populations in local areas*”.

<sup>3.80</sup> Given this context, the SHMA has developed independent household projections using a 10-year migration trend based on Census data. The specific method used has been supported previously at Examination<sup>24</sup>, where it was noted that “*a 10 year period is a reasonable approach*” and “*the inter-censal period provides a readily understandable and robust check on the reasonableness of the average*”.

<sup>3.81</sup> Figure 41 shows that the population projection based on 10-year migration trends identifies an increase of 36,899 households across the HMA for the 22-year period 2011-33 (603 households in East Hertfordshire, 409 in Epping Forest, 216 in Harlow and 449 in Uttlesford), an average growth of 1,677 each year.

<sup>3.82</sup> Whilst these figures are lower than the CLG 2012-based projections for the same period, the SHMA analysis reflects good practice and provides a stable projection based on the most reliable data. The lower increase in household numbers is due to the underlying population projections – long-term migration trends show lower migration rates than recent years. These lower migration rates are partly due to errors in the population estimates over the last 10 years (corrected following the 2011 Census), but it is also important to recognise that short-term trends are unlikely to be sustained for the full 22-year period 2011-33.

<sup>3.83</sup> The long-term migration trends based on the intercensal period provide the most robust and reliable basis for projecting the future population, and therefore **the projected household growth of 1,677 households each year (1,745 dwellings) provides the most appropriate demographic projection on which to base the Objectively Assessed Need (OAN) for housing.**

<sup>24</sup> Report on the Examination into Bath and North East Somerset Council’s Core Strategy (June 2014)

# 4. Housing Mix and Tenure

## Establishing the need for market and affordable housing

- 4.1 Demographic projections provide the basis for identifying the Objectively Assessed Need for all types of housing, including both market housing and affordable housing.
- 4.2 PPG notes that affordable housing need is based on households “*who lack their own housing or live in unsuitable housing and who cannot afford to meet their housing needs in the market*” (paragraph 22) and identifies a number of different types of household which may be included:

### **What types of households are considered in housing need?**

*The types of households to be considered in housing need are:*

- » *Homeless households or insecure tenure (e.g. housing that is too expensive compared to disposable income)*
- » *Households where there is a mismatch between the housing needed and the actual dwelling (e.g. overcrowded households)*
- » *Households containing people with social or physical impairment or other specific needs living in unsuitable dwellings (e.g. accessed via steps) which cannot be made suitable in-situ*
- » *Households that lack basic facilities (e.g. a bathroom or kitchen) and those subject to major disrepair or that are unfit for habitation*
- » *Households containing people with particular social needs (e.g. escaping harassment) which cannot be resolved except through a move*

**Planning Practice Guidance (March 2014), ID 2a-023**

- 4.3 PPG also suggests a number of data sources for assessing past trends and recording current estimates for establishing the need for affordable housing (paragraph 24):
  - » Local authorities will hold data on the number of homeless households, those in temporary accommodation and extent of overcrowding.
  - » The Census also provides data on concealed households and overcrowding which can be compared with trends contained in the English Housing Survey.
  - » Housing registers and local authority and registered social landlord transfer lists will also provide relevant information.
- 4.4 The following section considers each of these sources in turn, alongside other relevant statistics and information that is available.

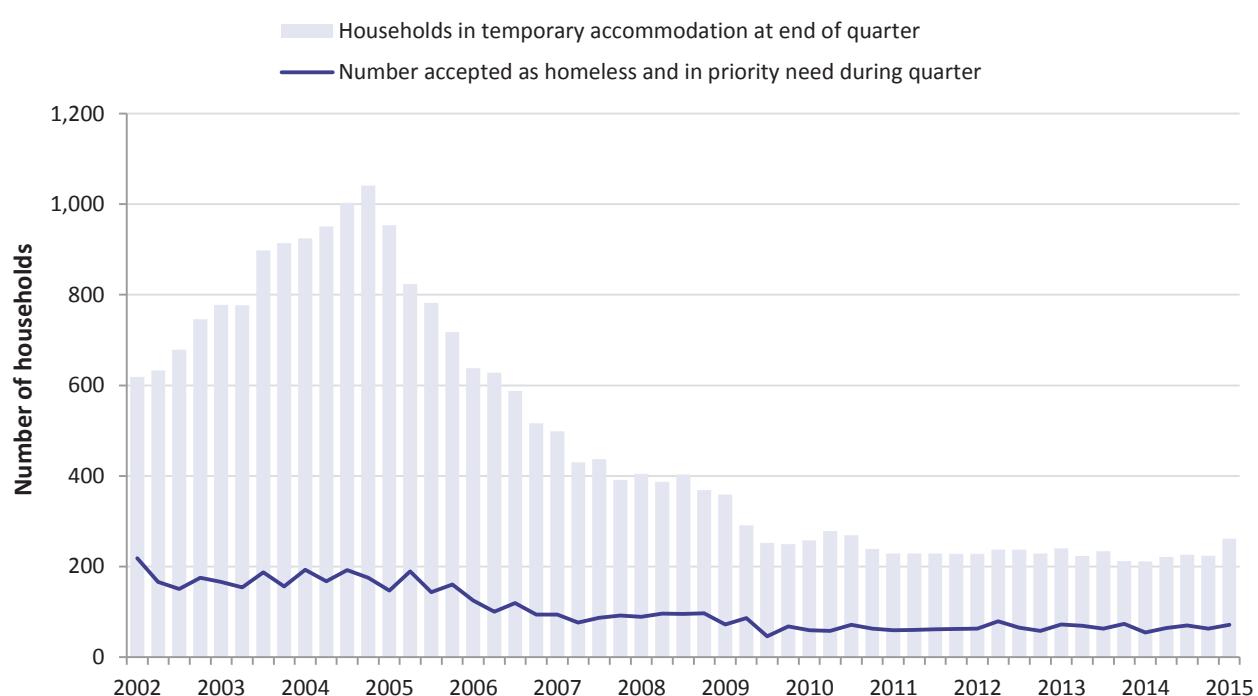
## Past Trends and Current Estimates of the Need for Affordable Housing

### Local Authority Data: Homeless Households and Temporary Accommodation

4.5 In West Essex and East Hertfordshire, there was a downward trend in the number of households accepted as being homeless and in priority need over the last decade (Figure 42). There were 218 such households in the first quarter of 2002 which reduced to 59 households by the first quarter of 2011, a net reduction of 159 households.

4.6 There has also been a downward trend in households living in temporary accommodation. There were 619 such households in 2002, including 38 in bed and breakfast accommodation and a further 76 in hostels; this had reduced to 229 in 2011, a net reduction of 390 households (Figure 43).

**Figure 42: West Essex and East Hertfordshire households accepted as homeless and in priority need and households in temporary accommodation 2001-2015 (Source: CLG P1E returns)**



**Figure 43: Households in temporary accommodation in West Essex and East Hertfordshire (Source: CLG P1E returns for March 2002 and March 2011. Note: Figures were not available for all of the study area in the 2001 data)**

		West Essex and East Hertfordshire			England 2011
		2002	2011	Net change 2002-11	
Households in temporary accommodation	Bed and breakfast	38	6	-32	-
	Hostels	76	57	-19	-
	Local Authority or RSL stock	500	87	-413	-
	Private sector leased (by LA or RSL)	3	12	9	-
	Other (including private landlord)	2	67	65	-
	<b>TOTAL</b>	<b>619</b>	<b>229</b>	<b>-390</b>	-
	<i>Rate per 1,000 households</i>	3.8	1.3	-2.5	2.2
Households accepted as homeless but without temporary accommodation provided			3	3	0

4.7 It is evident that statutory homelessness has not become significantly worse in West Essex and East Hertfordshire over the period since 2002, but this does not necessarily mean that fewer households risk becoming homeless. Housing advice services provided by the councils limit the number of homeless presentations, through helping people threatened with homelessness find housing before they become homeless. Housing allocation policies can also avoid the need for temporary housing if permanent housing is available sooner; however many households facing homelessness are now offered private rented housing.

4.8 Changes to the Law in 2010 means private sector households can now be offered accommodation in the Private Rented Sector and this cannot be refused, provided it is a reasonable offer. Prior to this change, Local Authorities could offer private sector housing to homeless households (where they have accepted a housing duty under Part 7 of the Housing Act 1996) but the applicant was entitled to refuse it. The Localism Act 2010 means refusal is no longer possible providing the offer is suitable. While the change aims to reduce the pressures on the social housing stock, an indirect result is that there are further demands on the private rented sector as Councils seek to house homeless households.

## Census Data: Concealed Households and Overcrowding

4.9 The Census provides detailed information about households and housing in the local area. This includes information about **concealed families** (i.e. couples or lone parents) and **sharing households**. These households lack the sole use of basic facilities (e.g. a bathroom or kitchen) and have to share these with their "host" household (in the case of concealed families) or with other households (for those sharing).

### Concealed Families

4.10 The number of **concealed families** living with households in West Essex and East Hertfordshire increased from 961 to 1,695 over the 10-year period 2001-11 (Figure 44), an increase of 734 families (76%).

**Figure 44: Concealed families in West Essex and East Hertfordshire by age of family representative (Source: Census 2001 and 2011)**

	2001	2011	Net change 2001-11
Aged under 25	113	368	+255
Aged 25 to 34	318	539	+221
Aged 35 to 44	152	163	+11
Aged 45 to 54	59	147	+88
<b>Sub-total aged under 55</b>	<b>642</b>	<b>1,217</b>	<b>+575</b>
Aged 55 to 64	64	130	+66
Aged 65 to 74	151	203	+52
Aged 75 or over	104	145	+41
<b>Sub-total aged 55 or over</b>	<b>319</b>	<b>478</b>	<b>+159</b>
<b>All Concealed Families</b>	<b>961</b>	<b>1,695</b>	<b>+734</b>

4.11 Although many concealed families do not want separate housing (in particular where they have chosen to live together as extended families), others are forced to live together due to affordability difficulties or other constraints – and these concealed families will not be counted as part of the CLG household projections. Concealed families with older family representatives will often be living with another family in order to receive help or support due to poor health. Concealed families with younger family representatives are more likely to demonstrate un-met need for housing. When we consider the growth of

734 families over the period 2001-11, almost 8-in-10 (78%) have family representatives aged under 55, with substantial growth amongst those aged under 35 in particular (in line with national trends).

### Sharing Households

4.12 The number of **sharing households** fell from 232 to 43 over the 10-year period 2001-11 (Figure 45), a decrease of 189 households (81%).

Figure 45: Shared Dwellings and Sharing Households in West Essex and East Hertfordshire (Source: Census 2001 and 2011)

	2001	2011	Net change 2001-11
Number of shared dwellings	206	20	-186
Number of household spaces in shared dwellings	232	87	-145
<b>All Sharing Households</b>	<b>232</b>	<b>43</b>	<b>-189</b>
Household spaces in shared dwellings with no usual residents	0	44	44

4.13 Figure 46 shows that the number of **multi-adult households** living in the area increased from 5,407 to 6,590 households over the same period, an increase of 1,183 (22%). These people also have to share basic facilities, but are considered to be a single household as they also share a living room, sitting room or dining area. This includes **Houses in Multiple Occupation (HMOs) with shared facilities**, as well as **single people living together as a group** and **individuals with lodgers**.

Figure 46: Multi-adult Households in West Essex and East Hertfordshire (Source: Census 2001 and 2011)

	2001	2011	Net change 2001-11
Owned	3,334	3,806	472
Private rented	1,351	1,985	634
Social rented	722	799	77
<b>All Households</b>	<b>5,407</b>	<b>6,590</b>	<b>1,183</b>

4.14 The growth in multi-adult households was focussed particularly in the private rented sector, with an increase in single persons choosing to live with friends together with others living in HMOs. This growth accounts for 634 households (an increase from 1,351 to 1,985 households over the period) and this represents over half (54%) of the total increase in multi-adult households living in the area.

4.15 Nevertheless, shared facilities is a characteristic of HMOs and many people living in this type of housing will only be able to afford shared accommodation (either with or without housing benefit support). Extending the Local Housing Allowance (LHA) Shared Accommodation Rate (SAR) allowance to cover all single persons up to 35 years of age has meant that many more young people will only be able to afford shared housing, and this has further increased demand for housing such as HMOs.

4.16 There is therefore likely to be a continued (and possibly growing) role for HMOs, with more of the existing housing stock possibly being converted. Given this context, it would not be appropriate to consider households to need affordable housing only on the basis of them currently sharing facilities (although there may be other reasons why they would be considered as an affordable housing need).

## Overcrowding

<sup>4.17</sup> The Census also provides detailed information about occupancy which provides a measure of whether a household's accommodation is **overcrowded or under occupied**:

*"There are two measures of occupancy rating, one based on the number of rooms in a household's accommodation, and one based on the number of bedrooms. The ages of the household members and their relationships to each other are used to derive the number of rooms/bedrooms they require, based on a standard formula. The number of rooms/bedrooms required is subtracted from the number of rooms/bedrooms in the household's accommodation to obtain the occupancy rating. An occupancy rating of -1 implies that a household has one fewer room/bedroom than required, whereas +1 implies that they have one more room/bedroom than the standard requirement."*

<sup>4.18</sup> When considering the number of rooms required, the ONS use the following approach to calculate the room requirement:

- » A one person household is assumed to require three rooms (two common rooms and a bedroom); and
- » Where there are two or more residents it is assumed that they require a minimum of two common rooms plus one bedroom for:
  - each couple (as determined by the relationship question)
  - each lone parent
  - any other person aged 16 or over
  - each pair aged 10 to 15 of the same sex
  - each pair formed from any other person aged 10 to 15 with a child aged under 10 of the same sex
  - each pair of children aged under 10 remaining
  - each remaining person (either aged 10 to 15 or under 10).

<sup>4.19</sup> For West Essex and East Hertfordshire, overcrowding increased from 8,899 to 11,583 households (an increase of 2,684) over the 10-year period 2001-11 (Figure 47). This represents a growth of 30%, which is higher than the national increase for England (23%). When considered by tenure, overcrowding has increased by 44 households in the owner occupied sector, increased by 906 households in the social rented sector with the largest growth in the private rented sector where the number has increased from 1,690 to 3,424, a growth of 1,734 households over the 10-year period. The percentage of overcrowded households in the private rented sector has also had the biggest increase from 11.0% to 14.7% (a growth of 33%).

<sup>4.20</sup> Considering the individual authorities in the study area:

- » **East Hertfordshire** has seen the most significant increase (+31%), particularly in social rent (+26%) and private rent (24%);
- » **Epping Forest** has seen a more modest increase (+18%) including a reduction in owned (-8%), but with a larger increase in private rent (+30%) and social rent (+29%);
- » **Harlow** has seen a more modest increase (+21%) including a reduction in owned (-4%), but with a larger increase in private rent (+38%); and
- » **Uttlesford** has also seen an increase of 20% with a relatively small rise in owned (+2%) and larger increases in private rent (+33%) and social rent (+24%).

**Figure 47: Proportion of overcrowded households 2011 for West Essex and East Hertfordshire and change 2001-11 by tenure**

(Note: Overcrowded households are considered to have an occupancy rating of -1 or less. Source: UK Census of Population 2001 and 2011)

	Occupancy rating (rooms)						Occupancy rating (bedrooms) 2011	
	2001		2011		Net change 2001-11			
	N	%	N	%	N	%	N	%
<b>East Hertfordshire</b>								
Owned	920	2.3%	1,048	2.6%	128	+11%	509	1.2%
Private rented	673	12.4%	1,281	15.6%	608	+26%	409	5.0%
Social rented	864	12.9%	1,154	16.1%	290	+24%	527	7.3%
<b>All Households</b>	<b>2,457</b>	<b>4.7%</b>	<b>3,483</b>	<b>6.2%</b>	<b>1,026</b>	<b>+31%</b>	<b>1,445</b>	<b>2.6%</b>
<b>Epping Forest</b>								
Owned	1,149	3.0%	1,058	2.8%	-91	-8%	698	1.8%
Private rented	511	11.1%	927	14.5%	416	+30%	346	5.4%
Social rented	1,094	13.4%	1,357	17.4%	263	+29%	650	8.3%
<b>All Households</b>	<b>2,754</b>	<b>5.4%</b>	<b>3,342</b>	<b>6.4%</b>	<b>588</b>	<b>+18%</b>	<b>1,694</b>	<b>3.3%</b>
<b>Harlow</b>								
Owned	871	4.4%	834	4.2%	-37	-4%	567	2.9%
Private rented	278	14.8%	825	20.3%	547	+38%	413	10.2%
Social rented	1,589	13.8%	1,804	16.7%	215	+21%	950	8.8%
<b>All Households</b>	<b>2,738</b>	<b>8.3%</b>	<b>3,463</b>	<b>10.0%</b>	<b>725</b>	<b>+21%</b>	<b>1,930</b>	<b>5.6%</b>
<b>Uttlesford</b>								
Owned	337	1.6%	381	1.7%	44	+2%	269	1.2%
Private rented	228	6.7%	391	8.5%	163	+27%	154	3.3%
Social rented	385	10.8%	523	13.2%	138	+22%	268	6.8%
<b>All Households</b>	<b>950</b>	<b>3.5%</b>	<b>1,295</b>	<b>4.1%</b>	<b>345</b>	<b>+20%</b>	<b>691</b>	<b>2.2%</b>
<b>WEST ESSEX AND EAST HERTFORDSHIRE</b>								
Owned	3,277	2.8%	3,321	2.7%	44	-1%	2,043	1.7%
Private rented	1,690	11.0%	3,424	14.7%	1,734	+33%	1,322	5.7%
Social rented	3,932	13.1%	4,838	16.3%	906	+24%	2,395	8.0%
<b>All Households</b>	<b>8,899</b>	<b>5.5%</b>	<b>11,583</b>	<b>6.6%</b>	<b>2,684</b>	<b>+22%</b>	<b>5,760</b>	<b>3.3%</b>
<b>All Households</b>								
<b>ENGLAND</b>	-	<b>7.1%</b>	-	<b>8.7%</b>	-	<b>+23%</b>	-	<b>4.6%</b>
South West Essex	-	5.9%	-	7.7%	-	+31%	-	4.3%
Stevenage & Northern Herts	-	5.5%	-	6.6%	-	+20%	-	3.2%
Crawley & Reigate	-	5.2%	-	6.5%	-	+26%	-	3.2%
Greater London	-	17.3%	-	21.7%	-	+25%	-	11.3%

## English Housing Survey Data

### Overcrowding

<sup>4.21</sup> The English Housing Survey (EHS) does not provide information about individual local authorities, but it does provide a useful context about these indicators in terms of national trends between Census years.

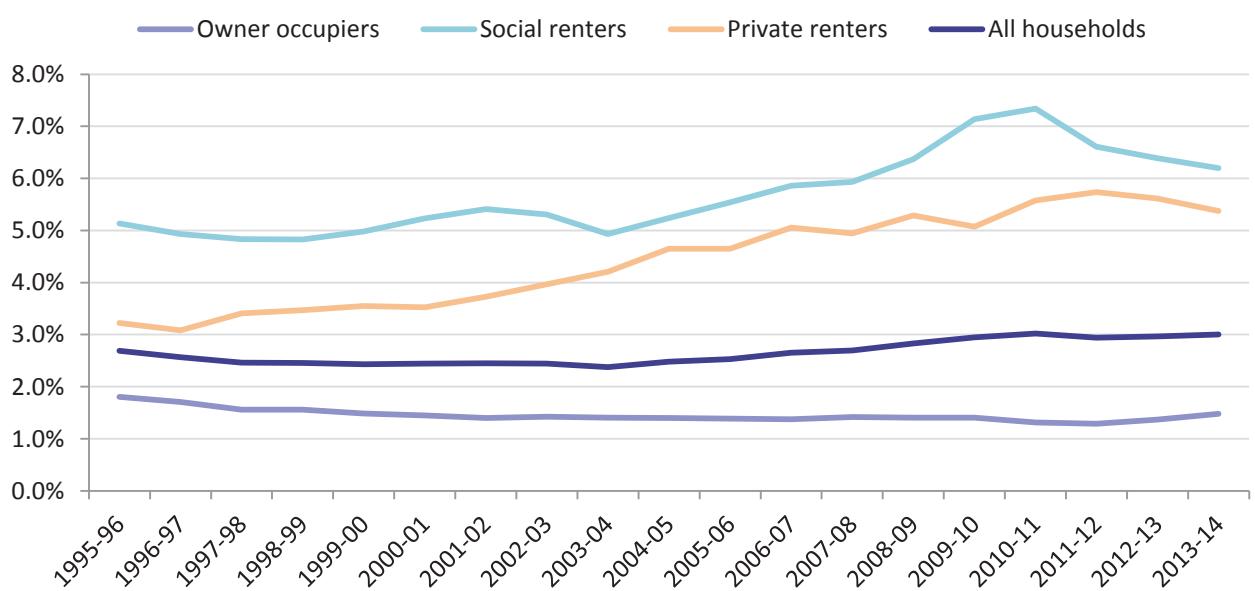
<sup>4.22</sup> The measure of overcrowding used by the EHS provides a consistent measure over time **however the definition differs from both occupancy ratings provided by the Census**. The EHS approach<sup>25</sup> is based on a “bedroom standard” which assumes that adolescents aged 10-20 of the same sex will share a bedroom, and only those aged 21 or over are assumed to require a separate bedroom (whereas the approach used by the ONS for the Census assumes a separate room for those aged 16 or over):

*“The ‘bedroom standard’ is used as an indicator of occupation density. A standard number of bedrooms is calculated for each household in accordance with its age/sex/marital status composition and the relationship of the members to one another. A separate bedroom is allowed for each married or cohabiting couple, any other person aged 21 or over, each pair of adolescents aged 10-20 of the same sex, and each pair of children under 10. Any unpaired person aged 10-20 is notionally paired, if possible, with a child under 10 of the same sex, or, if that is not possible, he or she is counted as requiring a separate bedroom, as is any unpaired child under 10.*

*“Households are said to be overcrowded if they have fewer bedrooms available than the notional number needed. Households are said to be under-occupying if they have two or more bedrooms more than the notional needed.”*

<sup>4.23</sup> Nationally, overcrowding rates increased for households in both social and private rented housing, although the proportion of overcrowded households has declined in both sectors since 2011. Overcrowding rates for owner occupiers have remained relatively stable since 1995.

**Figure 48: Trend in overcrowding rates for England by tenure (Note: Based on three-year moving average, up to and including the labelled date. Source: Survey of English Housing 1995-96 to 2007-08; English Housing Survey 2008-09 onwards)**



<sup>25</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/284648/English\\_Housing\\_Survey\\_Headline\\_Report\\_2012-13.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284648/English_Housing_Survey_Headline_Report_2012-13.pdf)

<sup>4.24</sup> Whilst the EHS definition of overcrowding is more stringent than the Census, the measurement closer reflects the definition of statutory overcrowding that was set out by Part X of the Housing Act 1985 and is consistent with statutory Guidance<sup>26</sup> that was issued by CLG in 2012 to which authorities must have regard when exercising their functions under Part 6 of the 1996 Housing Act (as amended).

<sup>4.25</sup> This Guidance, *"Allocation of accommodation: Guidance for local housing authorities in England"*, recommends that authorities should use the bedroom standard when assessing whether or not households are overcrowded for the purposes of assessing housing need:

*"4.8 The Secretary of State takes the view that the bedroom standard is an appropriate measure of overcrowding for allocation purposes, and recommends that all housing authorities should adopt this as a minimum. The bedroom standard allocates a separate bedroom to each:*

- married or cohabiting couple*
- adult aged 21 years or more*
- pair of adolescents aged 10-20 years of the same sex*
- pair of children aged under 10 years regardless of sex"*

<sup>4.26</sup> The bedroom standard therefore provides the most appropriate basis for assessing overcrowding. By considering the Census and EHS data for England, together with the Census data for West Essex and East Hertfordshire, we can estimate overcrowding using the bedroom standard. Figure 49 sets out this calculation based on the Census occupancy rating for both rooms and bedrooms. Based on the bedroom standard, it is estimated that **1,098 owner occupied, 709 private rented and 1,904 social rented households were overcrowded** in the West Essex and East Hertfordshire HMA in 2011. Student households have been excluded from this calculation given that their needs are assumed to be transient.

**Figure 49: Estimate of the number of overcrowded households in West Essex & East Hertfordshire HMA by tenure based on the bedroom standard (Source: EHS; UK Census of Population 2011)**

	Owned		Private Rented		Social Rented	
<b>ENGLAND</b>						
<b>EHS bedroom standard 2011</b> Percentage of households overcrowded [A]		1.3%		5.6%		7.3%
<b>Census occupancy rating</b> Percentage of households overcrowded [B]	<i>Bedrooms</i> 2.3%	<i>Rooms</i> 3.3%	<i>Bedrooms</i> 8.8%	<i>Rooms</i> 20.2%	<i>Bedrooms</i> 8.9%	<i>Rooms</i> 16.9%
Proportion of these overcrowded households based on bedroom standard [C = A ÷ B]	57%	40%	64%	28%	83%	43%
<b>WEST ESSEX &amp; EAST HERTFORDSHIRE HMA</b>						
<b>Census occupancy rating</b> Number of overcrowded households [D]	<i>Bedrooms</i> 2,043	<i>Rooms</i> 3,321	<i>Bedrooms</i> 1,322	<i>Rooms</i> 3,424	<i>Bedrooms</i> 2,395	<i>Rooms</i> 4,838
Full-time student households [E]	306	306	359	564	207	204
Overcrowded households (excluding students) [F = D - E]	1,737	3,015	963	2,860	2,188	4,634
Estimate of overcrowded households based on the bedroom standard [G = C × F]	<b>990</b>	<b>1,206</b>	<b>616</b>	<b>801</b>	<b>1,816</b>	<b>1,993</b>
<b>Estimate of overcrowded households in 2011 based on the bedroom standard (average)</b>	<b>1,098</b>		<b>709</b>		<b>1,904</b>	

<sup>26</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/5918/2171391.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/5918/2171391.pdf)

## Housing Condition and Disrepair

<sup>4.27</sup> The EHS also provides useful information about **housing disrepair**. The EHS headline report for 2013-14 identifies that private rented sector dwellings had the highest rate of disrepair: 7% compared with 4% of owner occupied dwellings and 3% of social sector dwellings.

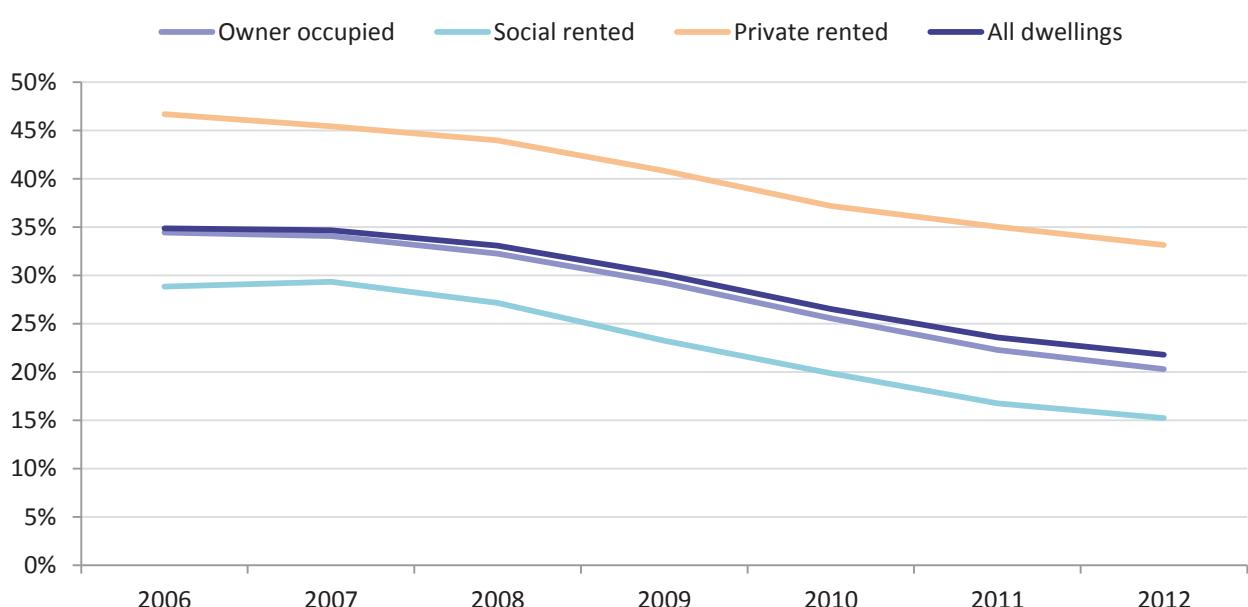
<sup>4.28</sup> The Decent Homes Standard provides a broad measure of **housing condition**. It was intended to be a minimum standard that all housing should meet and that to do so should be easy and affordable. It was determined that in order to meet the standard a dwelling must achieve all of the following:

- » Be above the legal minimum standard for housing (currently the Housing Health and Safety Rating System, HHSRS); and
- » Be in a reasonable state of repair; and
- » Have reasonably modern facilities (such as kitchens and bathrooms) and services; and
- » Provide a reasonable degree of thermal comfort (effective insulation and efficient heating).

<sup>4.29</sup> If a dwelling fails any one of these criteria, it is considered to be “non-decent”. A detailed definition of the criteria and their sub-categories are described in the ODPM guidance: “A Decent Home – The definition and guidance for implementation” June 2006.

<sup>4.30</sup> Figure 50 shows the national trends in non-decent homes by tenure. It is evident that conditions have improved year-on-year (in particular due to energy efficiency initiatives), however whilst social rented properties are more likely to comply with the standard, almost a third of the private rented sector (33.1%) remains currently non-decent. This is a trend that tends to be evident at a local level in most areas where there are concentrations of private rented housing, and there remains a need to improve the quality of housing provided for households living in the private rented sector.

**Figure 50: Trend in non-decent homes in England by tenure (Source: English House Condition Survey 2006 to 2007; English Housing Survey 2008 onwards)**



## Housing Register Data

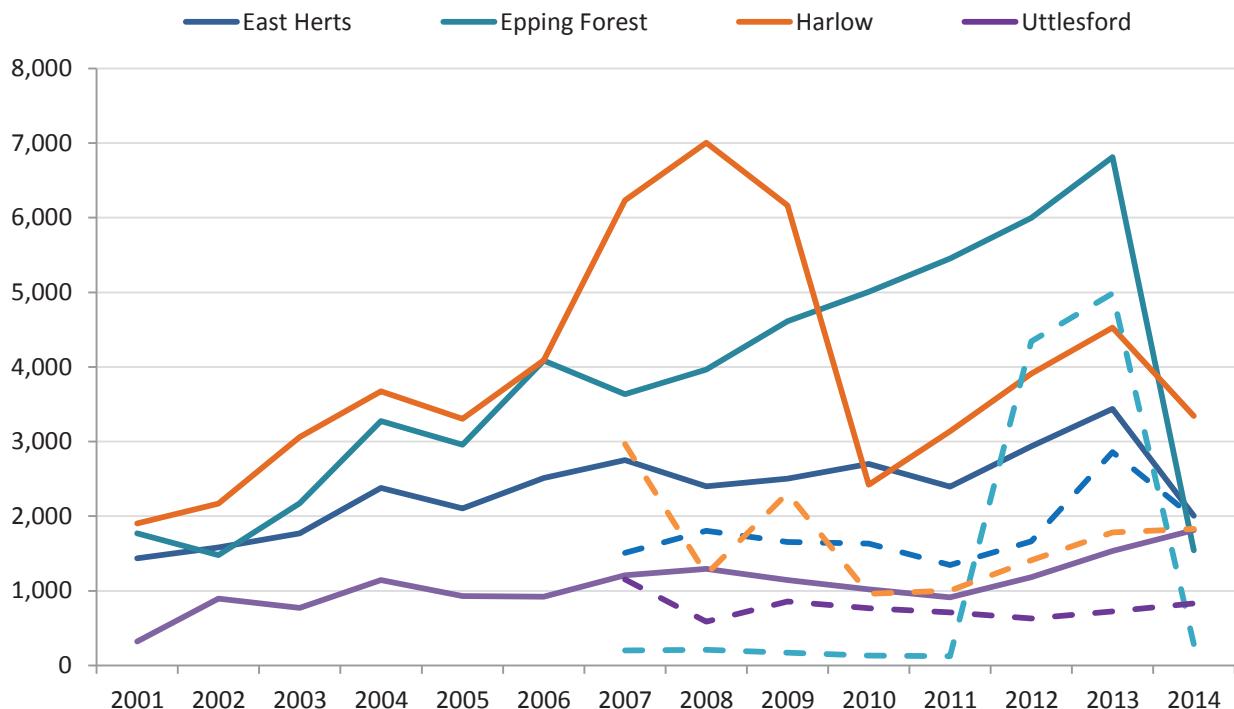
<sup>4.31</sup> The local authority **housing register** and **transfer lists** are managed through individual HomeChoice local Choice Based Lettings schemes managed by each of the four local authorities in West Essex and East Hertfordshire. Households apply for a move via the scheme and 'bid' for homes along with applicants from various sources, including homeless households, housing register and transfer applicants.

<sup>4.32</sup> Figure 51 shows the trend in households on the housing register over the period since 2001:

- » **East Hertfordshire** households on the housing register rose from 1,400 to 2,000 over the period 2001-14;
- » **Epping Forest** households on the housing register fell from 1,800 to 1,500 over the period 2001-14, but with much sharper rises in the interim period;
- » **Harlow**: household on the housing register rose from 1,900 to 3,300 over the period 2001-14; and
- » **Uttlesford**: household numbers on the housing register rose from 300 in 2001 to 1,800 in 2014.

<sup>4.33</sup> Overall, the trends show that the number of households registering for affordable housing has increased by around 60% over the last decade. Nevertheless, the criteria for joining the housing registers in all areas have recently changed as a result of policy changes following the Localism Act. Only people with a local connection now qualify for the housing register, and people with adequate financial resources (including owner occupiers) are no longer included – so the trends discussed above have to be understood in this context and number on the registers are falling.

**Figure 51: Number of households on LA housing registers 2001-14 (Note: Solid line shows total number of households; dotted line shows number of households in a reasonable preference category. Source: LAHS and HSSA returns to CLG)**



<sup>4.34</sup> Figure 51 also show the number recorded in a reasonable preference category since 2007. Reasonable preference categories are defined in the Housing Act 1996, which requires “reasonable preference” for housing to be given to people who are:

- » Legally homeless;
- » Living in unsatisfactory housing (as defined by the Housing Act 2004);
- » Need to move on medical/welfare grounds; or
- » Need to move to a particular area to avoid hardship.

<sup>4.35</sup> Figure 52 provides further detailed information for the last 2 years. The number of households in **reasonable preference categories** has also been subject to variation from year-to-year, although these have not always followed the trends in the overall number of households on the register. The number of households with a reasonable preference in 2014 was 4,930 which was less than half the figure in 2013 (10,351) reflecting recent revisions to the system as part of the Localism agenda.

**Figure 52: Number of households on the local authority housing register at 1<sup>st</sup> April (Source: LAHS returns to CLG. Note: “\*” denotes that the data was unavailable)**

	East Herts		Epping Forest		Harlow		Uttlesford		West Essex & East Herts	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Total households on the housing waiting list	3,438	2,005	6,811	1,544	4,527	3,344	1,536	1,813	16,312	8,706
<b>Total households in a reasonable preference category</b>	<b>2,859</b>	<b>1,980</b>	<b>4,984</b>	<b>286</b>	<b>1,782</b>	<b>1,831</b>	<b>726</b>	<b>833</b>	<b>10,351</b>	<b>4,930</b>
People currently living in temporary accommodation who have been accepted as being homeless (or threatened with homelessness)	14	10	35	0	*	77	17	15	*	102
Other people who are homeless within the meaning given in Part VII of the Housing Act (1996), regardless of whether there is a statutory duty to house them	14	23	203	0	107	*	58	73	382	*
People occupying insanitary or overcrowded housing or otherwise living in unsatisfactory housing conditions	977	554	0	0	1,165	655	168	572	2,310	1,781
People who need to move on medical or welfare grounds, including grounds relating to a disability	1,242	780	1,165	286	235	312	453	378	3,095	1,756
People who need to move to a particular locality in the district of the authority, where failure to meet that need would cause hardship (to themselves or to others)	52	34	0	0	*	0	30	8	*	42

<sup>4.36</sup> The number of people recorded by the housing register as homeless or owed a duty under the Housing Act appears to be broadly consistent with the local authority data about homelessness.

<sup>4.37</sup> Nevertheless, we previously estimated that there were around 3,711 overcrowded households in the West Essex and East Hertfordshire HMA, based on the bedroom standard (Figure 49) – but only 1,781 people were recorded by the housing registers in 2014 as currently “*occupying insanitary or overcrowded housing or otherwise living in unsatisfactory housing conditions*”. Therefore, there are likely to be many households who have not registered for affordable housing despite being overcrowded. This will partly reflect their affordability (for example, most owner occupiers would not qualify for rented affordable housing due to the equity in their current home) whilst others may only be temporarily overcrowded and will have sufficient space available once a concealed family is able to leave and establish an independent household.

<sup>4.38</sup> When considering the types of household to be considered in housing need, the PPG also identified “*households containing people with social or physical impairment or other specific needs living in unsuitable dwellings (e.g. accessed via steps) which cannot be made suitable in-situ*” and “*households containing people with particular social needs (e.g. escaping harassment) which cannot be resolved except through a move*”. It is only through the housing register that we are able to establish current estimates of need for these types of household, and not all would necessarily be counted within a reasonable preference category. Nevertheless, there were 1,756 people registered “*who need to move on medical or welfare grounds, including grounds relating to a disability*” and a further 42 “*who need to move to a particular locality in the district of the authority, where failure to meet that need would cause hardship (to themselves or to others)*”.

## Households Unable to Afford their Housing Costs

<sup>4.39</sup> The PPG emphasises in a number of paragraphs that affordable housing need should only include those households that are unable to afford their housing costs:

*Plan makers ... will need to estimate the number of households and projected households who lack their own housing or live in unsuitable housing and who cannot afford to meet their housing needs in the market (ID 2a-022, emphasis added)*

*Plan makers should establish unmet (gross) need for affordable housing by assessing past trends and recording current estimates of ... those that cannot afford their own homes. Care should be taken to avoid double-counting ... and to include only those households who cannot afford to access suitable housing in the market (ID 2a-024, emphasis added)*

*Projections of affordable housing need will need to take into account new household formation, the proportion of newly forming households unable to buy or rent in the market area (ID 2a-025, emphasis added)*

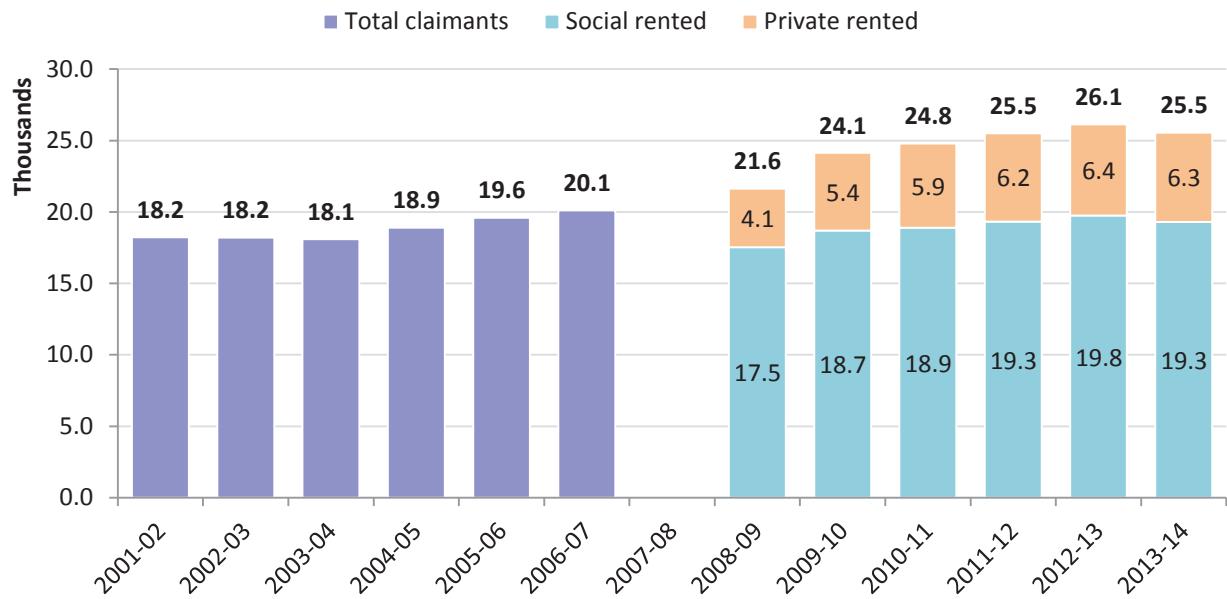
Planning Practice Guidance (March 2014)

<sup>4.40</sup> Housing benefit data from the Department for Work and Pensions (DWP) provides reliable, consistent and detailed information about the number of families that are unable to afford their housing costs in each local authority area. Data was published annually from 2001-02 to 2006-07 which identified the total number of claimants in receipt of housing benefit, and more detailed information has been available since 2008-09 which includes more detailed information about claimants and the tenure of their home.

## Housing Benefit Claimants in West Essex & East Hertfordshire HMA

<sup>4.41</sup> Figure 53 shows the trend in the number of housing benefit claimants in West Essex & East Hertfordshire HMA.

Figure 53: Number of claimants in receipt of housing benefit in West Essex & East Hertfordshire by tenure (Source: DWP)



<sup>4.42</sup> The number of housing benefit claimants in West Essex & East Hertfordshire HMA increased from 18,227 to 20,100 over the period 2001-02 to 2006-07, equivalent to an average annual growth of around 375 families. The number of claimants reached 26,134 in 2012-13, therefore a much faster growth of around 1,000 families each year on average over the period from 2006-07. The largest growth was experienced between 2008-09 and 2009-10 when the number of claimants increased by about 2,500 families.

<sup>4.43</sup> Considering the information on tenure, it is evident that the number of claimants in social rented housing increased from around 17,500 to 19,800 over the period 2008-09 to 2012-13 – an increase of 2,200 families (13%); however over the same period the number of claimants in private rented housing increased from 4,100 to 6,400 families – an increase of 2,300 families (55%).

<sup>4.44</sup> This increase in housing benefit claimants, in particular those living in private rented housing, coincides with the increases observed on the housing register in West Essex and East Hertfordshire. Indeed, it is likely that many households applying for housing benefit would have also registered their interest in affordable housing. Nevertheless, many of them will have secured appropriate housing in the private rented sector which housing benefit enabled them to afford; so not all will necessarily need affordable housing, though many may prefer this type of housing if it were available.

<sup>4.45</sup> The information published by DWP provides the detailed information needed for understanding the number of households unable to afford their housing costs. Of course, there will be other households occupying affordable housing who do not need housing benefit to pay discounted social or affordable rents but who would not be able to afford market rents. Similarly there will be others who are not claiming housing benefit support as they have stayed living with parents or other family or friends and not formed independent households. However, providing that appropriate adjustments are made to take account of these exceptions, **the DWP data provides the most reliable basis for establishing the number of households unable to afford their housing costs and estimating affordable housing need.**

## Establishing Affordable Housing Need

4.46 In establishing the Objectively Assessed Need for affordable housing, it is necessary to draw together the full range of information that has already been considered in this report.

4.47 PPG sets out the framework for this calculation, considering both the current unmet housing need and the projected future housing need in the context of the existing affordable housing stock:

### ***How should affordable housing need be calculated?***

*This calculation involves adding together the current unmet housing need and the projected future housing need and then subtracting this from the current supply of affordable housing stock.*

**Planning Practice Guidance (March 2014), ID 2a-022**

## Current Unmet Need for Affordable Housing

4.48 In terms of establishing the **current** unmet need for affordable housing, the PPG draws attention again to those types of households considered to be in housing need; whilst also emphasising the need to avoid double-counting and including only those households unable to afford their own housing.

### ***How should the current unmet gross need for affordable housing be calculated?***

*Plan makers should establish unmet (gross) need for affordable housing by assessing past trends and recording current estimates of:*

- » *the number of homeless households;*
- » *the number of those in priority need who are currently housed in temporary accommodation;*
- » *the number of households in overcrowded housing;*
- » *the number of concealed households;*
- » *the number of existing affordable housing tenants in need (i.e. householders currently housed in unsuitable dwellings);*
- » *the number of households from other tenures in need and those that cannot afford their own homes.*

*Care should be taken to avoid double-counting, which may be brought about with the same households being identified on more than one transfer list, and to include only those households who cannot afford to access suitable housing in the market.*

**Planning Practice Guidance (March 2014), ID 2a-024**

4.49 Earlier sections of this chapter set out the past trends and current estimates for relevant households based on the data sources identified by PPG (based on a reference point of March 2011). Although this evidence does not provide the basis upon which to establish whether or not households can afford to access suitable housing, we believe that it is reasonable to assume that certain households will be unable to afford housing, otherwise they would have found a more suitable home.

## Establishing the Current Unmet Need for Affordable Housing

<sup>4.50</sup> Households assumed to be unable to afford housing include:

- » All households that are currently **homeless**;
- » All those currently housed in **temporary accommodation**; and
- » People in a **reasonable preference category** on the housing register, where their needs have not already been counted.

<sup>4.51</sup> Given this context, our analysis counts the needs of all of these households when establishing the Objectively Assessed Need for affordable housing at a base date of 2011.

<sup>4.52</sup> Only around 40% of households currently living in **overcrowded** housing (based on the bedroom standard) are registered in a reasonable preference category, which will partly reflect their affordability. It is likely that most owner occupiers would not qualify for rented affordable housing (due to the equity in their current home); but it is reasonable to assume that households living in overcrowded rented housing are unlikely to be able to afford housing, otherwise they would have found a more suitable home.

<sup>4.53</sup> Our analysis counts the needs of all households living in overcrowded rented housing when establishing the OAN for affordable housing (which could marginally overstate the affordable housing need) but it does not count the needs of owner occupiers living in overcrowded housing (which can be offset against any previous over-counting). Unlike other low-income households, students are not eligible for welfare payments (such as housing benefit) and would not be allocated affordable housing; therefore student households are also excluded from the assessment of affordable housing need. Of course, the needs of student households are properly included within the assessment of overall housing needs.

<sup>4.54</sup> The analysis does not count people occupying insanitary housing or otherwise living in unsatisfactory housing conditions as a need for additional affordable housing. These dwellings would be unsuitable for any household, and enabling one household to move out would simply allow another to move in – so this would not reduce the overall number of households in housing need. This housing need should be resolved by improving the existing housing stock, and the Councils have a range of statutory enforcement powers to improve housing conditions.

<sup>4.55</sup> When considering **concealed families**, it is important to recognise that many do not want separate housing. Concealed families with older family representatives will often be living with another family, perhaps for cultural reasons or in order to receive help or support due to poor health. However, those with younger family representatives are more likely to experience affordability difficulties or other constraints (although not all will want to live independently).

<sup>4.56</sup> **Concealed families in a reasonable preference category on the housing register will be counted regardless of age, but our analysis also considers the additional growth of concealed families with family representatives aged under 55** (even those not registered on the housing register) and assumes that all such households are unlikely to be able to afford housing (otherwise they would have found a more suitable home).

<sup>4.57</sup> The needs of these households are counted when establishing the OAN for affordable housing and **they also add to the OAN for overall housing, as concealed families are not counted by the CLG household projections.**

<sup>4.58</sup> Figure 54 sets out the assessment of current affordable housing need for the West Essex & East Hertfordshire HMA.

**Figure 54: Assessing current unmet gross need for affordable housing for West Essex and East Hertfordshire (Source: ORS Housing Model)**

	Affordable Housing		Increase in Overall Housing Need
	Gross Need	Supply	
<b>Homeless households in priority need (see Figure 43)</b>			
Currently in temporary accommodation in communal establishments (Bed and breakfast or Hostels)	63		63
Currently in temporary accommodation in market housing (Private sector leased or Private landlord)	79		
Currently in temporary accommodation in affordable housing (Local Authority or RSL stock)	87	87	
Households accepted as homeless but without temporary accommodation provided	3		3
<b>Concealed households (see Figure 44)</b>			
Growth in concealed families with family representatives aged under 55	575		575
<b>Overcrowding based on the bedroom standard (see Figure 49)</b>			
Households living in overcrowded private rented housing	709		
Households living in overcrowded social rented housing	1,904	1,904	
<b>Other households living in unsuitable housing that cannot afford their own home (see Figure 52)</b>			
People who need to move on medical or welfare grounds, including grounds relating to a disability	1,756	112	
People who need to move to a particular locality in the district of the authority, where failure to meet that need would cause hardship (to themselves or to others)	42	3	
<b>TOTAL</b>	<b>5,218</b>	<b>2,106</b>	<b>641</b>

<sup>4.59</sup> Based on a detailed analysis of the past trends and current estimates of households considered to be in housing need, our analysis has concluded that there are **5,218 households currently in affordable housing need in the West Essex and East Hertfordshire HMA who are unable to afford their own housing**. This assessment is based on the criteria set out in the PPG and avoids double-counting (as far as possible).

<sup>4.60</sup> Of these households, 2,106 currently occupy affordable housing that does not meet the households' current needs, mainly due to overcrowding. Providing suitable housing for these households will enable them to vacate their existing affordable housing, which can subsequently be allocated to another household in need of affordable housing. **There is, therefore, a net need from 3,112 households** (5,218 less 2,106 = 3,112) **who currently need affordable housing and do not currently occupy affordable housing in the West Essex and East Hertfordshire HMA** (although a higher number of new homes may be needed to resolve all of the identified overcrowding).

<sup>4.61</sup> This number includes 641 households that would not be counted by the household projections. **There is, therefore, a need to increase the housing need based on demographic projections to accommodate these additional households.**

<sup>4.62</sup> Providing the net additional affordable housing needed will **release back into the market (mainly in the private rented sector) the dwellings occupied by a total of 2,471 households** (5,218 less 2,106 + 641) **that are currently in affordable housing need who are unable to afford their own housing.**

## Projected Future Affordable Housing Need

4.63 In terms of establishing **future** projections of affordable housing need, the PPG draws attention to new household formation (in particular the proportion of newly forming households unable to buy or rent in the market area) as well as the number of existing households falling into need.

### **How should the number of newly arising households likely to be in housing need be calculated?**

*Projections of affordable housing need will need to take into account new household formation, the proportion of newly forming households unable to buy or rent in the market area, and an estimation of the number of existing households falling into need. This process should identify the minimum household income required to access lower quartile (entry level) market housing (plan makers should use current cost in this process, but may wish to factor in changes in house prices and wages). It should then assess what proportion of newly-forming households will be unable to access market housing.*

**Planning Practice Guidance (March 2014), ID 2a-025**

4.64 The ORS Housing Mix Model considers the need for market and affordable housing on a longer-term basis that is consistent with household projections and Objectively Assessed Need. The Model provides robust and credible evidence about the required mix of housing over the full planning period, and recognises how key housing market trends and drivers will impact on the appropriate housing mix.

4.65 The Model uses a wide range of secondary data sources to build on existing household projections and profile how the housing stock will need to change in order to accommodate the projected future population. A range of assumptions can be varied to enable effective sensitivity testing to be undertaken. In particular, the Model has been designed to help understand the key issues and provide insight into how different assumptions will impact on the required mix of housing over future planning periods.

4.66 The Housing Mix Model considers the future number and type of households based on the household projections alongside the existing dwelling stock. Whilst the Model considers the current unmet need for affordable housing (including the needs of homeless households, those in temporary accommodation, overcrowded households, concealed households, and established households in unsuitable dwellings or that cannot afford their own homes), it also provides a robust framework for projecting the future need for affordable housing.

## Households Unable to Afford their Housing Costs

4.67 PPG identifies that “*projections of affordable housing need will need to take into account new household formation, the proportion of newly forming households unable to buy or rent in the market area, and an estimation of the number of existing households falling into need*” (paragraph 25); **however, the Model recognises that the proportion of households unable to buy or rent in the market area will not be the same for all types of household, and that this will also differ between age cohorts.** Therefore, the appropriate proportion is determined separately for each household type and age group.

4.68 The affordability percentages in Figure 55 are calculated using data published by DWP about housing benefit claimants alongside detailed information from the 2011 Census. There are several **assumptions** underpinning the Model:

- » Where households are claiming housing benefit, it is assumed that they cannot afford market housing; and the Model also assumes that households occupying affordable housing will continue to do so;
- » Households occupying owner occupied housing and those renting privately who aren't eligible for housing benefit are assumed to be able to afford market housing; so the Model only allocates affordable housing to those established households that the Government deems eligible for housing support through the welfare system; and
- » The Model separately considers the needs of concealed families and overcrowded households (both in market housing and affordable housing) which can contribute additional affordable housing need.

**Figure 55: Assessing affordability for West Essex and East Hertfordshire by household type and age (Source: ORS Housing Model based on Census 2011 and DWP)**

	Under 25	25-34	35-44	45-54	55-64	65+
<b>EAST HERTFORDSHIRE:</b>						
<b>Percentage unable to afford market housing</b>						
Single person household	33%	12%	17%	20%	21%	26%
Couple family with no dependent children	12%	4%	5%	8%	7%	12%
Couple family with 1 or more dependent children	71%	26%	10%	6%	9%	9%
Lone parent family with 1 or more dependent children	89%	84%	47%	30%	33%	49%
Other household type	17%	12%	24%	20%	16%	12%
<b>EPPING FOREST:</b>						
<b>Percentage unable to afford market housing</b>						
Single person household	35%	16%	24%	26%	27%	28%
Couple family with no dependent children	10%	4%	7%	9%	7%	10%
Couple family with 1 or more dependent children	60%	26%	12%	9%	11%	22%
Lone parent family with 1 or more dependent children	90%	78%	55%	39%	29%	57%
Other household type	22%	25%	24%	20%	14%	11%
<b>HARLOW:</b>						
<b>Percentage unable to afford market housing</b>						
Single person household	60%	26%	38%	48%	45%	47%
Couple family with no dependent children	27%	8%	15%	20%	20%	26%
Couple family with 1 or more dependent children	83%	41%	25%	22%	23%	34%
Lone parent family with 1 or more dependent children	96%	86%	65%	57%	51%	90%
Other household type	42%	41%	33%	38%	33%	30%
<b>UTTLESFORD:</b>						
<b>Percentage unable to afford market housing</b>						
Single person household	22%	11%	17%	19%	25%	31%
Couple family with no dependent children	14%	5%	6%	7%	7%	12%
Couple family with 1 or more dependent children	46%	21%	9%	6%	6%	16%
Lone parent family with 1 or more dependent children	92%	75%	50%	39%	27%	29%
Other household type	29%	21%	21%	16%	17%	13%

## Components of Projected Household Growth

<sup>4.69</sup> PPG identifies that the CLG household projections “should provide the starting point estimate for overall housing need” (paragraph 15) and that “the 2012-2037 Household Projections ... are the most up-to-date estimate of future household growth” (paragraph 16). **However, when considering the number of newly arising households likely to be in affordable housing need**, the PPG recommends a “gross annual estimate” (paragraph 25) suggesting that “the total need for affordable housing should be converted into annual flows” (paragraph 29).

<sup>4.70</sup> The demographic projections developed to inform the overall Objectively Assessed Need include annual figures for household growth, and these can therefore be considered on a year-by-year basis as suggested by the Guidance; but given that elements of the modelling are fundamentally based on 5-year age cohorts, it is appropriate to annualise the data using 5-year periods.

<sup>4.71</sup> Figure 56 shows the individual components of annual household growth over a 25 year period, with the first period containing 5 years.

**Figure 56: Components of average annual household growth for West Essex and East Hertfordshire by 5-year projection period**  
 (Source: ORS Housing Model. Note: Figures may not sum due to rounding)

	Annual average for 5-year periods					Annual average 2011-33
	2011-16	2016-21	2021-26	2026-31	2031-36	
New household formation	3,521	3,493	3,453	3,553	3,706	3,523
Household dissolution following death	2,611	2,614	2,700	2,871	3,119	2,737
<b>Net household growth within the HMA</b>	<b>+910</b>	<b>+880</b>	<b>+752</b>	<b>+683</b>	<b>+587</b>	<b>+786</b>
Household migration in	8,830	8,999	9,226	9,514	9,840	9,206
Household migration out	7,986	8,201	8,361	8,523	8,783	8,315
<b>Net household migration</b>	<b>+844</b>	<b>+798</b>	<b>+866</b>	<b>+991</b>	<b>+1,056</b>	<b>+891</b>
<b>Total household growth</b>	<b>+1,754</b>	<b>+1,677</b>	<b>+1,618</b>	<b>+1,673</b>	<b>+1,643</b>	<b>+1,677</b>

<sup>4.72</sup> Over the initial 5-year period (2011-16) the model shows that:

- » There are projected to be 3,521 new household formations each year; but this is offset against 2,611 household dissolutions following death – so there is an **average net household growth of 910 households** locally in West Essex and East Hertfordshire HMA;
- » There are also projected to be 8,830 households migrating to West Essex and East Hertfordshire HMA offset against 7,986 households migrating away from the area – which yields an **increase of 845 households attributable to net migration**;
- » The total household growth is therefore **projected to be 1,754** (910 plus 844 = 1,754) **households each year** over the initial 5-year period of the projection.

<sup>4.73</sup> During the course of the full projection period, net household growth within West Essex and East Hertfordshire HMA is projected to be higher in the early part of the projection period than in the later years. This is despite gross household formation and net in-migration being projected to increase, due to a larger number of households projected to dissolve over the projection period.

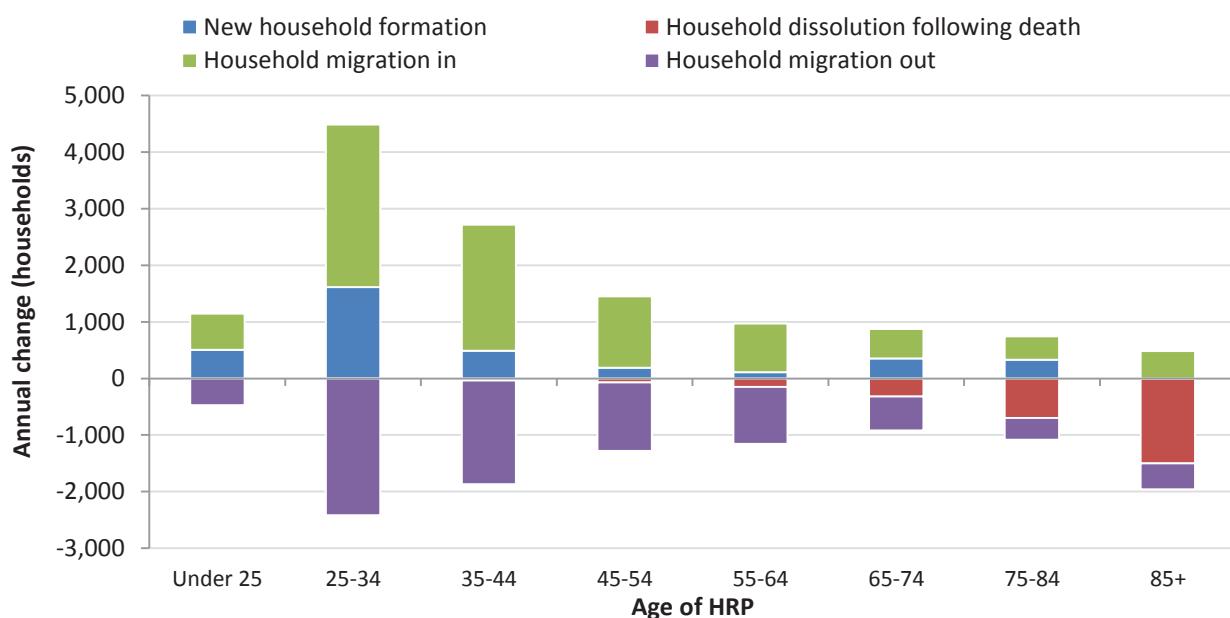
<sup>4.74</sup> Over the 22-year period 2011-33, total **household growth averages 1,677 households** each year with an average annual net growth of **786 households** within the HMA and a net gain of **891 households** based on migration.

## Change in Household Numbers by Age Cohort

4.75 To establish the **proportion of newly forming households unable to buy or rent** in the market area, it is necessary to consider the characteristics of the 3,521 new households projected to form in West Essex and East Hertfordshire each year over the period 2011-16 (Figure 56) alongside the detailed information about household affordability (Figure 55).

4.76 Figure 57 shows the age structure of each of the **components of household change**. Note that this analysis is based on changes within each age cohort, so comparisons are based on households born in the same year and relate to their age at the end of the period. Therefore all new households are properly counted, rather than only counting the increase in the number of households in each age group.

**Figure 57: Annual change in household numbers in each age cohort for West Essex and East Hertfordshire by age of HRP**  
 (Source: ORS Housing Model)



4.77 Together with information on household type, this provides a framework for the Model to establish the proportion of households who are unable to afford their housing costs.

4.78 The Model identifies that 27% of all newly forming households are unable to afford their housing costs, which represents 939 households each year (Figure 58). The Model shows that a lower proportion of households migrating to the area are unable to afford (22%), but this still represents 1,975 households moving in to the area. Some of these households will be moving to social rented housing, but many others will be renting housing in the private rented sector with housing benefit support. **Together, there are 2,914 new households each year who are unable to afford their housing costs.**

**Figure 58: Affordability of new households for West Essex and East Hertfordshire over the initial 5-year period 2011-16** (Source: ORS Housing Model)

	All households (annual average)	Households able to afford housing costs	Households unable to afford housing costs	% unable to afford housing costs
Newly forming households	3,521	2,582	939	27%
Households migrating in to the area	8,830	6,855	1,975	22%
<b>All new households</b>	<b>12,351</b>	<b>9,437</b>	<b>2,914</b>	<b>24%</b>

4.79 Having established the need for affordable housing and the dwellings likely to be vacated, the PPG suggests that the total net need can be calculated by subtracting "*total available stock from total gross need*" (paragraph 29), **but this over-simplifies what is a very complex system.**

4.80 It is essential to recognise that some households who are unable to buy or rent in the market area when they first form may become able to afford their housing costs at a later date – for example:

- » Two newly formed single person households may both be unable to afford housing, but together they might create a couple household that can afford suitable housing;
- » Similarly, not all households that are unable to afford housing are allocated affordable housing;
- » Some will choose to move to another housing market area and will therefore no longer require affordable housing.

4.81 **In these cases, and others, the gross need will need adjusting.** The Model recognises these complexities, and through considering the need for affordable housing as part of a whole market analysis, it maintains consistency with the household projections and avoids any double counting.

4.82 Considering those components of household change which reduce the number of households resident in the area, the Model identifies **2,611 households are likely to dissolve** following the death of all household members. Many of these households will own their homes outright; however 24% are unable to afford market housing: most living in affordable housing.

4.83 When considering **households moving away** from the West Essex and East Hertfordshire HMA, the Model identifies that an average of 7,986 households will leave the area each year. Some will be leaving social rented housing, which will become available for another household needing affordable housing. Whilst others will not vacate a social rented property, those unable to afford their housing costs will have been counted in the estimate of current need for affordable housing or at the time they were a new household (either newly forming or migrating in to the area). Whilst some of these households might prefer to stay in the area if housing costs were less expensive or if more affordable housing was available, given that these households are likely to move from the HMA it is appropriate that their needs are discounted.

4.84 Figure 59 summarises the total household growth. This includes the 2,914 new households on average each year who are unable to afford their housing costs, but offsets this against the 2,425 households who will either vacate existing affordable housing or who will no longer constitute a need for affordable housing in the West Essex and East Hertfordshire HMA (as they have moved to live elsewhere).

**Figure 59: Components of average annual household growth for West Essex and East Hertfordshire 2011-16 (Source: ORS Housing Model)**

	All households (annual average)	Households able to afford housing costs	Households unable to afford housing costs	% unable to afford housing costs
Newly forming households	3,521	2,582	939	27%
Households migrating in to the area	8,830	6,855	1,975	22%
<b>All new households</b>	<b>12,351</b>	<b>9,437</b>	<b>2,914</b>	<b>24%</b>
Household dissolutions following death	2,611	1,973	638	24%
Households migrating out of the area	7,986	6,199	1,787	22%
<b>All households no longer present</b>	<b>10,597</b>	<b>8,172</b>	<b>2,425</b>	<b>23%</b>
<b>Average annual household growth 2011-16</b>	<b>1,754</b>	<b>1,265</b>	<b>489</b>	<b>28%</b>

<sup>4.85</sup> Overall, the Model projects that household growth will yield a net increase of 489 households on average each year (over the period 2011-16) who are unable to afford their housing, which represents 28% of the 1,754 total household growth for this period.

### Projecting Future Needs of Existing Households

<sup>4.86</sup> PPG also identifies that in addition to the needs of new households, it is also important to estimate “*the number of existing households falling into need*” (ID 2a-025). Whilst established households that continue to live in the West Essex and East Hertfordshire HMA will not contribute to household growth, changes in household circumstances (such as separating from a partner or the birth of a child) can lead to households who were previously able to afford housing falling into need. The needs of these households are counted by the Model, and it is **estimated that an average of 634 established households fall into need each year** in the West Essex and East Hertfordshire HMA. This represents a rate of 3.6 per 1,000 household falling in to need each year.

<sup>4.87</sup> Finally, whilst the PPG recognises that established households’ circumstances can deteriorate such that they fall into need, it is also important to recognise that **established households’ circumstances can improve**. For example:

- » When two people living as single person households join together to form a couple, pooling their resources may enable them to jointly afford their housing costs (even if neither could afford separately). Figure 55 showed that 33% of single person households aged under 25 in East Hertfordshire could not afford housing, compared to 12% of couples of the same age; and for those aged 25 to 34, the proportions were 12% and 4% respectively.
- » Households also tend to be more likely to afford housing as they get older, so young households forming in the early years of the projection may be able to afford later in the projection period. Figure 55 showed that 26% of couple families with dependent children aged 25 to 34 in Epping Forest could not afford housing, compared to 12% of such households aged 35 to 44.

<sup>4.88</sup> Given this context, it is clear that **we must also recognise these improved circumstances which can reduce the need for affordable housing over time**, as households that were previously counted no longer need financial support. The Model identifies that the circumstances of **726 households improve each year** such that they become able to afford their housing costs despite previously being unable to afford. This represents a rate of 3.9 per 1,000 household climbing out of need each year.

<sup>4.89</sup> Therefore, considering the overall changing needs of existing households, **there is an average net reduction of 92 households** (634 less 726 = -92) **needing affordable housing each year**.

## Projecting Future Affordable Housing Need (average annual estimate)

4.90 Figure 60 provides a comprehensive summary of all of the components of household change that contribute to the projected level of affordable housing need. More detail on each is provided earlier in this Chapter.

**Figure 60: Components of future affordable housing need for West Essex and East Hertfordshire 2011-16 (Source: ORS Housing Model)**

	All households (annual average)	Households able to afford housing costs	Households unable to afford housing costs	% unable to afford housing costs
Newly forming households	3,521	2,582	939	27%
Households migrating in to the area	8,830	6,855	1,975	22%
<b>All new households</b>	<b>12,351</b>	<b>9,437</b>	<b>2,914</b>	<b>24%</b>
Household dissolutions following death	2,611	1,973	638	24%
Households migrating out of the area	7,986	6,199	1,787	22%
<b>All households no longer present</b>	<b>10,597</b>	<b>8,172</b>	<b>2,425</b>	<b>23%</b>
<b>Average annual household growth 2011-16</b>	<b>+1,754</b>	<b>+1,265</b>	<b>+489</b>	<b>28%</b>
Existing households falling into need	-	-634	+634	100%
Existing households climbing out of need	-	+726	-726	0%
<b>Change in existing households</b>	<b>-</b>	<b>92</b>	<b>-92</b>	<b>-</b>
<b>Average annual future need for market and affordable housing 2011-16</b>	<b>+1,754</b>	<b>+1,357</b>	<b>+397</b>	<b>23%</b>

4.91 Overall, there is a projected need from **2,914 new households who are unable to afford their housing costs** (939 newly forming households and 1,975 households migrating to the area) each year; however, **2,425 households will either vacate existing affordable housing or will no longer need affordable housing** in the West Essex and East Hertfordshire HMA (as they have moved to live elsewhere) **thereby reducing the new need to a net total of 489 households**.

4.92 Considering the needs of existing households, there are 634 households expected to fall into need each year (a rate of 3.6 per 1000 households) but this is offset against 726 households whose circumstances are projected to improve. There is, therefore, an **average net reduction of 92 existing households that need affordable housing each year**.

4.93 Based on the needs of new households and existing households, there is a **projected increase of 397 households each year on average for the initial period 2011-16 who will need affordable housing** (489 less 92 = 397).

4.94 Using the approach outlined above for the initial 5-year period of the projection, the Model also considers the need for affordable housing over the 22-year period 2011-33. The Model identifies that **the number of households in need of affordable housing will increase by 13,291 households over the period 2011-33**, equivalent to an annual average of 604 households per year. This represents 35.1% of the total household growth projected based on demographic trends.

## Assessing the Overall Need for Affordable Housing

<sup>4.95</sup> Figure 61 brings together the information on assessing the unmet need for affordable housing in 2011, and the future affordable housing need arising over the 22-year period 2011-33.

**Figure 61: Assessing total need for market and affordable housing in West Essex and East Hertfordshire (Source: ORS Housing Model)**

	Housing Need (households)		Overall Housing Need
	Market housing	Affordable housing	
<b>Unmet need for affordable housing in 2011 (see Figure 54)</b>			
Total unmet need for affordable housing	-	5,218	5,218
Supply of housing vacated	2,381	2,106	4,487
<b>Overall impact of current affordable housing need</b>	<b>-2,381</b>	<b>+3,112</b>	<b>+641</b>
<b>Projected future housing need 2011-33</b>			
Newly forming households	55,927	21,584	77,511
Household dissolutions following death	45,508	14,709	60,217
<b>Net household growth within West Essex and East Hertfordshire HMA</b>	<b>10,419</b>	<b>6,874</b>	<b>17,293</b>
Impact of existing households falling into need	-15,426	15,426	-
Impact of existing households climbing out of need	16,899	-16,899	-
Impact of households migrating to/from the area	14,828	4,778	19,606
<b>Future need for market and affordable housing 2011-33</b>	<b>26,720</b>	<b>10,179</b>	<b>36,899</b>
<b>Total need for market and affordable housing</b>			
Projected impact of affordable housing need in 2011	-2,381	3,112	641
Future need for market and affordable housing 2011-33	26,720	10,179	36,899
<b>Total need for market and affordable housing</b>	<b>24,339</b>	<b>13,291</b>	<b>37,540</b>
Average annual need for housing	1,106	604	1,706
<b>Proportion of need for market and affordable housing</b>	<b>64.8%</b>	<b>35.2%</b>	<b>100.0%</b>

<sup>4.96</sup> Figure 54 estimated there to be **5,218 households in need of affordable housing in 2011**. However, as 2,106 of these already occupied an affordable home, our previous conclusion was therefore a net need from 3,112 households (5,218 less 2,106 = 3,112) who need affordable housing and do not currently occupy affordable housing in the West Essex and East Hertfordshire HMA.

<sup>4.97</sup> The 22-year projection period 2011-33 then adopts the approach that was previously outlined for the initial 5-year period of the projection. The Model identifies that **the number of households in need of affordable housing will increase by 10,179 households over the period 2011-33**, alongside an increase of 26,720 households able to afford market housing.

<sup>4.98</sup> Overall, there will be a **need to provide additional affordable housing for 13,291 households** over the period 2011-33. This is equivalent to an average of **604 households per year**.

<sup>4.99</sup> Any losses from the current stock (such as demolition or clearance, or sales through Right to Buy) would increase the number of affordable dwellings needed by an equivalent amount.

## Need by Local Authority Area

<sup>4.100</sup> Figure 62 sets out the current unmet need for affordable housing and projected future affordable housing need for the 22-year period 2011-33 for each of the four local authority areas.

**Figure 62: Assessing affordable housing need for West Essex and East Hertfordshire by local authority (Source: ORS Housing Model)**

	Affordable Housing Need (households)				
	East Herts	Epping Forest	Harlow	Uttlesford	TOTAL
<b>Unmet need for affordable housing in 2011</b>					
Total unmet need for affordable housing	1,632	1,171	1,597	818	5,218
Supply of housing vacated	471	544	849	242	2,106
<b>Overall impact of current affordable housing need</b>	<b>1,161</b>	<b>627</b>	<b>748</b>	<b>576</b>	<b>3,112</b>
Future need for affordable housing 2011-33	2,967	2,525	2,541	2,148	10,179
<b>Total need for affordable housing 2011-33</b>	<b>4,128</b>	<b>3,152</b>	<b>3,289</b>	<b>2,724</b>	<b>13,291</b>
Percentage of overall housing need	31%	34%	67%	27%	35%

<sup>4.101</sup> The highest level of affordable housing need is in East Hertfordshire (4,128 households) compared to 3,152 in Epping Forest, 3,289 in Harlow and 2,724 in Uttlesford. However, whilst the proportion of affordable housing need is 34% in Epping Forest, 31% in East Hertfordshire and 27% in Uttlesford, the percentage in Harlow is markedly higher at 67%.

<sup>4.102</sup> Figure 63 sets out the housing mix in terms of property type, size and affordable housing tenure in each of the local authority areas.

**Figure 63: Assessing affordable housing mix for West Essex and East Hertfordshire by local authority (Source: ORS Housing Model. Note: Figures may not sum due to rounding)**

		East Herts	Epping Forest	Harlow	Uttlesford	TOTAL
<b>AFFORDABLE RENT</b>						
Flat	1 bedroom	720	520	90	290	1,600
	2+ bedrooms	400	350	460	230	1,400
House	2 bedrooms	1,020	550	790	580	2,900
	3 bedrooms	1,130	950	1,200	720	4,000
<b>Sub-total</b>		<b>3,500</b>	<b>2,600</b>	<b>2,900</b>	<b>2,000</b>	<b>11,000</b>
<b>% of affordable housing</b>		<b>84%</b>	<b>82%</b>	<b>85%</b>	<b>72%</b>	<b>81%</b>
<b>INTERMEDIATE AFFORDABLE HOUSING</b>						
Flat	1 bedroom	100	50	10	30	200
	2+ bedrooms	70	100	90	100	400
House	2 bedrooms	190	160	150	270	800
	3 bedrooms	280	230	200	340	1,000
<b>Sub-total</b>		<b>700</b>	<b>600</b>	<b>500</b>	<b>800</b>	<b>2,600</b>
<b>% of affordable housing</b>		<b>16%</b>	<b>18%</b>	<b>15%</b>	<b>28%</b>	<b>19%</b>
<b>TOTAL DWELLINGS</b>		<b>4,200</b>	<b>3,200</b>	<b>3,400</b>	<b>2,800</b>	<b>13,600</b>

<sup>4.103</sup> Across the West Essex and East Hertfordshire HMA, around a quarter of the affordable housing need is a need for flats and three quarters for houses (27% 2-bedroom and 37% 3-bedroom). The balance between flats and houses suggested by the Model is based on the future mix of households (by type and age) and housing currently occupied by each of these groups in each area. Therefore, it may be necessary to take a judgement on this balance where the Model identifies a particularly high (or particularly low) proportion of flats (or houses).

<sup>4.104</sup> Whilst the need for affordable housing with four or more bedrooms is less than 10% of the overall need, this still represents a need for over 1,000 large affordable homes that need to be provided over the 22-year period 2011-33. Much of this need will be from existing households living in overcrowded accommodation.

<sup>4.105</sup> When considering the need by affordable housing tenure, just over four-fifths (81%) of households in need of affordable housing need rented affordable housing (either social rent or affordable rent) and many would need housing benefit to pay their rent. Nevertheless, 19% could afford intermediate affordable housing products, such as shared equity or other forms of low cost home ownership. Marginally higher proportions of need for 2-3 bedroom properties (20-21%) is for intermediate affordable housing, but very few households that need 1 bedroom flats and houses with 4 or more bedrooms could afford the cost of intermediate affordable housing (11% and 13% respectively).

### Future Policy on Housing Benefit in the Private Rented Sector

<sup>4.106</sup> The Model also recognises **the importance of housing benefit and the role of the private rented sector**. The Model assumes that the level of housing benefit support provided to households living in the private rented sector will remain constant; however this is a national policy decision which is not in the control of the Councils. The Summer 2015 Budget introduced a four-year freeze to local housing allowance rates together with changes to the benefit cap, however this typically affects the amount of housing benefit paid rather than the number of households (although there were eligibility changes for those aged under 21).

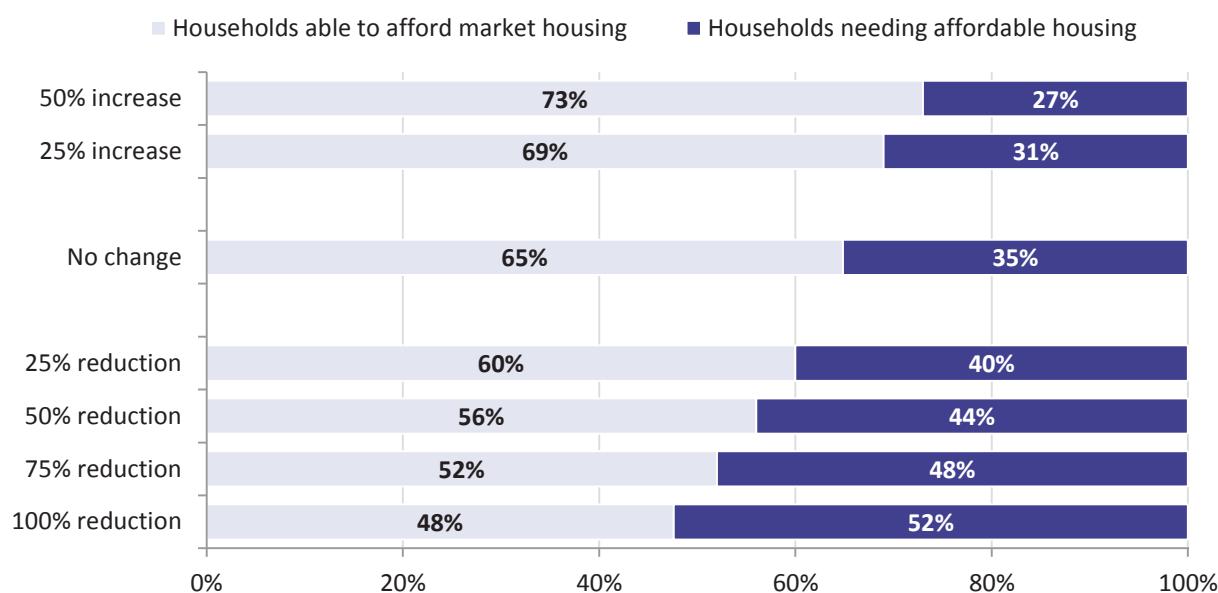
<sup>4.107</sup> It is important to note that private rented housing (with or without housing benefit) does not meet the definitions of affordable housing. However, many tenants that rent from a private landlord can only afford their housing costs as they receive housing benefit. These households aren't counted towards the need for affordable housing (as housing benefit enables them to afford their housing costs), but if housing benefit support was no longer provided (or if there wasn't sufficient private rented housing available at a price they could afford) then this would increase the need for affordable housing.

<sup>4.108</sup> The model adopts a neutral position in relation to this housing benefit support, insofar as it assumes that the number of claimants in receipt of housing benefit in the private rented sector will remain constant. **The model does not count any dwellings in the private rented sector as affordable housing supply**; however it does assume that housing benefit will continue to help some households to afford their housing costs, and as a consequence these households will not need affordable housing.

<sup>4.109</sup> To sensitivity test this position, Figure 64 shows the impact of reducing (or increasing) the number of households receiving housing benefit to enable them to live in the private rented sector. If households are no longer able to afford to live in private rented housing (or the supply of such housing reduces) then there is likely to be an increased demand for affordable housing, as illustrated by the chart.

<sup>4.110</sup> If no households were to receive housing benefit support in the private rented sector, more than half (52%) of the growth in household numbers would need affordable housing. This would need a total of 19,700 affordable homes to be provided over the 22-year period 2011-33.

**Figure 64: Theoretical impact of reducing or increasing Housing Benefit support for households living in private rented housing: Balance between households able to afford market housing and households needing affordable housing 2011-33 and associated number of affordable dwellings for West Essex and East Hertfordshire**



## Conclusions

<sup>4.111</sup> Based on the household projections previously established, we have established the balance between the need for market housing and the need for affordable housing. This analysis has identified a need to increase the overall housing need by 641 households to take account of concealed families and homeless households that would not be captured by the household projections.

<sup>4.112</sup> **The housing mix analysis identified a need to provide additional affordable housing for 13,291 households over the 22-year period 2011-33 (an average of 604 per year).** This would provide for the current unmet needs for affordable housing in addition to the projected future growth in affordable housing need, but assumes that the level of housing benefit support provided to households living in the private rented sector remains constant.

<sup>4.113</sup> Providing sufficient affordable housing for all of these households would increase the need to 19,700 affordable homes over the Plan period (895 each year); but it is important to recognise that, in this scenario, the private rented housing currently occupied by households in receipt of housing benefit would be released back to the market and this is likely to have significant consequences which would be difficult to predict.

# 5. Objectively Assessed Need

## Analysing the evidence to establish overall housing need

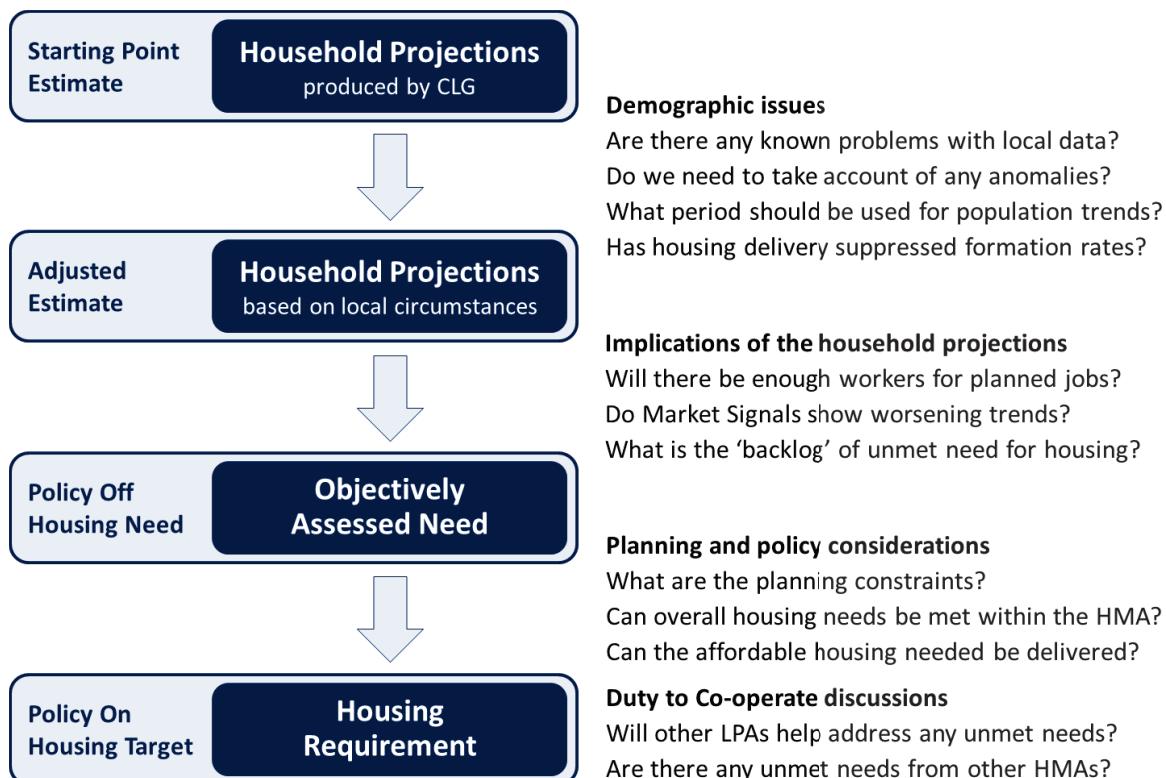
5.1 A key objective of this study is to establish the Objectively Assessed Need (OAN) for housing. The OAN identifies the future quantity of housing that is likely to be needed (both market and affordable) in the Housing Market Area (HMA) over the future plan period. It is important to recognise that the OAN does not take account of any possible constraints to future housing supply. Such factors will be subsequently considered by the local planning authorities before establishing the final Housing Requirement.

*The assessment of development needs is an objective assessment of need based on facts and unbiased evidence. Plan makers should not apply constraints to the overall assessment of need, such as limitations imposed by the supply of land for new development, historic under performance, viability, infrastructure or environmental constraints. However, these considerations will need to be addressed when bringing evidence bases together to identify specific policies within development plans.*

Planning Practice Guidance (PPG), ID 2a-004

5.2 Figure 65 sets out the process for establishing the housing number for the HMA. It starts with a demographic process to derive housing need from a consideration of population and household projections. To this, external market and macro-economic constraints are applied ('Market Signals') in order to ensure that an appropriate balance is achieved between the demand for and supply of dwellings.

Figure 65: Process for establishing a Housing Number for the HMA (Source: ORS based on NPPF and PPG)



## National Context for England

5.3 The NPPF requires Local Planning Authorities to “ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area” and “identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which meets household and population projections, taking account of migration and demographic change” (paragraphs 47 and 159).

5.4 PPG further identifies that “household projections published by the Department for Communities and Local Government should provide the starting point estimate of overall housing need ... The 2012-2037 Household Projections were published on 27 February 2015, and are the most up-to-date estimate of future household growth” (paragraphs 15-16).

## Household Growth

5.5 The 2012-based CLG household projections show that the number of households in England will increase from 22.3 million to 27.5 million over the period 2012 to 2037. This represents a growth of 5.2 million households over 25 years, equivalent to an annual average of 210,000 households each year, and this provides the starting point estimate of overall housing need for England.

5.6 It should be noted that the annual average of 210,000 households is already much higher than current housing delivery: CLG data for April 2013 to March 2014 identifies that construction started on 133,900 dwellings and 112,400 dwellings were completed during the year. Therefore, to build sufficient homes to meet annual household growth would require housebuilding to increase by 57% – so providing for household growth in itself would require a significant step-change in the number of homes currently being built.

## International Migration

5.7 The 2012-based CLG household projections are based on the ONS 2012-based sub-national population projections. These projections identify an average net gain of around 151,600 persons each year due to international migration, and a net loss of around 6,400 persons each year from England to other parts of the UK. Therefore, the 2012-based projections are based on net migration averaging around 145,100 persons each year.

5.8 However, these estimates for future international migration may be too low. Oxford University research (March 2015) showed net international migration to be around 565,000 persons over the 3-year period 2011-14, an average of 188,300 per annum; and net migration to England averaged 211,200 persons annually between the Census in 2001 and 2011. Both figures suggest that the 2012-based SNPP may underestimate international migration, which would have knock-on implications for projected population growth.

5.9 As previously noted, longer-term projections typically benefit from longer-term trends and therefore ORS routinely consider migration based on trends for the 10-year period 2001-11. On this basis, our trends are based on a period when net migration to England averaged 211,200 persons each year: 66,100 persons higher than assumed by the 2012-based SNPP, which represents an additional 29,000 households each year based on CLG average household sizes. Therefore, the approach taken for establishing migration based on longer-term trends would increase household growth for England from 210,000 households to around 239,000 households each year on average.

## Market Signals

5.10 The NPPF also sets out that "*Plans should take account of market signals, such as land prices and housing affordability*" (paragraph 17) and PPG identifies that "*the housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals*" (ID 2a-019).

5.11 The market signals identified include land prices, house prices, rents, affordability and the rate of development; but there is no formula that can be used to consolidate the implications of this data. Nevertheless, the likely consequence of housing affordability problems is an increase in overcrowding, concealed and sharing households, homelessness and the numbers in temporary accommodation. PPG identifies that these indicators "*demonstrate un-met need for housing*" and that "*longer term increase in the number of such households may be a signal to consider increasing planned housing numbers*" (ID 2a-019).

5.12 The Census identified that the number of concealed families living in England increased from 161,000 families to 276,000 families over the decade 2001 to 2011, which represents a growth of 115,000 families over 10 years. Although many concealed families do not want separate housing (in particular where they have chosen to live together as extended families), others are forced to live together due to affordability difficulties or other constraints – and these concealed families will not be counted as part of the CLG household projections.

5.13 Concealed families with older family representatives will often be living with another family in order to receive help or support due to poor health. Concealed families with younger family representatives are more likely to demonstrate un-met need for housing. When we consider the growth of 115,000 families over the period 2001-11, over three quarters (87,100) have family representatives aged under 55, with substantial growth amongst those aged 25-34 in particular. This is a clear signal of the need to increase the planned housing numbers in order to address the increase in concealed families over the last decade and also factor in their impact on current and future average household sizes.

5.14 Addressing the increase in concealed families would increase projected household growth by 87,100 over the 25-year period, an average of 3,500 households each year over the period 2012-37 (or higher if the need is addressed over a shorter period). Therefore, adjusting for longer-term migration trends and taking account of the market signals uplift for concealed families yields an average household growth for England of around 242,500 each year.

## Converting to Dwellings

5.15 Finally, in converting from households to dwellings we need to allow for a vacancy and second home rate as not all dwellings will be occupied. At the time of the 2011 Census this figure was around 4.3% of all household spaces in England: we have applied this to future household growth, and on this basis the growth of 242,500 households would require the provision of **253,400 dwellings each year across England**. This is the average number of dwellings needed every year over the 25-year period 2012-37 and represents a 1.1% increase in the dwelling stock each year.

5.16 This takes account of household growth based on CLG 2012-based projections (the starting point); adjusts for long-term migration trends which assume a higher rate of net migration to England; responds to market signals through providing for the growth of concealed families; and takes account of vacant and second homes.

5.17 Whilst the uplift for market signals represents less than 2% of the projected household growth, the household growth itself is much higher than current rates of housing delivery. **The identified housing need of 253,400 dwellings requires current housebuilding rates to increase by 89%** (based on dwelling starts in 2013-14).

5.18 Development industry campaigners (such as Homes for Britain<sup>27</sup>) are supporting a position which requires 245,000 homes to be built in England every year, a figure derived from the Barker Review (2004)<sup>28</sup>. It is evident that objectively assessed need based on household projections which take account of longer-term migration trends together with a market signals adjustment for concealed families exceeds this target, so any further increase in housing numbers at a local level (such as adjustments which might be needed to deliver more affordable housing or provide extra workers) must be considered in this context.

## Establishing Objectively Assessed Need for West Essex and East Herts

5.19 The earlier part of this Chapter sets out the context for national change in households, and the underlying complexities and features around this. We now move on to the position for the study area. Our approach for this section follows the format of the earlier section, albeit with specific reference to West Essex and East Hertfordshire. Essentially, therefore, this section is concerned with:

- » CLG 2012-based household projections (the starting point);
- » Migration adjustments, based on Census, for longer-term migration trends (which incorporate higher international migration rates and correct for errors in previous population estimates);
- » Market signals, including an uplift for concealed families;
- » Converting from household growth to a requirement for dwellings, taking account of vacancies and second homes.

5.20 In addition, we consider employment trends and the relationship between the jobs forecast and projected number of workers, and the need for affordable housing.

### CLG Household Projections

5.21 The “starting point” estimate for OAN is the CLG household projections, and the latest published data is the 2012-based projections for period 2012-37. These projections suggest that household numbers across the study area will increase by 49,600 over the 22-year period 2011-33, an average of 2,260 per year.

5.22 However, the notes accompanying the CLG Household Projections explicitly state that:

*The 2012-based household projections are linked to the Office for National Statistics 2012-based sub-national population projections. They are not an assessment of housing need or do not take account of future policies, they are an indication of the likely increase in households given the continuation of recent demographic trends.*

5.23 The ONS 2012-based sub-national population projections are based on migration trends from the 5-year period before the projection base date; so trends for the period 2007-2012. Short-term migration trends are generally not appropriate for long-term planning, as they risk rolling-forward rates that are unduly high or unduly low. PAS advice to Local Authorities suggests that the official projections are “very unstable” and it is more appropriate to adopt a longer base period to establish robust migration trends.

<sup>27</sup> <http://www.homesforbritain.org.uk>

<sup>28</sup> [http://webarchive.nationalarchives.gov.uk/+http://www.hmtreasury.gov.uk/barker\\_review\\_of\\_housing\\_supply\\_recommendations.htm](http://webarchive.nationalarchives.gov.uk/+http://www.hmtreasury.gov.uk/barker_review_of_housing_supply_recommendations.htm)

## Adjustments for Local Demographic Factors

5.24 The SHMA has developed independent household projections based on local circumstances. These adopt longer-term migration trends; with a baseline projection based on migration trends for the 10-year period 2001-2011. The projections take full account of errors in the trend-based data which were identified by the 2011 Census; and avoid relying on data which may continue to be affected by systematic problems.

5.25 This is consistent with our standard approach when establishing OAN which recognises that Census data is inherently more reliable than any other population estimates at a local level. The specific method used has been supported previously at Examination, where it was noted that "*a 10 year period is a reasonable approach*" and "*the inter-censal period provides a readily understandable and robust check on the reasonableness of the average*".

5.26 On the basis of 10-year migration trends for the period 2001-11 based on Census data, **household numbers across the study area are projected to increase by 36,899 households over the 22-year period 2011-33, an average of 1,677 per year. Providing for an annual increase of 1,677 households yields a housing need of 1,745 dwellings each year.**

5.27 Whilst this projection is lower than the CLG 2012-based household projection (2,260 p.a.) , the SHMA analysis reflects good practice and provides a stable projection based on the most reliable data. The lower increase in household numbers is due to the underlying population projections – long-term migration trends show lower migration rates than recent years. These lower migration rates are partly due to errors in previous population estimates (that were corrected following the 2011 Census), but it is also important to recognise that short-term trends are unlikely to be sustained for the full 22-year period 2011-33.

## Affordable Housing Need

5.28 The SHMA has undertaken a comprehensive analysis of the existing unmet need for affordable housing. This analysis identified that **overall housing need should be increased by 641 households** to take account of **concealed families** and **homeless households** that would not be captured by the household projections. When the unmet needs from existing households living in unsuitable housing were also included, the analysis established an overall need from 5,218 households in need of affordable housing in 2011.

5.29 Nevertheless, 2,106 of these households already occupy an affordable home (albeit unsuitable for their current needs) – so the home that will be vacated when their needs are resolved must be offset against the overall need to establish the unmet need. **There is an unmet need from 3,112 households** (5,218 less 2,106 = 3,112) **who will need affordable housing at the start of the period 2011-33 and do not already occupy affordable housing in the West Essex and East Hertfordshire HMA.**

5.30 Based on the household projections, the SHMA has established the balance between the future need for market housing and affordable housing. The analysis identifies that **the number of households in need of affordable housing will increase by 10,179 households over the period 2011-33**, alongside an increase of 26,720 households able to afford market housing.

5.31 Overall, there will be a **need to provide additional affordable housing for 13,291 households over the 22-year period 2011-33 (an average of 604 per year)**. This would provide for the current unmet needs for affordable housing in addition to the projected future growth in affordable housing need, but assumes that the level of housing benefit support provided to households living in the private rented sector remains constant. Furthermore, any losses from the current stock (such as demolition or clearance, or sales through Right to Buy) would increase the number of affordable dwellings needed by an equivalent amount.

## Employment Trends

5.32 While demographic trends are key to the assessment of OAN, it is also important to consider current Employment Trends and how the projected growth of the economically active population fits with the future changes in job numbers.

*Plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population in the housing market area.*

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

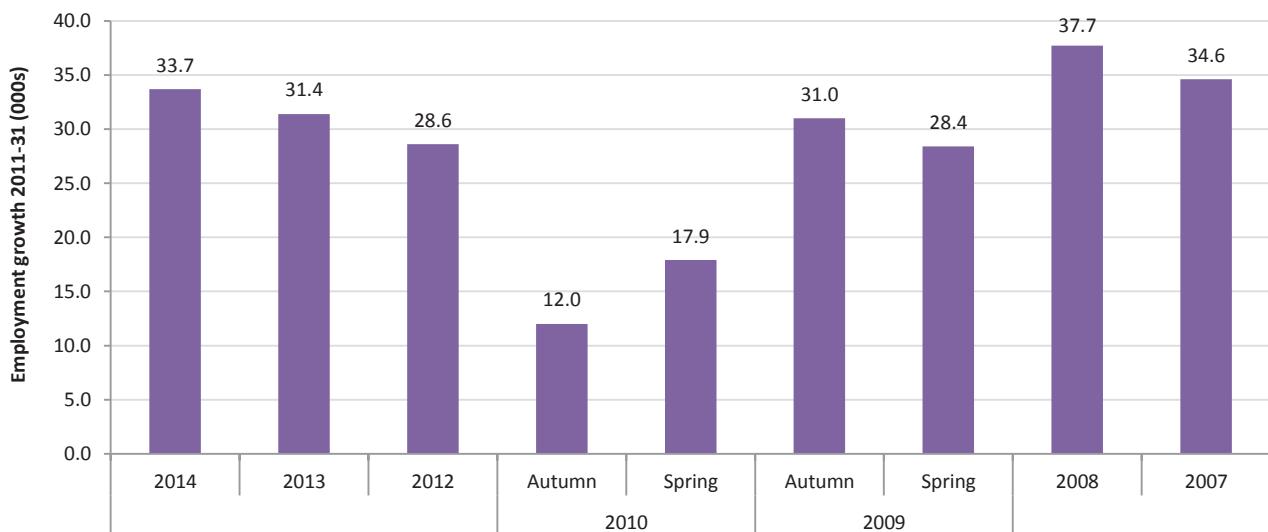
Planning Practice Guidance 2014, paragraph 18

## East of England Forecasting Model (EEFM)

5.33 Forecasts of jobs growth have been regularly produced for each local authority in the East of England from the East of England Forecasting Model (EEFM). The EEFM was developed by Oxford Economics to project economic, demographic and housing trends in a consistent manner. It covers a wide range of variables, and is designed to be flexible so that alternative scenarios can be run. The model provides data at regional and sub-regional level, including counties, unitaries and district authorities.

5.34 The most recent outputs (EEFM 2014) were published in January 2015 and the baseline forecast suggested that total employment in West Essex and East Hertfordshire would increase from 210,000 in 2011 to 243,700 in 2031. When we consider previous forecasts from the EEFM model, it is evident that the forecasts have varied, but the latest data appears reasonable in the context of the full range of outputs:

Figure 66: Employment growth forecasts for West Essex and East Hertfordshire 2011-31 (Source: EEFM)



5.35 This EEFM forecast assumed that the population would increase from 425,200 to 488,400 people (an increase of 63,200 people), the number of households would increase from 176,900 to 207,700 (an increase of 30,800 households) and the number of dwellings would increase from 181,300 to 212,900 (an

increase of around 31,500 dwellings); all over the same 20-year period (2011-31). These assumptions are lower than the SHMA household projection based on 10-year migration trends, which suggests an increase of 38,400 dwellings over the 22-year period 2011-33 (an annual average that is 11% higher than assumed by the EEFM).

<sup>5.36</sup> Based on the EEFM outputs, further economic evidence prepared by Hardisty Jones Associates has concluded that the growth of Stansted Airport is likely to yield further jobs growth, with a total of 41,700 jobs likely to be created over the 22-year period 2011-33; so it is appropriate that we balance future workers against these extra jobs.

<sup>5.37</sup> As previously noted, the demographic analysis (based on 10-year migration trends) identified that the economically active population in the West Essex and East Hertfordshire HMA would increase by around 26,400 people over the 22-year period 2011-33 (around 1,200 per year on average). In addition, the number of unemployment benefit claimants recorded by DWP reduced by around 3,700 over the period March 2011 to March 2015, which also increases the number of available workers.

<sup>5.38</sup> Taken together, these figures suggest that the number of available workers will increase by around 30,100 over the 22-year period 2011-33 (without any further reduction in unemployment), equivalent to an average of around 1,370 additional workers each year. However, there are a number of factors which should be considered when relating jobs to workers, particularly the issue of commuting:

- » **Out-commuting:** Based on 2011 Census commuting flows, 61.7% of working residents in the West Essex and East Hertfordshire HMA are also employed in the local area. This implies that 38.3% commute to jobs outside the area. Therefore, of the additional 30,100 workers, we would expect around 18,600 (61.7%) to work locally and around 11,500 (38.3%) would commute outside of the area (assuming no change in commuting patterns). On this basis, we have assumed that the number of workers that out-commute from West Essex and East Hertfordshire will increase by around 11,500 over the 22-year period 2011-33.
- » **In-commuting:** at the time of the 2011 Census, 28.7% of jobs in the HMA were filled by people travelling in from other authorities. Therefore, a jobs growth of 41,700 over the period 2011-33 is likely to draw in around 12,000 (28.7%) additional in-commuters; leaving around 29,700 extra jobs that need to be filled by workers living in the area (again assuming no change in commuting patterns). There is therefore assumed to be a small increase in net in-commuting of around 500 workers, mainly as a consequence of the expansion of Stansted Airport.

<sup>5.39</sup> It is also important to recognise that the jobs forecast by the EEFM include full-time and part-time work, and some workers may have more than one job. Whilst the EEFM model identified 210,000 jobs in the HMA in 2011, the number of workplace employed people was 185,900. Given that the jobs number was 12.9% higher than the number of workers, we can conclude that 12.9% of workers were “double jobbing”. If we assume this ratio of people holding more than one job continues (as is currently forecast), providing sufficient people for 29,700 additional jobs would need around an extra 26,400 workers living in West Essex and East Hertfordshire.

<sup>5.40</sup> When these factors are properly considered, we can conclude that the demographic projections (without any uplift for market signals) would provide around 18,600 extra workers locally whereas 26,400 extra workers would be needed. **There is therefore a shortfall of around 7,800 workers based on the increase in jobs that is currently forecast.**

## Conclusions on Jobs and Workers

5.41 While demographic projections form the starting point for OAN calculations it is necessary to ensure a balance between future jobs and workers.

5.42 Based on the EEFM outputs, further economic evidence prepared by Hardisty Jones Associates has concluded that the overall increase in employment (taking account of the growth of Stansted Airport) is likely to yield 41,700 extra jobs in the West Essex and East Hertfordshire HMA over the 22-year period 2011-33; so it is appropriate that we balance future workers against these extra jobs.

5.43 Taking account of existing commuting patterns and changes to unemployment recorded over the period 2011-15, the demographic projections (without any uplift for market signals) would provide around 18,600 extra workers locally whereas 26,400 extra workers would be needed. **Therefore, there is need to increase housing delivery to ensure that there will be enough workers for the likely increase in jobs in the area.**

5.44 An extra 7,800 workers would need a further 5,600 dwellings to be provided over the 22-year period 2011-33, increasing the housing need from 38,400 dwellings to 44,000 dwellings (equivalent to an uplift of 14.6%). Of course, any uplift to the overall housing need in response to market signals or uplift to the housing requirement to help to deliver affordable housing is also likely to draw in additional population, which would increase the number of workers; so it will be important to consider the cumulative impact of any uplifts that are applied.

## Market Signals

5.45 While demographic trends are key to the assessment of OAN, it is also important to consider current Market Signals and how these may affect housing needs. PPG identifies a range of housing market signals that should be considered when determining the future housing number. Key to this is how market signals should be taken into account:

*The housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between the demand for and supply of dwellings (Paragraph 019)*

*A worsening trend in any of these indicators will require upward adjustment to planned housing numbers compared to ones based solely on household projections. (Paragraph 020)*

**Planning Practice Guidance: Assessment of housing and economic development needs (March 2014)**

5.46 The Market Signals include:

- » Land and house prices;
- » Rents and affordability;
- » Rate of development; and
- » Overcrowding.

5.47 Furthermore, there are other issues that should be considered, for example the macro-economic climate. Further, there are wider market trends and drivers to consider. A full range of market signals are considered and their implications are considered especially where these may indicate undersupply relative to demand and the need to deviate from household projections.

<sup>5.48</sup> PPG and the PAS OAN technical advice note emphasise the importance of considering indicators in the context of longer-term trends and looking at rates of change as well as absolute levels – for example, house prices in the housing market may be higher or lower than the national average, however the more important consideration is whether or not they are becoming more (or less) expensive at a rate that differs from the national rates or rates in similar areas.

*Appropriate comparisons of indicators should be made. This includes comparison with longer term trends (both in absolute levels and rates of change) in the housing market area; similar demographic and economic areas; and nationally.*

Planning Practice Guidance (March 2014), ID 2a-020

<sup>5.49</sup> To identify areas with similar demographic and economic characteristics to West Essex and East Herts, we have analysed data from the ONS area classifications together with data from the CLG Index of Multiple Deprivation. This analysis showed that the following areas had similar characteristics to the HMA:

- » **South West Essex** (Basildon, Brentwood and Thurrock);
- » **Stevenage** (with North Hertfordshire); and
- » **Crawley** (with Horsham, Mid Sussex, Mole Valley, Reigate & Banstead and Tandridge).

<sup>5.50</sup> Therefore, in considering market signals, we have considered these council areas as appropriate comparators and compared them against West Essex and East Herts. We have also compared the indicators with **Greater London** as well as the national data for **England**.

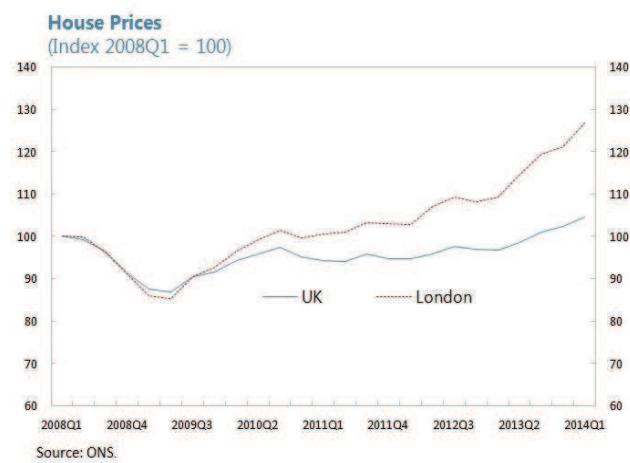
## House Prices

<sup>5.51</sup> House prices in England and Wales have been relatively volatile in the past 15 years. House prices have increased by 6.4% in the 12 months to April 2014; the fastest rises were in London (17.0%), the East of England (6.6%) and the South East (6.1%). The average UK house price in 2014 was £172,000 compared to the high of £181,500 in 2007. Average house price trends 2008-2014 (Source: ONS) show the price divergence between London and the rest of the UK.

**Figure 67: Annual house price rates of change, UK all dwellings 2004-2014 (Source: Regulated Mortgage Survey. Note: Not seasonally adjusted)**



**Figure 68: UK and London House Price Index 2008-2014 (Source: ONS)**



<sup>5.52</sup> The Bank of England has overall responsibility for UK monetary policy: it has become concerned about the risks posed by house prices, high levels of borrowing and any housing 'bubble' to national economic recovery. In his speech at the Mansion House in June 2014, the Governor of the Bank said:

*"The underlying dynamic of the housing market reflects a chronic shortage of housing supply, which the Bank of England can't tackle directly. Since we are not able to build a single house, I welcome the Chancellor's announcement tonight of measures to increase housing supply.*

*To be clear, the Bank does not target asset price inflation in general or house prices in particular.*

*It is indebtedness that concerns us.*

*This is partly because over-extended borrowers could threaten the resilience of the core of the financial system since credit to households represents the lion's share of UK banks' domestic lending.*

*It is also because rapid growth in or high levels of mortgage debt can affect the stability of the economy as a whole."*

<sup>5.53</sup> The International Monetary Fund (IMF) has also highlighted concerns about these risks and especially the high borrowings of households relative to income, especially in London:

*"The increase in the number of high loan-to-income (LTI) mortgages is more pronounced in London and among first-time buyers. As a result, an increasing number of households are vulnerable to negative income and interest rate shocks."*

<sup>5.54</sup> However, the surge in prices appears to be cooling; the Council of Mortgage Lenders (CML) latest Credit Conditions Survey (Summer 2014) suggests

*"This source of stimulus may now be drying up, amid signs that lenders may be approaching the limits of their risk appetite with respect to maximum loan-to-value (LTV) and income multiples."*

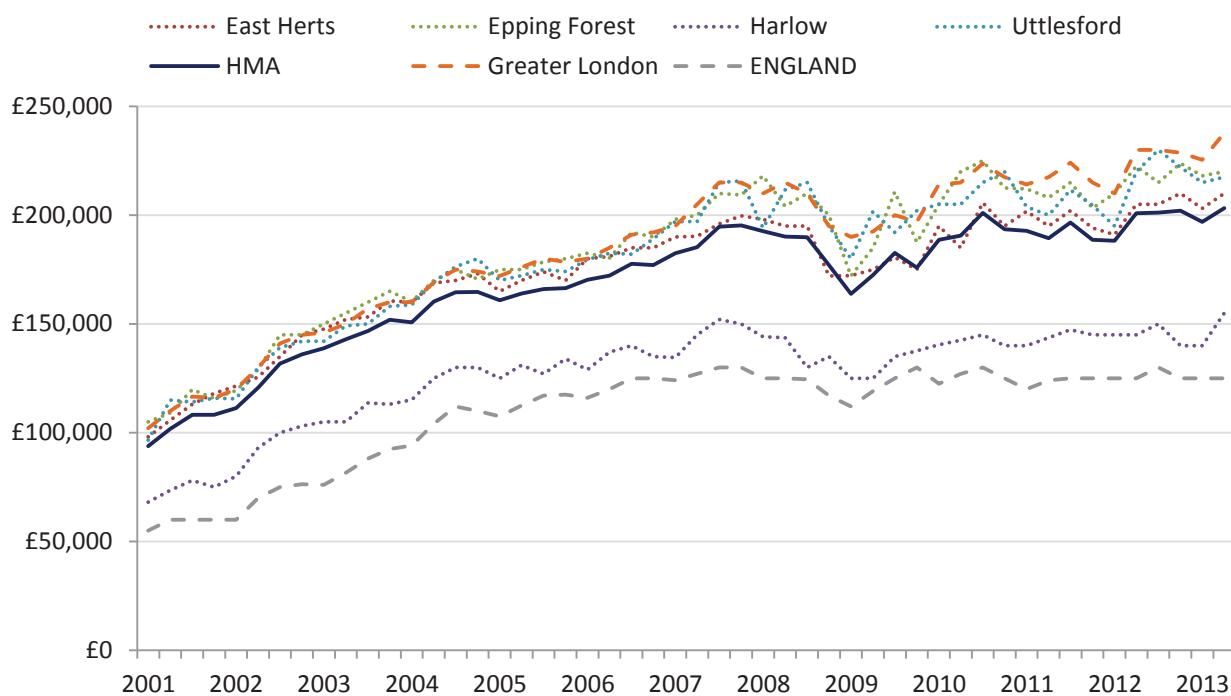
<sup>5.55</sup> The Government has strengthened the existing powers of the Bank of England to recommend to regulators a limit on the proportion of high loan to income mortgages. From May 2015, lenders are prevented from extending more than 15% of their mortgages to customers needing to borrow 4.5 times their income.

<sup>5.56</sup> The future for the housing market is difficult to predict, although long term trends indicate continued demand issues from household growth, albeit with issues around affordability. The current Government policy towards national economy recovery, and the role played in this by the Bank of England, indicate that action may be taken to contain any housing price 'bubble'. Interest rates seem likely to rise in the medium term, and this could expose risk of those borrowing high LTV at low interest rates.

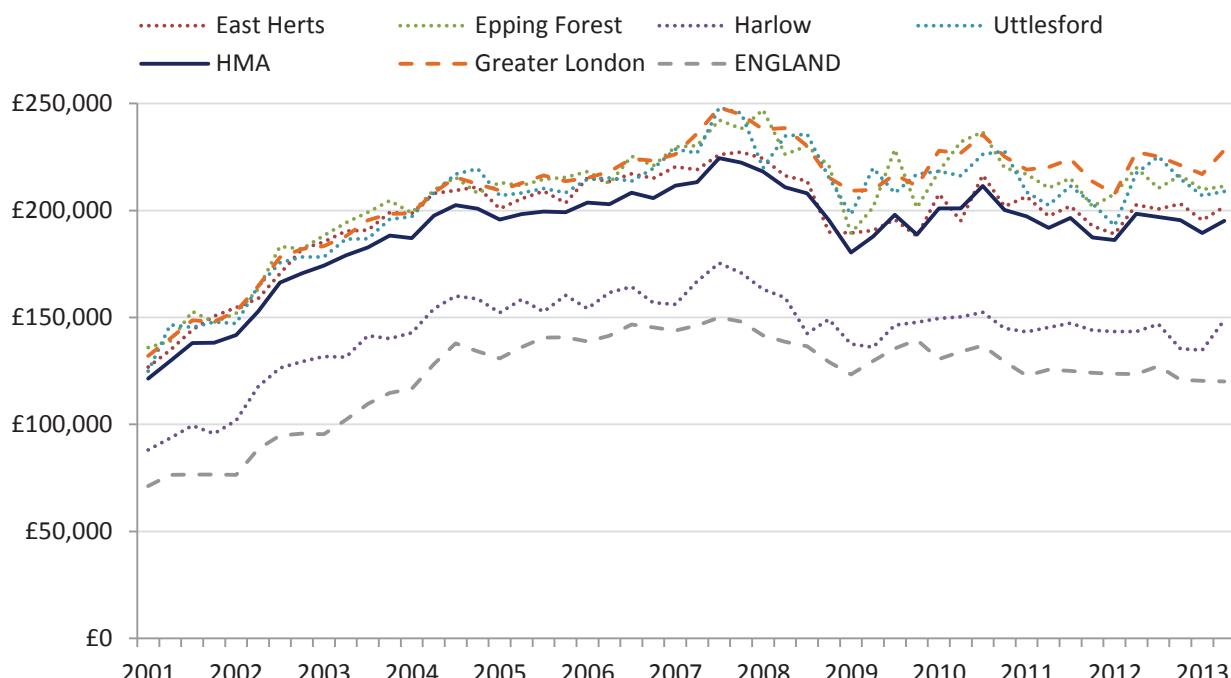
## Local House Prices

5.57 House price trends (2000-2013) are shown in Figure 69 and Figure 70 shows lower quartile house prices adjusted for the impact of inflation. Therefore, the prices reflect real changes which have occurred since 2001 when removing the impact of background inflation.

**Figure 69: House Price Trends: Lower Quartile Prices (Source: CLG Live Tables. Note: HMA figure derived using population weighted average of Local Authority data)**



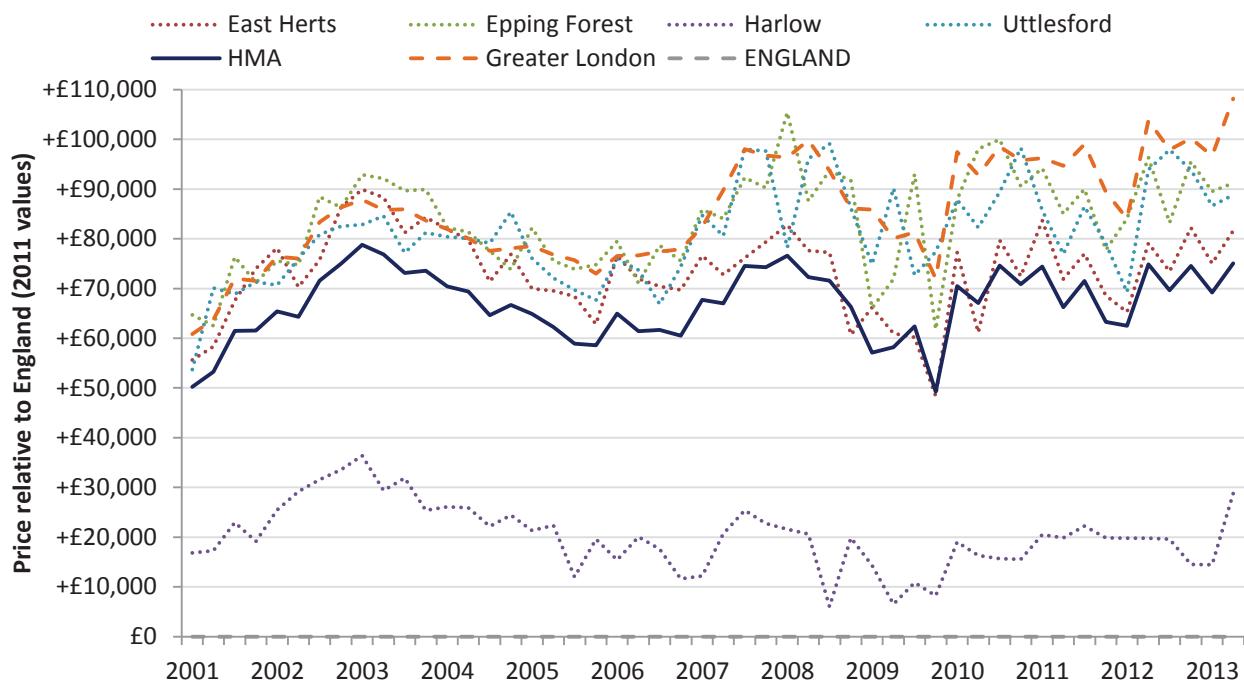
**Figure 70: Real House Price Trends: Lower Quartile Prices adjusted to 2011 values using CPI (Source: CLG Live Tables; Bank of England. Note: HMA figure derived using population weighted average of Local Authority data)**



5.58 It is clear that real house prices in the HMA increased substantially in the period 2001-2004 (from £121,400 to £202,500 at 2011 values, a real increase of 67%) and peaked in 2007 at £224,500; but they have progressively reduced since that time with real prices at around £195,100 in mid-2013 (at 2011 values) which is 13% below their peak.

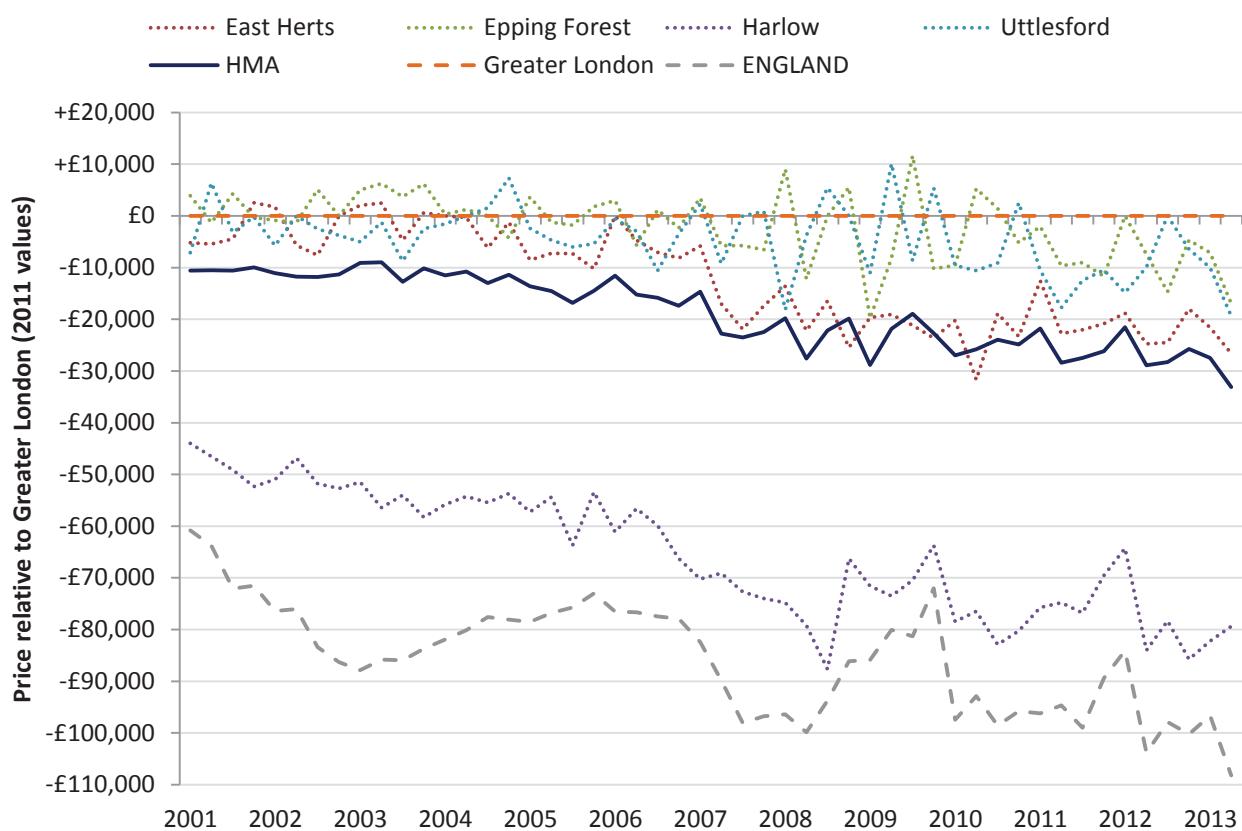
5.59 Figure 71 shows how real house prices in the HMA have varied when compared with England. This shows that house prices in the HMA have been around £75,000 higher than England (in real terms) since 2010.

**Figure 71: Real House Price Trends relative to England: Lower Quartile Prices adjusted to 2011 values using CPI (Source: CLG Live Tables; Bank of England. Note: HMA figure derived using population weighted average of Local Authority data)**



5.60 Nevertheless, it is evident that house prices in the HMA have tended to track Greater London prices and Figure 72 shows how real house prices in the HMA have varied when compared with Greater London. This shows that prices in Epping Forest and Uttlesford have typically been very similar to London prices; however whilst prices in East Hertfordshire used to be comparable to London, the gap has been larger since 2007. House prices in Harlow are evidently very different to London, being much closer to the England norm.

**Figure 72: Real House Price Trends relative to Greater London: Lower Quartile Prices adjusted to 2011 values using CPI (Source: CLG Live Tables; Bank of England. Note: HMA figure derived using population weighted average of Local Authority data)**



<sup>5.61</sup> It is interesting to note that the gap between London prices and house prices across the HMA has increased in real terms from around £10,000 in 2001 to over £30,000 in 2013 (both at 2011 values). Therefore, despite house prices increasing substantially since 2001, the area offers housing that is increasingly more affordable than housing in London.

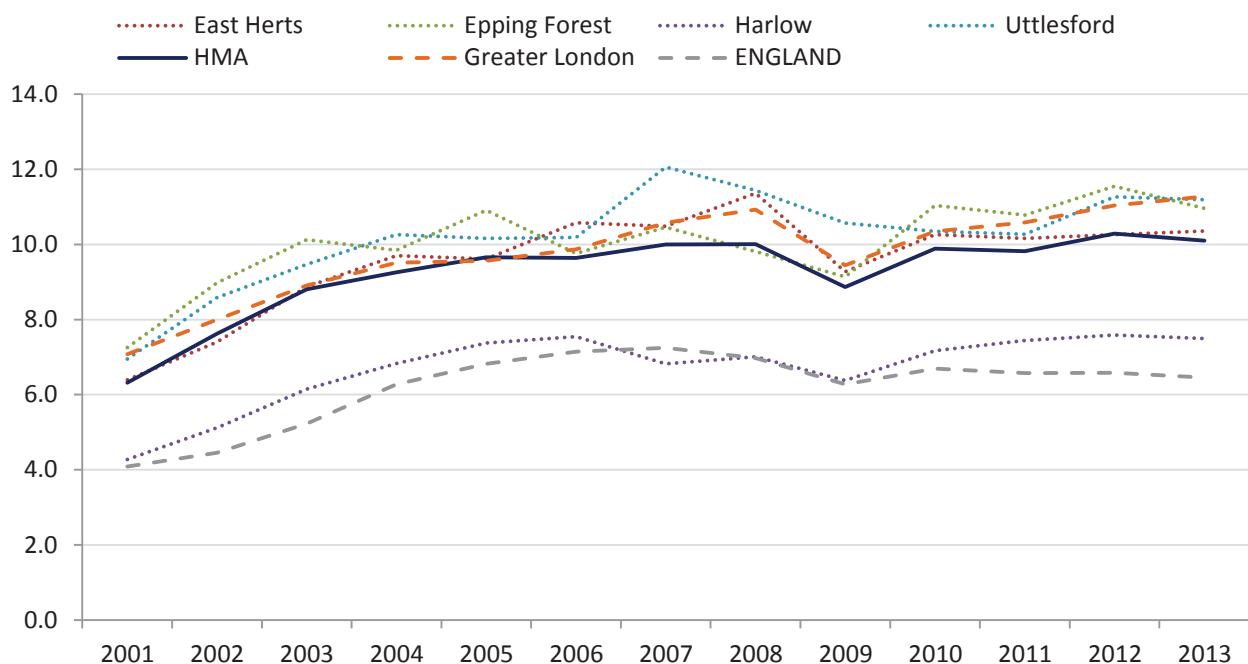
<sup>5.62</sup> The planned step-change in housing supply in Greater London should help to reduce some of the housing market pressure currently experienced in the region, and if housing delivery rates successfully increase to meet the targets that have been established it would be reasonable to expect house prices to stabilise and affordability to improve. This would probably lead to the gap between Greater London house prices and prices in the HMA reducing, and if London prices reduce (in real terms) then it is likely that prices would also reduce in West Essex and East Hertfordshire.

## Affordability

5.63 Figure 73 below shows the ratio of lower quartile house price to lower quartile earnings in the HMA between 2001 and 2013. This long term trend for the HMA shows that the lower quartile affordability multiplier increased from 6.3 in 2001 to 8.8 in 2003 (due to the increase in real house prices) however it has remained relatively stable at around 10.0 over the period since 2005. Whilst this ratio is notably higher than the ratio for England, it is lower than the multiplier for Greater London which has increased from 9.4 in 2009 to 11.3 in 2013.

5.64 Of course, it is important to remember that affordability can be influenced by supply issues (e.g. lower housing delivery levels) and demand side issues (e.g. lower availability of mortgage finance for first time buyers).

**Figure 73: Ratio of Lower Quartile House Price to Lower Quartile Earnings (Source: DCLG. Note: HMA figure derived using population weighted average of Local Authority data)**



## Overcrowding

5.65 Overcrowding was considered in detail when establishing the need for affordable housing, and based on the bedroom standard we estimated that 3,711 households were overcrowded in the HMA (Figure 49), including 1,098 owner occupiers, 709 households renting privately and 1,904 households in the social rented sector.

5.66 PPG also identifies a series of other factors to monitor alongside overcrowding, including concealed and sharing households, homelessness and the numbers in temporary housing:

*Indicators on overcrowding, concealed and sharing households, homelessness and the numbers in temporary accommodation demonstrate un-met need for housing. Longer term increase in the number of such households may be a signal to consider increasing planned housing numbers.*

Planning Practice Guidance (March 2014), ID 2a-019

<sup>5.67</sup> These were also considered when establishing the need for affordable housing, and the overall housing number was increased to take account of the needs of homeless households and concealed families with younger family representatives who would not have been counted as part of the household projections. This adjustment has already been incorporated as a response to the identified un-met need for housing, and can be considered as part of the response to market signals.

## Summary of Market Signals

<sup>5.68</sup> In terms of headline outputs, the market signals when compared to relevant comparator areas show:

Figure 74: Summary of Market Signals for West Essex and East Herts and selected comparator areas

		West Essex & East Herts	South West Essex	Stevenage with North Herts	Crawley with Horsham, Mid Sussex, Mole Valley, Reigate & Banstead and Tandridge	Greater London	England
INDICATORS RELATING TO PRICE							
House prices							
Lower quartile house price	2012- 13 value	£200,600	£155,300	£161,400	£207,500	£230,200	£126,300
	Relative to England	+59%	+23%	+28%	+64%	+82%	-
	2007-08 value	£192,100	£157,700	£164,300	£203,900	£215,000	£127,500
	5-year change	+4%	-2%	-2%	+2%	+7%	-1%
Rents							
Average monthly rent	2013- 14 value	£911	£825	£751	£994	£1,461	£720
	Relative to England	+27%	+15%	+4%	+38%	+103%	-
	2008 value	£627	£596	£539	£630	£775	£500
	5-year change	+45%	+38%	+39%	+58%	+88%	+43%
Affordability							
Lower quartile house price to earnings	2013 ratio	10.1	7.6	7.9	10.5	11.3	6.5
	Relative to England	+57%	+18%	+22%	+62%	+53%	-
	2008 ratio	10.0	8.4	8.8	10.4	10.9	7.0
	5-year change	+1%	-9%	-10%	+1%	+4%	-7%
INDICATORS RELATING TO QUANTITY							
Overcrowding							
Overcrowded households	2011 proportion	6.6%	7.7%	6.6%	6.5%	21.7%	8.7%
	Relative to England	-24%	-12%	-24%	-26%	+148%	-
	2001 proportion	5.5%	5.9%	5.5%	5.2%	17.3%	7.1%
	10-year change	+22%	+31%	+20%	+26%	+25%	+23%
Rate of development							
Increase in stock	2001-11 change	+8%	+6%	+9%	+8%	+9%	+8%
	Relative to England	-1%	-25%	+7%	+2%	+4%	-

<sup>5.69</sup> As acknowledged earlier in this section, there is no single formula that can be used to consolidate the implications of this information; and furthermore the housing market signals will have been predominantly influenced by relatively recent housing market trends. Nevertheless, on the basis of this data we can conclude:

- » **House Prices:** lower quartile prices are higher than the national average, with a lower quartile price of £200,600, higher than England's £126,300 but lower than Greater London's £230,200

(based on 2012-13). House prices in the HMA are higher than both South West Essex and Stevenage, but lower than Crawley. Over the last 5-years, prices have remained relatively constant in all of these areas, despite increasing in Greater London;

- » **Rents:** for average private sector rents in 2013-14, the study area is higher than England (£911 cf. £720 pcm) but considerably lower than Greater London (£1,461 pcm). While rents in Crawley are higher than in the study area, rents in South West Essex and Stevenage are lower; consistent with house prices in those areas. Over the last 5 years, average rents have increased less in the study area than in Greater London and Crawley, but more than the other comparator areas;
- » **Affordability** (in terms of the ratio between lower quartile house prices and lower quartile earnings) is currently ‘worse’ in the study area than across England as a whole (10.1x cf. 6.5), and the rate is also worse than in South West Essex and Stevenage, although not as ‘bad’ as either Crawley or Greater London. Furthermore, whilst national affordability ratios have improved since 2008, the ratio has not improved in the study area;
- » **Overcrowding** (in terms of Census occupancy rates) shows that 6.6% of households in the study area are overcrowded based on an objective measure, which is lower than England (8.7%) and much lower than Greater London (21.7%). The proportion of overcrowded households has increased over the last 10 years at a rate comparable to England (+22% cf. +23%);
- » **Rate of development** (in terms of increase in dwelling stock over the last 10 years) shows that development has been relatively similar to England (both around 8%). This rate is also similar to comparator areas. Of course, these figures will inevitably be influenced by local constraints as well as individual policies.

<sup>5.70</sup> As previously noted, PPG suggests that “*household projections should be adjusted to reflect appropriate market signals*” where there is a “*worsening trend in any of these indicators*” (paragraphs 19-20). Whilst house prices and affordability have remained relatively stable, these are notably higher than the rates for England (although lower than the rates for Greater London). Furthermore, rents have also increased and there are higher levels of overcrowding than recorded in 2001 (although overcrowding continues to be below the England average, and considerably lower than overcrowding rates in Greater London).

<sup>5.71</sup> On the basis of the Market Signals, we can conclude that conditions across the HMA suggest that the level of **Objectively Assessed Need for the HMA should be higher than suggested by household projections** in isolation. However as previously noted, there is no definitive guidance on what level of uplift is appropriate.

<sup>5.72</sup> The analysis of overcrowding for the SHMA Update has already identified that the overall housing need should be increased by 641 households to take account of **concealed families and homeless households** that would not be captured by the household projections. This specific adjustment should be incorporated as a response to market signals to take account of the identified un-met need for housing, representing an uplift of 1.7% on the household projections; nevertheless, given the market signals context, it is probably appropriate to increase this uplift.

## Conclusions on Market Signals

<sup>5.73</sup> There is no definitive guidance on what level of uplift is appropriate. Nevertheless, the Inspector examining the Eastleigh Local Plan judged 10% to be reasonable given the market signals identified for that HMA:

*"It is very difficult to judge the appropriate scale of such an uplift ... Exploration of an uplift of, say, 10% would be compatible with the "modest" pressure of market signals recognised in the SHMA itself."*

<sup>5.74</sup> On this basis, it is helpful to compare the Market Signals for West Essex and East Hertfordshire with those for Eastleigh and its wider HMA (which we have based on Southampton with Eastleigh and the New Forest). In summary:

- » **House prices** in West Essex and East Hertfordshire are higher than in Eastleigh and its wider HMA (£200,600 cf. £166,900 and £156,000 respectively at the lowest quartile);
- » **Market rents** in West Essex and East Hertfordshire (£911 pcm) are also higher than in Eastleigh and its wider HMA (£798 pcm and £782 pcm respectively);
- » **Affordability** is worse in West Essex and East Hertfordshire (10.1x) than in Eastleigh and its wider HMA (8.4x and 8.1x respectively);
- » **Overcrowding** in West Essex and East Hertfordshire is higher than in Eastleigh (7% cf. 5%), but lower than its wider HMA (9%); and
- » **Rates of development** over the last decade were marginally lower in West Essex and East Hertfordshire than in Eastleigh's wider HMA (8% cf. 9%).

<sup>5.75</sup> The indicators for the West Essex and East Hertfordshire HMA identify greater housing pressure than in Eastleigh (and its wider HMA), so it would seem reasonable for 10% to be considered a minimum response to Market Signals in this area. **On balance we would recommend an overall uplift of 20% of the housing need identified based on the household projections as a response to Market Signals for West Essex and East Hertfordshire.**

<sup>5.76</sup> The household projections previously identified an increase of 36,899 households (38,382 dwellings); so **the proposed market signals uplift represents an additional 7,676 dwellings over the 22-year period 2011-33, which provides an appropriate response to market signals.** This is consistent with the views of the Eastleigh Inspector in the context of the indicators for the two areas.

<sup>5.77</sup> The previous analysis already identified that the overall housing need should be increased by a specific uplift of 641 households (667 dwellings) to take account of **concealed families** and **homeless households** that would not be captured by the household projections. This adjustment has already been incorporated as a response to the identified un-met need for housing; however it is appropriate for it to be considered as part of the response to market signals. **An additional increase of 7,009 dwellings is therefore needed to deliver the overall uplift of 7,676 dwellings identified in response to market signals.**

## Housing Backlog

<sup>5.78</sup> The Planning Advisory Service Good Plan Making Guide<sup>29</sup> identifies that the SHMA should "re-set the clock" and provide a new baseline assessment of all housing need. However, the SHMA must take account of 'backlog': any unmet need for housing that exists at the start of the plan period.

*"Having an up-to-date, robust Strategic Housing Market Assessment should re-set the clock, and therefore carrying forward under-provision from a previous plan period would be 'double counting'. Make sure however that the Strategic Housing Market Assessment takes*

<sup>29</sup> <http://www.pas.gov.uk/documents/332612/6363137/Pages+from+FINAL+PAS+Good+Plan+Making+-6.pdf>

*account of 'backlog' which is unmet need for housing that still exists at the start of the new plan period (for example, the needs of the homeless and other households living in unacceptable accommodation). The Strategic Housing Market Assessment should show all those in need. It is therefore vitally important to have a properly done Strategic Housing Market Assessment that has the right scope." (page 49)*

<sup>5.79</sup> This SHMA has fully considered the unmet needs of homeless and other households living in unacceptable accommodation (such as concealed families and sharing households) that existed in 2011. Furthermore, given that the SHMA also identifies all new housing need from the baseline date of 2011, all needs arising over the 22-year period 2011-33 have been identified and there will be no additional unmet need for housing to be counted for Plans with this base date.

## Conclusions

<sup>5.80</sup> The "*starting point*" estimate for OAN is the CLG household projections, and the latest published data is the 2012-based projections for period 2012-37. These projections suggest that household numbers across the study area will increase by 49,638 over the 22-year period 2011-33, an average of 2,256 per year. However, the future projections are particularly sensitive to the period on which migration trends are based, and PAS advice to Local Authorities suggests that the official projections are "*very unstable*" and it is more appropriate to adopt a longer base period to establish robust migration trends. This view is echoed by academics and has been promoted by Planning Inspectors at numerous Local Plan Examinations. Furthermore, the Public Administration Select Committee has identified the Census as "*the only reliable source of data on migrant populations in local areas*".

<sup>5.81</sup> Given this context, the SHMA has developed independent household projections using a 10-year migration trend based on Census data. The specific method used has been supported previously at Examination, where it was noted that "*a 10 year period is a reasonable approach*" and "*the inter-censal period provides a readily understandable and robust check on the reasonableness of the average*". On the basis of 10-year migration trends, **household numbers across the study area are projected to increase by 36,899 households over the 22-year period 2011-33, an average of 1,677 per year.**

<sup>5.82</sup> We have identified that the baseline household projections should be increased by 641 households to take account of **concealed families** and **homeless households** that would otherwise not be captured due to suppressed household formation rates. On this basis, the demographic projections identify a total increase of 37,540 households over the 22-year period 2011-33. This adjustment responds to identified un-met need for affordable housing and also addresses suppressed household formation rates. **Providing for an increase of 37,540 households yields a baseline housing need of 39,049 dwellings over the 22-year period 2011-33, equivalent to an average of 1,775 dwellings per year.**

<sup>5.83</sup> While demographic projections form the starting point for Objectively Assessed Need calculations, it is necessary to consider whether a higher rate of housing delivery may be needed to help address housing market problems. Further adjustments may be needed in response to balancing jobs and workers, market signals or any backlog of housing provision. However, it is important to recognise that these adjustments are not necessarily cumulative: it is necessary to consider them collectively.

<sup>5.84</sup> **The evidence from planned jobs and workers identifies a need to increase housing delivery by 5,600 dwellings to provide enough workers for the likely increase in jobs in the area (taking account of the likely expansion of Stansted Airport).**

**5.85 An uplift of 7,676 dwellings is proposed as an appropriate response to the market signal indicators.**

The overall housing need has already been increased by 667 dwellings to take account of concealed families and homeless households not captured by the household projections, and this should be considered as part of the response to market signals; but an additional increase of 7,009 dwellings is needed to deliver the overall uplift of 7,676 dwellings that has been identified.

**5.86 As the SHMA has fully considered the unmet needs of homeless and other households living in unacceptable accommodation that will exist at 2011 and identified all needs arising over the 22-year period 2011-33, there will be no 'backlog' of additional unmet need for housing to be counted at the start of new Plan periods that start in 2011.**

5.87 On this basis, the baseline housing need of 39,049 dwellings is increased by 7,009 dwellings based on the additional uplift needed in response to market signals. This will also provide sufficient housing to balance future jobs and workers. **This yields an overall total of 46,058 dwellings over the 22-year period 2011-33.** This represents an uplift of 20.0% on the baseline household projections.

5.88 Figure 75 summarises each of the stages for establishing the Full Objectively Assessed Need for Housing.

**Figure 75: Full Objectively Assessed Need for Housing across West Essex and East Hertfordshire HMA 2011-33**

Stage	Households	Dwellings
<b>Demographic starting point</b> CLG household projections 2011-33	<b>49,638</b>	-
<b>Adjustment for long-term migration trends</b> 10-year migration trend 2001-11	-12,739	-
<b>Baseline household projections taking account of local circumstances</b>	<b>36,899</b>	<b>38,382</b>
<b>Adjustment for suppressed household formation rates</b> Concealed families and homeless households	+641	+667
<b>Baseline housing need based on demographic projections</b>	<b>37,540</b>	<b>39,049</b>
<b>Further adjustments needed...</b>		
<b>In response to balancing jobs and workers</b> Projected growth in workers exceeds forecast jobs growth and planned jobs growth therefore no further adjustment needed	-	+5,600
<b>In response to market signals</b> 7,009 dwellings needed (in addition to the 667 dwellings for concealed families and homeless households) to deliver the overall uplift of 7,676 dwellings proposed	-	+7,009
<b>Combined impact of the identified adjustments</b>	-	<b>+7,009</b>
<b>Full Objectively Assessed Need for Housing 2011-33</b>	-	<b>46,058</b>

5.89 Of course, it is important to remember that "*establishing future need for housing is not an exact science*" (PPG paragraph 14). Whilst the OAN must be underwritten by robust evidence that is based on detailed analysis and informed by reasonable assumptions, the final conclusions should reflect the overall scale of the housing needed in the housing market area without seeking to be spuriously precise.

5.90 **The SHMA therefore identifies the Full Objective Assessed Need for Housing in West Essex and East Hertfordshire to be 46,100 dwellings over the 22-year period 2011-33, equivalent to an average of 2,095 dwellings per year. This includes the Objectively Assessed Need of Affordable Housing for 13,600 dwellings (based on 13,291 households) over the same period, equivalent to an average of 618 per year.**

<sup>5.91</sup> Considering the needs in each local authority, the SHMA concludes that the Objectively Assessed Need for Housing over the 22-year period as being:

- » 16,400 dwellings in East Hertfordshire (745 per year);
- » 11,300 dwellings in Epping Forest (514 per year);
- » 5,900 dwellings in Harlow (268 per year); and
- » 12,500 dwellings in Uttlesford (568 per year).

<sup>5.92</sup> This is the average number of dwellings needed every year over the period 2011-33 and represents a 1.1% increase in the dwelling stock each year across the study area (consistent with the 1.1% growth required across England to deliver 253,600 dwellings annually).

<sup>5.93</sup> Figure 76 sets out the mix of market and affordable housing need by dwelling type and size. Most of the market housing need is for housing (29,700 dwellings over the 22-year period) with a need for 2,800 flats also identified (around 9%). The need for affordable housing is also predominantly for housing (around 10,000 dwellings) with a need for around 3,600 flats (around 26%).

<sup>5.94</sup> Of course, the spatial distribution of housing provision will be determined through the planning process; which will also consider the most appropriate location for market and affordable housing, and the type and size of properties to be provided in different areas.

**Figure 76: Market and affordable housing mix by LA (Source: ORS Housing Model. Note: Figures may not sum due to rounding)**

		East Herts	Epping Forest	Harlow	Uttlesford	TOTAL
<b>MARKET HOUSING</b>						
Flat	1 bedroom	710	430	170	140	1,400
	2+ bedrooms	810	450	30	80	1,400
House	2 bedrooms	1,510	1,020	610	690	3,800
	3 bedrooms	5,640	4,090	1,690	4,290	15,700
	4 bedrooms	2,740	1,580	50	3,110	7,500
	5+ bedrooms	770	510	-	1,410	2,700
	<b>Total Market Housing</b>	<b>12,200</b>	<b>8,100</b>	<b>2,500</b>	<b>9,700</b>	<b>32,500</b>
<b>AFFORDABLE HOUSING</b>						
Flat	1 bedroom	820	570	100	320	1,800
	2+ bedrooms	470	450	550	330	1,800
House	2 bedrooms	1,210	710	940	850	3,700
	3 bedrooms	1,410	1,180	1,400	1,060	5,100
	4+ bedrooms	310	310	360	220	1,000
<b>Total Affordable Housing</b>		<b>4,200</b>	<b>3,200</b>	<b>3,400</b>	<b>2,800</b>	<b>13,600</b>
<b>TOTAL DWELLINGS</b>		<b>16,400</b>	<b>11,300</b>	<b>5,900</b>	<b>12,500</b>	<b>46,100</b>

# 6. Housing Requirements

## Considering the policy response to identified housing need

6.1 The SHMA has established the Full Objectively Assessed Need for Housing in the West Essex and East Hertfordshire HMA to be 46,100 dwellings over the 22-year period 2011-33, however this figure will need to be tested through the statutory Plan-making process. Until it is tested at examination, the OAN must not be portrayed as a new housing requirement for planning purposes: existing adopted Plans for each Local Authority will continue to fulfil this role.

6.2 This is confirmed by Planning Practice Guidance for housing and economic land availability assessment, which states that *“housing requirement figures in up-to-date adopted Local Plans should be used as the starting point for calculating the five year supply”* (paragraph 30). This point was further emphasised in a letter from the Housing Minister to the Planning Inspectorate in December 2014:

*“Many councils have now completed Strategic Housing Market Assessments either for their own area or jointly with their neighbours. The publication of a locally agreed assessment provides important new evidence and where appropriate will prompt councils to consider revising their housing requirements in their Local Plans. We would expect councils to actively consider this new evidence over time and, where over a reasonable period they do not, Inspectors could justifiably question the approach to housing land supply.*

*“However, the outcome of a Strategic Housing Market Assessment is untested and should not automatically be seen as a proxy for a final housing requirement in Local Plans. It does not immediately or in itself invalidate housing numbers in existing Local Plans.*

*“Councils will need to consider Strategic Housing Market Assessment evidence carefully and take adequate time to consider whether there are environmental and policy constraints, such as Green Belt, which will impact on their overall final housing requirement. They also need to consider whether there are opportunities to co-operate with neighbouring planning authorities to meet needs across housing market areas. Only after these considerations are complete will the council’s approach be tested at examination by an Inspector. Clearly each council will need to work through this process to take account of particular local circumstances in responding to Strategic Housing Market Assessments.”*

6.3 The individual local authorities are currently in the process of preparing Local Plans. In establishing the OAN, the SHMA has taken full account of all unmet need for housing that is likely to exist at the start of new Plan periods starting in 2011; therefore any under-delivery against current housing targets need not be counted again. However, whilst the OAN identified by the SHMA will be a key part of the evidence base, the Local Plans will be the mechanism through which the SHMA evidence will be assessed against environmental and policy constraints, such as Green Belt, to identify a sustainable and deliverable plan requirement.

6.4 The Local Plans will also consider the spatial distribution of the OAN across the functional housing market area for West Essex and East Hertfordshire, considering the full geographic area identified in Chapter 2.

## Affordable Housing Need

6.5 The SHMA has identified a substantial need for additional affordable housing: a total of 13,600 dwellings across the West Essex and East Hertfordshire HMA over the 22-year period 2011-33, which includes 5,218 households in need of affordable housing in 2011. The analysis also identified that a number of households unable to afford their housing costs are likely to move away from the area, and some might prefer to stay in the area if housing costs were less expensive or if more affordable housing was available.

6.6 Given the overall level of affordable housing need identified, it will be important to maximise the amount of affordable housing that can be delivered through market housing led developments throughout the 22-year period. Key to this is the economic viability of such developments, as this will inevitably determine (and limit) the amount of affordable housing that individual schemes are able to deliver.

6.7 As part of their strategic planning and housing enabling functions, the Councils will need to consider the most appropriate affordable housing target in order to provide as much affordable housing as possible without compromising overall housing delivery. This target should provide certainty to market housing developers about the level of affordable housing that will be required on schemes, and the Councils should ensure that this target is achieved wherever possible in order to increase the effective rate of affordable housing delivery.

6.8 PPG identifies that Councils should also consider "*an increase in the total housing figure*" where this could "*help deliver the required number of affordable homes*"; although this would not be an adjustment to the OAN, but a policy response to be considered in the local plan:

*The total affordable housing need should then be considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments, given the probable percentage of affordable housing to be delivered by market housing led developments. An increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes.*

**Planning Practice Guidance (March 2014), ID 2a-029**

6.9 It will therefore be important for the Councils to consider the need for any further uplift once the affordable housing target has been established. However, as confirmed by the Inspector examining the Cornwall Local Plan in his preliminary findings<sup>30</sup> (paragraphs 3.20-21):

*"National guidance requires **consideration** of an uplift; it does not automatically require a mechanistic increase in the overall housing requirement to achieve all affordable housing needs based on the proportions required from market sites. The realism of achieving the intended benefit of additional affordable housing from any such uplift is relevant at this stage, otherwise any increase may not achieve its purpose.*

*Any uplift on the demographic starting point ... would deliver some additional affordable housing and can be taken into account in judging whether any further uplift is justified."*

6.10 Given that the identified OAN already incorporates an uplift of more than 20% on the baseline household projections, this will contribute to increasing the supply of affordable homes through market housing led developments. The Councils will need to consider whether there is sufficient justification for any further

<sup>30</sup> <https://www.cornwall.gov.uk/media/12843214/ID05-Preliminary-Findings-June-2015-2-.pdf>

increase in the total housing figures included in the local plan (beyond the identified OAN) as part of their policy response to meeting the identified need for affordable housing; although it will be important for them to consider the implications of providing a higher level of market housing than identified by the OAN, in particular the consequences on the balance between jobs and workers.

6.11 The contribution towards affordable housing delivery that can be achieved through market housing led developments shouldn't be considered in isolation. The Government has launched a series of new initiatives in the past 5 years to attempt to boost the supply of homes, including affordable homes. The key Homes and Communities Agency (HCA) investment programmes include:

- » **Affordable Homes Programme:** the flagship HCA investment programme(s) for new affordable homes – the 2015-18 programme intends to support the building of 43,821 new affordable homes across 2,697 schemes in England
- » **Affordable Homes Guarantees Programme:** guaranteeing up to £10bn of housing providers' debt in order to bring schemes forward
- » **Care and Support Specialised Housing Fund:** funding used to accelerate the development of the specialised housing market such as Older People and those with disabilities
- » **Community Right to Build:** (Outside London) including some provision for affordable homes
- » **Empty Homes programme**
- » **Estate Regeneration Programme:** often creating mixed tenure communities
- » **Get Britain Building:** aiming to unlock locally-backed stalled sites holding planning permission and including affordable homes

6.12 However, there are currently a number of constraints that are affecting the delivery of new affordable housing; although there is also a range of other initiatives that may help increase delivery in future.

Constraints affecting the delivery of new affordable housing	Other initiatives potentially increasing the delivery of new affordable housing
<p><b>Welfare reform</b> Most stakeholders (including private landlords, house builders, local authorities and RPs) are concerned at the impact of benefit reform and the risk to their revenue. Credit rating agency have also signalled concerns.</p> <p><b>Registered Providers</b> Many RPs have become more risk averse in their approach to developing new homes. The move to Affordable Rent as opposed to Social Rent housing and the resultant reduction in grant rates has made delivery and viability issues more pronounced. Grant level reductions in the AHP 2015-18 have, arguably, increased risk perceptions further.</p> <p><b>Stock rationalisation by Registered Providers</b> The new regulatory framework for RPs continues the emphasis on economic regulation. This could, potentially, reduce current supply of affordable housing. Already, sector trends indicate many associations are identifying under-performing stock with a view to rationalisation.</p> <p><b>Extension of Right to Buy (RTB) to Registered Providers</b> The Government pledge to introduce an RTB for RP tenants mean many associations will need to assess the risk to their Business Plans and this might reduce appetite for new development.</p>	<p><b>Councils building more new homes</b> Many Councils are now trying to bring new rental schemes forward following reform of the HRA system.</p> <p><b>New 'for profit' providers</b> Over 30 'for profit' providers to deliver AHP homes have so far registered with the HCA, mainly in order to deliver non-grant affordable housing. There is arguably potential for increased supply of affordable homes for rent by 'for profit' providers.</p> <p><b>Co-operative Housing</b> Given current delivery constraints, co-operative housing has been identified as a further alternative supply for households unable to access ownership or affordable housing. The Confederation of Co-operative Housing, working with RPs, is currently trying to bring schemes forward. The HCA has held back funding for Co-operative Housing in the previous AHP.</p>

6.13 The Government also sees the growth in the private rented sector as positive. Whilst private rented housing (with or without housing benefit) does not meet the definitions of affordable housing, it offers a flexible form of tenure and meets a wide range of housing needs. The sector also has an important role to play given that many tenants that rent from a private landlord can only afford their housing costs as they receive housing benefit. If there isn't sufficient private rented housing available at a price these households can afford, the need for affordable housing would be even higher.

6.14 A Government task force was established in 2013 to encourage and support build-to-let investment<sup>31</sup>. The HCA also has several investment programmes to help bring schemes forward. These include a £1 billion Build to Rent Fund, which will provide equity finance for purpose-built private rented housing, alongside a £10 billion debt guarantee scheme to support the provision of these new homes. New supply of private rented housing therefore seems likely from various sources, despite current volumes being relatively low:

- » **Registered Providers** are potential key players in the delivery of new PRS supply and recently several have begun to enter the market in significant scale<sup>32</sup>, particularly in response to the Build to Rent Fund, although other institutional funding is also being sought. Overall, although interest is high, it remains unclear as to the scale of development which may deliver.
- » **Local Authorities** can also enable new PRS supply to come forward investing local authority land, providing financial support (such as loan guarantees), and joint ventures with housing associations, developers or private investors under the Localism Act. Whilst LA initiatives may contribute to new build PRS, these will take time to deliver significant numbers of units.
- » **Local Enterprise Partnerships** are another potential source of new build PRS homes<sup>33</sup>. The Growing Places Fund provides £500 million to enable the development of local funds to promote economic growth and address infrastructure constraints in order to enable the delivery of jobs and houses. Any funding for housing, however, has to compete with other priorities e.g. skills and infrastructure. However, LEPs could potentially enable new PRS housing delivery and some attempts have been made in this regard to increase supply.
- » **Insurance companies and pension funds** have been expanding into property lending in recent years; especially schemes in London. Nearly a quarter of new UK commercial property finance came from non-bank lenders in 2013.

6.15 National Government policy is also focussed on improving the quality of both management and stock in the private rented sector, and local councils also have a range of enforcement powers. This is particularly important given the number of low income households that rent from a private landlord.

6.16 Whilst the SHMA has identified an affordable housing need of 13,600 dwellings over the 22-year period 2011-33, this is based on the level of housing benefit support provided to households living in the private rented sector remaining constant. Without this support, a total of 19,700 affordable homes would need to be provided over the same period.

6.17 **Given the substantial need for affordable housing identified across West Essex and East Hertfordshire, the Councils will need to consider the most appropriate affordable housing target as part of their strategic planning and housing enabling functions. However, it will also be important for the Councils to consider all of the options available to help deliver more affordable homes in the area.**

<sup>31</sup> <https://www.gov.uk/government/publications/2010-to-2015-government-policy-rented-housing-sector/2010-to-2015-government-policy-rented-housing-sector#appendix-9-private-rented-sector>

<sup>32</sup> <http://www.insidehousing.co.uk/business/development/transactions/lq-to-launch-prs-subsidiary/7009701.article>

<sup>33</sup> <https://www.gov.uk/government/publications/growing-places-fund-prospectus>

## Older People

6.18 Planning Practice Guidance for Housing and Economic Land Availability Assessment states the following in relation to housing for older people:

### ***How should local planning authorities deal with housing for older people?***

*Older people have a wide range of different housing needs, ranging from suitable and appropriately located market housing through to residential institutions (Use Class C2). Local planning authorities should count housing provided for older people, including residential institutions in Use Class C2, against their housing requirement. The approach taken, which may include site allocations, should be clearly set out in the Local Plan.*

**Planning Practice Guidance (March 2015), ID 3-037**

6.19 On this basis, the Councils will need to consider the most appropriate way to count the supply of bedspaces in residential institutions (Use Class C2) as part of their overall housing monitoring, and decide whether this should form part of the overall housing supply.

6.20 **It is important to recognise that the identified OAN of 46,100 dwellings does not include the projected increase of institutional population, which represents a growth of 1,773 persons over the 22-year period 2011-33.** This increase in institutional population is a consequence of the CLG approach to establishing the household population<sup>34</sup>, which assumes “*that the share of the institutional population stays at 2011 levels by age, sex and relationship status for the over 75s*” on the basis that “*ageing population will lead to greater level of population aged over 75 in residential care homes*”.

6.21 **On this basis, if bedspaces in residential institutions in Use Class C2 are counted within the housing supply then the increase in institutional population aged 75 or over would need to be counted as a component of the housing requirement (in addition to the assessed OAN).** If these bedspaces are not counted within the housing supply, then there is no need to include the increase in institutional population as part of the housing requirement.

6.22 Nevertheless, older people are living longer, healthier lives, and the specialist housing offered today may not be appropriate in future years and the Government’s reform of Health and Adult Social Care is underpinned by a principle of sustaining people at home for as long as possible. Therefore, despite the ageing population, future policies may lead to a decline in the number of care homes and nursing homes, as people are supported to continue living in their own homes for longer.

6.23 Although the institutional population is projected to increase by 1,773 persons over the Plan period (based on the CLG assumption that there will be a “*greater level of population aged over 75 in residential care homes*”), it does not necessarily follow that all of this need should be provided as additional bedspaces in residential institutions in Use Class C2 – but any reduction in the growth of institutional population aged 75 or over would need to be offset against higher growth for these age groups in the household population; which would yield more households than assumed when establishing the OAN.

6.24 **As a consequence, if fewer older people are expected to live in communal establishments than is currently projected, the needs of any additional older people in the household population would need to be counted in addition to the assessed OAN.**

<sup>34</sup> Household Projections 2012-based: Methodological Report, Department for Communities and Local Government, February 2015

## Households with Specific Needs

6.25 Paragraph 50 of the NPPF identifies that local planning authorities should plan households with specific needs, and PPG states:

### ***Households with specific needs***

*There is no one source of information about disabled people who require adaptations in the home, either now or in the future.*

*The Census provides information on the number of people with long-term limiting illness and plan makers can access information from the Department of Work and Pensions on the numbers of Disability Living Allowance/Attendance Allowance benefit claimants. Whilst these data can provide a good indication of the number of disabled people, not all of the people included within these counts will require adaptations in the home.*

*Applications for Disabled Facilities Grant will provide an indication of levels of expressed need, although this could underestimate total need. If necessary, plan makers can engage with partners to better understand their housing requirements.*

**Planning Practice Guidance (March 2015), ID 2a-021**

6.26 Personal Independence Payments started to replace the Disability Living Allowance from April 2013, and these are awarded to people aged under 65 years who incur extra costs due to disability (although there is no upper age limit once awarded, providing that applicants continue to satisfy either the care or mobility conditions). Higher Mobility Component (HMC) is awarded when applicants have “*other, more severe, walking difficulty*” above the Lower Mobility Component (which is for supervision outdoors).

6.27 Attendance Allowance contributes to the cost of personal care for people who are physically or mentally disabled and who are aged 65 or over. It is paid at two different rates: a lower rate is paid for those who need help or constant supervision during the day, or supervision at night; a higher rate is paid where help or supervision throughout both day and night is needed, or if people are terminally ill.

6.28 Nevertheless, PPG recognises that neither of these sources provides information about the need for adapted homes as “*not all of the people included within these counts will require adaptations in the home*”.

6.29 Disabled Facilities Grants (DFG) are normally provided by Councils and housing associations to adapt properties for individuals with health and/or mobility needs. Grants cover a range of works, such as:

- » Widening doors and installing ramps;
- » Improving access to rooms and facilities, for example stair lifts or a downstairs bathroom;
- » Providing a heating system suitable for needs; and
- » Adapting heating or lighting controls to make them easier to use.

6.30 Local data about DFGs was published by CLG in Live Table 314<sup>35</sup>, and this indicated that 192 DFGs were funded in the study area in 2010/11 at an average cost of £7,260. This represents around 10% of the overall annual housing need identified, however PPG notes that whilst patterns of DFG applications “*provide an indication of expressed need*” it cautions that this could “*underestimate need*”. Of course, it is

<sup>35</sup> Table 314 has now been discontinued by CLG

also important to recognise that DFGs typically relate to adaptations to the existing housing stock rather than new housing provision.

<sup>6.31</sup> As previously noted, the Government's reform of Health and Adult Social Care is underpinned by a principle of sustaining people at home for as long as possible. This was reflected in the recent changes to building regulations relating to adaptations and wheelchair accessible homes that were published in the 2015 edition of Approved Document M: Volume 1 (Access to and use of dwellings)<sup>36</sup>. This introduces three categories of dwellings:

- » Category 1: Visitable dwellings – Mandatory, broadly about accessibility to ALL properties
- » Category 2: Accessible and adaptable dwellings – Optional, similar to Lifetime Homes
- » Category 3: Wheelchair user dwellings – Optional, equivalent to wheelchair accessible standard.

<sup>6.32</sup> Local authorities should identify the proportion of dwellings in new developments that should comply with the requirements for Category 2 and Category 3 as part of the Local Plan, based on the likely future need for housing for older and disabled people (including wheelchair user dwellings) and taking account of the overall impact on viability. Planning Practice Guidance for Housing optional technical standards states:

*Based on their housing needs assessment and other available datasets it will be for local planning authorities to set out how they intend to approach demonstrating the need for Requirement M4(2) (accessible and adaptable dwellings), and / or M4(3) (wheelchair user dwellings), of the Building Regulations.*

*To assist local planning authorities in appraising this data the Government has produced a summary data sheet. This sets out in one place useful data and sources of further information which planning authorities can draw from to inform their assessments. It will reduce the time needed for undertaking the assessment and thereby avoid replicating some elements of the work.*

**Planning Practice Guidance (March 2015), ID 56-007**

<sup>6.33</sup> The demographic projections from the housing needs assessment (chapter 3) show that the population of West Essex and East Hertfordshire is likely to increase by around 65,000 persons over the 22-year period 2011-33. The number of people aged 65 or over is projected to increase by around 47,200 persons, almost three-quarters (73%) of the overall growth. This includes 23,300 persons aged 85 or over, more than a third (36%) of the total increase. Most of these older people will already live in the area and many will not move from their current homes; but those that do move home are likely to need accessible housing. **Given this context, the evidence supports the need for all dwellings to meet Category 2 requirements, providing that this does not compromise viability.** This approach has been adopted in Local Plans elsewhere.

<sup>6.34</sup> The CLG guide to available disability data<sup>37</sup> (referenced by PPG) shows that currently around 1-in-30 households in England (3.3%) have at least one wheelchair user, although the rate is notably higher for households living in affordable housing (7.1%). It is also important to recognise that these proportions are likely to increase over the period to 2033 in the context of the larger numbers of older people projected to be living in the area. **The evidence therefore supports the need for 10% of market housing and 15% of affordable housing to meet Category 3 requirements.** This recognises the changing demographics of the area and also provides an element of choice for households that need wheelchair user dwellings now as well as those households considering how their needs may change in future.

<sup>36</sup> <http://www.planningportal.gov.uk/buildingregulations/approveddocuments/partm/adm/admvol1>

<sup>37</sup> <https://www.gov.uk/government/publications/building-regulations-guide-to-available-disability-data>

## People Wishing to Build their Own Homes

6.35 Paragraph 50 of the NPPF identifies that local planning authorities should plan for people wishing to build their own homes, and PPG states:

### ***People wishing to build their own homes***

*The Government wants to enable more people to build their own home and wants to make this form of housing a mainstream housing option. There is strong industry evidence of significant demand for such housing, as supported by successive surveys. Local planning authorities should, therefore, plan to meet the strong latent demand for such housing.*

Planning Practice Guidance (March 2015), ID 2a-021

6.36 Over half of the population (53%) say that they would consider building their own home<sup>38</sup> (either directly or using the services of architects and contractors); but it's likely that this figure conflates aspiration with effective market demand. Self-build currently represents only around 10% of housing completions in the UK, compared to rates of around 40% in France and 70 to 80% elsewhere in Europe.

6.37 The attractiveness of self-build is primarily reduced costs; however the Joseph Rowntree Foundation report *"The current state of the self-build housing market"* (2001) showed how the sector in the UK had moved away from those unable to afford mainstream housing towards those who want an individual property or a particular location.

6.38 *"Laying the Foundations – a Housing Strategy for England"* (HM Government, 2011)<sup>39</sup> redefined self-build as 'Custom Build' and aimed to double the size of this market, creating up to 100,000 additional homes over the decade. *"Build-it-yourself? Understanding the changing landscape of the UK self-build market"* (University of York, 2013) subsequently set out the main challenges to self-build projects and made a number of recommendations for establishing self-build as a significant contributor to housing supply. The previous Government also established a network of 11 Right to Build 'Vanguards' to test how the 'Right to Build' could work in practice in a range of different circumstances.

6.39 In the Budget 2014, the Government announced an intention to consult on creating a new 'Right to Build', giving 'Custom Builders' a right to a plot from councils. The Self-Build and Custom Housebuilding Act<sup>40</sup> 2015 has now placed a duty on local planning authorities to:

- » Keep a register (and publicise this) of eligible prospective 'custom' and self-build individuals, community groups and developers;
- » Plan to bring forward sufficient serviced plots of land, probably with some form of planning permission, to meet the need on the register and offer these plots to those on the register at market value; and
- » Allow developers working with a housing association to include self-build and custom-build as contributing to their affordable housing contribution.

6.40 Government funding<sup>41</sup> is currently available via the HCA Custom Build Homes Fund programme (short-term project finance to help unlock group custom build or self-build schemes). The Government announced

<sup>38</sup> Building Societies Association Survey of 2,051 UK consumers 2011

<sup>39</sup> <https://www.gov.uk/government/publications/laying-the-foundations-a-housing-strategy-for-england--2>

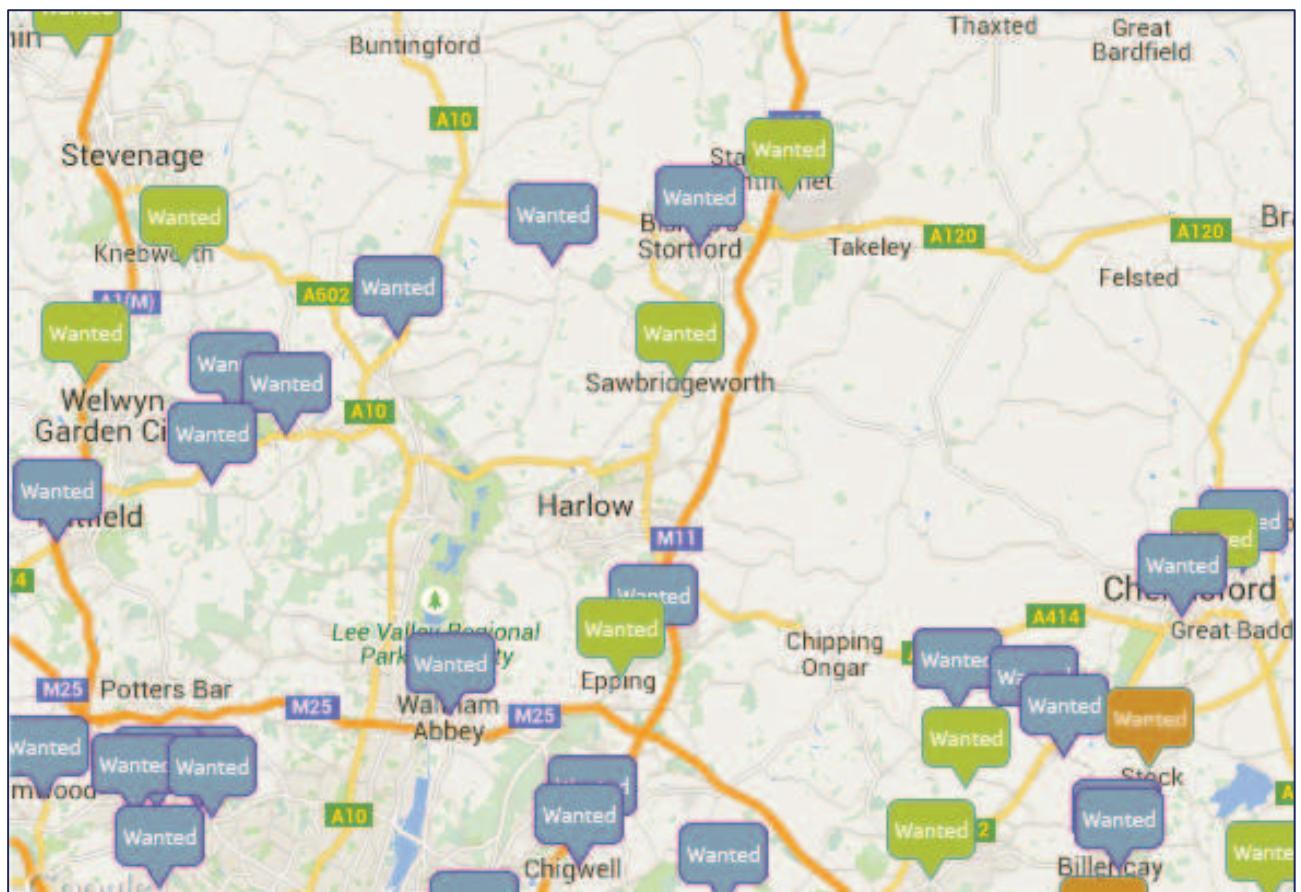
<sup>40</sup> <http://services.parliament.uk/bills/2014-15/selfbuildandcustomhousebuilding.html>

<sup>41</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/364100/custom\\_build\\_homes\\_fund\\_prospectus\\_120712.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364100/custom_build_homes_fund_prospectus_120712.pdf)

further measures in 2014 (Custom Build Serviced Plots Loan Fund) to encourage people to build their own homes, and to help make available 10,000 'shovel ready' sites with planning permission.

6.41 In May 2012 a Self-Build Portal<sup>42</sup> run by the National Custom and Self Build Association (NCaSBA) was launched. Figure 77 shows the current registrations from groups and individuals looking for land in the HMA on the 'Need-a-Plot' section of the portal. Whilst there is clearly some interest in self-build across the area, this represents only a very small proportion of the overall housing need identified each year.

**Figure 77: Group and Individual Registrations currently looking for land in and around West Essex and East Hertfordshire on the 'Need-a-Plot' Portal (Source: NCaSBA, July 2015. Note: Green flags represent solo plots wanted, brown flags represent group plots wanted and blue flags represent group or solo plots wanted)**



6.42 Given the historic low supply of self-build homes and the challenges in bringing schemes forward it seems unlikely that self-build will make a significant contribution locally to meeting housing need in its current form. Nevertheless, the Councils should put arrangements in place to comply with the Self-Build and Custom Housebuilding Act (if they have not already done so).

6.43 A survey to ascertain levels of demand for self-build could be undertaken in future; however it would be important to ensure that appropriate questions are designed that can effectively separate aspiration from effective market demand.

<sup>42</sup> <http://www.selfbuildportal.org.uk/>

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**Joint Statement for the Cooperation for Sustainable Development Board on  
22 September 2015**

On 22 September 2015, the Co-operation for Sustainable Development Board (*the Board*) noted the updated Strategic Housing Market Assessment for the West Essex/East Herts area (covering East Herts, Epping Forest, Harlow and Uttlesford Districts) and an associated joint report on economic growth. The revised SHMA identifies the objectively assessed housing need for the SHMA area using the latest published population projections as the starting point. The new SHMA identifies a total objectively assessed housing need for the Housing Market Area as a whole of 46,100 net additional dwellings over the Local Plan period 2011-2033. The figures are broken down by District – East Herts DC 16,400; Epping Forest DC 11,300, Harlow DC 5,900 and Uttlesford DC 12,500. It also gives a breakdown of the OAHN for each district by tenure and dwelling size.

The identification of the objectively assessed housing need **is not** the housing target but provides the basis for each authority to develop its housing target taking account of policy, and supply factors and all 4 authorities will be considering the SHMA and economic reports at a local level. East Herts will be reporting to the District Planning Executive Panel on 22 October 2015; Epping Forest District Council will be reporting the SHMA and economic reports to its Cabinet on 8 October 2015; Harlow will be reporting to its Local Development Plans Panel on 21 October 2015; and Uttlesford will be reporting to the Planning Policy Working Group on 29 September 2015.

In accordance with the legal obligations of the Duty to Cooperate the Board will continue to discuss the distribution of proposed housing and jobs growth across the Strategic Housing Market Area/Functional Economic Market Area. This includes ensuring that Strategic Housing Market Area housing needs are met, taking account of availability, viability and deliverability, with the outcomes of any discussions being taken back to the individual authorities for decision making. The Board will work towards the production of a memorandum of understanding to support the joint working and meeting the duty to cooperate.

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# Agenda Item 6

## EAST HERTS COUNCIL

### DISTRICT PLANNING EXECUTIVE PANEL – 22 OCTOBER 2015

#### REPORT BY THE LEADER OF THE COUNCIL

#### ECONOMIC EVIDENCE TO SUPPORT THE DEVELOPMENT OF THE OAHN FOR WEST ESSEX AND EAST HERTS, SEPTEMBER 2015

WARD(S) AFFECTED: ALL

#### Purpose/Summary of Report

- This report presents the findings of the economic evidence prepared for the Co-operation for Sustainable Development Board (*The Board*) to support the development of the objectively assessed housing need (OAHN) for West Essex and East Herts who share a housing market area.
- The report seeks agreement to use the Report as part of the evidence base to inform and support preparation of the District Plan.

#### RECOMMENDATION FOR DISTRICT PLANNING EXECUTIVE PANEL: That Council, via the Executive, be advised that:

(A)	the Economic Evidence to Support the Development of the OAHN for West Essex and East Herts, September 2015, be agreed as part of the evidence base to inform and support preparation of the East Herts District Plan;
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#### 1.0 Background

- 1.1 As explained in the report at Agenda item 5, Opinion Research Services (ORS) was jointly commissioned last July by the local authorities of West Essex (Epping Forest, Harlow and Uttlesford) and East Herts to undertake a Strategic Housing Market Assessment (SHMA).
- 1.2 A SHMA is a technical study intended to assist local planning authorities identify the scale and mix of housing and the range of

tenures that the population is likely to need over a plan period.

- 1.3 In order to ensure the SHMA takes into account economic issues, the Board commissioned Hardisty Jones Associates (HJA) to provide economic evidence to help calculate the OAHN for the SHMA area. A robust OAHN depends on having a shared, common employment growth projection for the area based on the best known information available. Recent Local Plan Inspectors' reports have stressed the importance of a clear link between employment and housing projections.
- 1.4 HJA looks at historic employment trends and projects future jobs growth at the SHMA level, and how this growth might be distributed across the four local authority areas. The report is 'policy-off' and therefore does not account for any policy interventions that individual authorities might make to alter the future scale of growth or distribution of jobs.
- 1.5 This report, along with the SHMA was noted by the Co-operation for Sustainable Development Board on 22 September 2015 and a joint statement, attached as **Essential Reference Paper 'B'** of Agenda Item 5, was agreed. Given that the economic evidence is an important component of the SHMA, the full document is presented as **Essential Reference Paper 'B'**.

## 2.0 Report

- 2.1 The Economic Evidence report contains seven chapters plus an executive summary. Chapter 1 introduces the scope and purpose of the study. The main purpose of this evidence is to understand how many people are projected to work in the SHMA area and each local authority area. There is a difference between working people that live in an area and working people that work in an area. There is also a difference between the number of jobs and the number of working people as some working people have more than one job (double-jobbing). This evidence therefore concentrates on jobs rather than workers.
- 2.2 Chapter 2 discusses the difference between the Functional Economic Market Area (FEMA) and the SHMA. A FEMA is an area over which a local economy and its key markets operate. It does not necessarily correlate with administrative boundaries. Whereas a SHMA area is defined as "...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.” A FEMA is determined by travel to work patterns (contained in the 2011 Census) and by data on economic flows of workers and trade.

- 2.3 Because of the particular geography of the area, the FEMA is much wider than the SHMA area and covers central and north London boroughs, as well as large parts of Essex, Hertfordshire and Cambridgeshire. There is a long term trend of out-commuting given the proximity of London and Cambridge, but there is also a high proportion of in-commuting.
- 2.4 Chapter 3 considers historic patterns of job creation using a wide variety of data sources published by the Office for National Statistics (ONS). It is necessary to use a wide range of data sources as some are limited by sample size, temporal range or consistency. The report therefore takes the data available and ‘smooths’ the trends to provide a robust baseline from which to build projections.
- 2.5 Chapter 4 looks at the working assumptions of each local authority in the Co-op group, in terms of what each authority is currently planning for based on their own employment evidence. For example, the emerging East Herts District Plan is currently planning for the creation of 9,700 jobs to 2031 (510 jobs per annum 2012-2031) based on evidence undertaken in 2008, 2012 and 2013.
- 2.6 Chapter 5 analyses the difference between historic actual jobs growth, the emerging evidence of each authority and the East of England Forecasting Model (EEFM) projection of future jobs growth. Each authority area saw a decline in jobs due to the 2008 recession. However, East Herts saw an overall decline in employment since the baseline date of 2002, compared to Harlow, which despite a significant fall has since returned to previous jobs totals, Uttlesford which has seen a recent increase and Epping Forest which has seen the highest level of job creation. All data sources predict a recovery from the recession with a significant growth in jobs over the next few years, which will gradually reduce over time.
- 2.7 The EEFM is used as a baseline for projecting the future jobs growth in the SHMA area. The baseline projection is for an additional 1,590 jobs per year between 2011 and 2031 (a total of 34,980 jobs). This does not include an additional allowance for Stansted Airport related growth.

2.8 HJA were therefore specifically tasked with taking into account the anticipated growth in jobs since Manchester Airport Group (MAG) took ownership of the airport. The Stansted Sustainable Development Plan proposes a growth of 10,000 on-site jobs up to 2030. This study draws upon a detailed Oxford Economics report on the Economic Impact of Stansted Scenarios (2013). Some of these jobs have already been included in the EEFM, while other jobs will cause a displacement of existing jobs elsewhere. This study therefore estimates that of the additional projected 10,000 jobs at the airport, 6,500 jobs would be created within the SHMA area. This equates to an additional 300 jobs per annum in addition to the baseline growth of 1,590. Therefore total jobs growth across the SHMA area increases to 1,895 jobs per annum (a total of 41,690 rounded up to 41,700).

2.9 Chapter 6 concentrates on the projected jobs growth and its distribution across the SHMA area using two scenarios. Under Scenario 1, the baseline projected growth of an additional 1,590 jobs per year is distributed based on the recent historic distribution of jobs using ONS jobs density data. Based on a current share of 33% of jobs in the SHMA area, East Herts would see a projected 525 jobs per year. Scenario 2 however, distributes the baseline figure based on the projected share indicated by the EEFM. Under this scenario East Herts would have a 28% share of total projected SHMA area jobs, a projected growth of 455 jobs per year.

2.10 Chapter 6 then assesses the distribution once the additional 300 jobs per year created by Stansted Airport are added (a total of 1,895 jobs per annum). The majority of new jobs created by the airport would be ground crew and service jobs. Therefore these would be located at the airport itself which is within Uttlesford district. Conversely, this means fewer jobs in the other authority areas because of the displacement effects of drawing a larger share of the labour force to Stansted. Under this Scenario 1, East Herts would see a projected 505 jobs (based on the current share), while under Scenario 2, East Herts would see 435 jobs (based on the projected share).

2.11 Chapter 7 contains the conclusions of the study. These conclusions have been used to inform the SHMA presented at Agenda Item 5.

### 3.0 Implications/Consultations

3.1 Information on any corporate issues and consultation associated with this report can be found within **Essential Reference Paper 'A'**.

### Background Papers

- Economic Evidence to Support the Development of the OAHN for West Essex and East Herts (September 2015)  
[www.eastherts.gov.uk/technicalstudies](http://www.eastherts.gov.uk/technicalstudies)

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## **ESSENTIAL REFERENCE PAPER 'A'**

### **IMPLICATIONS/CONSULTATIONS**

Contribution to the Council's Corporate Priorities/ Objectives (delete as appropriate):	<p><b><i>People – Fair and accessible services for those that use them and opportunities for everyone to contribute</i></b></p> <p>This priority focuses on delivering strong services and seeking to enhance the quality of life, health and wellbeing, particularly for those who are vulnerable.</p> <p><b><i>Place – Safe and Clean</i></b></p> <p>This priority focuses on sustainability, the built environment and ensuring our towns and villages are safe and clean.</p> <p><b><i>Prosperity – Improving the economic and social opportunities available to our communities</i></b></p> <p>This priority focuses on safeguarding and enhancing our unique mix of rural and urban communities, promoting sustainable, economic opportunities and delivering cost effective services.</p>
Consultation:	None
Legal:	None
Financial:	None
Human Resource:	None other than Planning Policy Team resource.
Risk Management:	None
Health and wellbeing – issues and impacts:	The emerging East Herts District Plan in general will have positive impacts on health and wellbeing through a range of policy approaches that seek to create sustainable communities.

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# **Economic Evidence to Support the Development of the OAHN for West Essex and East Herts**

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*Final Report*

**Prepared for the Cooperation for Sustainable Development Board**

September 2015

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Job Number:	14 04 03
Version Number:	2.1
Approved by:	Gareth Jones
Date:	September 2015

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## Executive Summary

Hardisty Jones Associates (HJA) was commissioned to provide economic evidence that will be used to help calculate the Objectively Assessed Housing Need (OAHN) within the West Essex and East Hertfordshire Strategic Housing Market Assessment. It has been commissioned by the Cooperation for Sustainable Development Board comprising members of four local authorities: East Hertfordshire District Council, Epping Forest District Council, Harlow Council and Uttlesford District Council. The economic evidence needs to be robust and objective. The evidence and subsequent OAHN should then be used to inform the policy-making process.

HJA has looked at historic job growth and projections of future jobs growth at the Strategic Housing Market Assessment (SHMA) area level. We have then suggested how this projected growth might be distributed across the four Local Authority areas. This is a 'policy-off' approach and is a starting point i.e. it does not account for any policies that the Local Authorities may choose to implement to alter the future scale of growth or distribution of jobs.

The results of this analysis and the indicative distribution of jobs across the four Local Authority areas are intended to inform each Council and help them to individually and jointly develop a policy approach to future jobs growth.

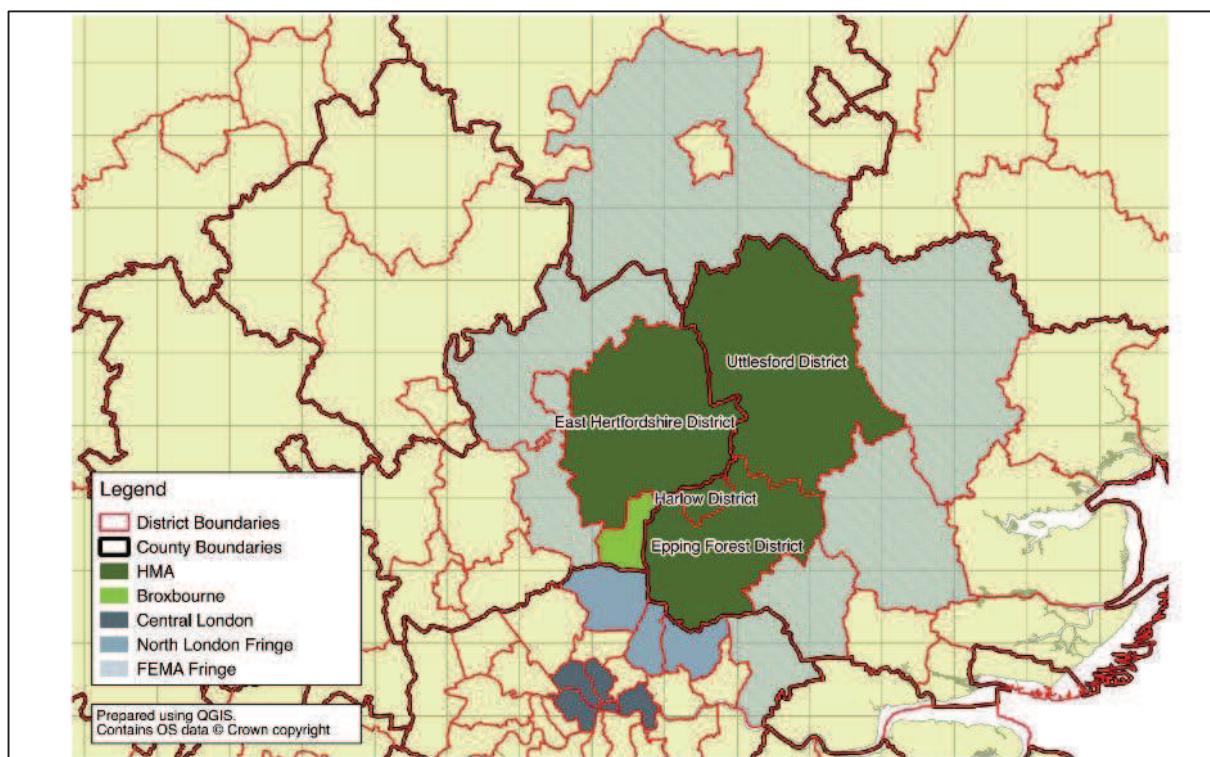
### **The FEMA and the SHMA area**

HJA was asked to consider the extent to which the Strategic Housing Market Assessment area (SHMA area) coincides with the Functional Economic Market Area (FEMA). The core of the FEMA coincides with the SHMA area i.e. comprising the four Local Authority areas of: East Herts, Epping Forest, Harlow and Uttlesford. It also includes Broxbourne. There is a fringe area comprising all of the immediately adjacent local authorities; and a link to central London.

Analysis of projected future jobs growth has been undertaken using the SHMA area and FEMA definitions, and there is no significant impact on final district level projected job numbers whether or not Broxbourne is included in the projections.

A map of the FEMA can be seen in the Figure below.

**Figure 1: The Functional Economic Market Area**



### **Historic actual job creation**

HJA was asked to analyse the actual creation of jobs in each of the four SHMA area Local Authorities over the last 10 years.

Four measures of historic actual job creation have been considered: the Business Register and Employment Survey (BRES) and its predecessor the Annual Business Inquiry (ABI); the Annual Population Survey (APS); the Census of Population; and the ONS Jobs Density measure. The ONS Jobs Density is the most comprehensive and best measure of historic actual workplace jobs. It also aligns to the East of England Forecasting Model (EEFM) measure of workplace jobs.

The ONS Jobs Density measure shows jobs growth of between 1,300 and 1,550 jobs per year in the SHMA area over the period from 2000 to 2013.

### **Local Plan evidence bases**

HJA was asked to review the four Local Authorities' emerging Local Plan evidence bases and identify future employment growth projections. These have been derived from Local Plans' evidence bases, supporting documents and other technical work, including consultations with officers from each of the Local Authorities. These show a projected annual jobs growth of between 1,780 and 1,980 per year. These are summarised in the Figure below.

**Figure 2: Jobs growth projections**

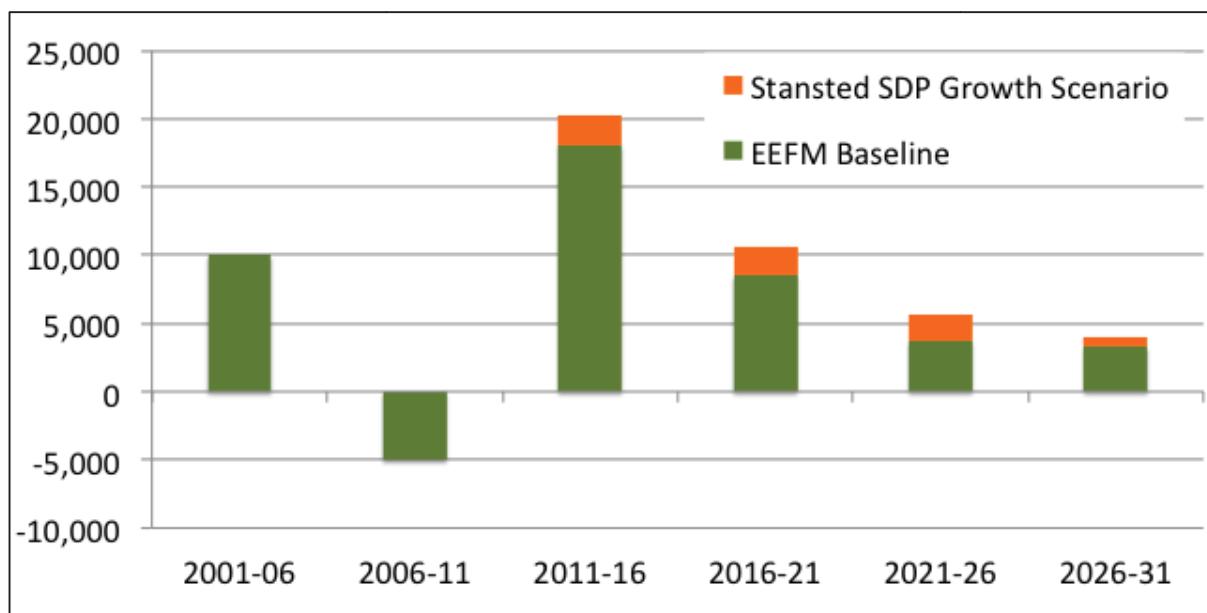
Local authority	Employment change	Period	Annual change
East Herts	9,700	2012-2031	510
Epping Forest	9,000	2011-2033	410
Harlow	8,000 – 12,000	2011-2031	400 - 600
Uttlesford	9,200	2011-2031	460
<i>Cumulative total</i>	<i>35,900 – 39,900</i>		<i>1,780 – 1,980</i>
Source: Local Authorities			

**Historic actual job creation and Local Plan evidence bases**

HJA was asked to look at how historic actual change in jobs compares to the Local Authorities' Local Plan evidence bases.

For historic actual jobs creation, the ONS Jobs Density measure shows an average of between 1,300 to 1,550 jobs per year over the period from 2000 to 2013. This is in broad agreement with the East of England Forecasting Model (EEFM) figures for actual historic change in jobs, with an average of between 1,200 and 1,800 jobs per year from the EEFM. Looking forwards, the Local Plans' evidence base assumptions for jobs growth per year are above the ONS Jobs Density historic range, but within the EEFM historic range. They are slightly higher than the baseline projected growth from the EEFM for the whole SHMA area – of 1,590 jobs per annum. There is planning permission in place for future growth at Stansted Airport, and when this is introduced the jobs growth increases to 1,895 per annum. In this scenario the Local Plans' evidence base projections are similar in overall scale to the EEFM plus Stansted projections, but the distribution within the SHMA area is very different (discussed below). The overall scale of projected growth can be seen in the Figure below.

**Figure 3: Historic growth and projected future growth**



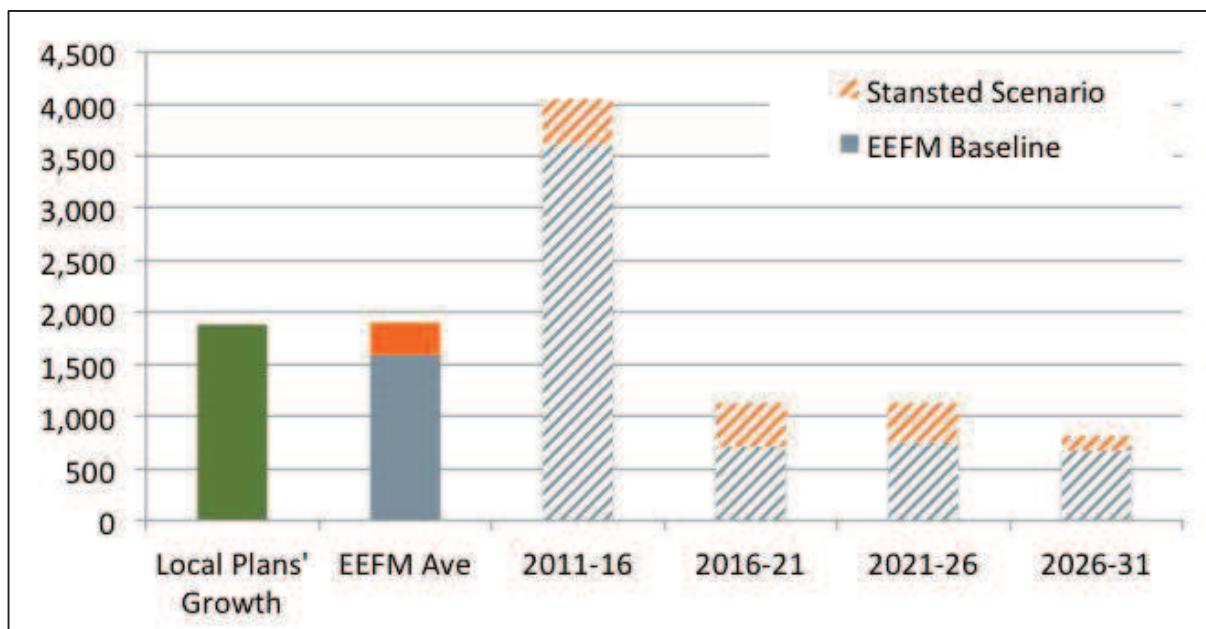
Source: EEFM (2014) and Hardisty Jones Associates analysis

### Future job growth projections

HJA was asked to consider future employment projections used to inform the SHMA.

As discussed above, the baseline projected level of jobs growth for the SHMA area as derived from the EEFM (2014) is 1,590 jobs per annum. However, Local Authority officers identified that future growth plans for Stansted Airport are not fully reflected in these figures, so HJA was asked to model the impact of this additional growth. When the impact of Stansted Airport growth is included, this increases to 1,895 jobs per annum. This latter figure is similar to the scale of projected growth set out in the Local Plans' evidence bases, but the distribution within the SHMA area is very different (discussed below).

**Figure 4: Local Plans and EEFM Baseline plus Stansted growth**



### Job growth projections at the Local Authority level

HJA was asked to look at how the SHMA area level jobs growth projection is likely to be distributed across the four constituent Local Authority areas over the period from 2011 to 2033.

Two different scenarios have been used to distribute the overall level of jobs growth in the SHMA to the constituent Local Authority areas. The intention is to provide a starting point to inform a policy debate between the four authorities. The allocations arrived at are indicative only and are based on a business-as-usual scenario i.e. these distributions do not take account of any policy interventions or major public investments such as the Harlow Enterprise Zone. Any policy debate may therefore lead to an alternative distribution of jobs across the SHMA area, which is preferred for policy reasons.

The growth projections modelled below include the additional growth at Stansted Airport.

Figure 5: Job growth projections (including Stansted) and emerging evidence base figures

	Job growth per year - based on historic share of total SHMA area jobs	Job growth per year - based on EEFM projected share of total SHMA area jobs	Target range for job growth	Job growth per year - derived from Local Plan emerging evidence bases
East Herts	505	435	435 - 505	510
Epping Forest	400	455	400 - 455	410
Harlow	325	335	325 - 335	400 - 600
Uttlesford	665	675	665 - 675	460
<b>Total</b>	<b>1,895</b>	<b>1,895</b>	<b>1,895</b>	<b>1,780 - 1,980</b>

N.b. Figures many not sum due to rounding

# 1 Introduction

This report provides economic evidence that will be used to calculate the Objectively Assessed Housing Need (OAHN) for West Essex and East Hertfordshire – which is a Strategic Housing Market Assessment area (SHMA). It has been commissioned by the Cooperation for Sustainable Development Board comprising members of four local authorities in the SHMA area: East Hertfordshire District Council, Epping Forest District Council, Harlow Council and Uttlesford District Council.

A robust OAHN depends on having a shared, common employment growth projection for the area, which is based on employment growth projections for each of the four constituent local authorities. It needs to take account of a number of future economic and employment projections that have been set out in:

- The latest (2014) version of the East of England Forecasting Model (EEFM)
- Historic trend-based projections
- Emerging employment targets in the evidence bases for the four authorities' Local Plans

This report helps to understand the different employment growth projections that have been suggested, understand where they have come from, select a robust and justifiable lead scenario, and explain why this should be considered ahead of all other potential options.

## 1.1 Background

Recent Local Plan Inspectors' reports have stressed the importance of a clear link between employment and housing projections. Planning Practice Guidance and the Planning Advisory Services' Technical note on objectively assessed need place employment growth projections at the heart of the OAHN debate. The scale of projected employment growth impacts on the projected need for new homes, but the latter is developed within the SHMA assessment and is outside the scope of this project.

## 1.2 Objectives and scope of the study

The objectives and scope of this study were set by the Cooperation for Sustainable Development Board comprising members of four local authorities in the SHMA. They are:

1. To understand the extent of the Functional Economic Market Area (FEMA) and how/whether this corresponds to the SHMA area
2. Analysis of the number of new jobs created in each of the four local authorities over the last 10 years
3. Review the current and emerging Local Plan evidence bases to identify employment growth projections
4. Analyse the difference between historic employment growth and Local Plan projections
5. Consider the employment projections that are currently set out in the draft SHMA
6. Suggest robust and defensible employment projections for each of the four authorities over the 22 year SHMA period

Each of these objectives is considered in the following chapters.

### 1.3 Jobs not residents

The purpose of this evidence is to understand how many people are projected to *work* in the SHMA area and each Local Authority area. There is a difference between working people that *live* in an area and working people that *work* in an area, because many people live in one Local Authority area and commute to work in another. The HJA analysis is focused on the workplace of the worker, not their place of residence.

There is also a difference between the number of *jobs* and the number of *working people* as some working people have more than one job. Our analysis concentrates on jobs. We understand that Opinion Research Services, the consultants working on the SHMA, will take account of those with more than one job, so that this will be factored into the eventual assessment of the OAHN.

## 2 The FEMA and the SHMA

The four local authorities want to understand the extent of the Functional Economic Market Area (FEMA) and how/whether this corresponds to the Strategic Housing Market Assessment (SHMA) area.

A FEMA is an area over which a local economy and its key markets operate. It does not necessarily correlate with administrative boundaries. Ideally a FEMA is defined using data on economic flows e.g. of workers and trade, but there is a limited amount of such data available.

The SHMA area is defined as "...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." The West Essex and East Herts SHMA area has been defined by Opinion Research Services (ORS) and comprises East Hertfordshire, Epping Forest, Harlow and Uttlesford Districts.

Our approach comprises:

- Considering the existing definitions of the FEMAs for each of the local authorities
- Reviewing 2011 Census commuting patterns

### 2.1 Existing FEMA definitions

We contacted each of the four local authorities to collect data on their FEMAs. Two of the local authorities have considered and defined their functional economic market areas (FEMAs): East Hertfordshire and Epping Forest. Harlow is clear about its role in the wider local area (i.e. West Essex), but does not have a definitive FEMA. Uttlesford has not defined its FEMA. More information on this can be seen in Appendix 1.

**Figure 2.1: Local Authorities' FEMA definitions**

Local authority	Definition of FEMA
East Hertfordshire	East Hertfordshire Broxbourne Welwyn Hatfield Stevenage North Hertfordshire Uttlesford Harlow Epping Forest
Epping Forest	Core: <ul style="list-style-type: none"><li>• Epping Forest</li><li>• Harlow</li></ul> Wider area: <ul style="list-style-type: none"><li>• London</li><li>• East Hertfordshire</li><li>• Harlow</li><li>• Uttlesford</li><li>• Brentwood</li><li>• Broxbourne</li></ul>

Local authority	Definition of FEMA
	<ul style="list-style-type: none"> <li>• Enfield</li> <li>• Stansted</li> <li>• Cambridge</li> </ul>
Harlow	<p>West Essex:</p> <ul style="list-style-type: none"> <li>• Harlow</li> <li>• Epping Forest</li> <li>• Uttlesford</li> </ul> <p>East Hertfordshire</p>
Uttlesford	n/a
Source: Local Authorities	

There is further discussion of these definitions at Appendix 1.

There are areas of commonality between these definitions. These are the local authority areas of:

- Broxbourne
- East Herts
- Epping Forest
- Harlow
- Uttlesford

## 2.2 Census commuting data

We have considered commuting data for the four local authority areas that comprise the SHMA area. The most comprehensive commuting data is provided through the Census of Population. The latest available data relates to 2011. This is the primary dataset used.

### 2.2.1 Out-Commuting

Out-commuting data allows consideration of where residents of the SHMA work. A key question to pose in terms of the designation of a FEMA is whether there are other critical employment locations outside the core SHMA area that need to be recognised.

A total of 216,594 residents of the SHMA were in employment at 2011. Of these 52% worked within the SHMA area itself (including 12% working mainly from or at home). In addition a further 9% have no fixed place of work. Considering these together, residence-based self-containment is assessed as 61%. This represents no change from the 2001 data<sup>1</sup>.

The remaining 39% of employed residents work in a range of locations. Unsurprisingly the major locations are around the fringes of the SHMA area and central London. London accounts for 23% of SHMA working residents' employment (almost 50,000 persons), and the rest of the East of England a further 14% (almost 30,000 persons). This represents a marginal change from 2001, which reported 24% out-commuting to London and 13% to elsewhere in the East of England. The absolute numbers out-commuting to both areas has increased but the broad pattern is consistent.

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<sup>1</sup> 2001 data was reported on a slightly different basis, without those working from home or those with no fixed place of work separated.

The relationship with London is clearly influenced by the presence of the Central Line running into Epping Forest District. The main commuting locations into London are along the Central Line route through east and central London. The commuting patterns to London could also be characterised into two areas – the north London fringe and central London.

Districts/Boroughs with more than 2% of all working residents from the SHMA area are:

- London Borough of Westminster/City of London 6.6%
- Broxbourne 3.3%
- London Borough of Tower Hamlets 2.2%
- Welwyn Hatfield 2.0%
- London Borough of Enfield 2.0%

There have been slight changes in the percentages between 2001 and 2011 but not to any great extent, and the broad patterns hold.

### **2.2.2 In-Commuting**

There are a total of 187,500 jobs within the SHMA area when including those working from home and those with no fixed place of work. Residents of the SHMA area occupy 71% of these jobs. This is a slight decline from 72% in 2001.

The remaining 29% of jobs (almost 54,000 persons) are filled by in-commuters. 18% are from the rest of the East of England region (33,600 persons) and 8% from the London region (15,500 persons). These shares are similar to 2001, with a slight increase from London Boroughs.

Districts/Boroughs contributing more than 2% of workers are:

- Broxbourne 3.4% (more than 6,000 persons)
- Braintree 2.8% (more than 5,000 persons)

Areas supplying more than 1% (1,800 persons) are:

- London Borough of Redbridge 1.8%
- London Borough of Waltham Forest 1.4%
- Chelmsford 1.3%
- North Hertfordshire 1.2%
- Stevenage 1.1%
- London Borough of Enfield 1.1%
- Welwyn Hatfield 1.0%
- South Cambridgeshire 1.0%

A very similar profile was reported in 2001.

### **2.2.3 Conclusions**

There has been a slight change in the balance of out-commuting in percentage terms, from London to the East of England, but the overall level has remained consistent between 2001 and 2011.

Unless a major shift in the balance of activities is forecast, there is every reason to expect this trend to continue.

The continued trend of out-commuting in percentage terms has taken place in the context of rising population and employment. Therefore, as the number of working residents in the HMA has increased so the number of out commuters has increased in equal proportion to the current rate. There has been a slight increase in the share of local jobs filled by in-commuters. However, there has been no major change in the pattern of in-commuting.

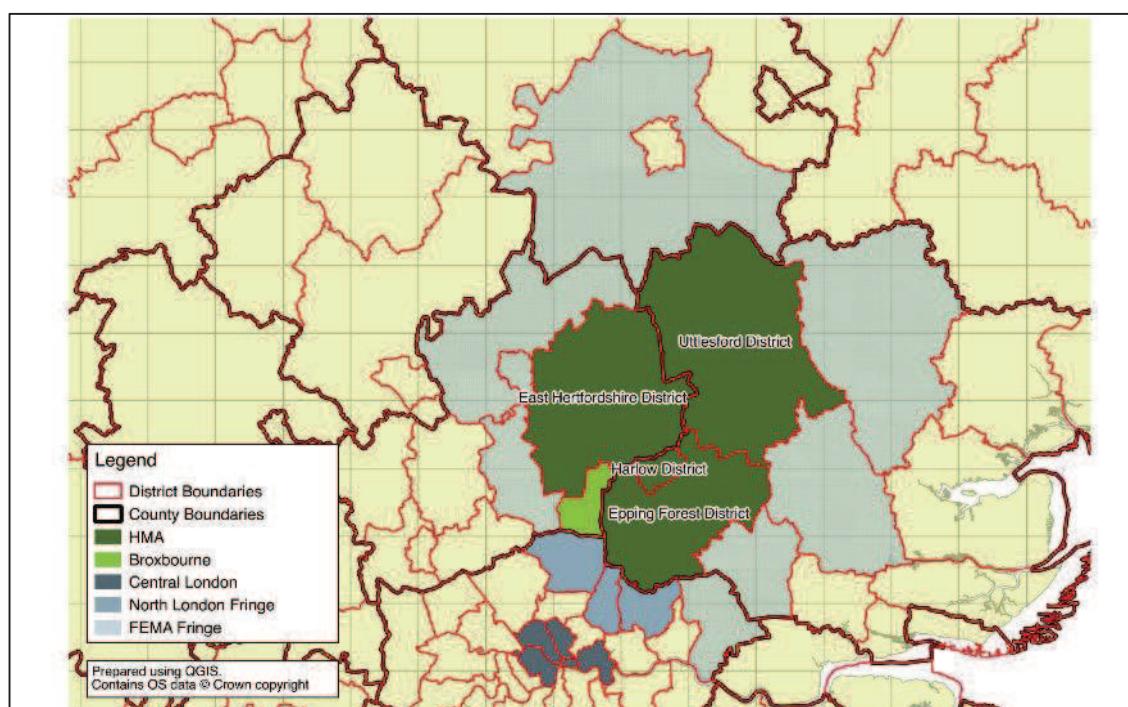
When considering a FEMA, the role of London as an employment location is clear. The draw for commuting locations around London's fringe is not a unique characteristic of this HMA. The London effect is heavily influenced by the Central Line. However, there are effects as a result of the draw of central London as an employment location, and the effects of the neighbouring north London Boroughs. When considering both in- and out-commuting relationships, the borough of Broxbourne is the only one that features a flow of at least 3% in each direction.

### 2.3 Definition of the FEMA

In this case, the SHMA area is not a self-contained FEMA. Whilst the immediate boundaries of the core local authorities are porous, London is a significant economic driver that extend the FEMA beyond the four local authorities' SHMA boundary.

The FEMA could include Broxbourne, and there is a clear relationship with London – both the nearby north London Boroughs and central London. The FEMA is shown in the Figure below.

**Figure 2.2: The Functional Economic Market Area**



Source: Hardisty Jones Associates

### 3 Historic Job Creation

The four local authorities requested analysis of the number of new jobs created in each of the four local authorities over the last 10 years. The purpose of this is to understand how many people *work* in this area. There is a difference between people that *live* in an area and people that *work* in an area. There is also a difference between the number of *jobs* and the number of *working people* as some working people have more than one job.

Our approach has been to review various official measures of employment. Each captures employment data in different ways and has strengths and weaknesses. The data from each source are volatile from year to year, and need smoothing.

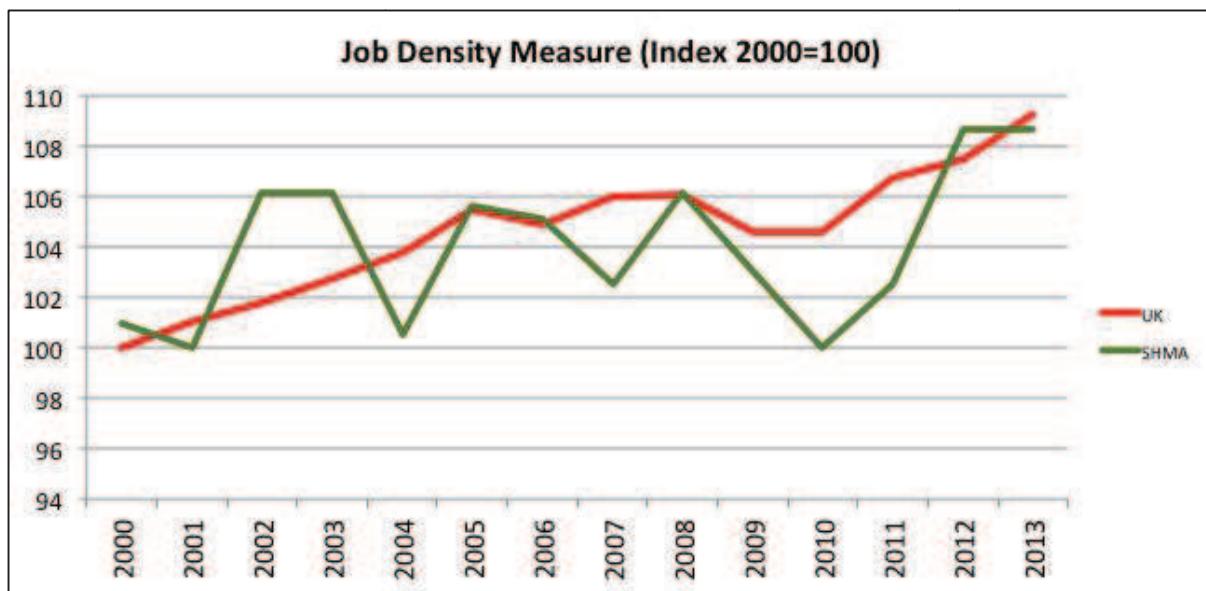
#### 3.1 Data volatility and smoothing

Datasets covering smaller areas are typically more volatile than datasets covering larger areas because:

- The loss or gain of a relatively small number of jobs will have a bigger proportional impact in a smaller area
- Data are often collected by survey, and surveys of smaller populations can lead to greater variations year-on-year

The figure below shows how jobs density in the SHMA is far more volatile than at the UK level, which covers a significantly larger population, so is less vulnerable to volatility.

**Figure 3.1: An illustration of data volatility at the local level**



Source: ONS

For these reasons, a single year-on-year change in job numbers should not be relied on, and the longer-term trend should be considered. Data can be smoothed to show the progression of data over a longer period (e.g. three years)

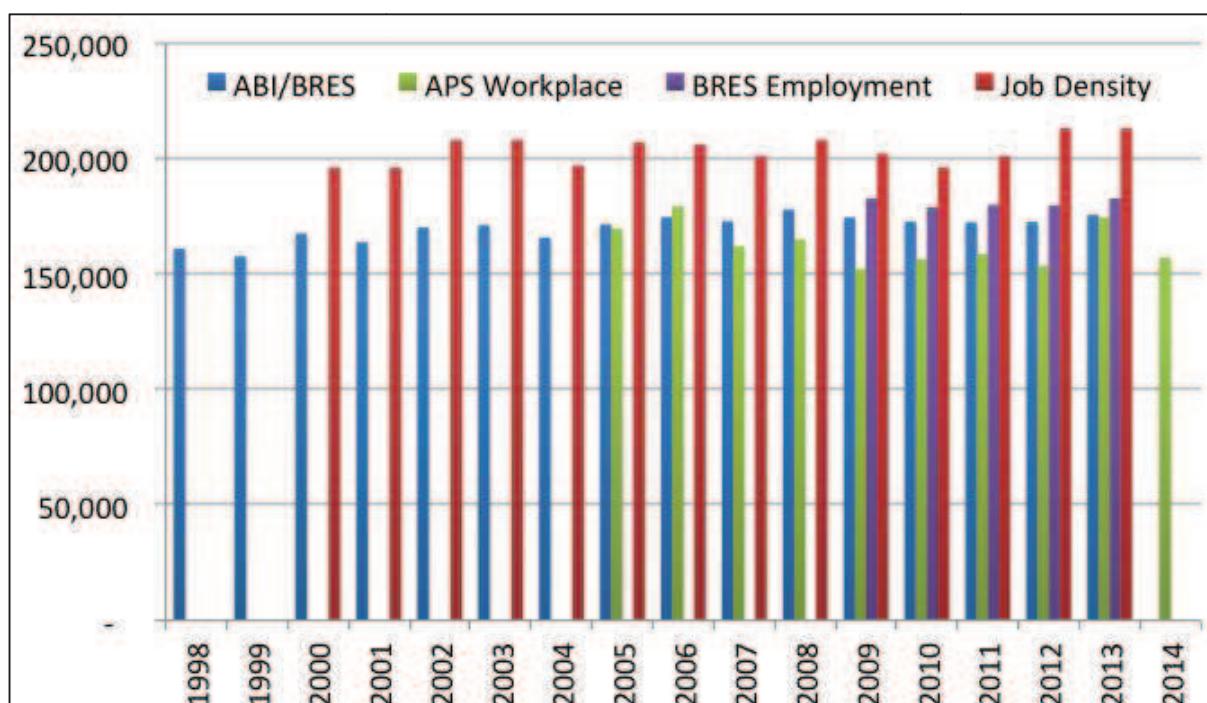
### 3.2 Historic job creation

We have considered the following sources of official government data on historic job creation, published by the Office for National Statistics (ONS):

- The Business Register and Employment Survey (BRES) and its predecessor the Annual Business Inquiry (ABI)
- The Annual Population Survey (APS)
- The Census of Population
- The ONS Jobs Density measure

ONS points to the Jobs Density measure as the definitive measure of jobs, but there are limitations in the time series of data available. It is the most comprehensive measure of jobs, including self-employment, HM Forces and government supported trainees as well as those in employment. The figure below shows the numbers of jobs reported by each of these sources, for the SHMA area.

**Figure 3.2: Historic job creation**



Source: ONS

Smoothed Jobs Density data shows the creation of between 1,300 and 1,550 jobs per year in the SHMA area over this period.

## 4 Local Plans' Evidence Bases and Working Assumptions

In this chapter we review the current and emerging Local Plan evidence bases for the four local authorities, to identify any emerging evidence on employment growth contained within these.

### 4.1 Local Plans' evidence bases and working assumptions

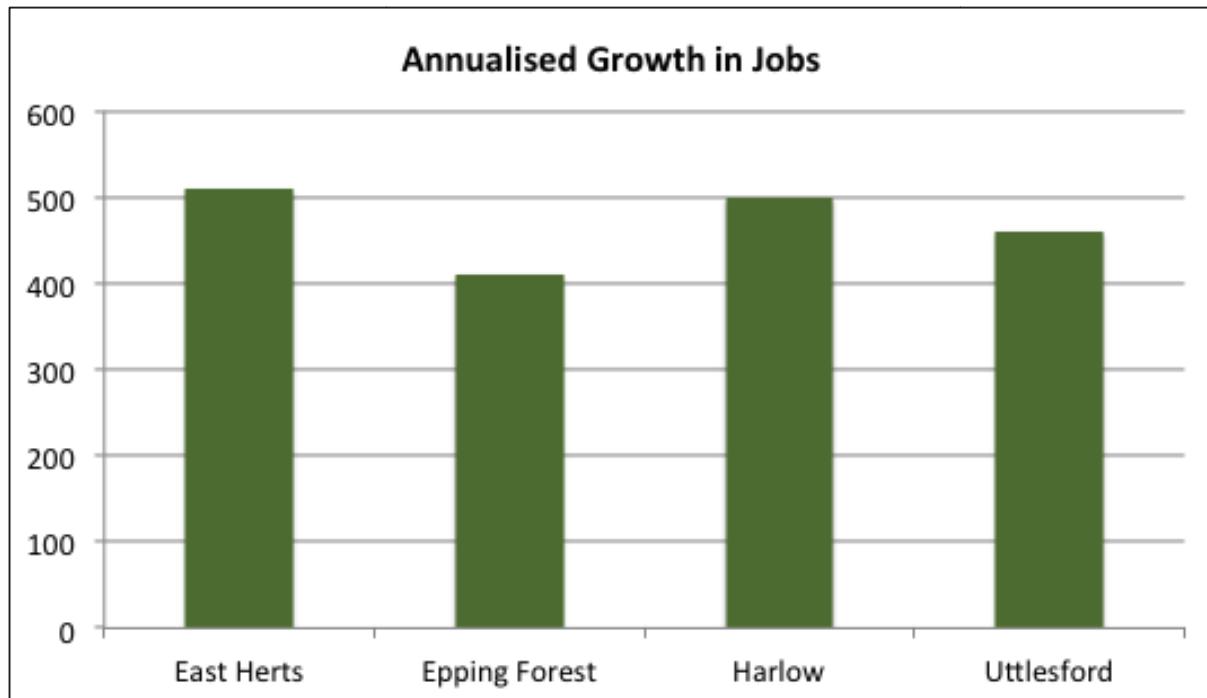
These growth projections have been derived from Local Plans' evidence bases, supporting documents and other technical work, which are discussed in more detail in Appendix 1. They have been confirmed as the best currently available working assumptions by officers from each of the Local Authorities.

**Figure 4.1: Jobs growth projections**

Local authority	Employment change	Period	Annual change
East Herts	9,700	2012-2031	510
Epping Forest	9,000	2011-2033	410
Harlow	8,000 – 12,000	2011-2031	400 – 600
Uttlesford	9,200	2011-2031	460
<i>Cumulative total</i>	<i>35,900 – 39,900</i>		<i>1,780 – 1,980</i>
Source: Local Authorities			

These figures are summarised in the chart below.

**Figure 4.2: Annualised growth in jobs**



Source: Local Authorities *N.b. Harlow has a planned growth of between 400 and 600 jobs per year*

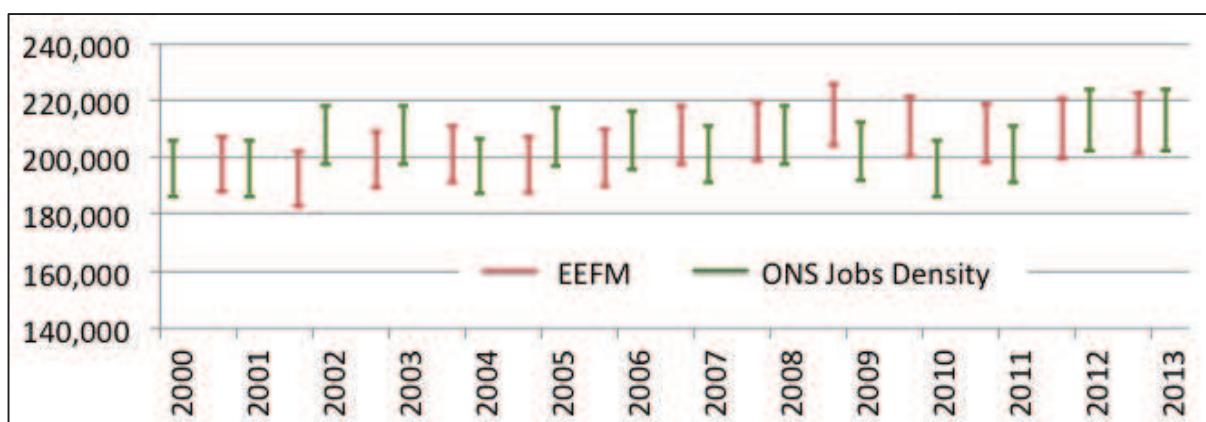
## 5 Historic Actual Jobs Growth and Future Projections

In this chapter we analyse the difference between historic actual jobs growth, the Local Plans' future job growth emerging evidence, and the EEFM projection of future jobs growth.

### 5.1 Historic change

As discussed in the previous chapter, ONS Jobs Density is the preferred measure of historic actual jobs change. Historic ONS Jobs Density data are broadly consistent with EEFM data on historic job change in the SHMA area, largely because the EEFM draws on this data to inform its modelling. The figure below shows that the ONS Jobs Density data (which has been smoothed, and error bars introduced to avoid reliance on a single data point) suggests a growth of between 1,300 and 1,550 new jobs per year (green bars). The EEFM (shown on the same basis) identifies a change of between 1,200 and 1,800 jobs per year (red bars), so there is clear overlap between the two.

**Figure 5.1: Historic jobs change in the SHMA area**



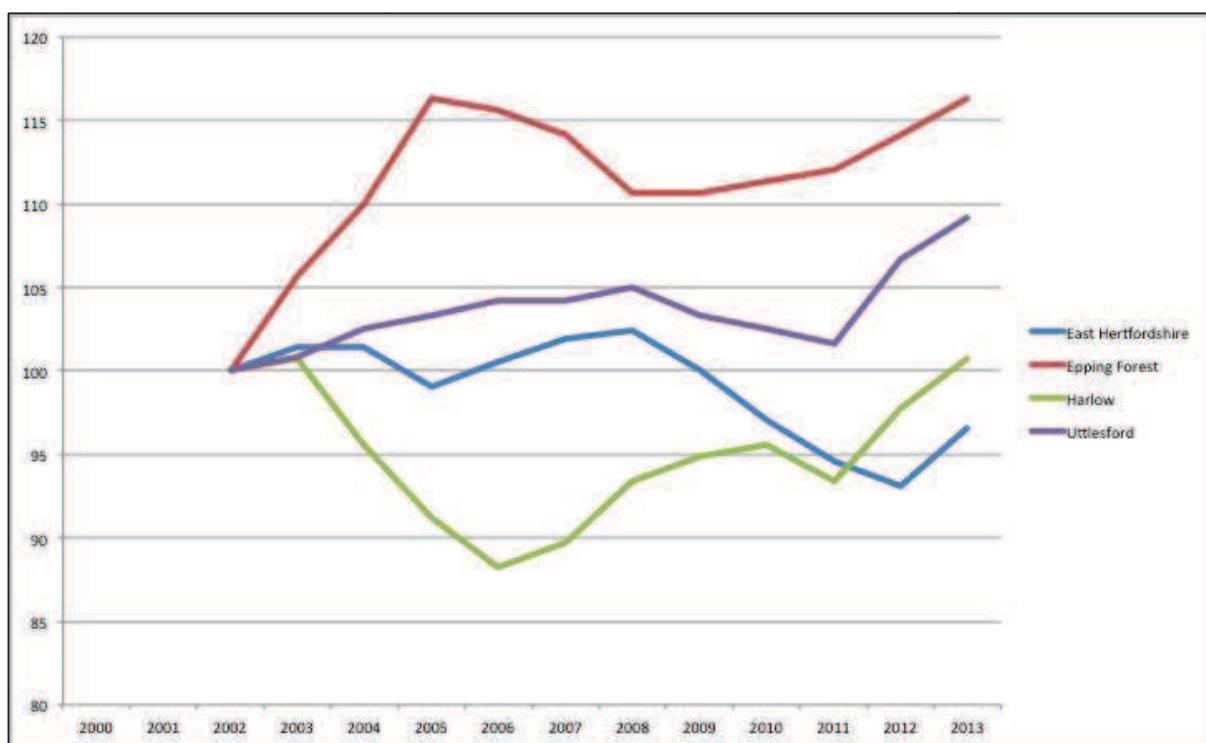
Source: ONS and EEFM (2014)

It is therefore possible to say that for the consideration of historic jobs change within the SHMA area, there is broad agreement between the ONS Jobs Density measure and the EEFM.

#### 5.1.1 Local Authority breakdown of historic actual change in jobs within the SHMA area

Most of this net jobs growth in the SHMA area has taken place in Epping Forest and Uttlesford Districts, as can be seen in the figure below, which shows the historic actual rate of jobs growth in each District (where each District is indexed to 100 in 2002).

Figure 5.2: Change in total jobs between 2002 and 2013 (Indexed: 2002 = 100)



Source: ONS Jobs Density data

This chart shows some divergence in the change in jobs within the SHMA. It uses three-year smoothed data to minimise data volatility. Epping Forest District has seen the largest growth in jobs over the period 2002 to 2013, followed by Uttlesford. Harlow's jobs dipped significantly but then rose back to close to where they started. East Hertfordshire saw an overall decline in employment over the period.

## 5.2 Projections of future jobs growth

### 5.2.1 Local Plan evidence bases

The previous chapter shows an analysis of the Local Plans' emerging evidence bases, which have identified emerging total future growth projections of between 1,780 and 1,980 jobs per year for the SHMA area. This is higher than the historic range derived from the ONS Jobs Density measure (of 1,300 to 1,550 jobs per year), but just overlaps with the EEFM historic range (of 1,200 to 1,800 jobs per year).

These figures show a baseline position set out in the evidence bases prepared for the Local Plans with a slightly higher amount of annual future jobs growth than has been seen in the past.

### 5.2.2 The East of England Forecasting Model

HJA has used the EEFM as a baseline for projecting future jobs growth in the SHMA area. The EEFM models local economic growth projections based on national growth projections, the structure of the local economy (in terms of jobs in each industrial sector and therefore the importance of each industrial sector to the local economy), and the employment structure of other nearby places that

will influence local economic growth. The model is based on a business-as-usual scenario so does not account for any local policy interventions in economic growth.

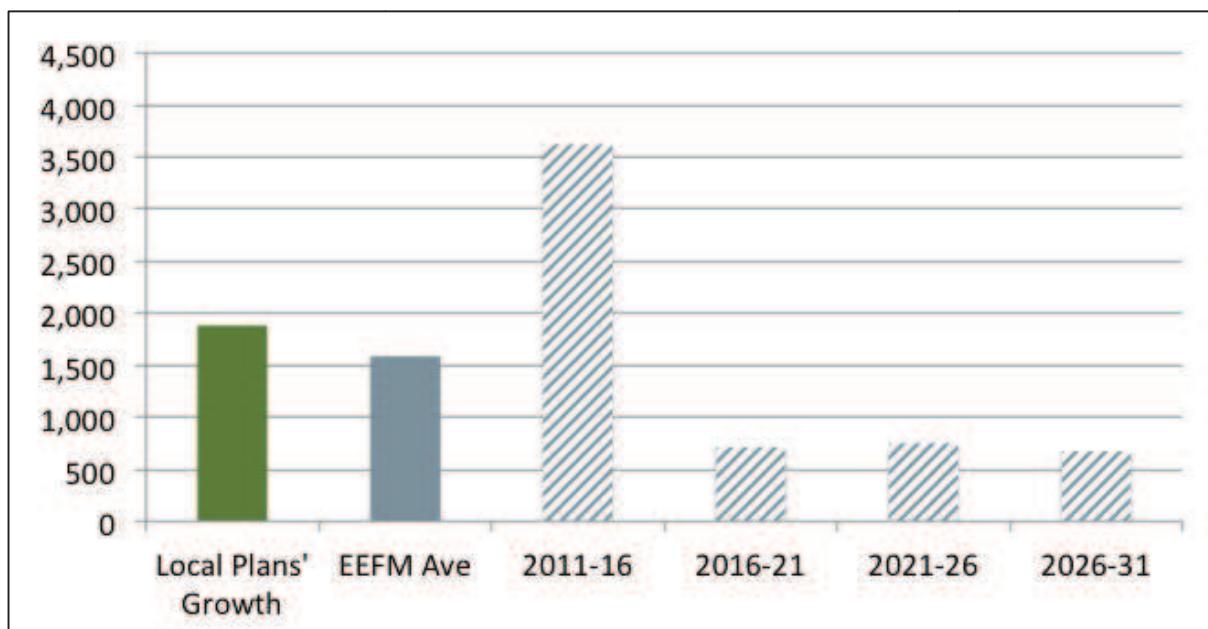
Initial results derived from the EEFM were tested with officers from the four Local Authorities. We were then asked to build in additional jobs growth associated with future plans for Stansted Airport as a separate scenario – which is discussed further below. We were not asked to account for any other major factors, as it was felt that the results gave sufficient allowance for these.

The EEFM baseline projection for the SHMA area is 1,590 additional jobs per year, without an additional allowance for Stansted-related growth.

### 5.2.3 Comparing the Local Plan evidence bases and the baseline EEFM projections

The EEFM projected jobs growth in the SHMA area is similar to, although slightly lower than, the overall level of growth set out in the emerging evidence base. This can be seen in the Figure below. Please note that the average annual jobs growth from the EEFM baseline over the period 2011 to 2031 is shown as a solid bar, and the average for each of the four five-year periods that make up this total are shown as hatched bars.

**Figure 5.3: Average annual jobs growth for the SHMA area from the Local Plans and EEFM baseline**



Source: Local Authorities and EEFM (2014)

### 5.2.4 Growth at Stansted Airport

Following a presentation of the interim findings of this report to the Local Authorities' officers group, we were asked to consider the additional jobs growth potential at Stansted Airport, which had not been fully reflected in the baseline position set out above. Planning permission has been awarded for expansion at Stansted, to accommodate up to 35 million passengers per annum (mppa). We have derived growth plans for Stansted Airport from the Stansted Sustainable Development Plan<sup>2</sup>. This

<sup>2</sup> London Stansted Airport (2015) Economy and Surface Access: Sustainable Development Plan

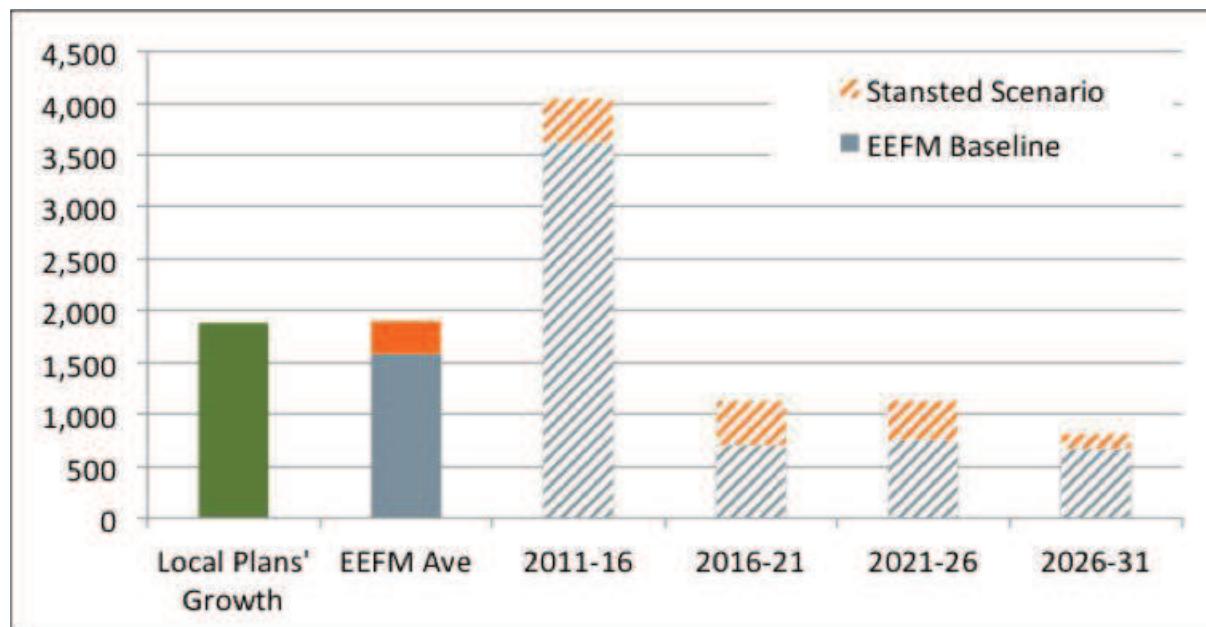
sets out an increase in passenger numbers to 35 mppa by 2025 and 45 mppa by 2030. The related increase in workforce would be from around 10,000 at present to more than 18,000 at 2025, and around 20,000 at 2030.

This level of on-site workforce increase is substantially above the level of Stansted Airport growth contained within the EEFM baseline. However, it will displace other activity in the SHMA area economy due to its draw on the local workforce<sup>3</sup>, so the net increase in jobs in the SHMA area will be less than the total number of new jobs at Stansted Airport. In summary:

- The London Stansted Airport higher growth scenario is likely to generate an additional 10,000 on-site jobs over the SHMA period
- Due to displacement effects elsewhere in the SHMA area we estimate 8,750 net additional jobs.
- We estimate that the EEFM already includes growth of around 2,200 jobs at Stansted. The EEFM is also likely to include some further indirect and induced effects across the SHMA area
- Combining these creates an additional uplift to EEFM baseline, based on high growth at Stansted Airport, of 6,500 jobs over the SHMA period
- This equates to an additional 300 jobs per annum, in addition to the baseline (core growth) of 1,590 jobs per annum in the SHMA area
- Total average annual job growth therefore increases to 1,895 per annum across the SHMA area

Full details of this analysis are set out in Appendix 2. EEFM projected jobs growth in the SHMA area plus an allowance for Stansted growth, as discussed above, is similar to the emerging Local Plan growth assumptions. This can be seen in the Figure below.

**Figure 5.4: Local Plans and EEFM Baseline plus Stansted growth**



Source: Local Authorities, EEFM (2014) and Hardisty Jones Associates analysis

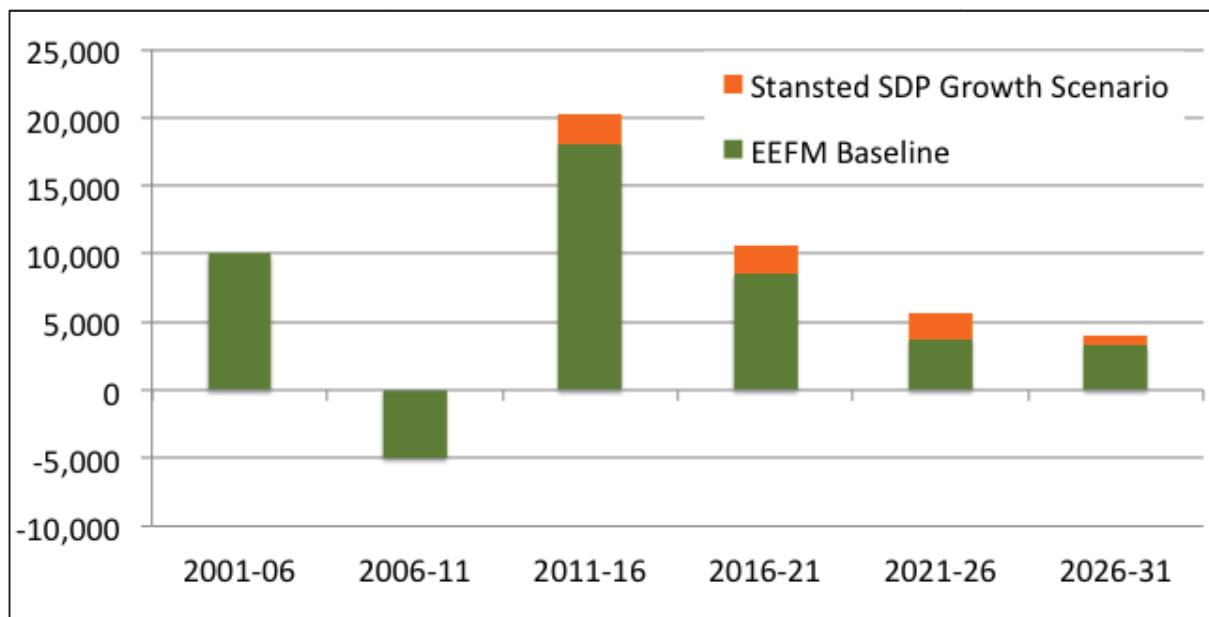
<sup>3</sup> The displacement effect is discussed in detail in Oxford Economics (2013) Economic Impact of Stansted Scenarios: A Report Prepared for the London Stansted Cambridge Consortium

### 5.3 Total projected change over time

In this section we consider the projected future change in employment, discussed above, alongside historic change over the period from 2001. To consider a consistent dataset over this period, we have used the EEFM, along with the adjustment for Stansted that is discussed above.

This analysis is shown in the Figure below. It is clear that actual historic change in the SHMA area saw a period of decline in jobs during the period of financial crisis – represented by the period 2006 to 2011 below. There is strong projected recovery over the immediate following period, and then reversion to a lower level of long-term growth.

**Figure 5.5: Historic growth and projected future growth**



Source: EEFM (2014) and Hardisty Jones Associates analysis

## 6 Projected Jobs Growth Within the SHMA

In this Chapter we consider the allocation of future growth within the SHMA area i.e. at the Local Authority area level. Having developed an overall baseline job growth projection for the period 2011 to 2033 (as discussed above), we consider the allocation of future growth within the SHMA area i.e. at the Local Authority area level. The baseline projected level of growth is taken from the EEFM. We consider how this could be allocated between the four Local Authorities using two different scenarios:

- In the first scenario we allocate the projected growth according to the recent historic distribution of jobs within the SHMA area using historic ONS Jobs Density data. We have used each Local Authority's average share of total SHMA area employment over the period 2000 to 2013 to avoid any distortion in a single year's data. As shown in Chapter 5, over this period employment had grown in Epping Forest District and Uttlesford, stayed around the same in Harlow, and declined in East Herts.
- In the second scenario we use the share of the total projected growth in each Local Authority area over the period 2011 to 2033 derived from the EEFM, i.e. how the projected jobs growth is expected to be distributed across the four Local Authorities. This is built up from the sectoral structure of each Local Authority's economy and the growth prospects in these sectors (driven by national growth projections).

As previously noted, the intention is to provide a starting point to inform a policy debate between the four authorities. The allocations arrived at are indicative only and are based on a business-as-usual scenario i.e. these distributions do not take account of any policy interventions or major public investments such as the Harlow Enterprise Zone. Any policy debate may therefore lead to an alternative distribution of jobs across the SHMA area, which is preferred for policy reasons.

### 6.1.1 Allocating projected growth according to current share

The EEFM baseline projected growth for the SHMA area over the period 2011 to 2033 is an additional 1,590 jobs per year. This total has been allocated across the Local Authority areas using each Local Authority's average actual share of total SHMA area employment over the period 2000 to 2013.

**Figure 6.1: Allocation of EEFM projected growth according to current share**

	Current share of total SHMA area jobs (% of total)	Projected job growth per year
East Herts	33%	525
Epping Forest	26%	415
Harlow	21%	335
Uttlesford	20%	320
Total	100%	1,590

N.b. Numbers may not sum due to rounding

### 6.1.2 Allocating projected growth according to EEFM forecast share

In this scenario the EEFM baseline projected growth of 1,590 jobs per year has been allocated across the Local Authority areas based on the projected share of growth over the period 2011 to 2033 set out in the EEFM.

**Figure 6.2: Allocation of EEFM projected growth according to EEFM projected shares of growth**

	EEFM projected share of total SHMA area jobs (% of total)	Projected job growth per year
East Herts	28%	455
Epping Forest	29%	470
Harlow	22%	345
Uttlesford	21%	325
Total	100%	1,590

N.b. Numbers may not sum due to rounding

Strong projected jobs growth in Epping Forest District is particularly driven by the projected growth in the construction sector and the professional services sector, both of which are important sectors in this local economy.

For Harlow and Uttlesford the shares are very similar across the two approaches. For East Herts the share is lower, and for Epping Forest District the share is higher. As noted previously, in recent years actual data shows that Epping Forest District has generated many more jobs than East Herts and has therefore contributed a greater share of the growth in total SHMA area employment. The EEFM, drawing on this pattern, forecasts a continuation of this trend.

Whether this is desirable in policy terms is an issue that the four Authorities will need to discuss as part of setting an employment strategy under the Duty to Cooperate.

### 6.1.3 Adding Stansted growth

We have then added the Stansted growth to the baseline growth projections for jobs in the SHMA area. In broad terms this scenario means a much higher level of jobs in Uttlesford District, based at Stansted, but fewer jobs overall in the other three authorities because of the displacement effects of drawing a larger share of the labour force to Stansted.

**Figure 6.3: Allocation of future growth including Stansted additional growth**

	Job growth per year - based on historic share of total SHMA area jobs	Job growth per year - based on EEFM projected share of total SHMA area jobs
East Herts	505	435
Epping Forest	400	455
Harlow	325	335
Uttlesford	665	675
Total	1,895	1,895

N.b. Numbers may not sum due to rounding

## 6.2 Comparing business-as-usual scenarios and Local Plan evidence bases

These figures can then be compared to the figures that have been derived from the emerging evidence bases that have been assembled to inform the development of the four Local Authorities' Local Plans.

**Figure 6.4: Job growth projections (including Stansted) and emerging evidence base figures**

	Job growth per year - based on historic share of total SHMA area jobs	Job growth per year - based on EEFM projected share of total SHMA area jobs	Job growth per year - derived from Local Plan emerging evidence bases
East Herts	505	435	510
Epping Forest	400	455	410
Harlow	325	335	400 - 600
Uttlesford	665	675	460
Total	1,895	1,895	1,780 - 1,980

N.b. Numbers may not sum due to rounding

Two things are notable from this table:

- The overall scale of projected jobs growth is similar to the overall figure for the SHMA area derived from the Local Plans' emerging evidence bases
- The distribution of the total projected growth across the four Local Authority areas varies from the figures set out in the emerging evidence bases, particularly in two places: Harlow and Uttlesford. Harlow's growth figure set out in its Local Plan evidence base is higher than the figure calculated by HJA – as the former includes aspirational jobs growth driven by the Enterprise Zone (i.e. greater than historical trend). Uttlesford's growth figure set out in its Local Plan evidence base is lower than the figure calculated by HJA – as the latter includes an allowance for jobs growth at Stansted Airport, based on the Manchester Airport Group's plans for the future development of Stansted Airport.

## 7 Conclusions

Six questions were asked of this study:

1. To understand the extent of the FEMA and how this corresponds to the SHMA area
2. Analysis of the number of new jobs created in each of the four local authorities over the last 10 years
3. Review the current and emerging Local Plan evidence bases to identify employment growth projections
4. Analyse the difference between historic employment growth and Local Plan projections
5. Consider the employment projections that are currently set out in the draft SHMA
6. Suggest robust and defensible employment projections for each of the four authorities over the 22 year SHMA period

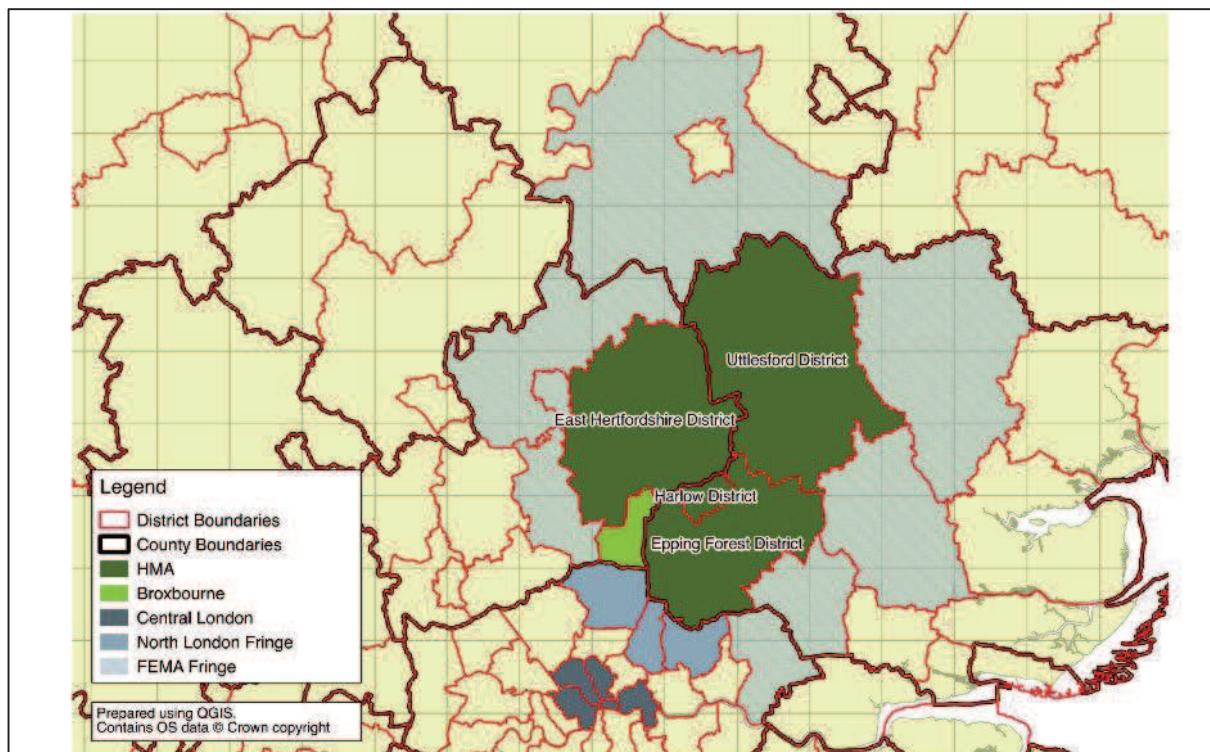
Each of these is discussed below.

### 7.1 The FEMA and the SHMA area

The core of the FEMA coincides with the SHMA area i.e. comprising the four Local Authority areas of: East Herts, Epping Forest, Harlow and Uttlesford. It also includes Broxbourne. There is a fringe area comprising all of the immediately adjacent local authorities; and a link to central London.

Analysis of projected future jobs growth has been undertaken using the SHMA area and FEMA definitions, and there is no significant impact on final district level projected job numbers.

**Figure 7.1: The Functional Economic Market Area**



## 7.2 Historic actual job creation

Four measures of historic actual job creation have been considered: the Business Register and Employment Survey (BRES) and its predecessor the Annual Business Inquiry (ABI); the Annual Population Survey (APS); the Census of Population; and the ONS Jobs Density measure. The ONS Jobs Density is the most comprehensive and best measure of historic actual workplace jobs. It also aligns to EEFM measure of workplace jobs.

The ONS Jobs Density measure shows jobs growth of between 1,300 and 1,550 jobs per year in the SHMA area over the period from 2000 to 2013.

## 7.3 Local Plan evidence bases

Growth projections have been derived from Local Plans' evidence bases, supporting documents and other technical work. These show a projected annual jobs growth of between 1,780 and 1,980 per year. These are summarised in the Figure below.

**Figure 7.2: Jobs growth projections**

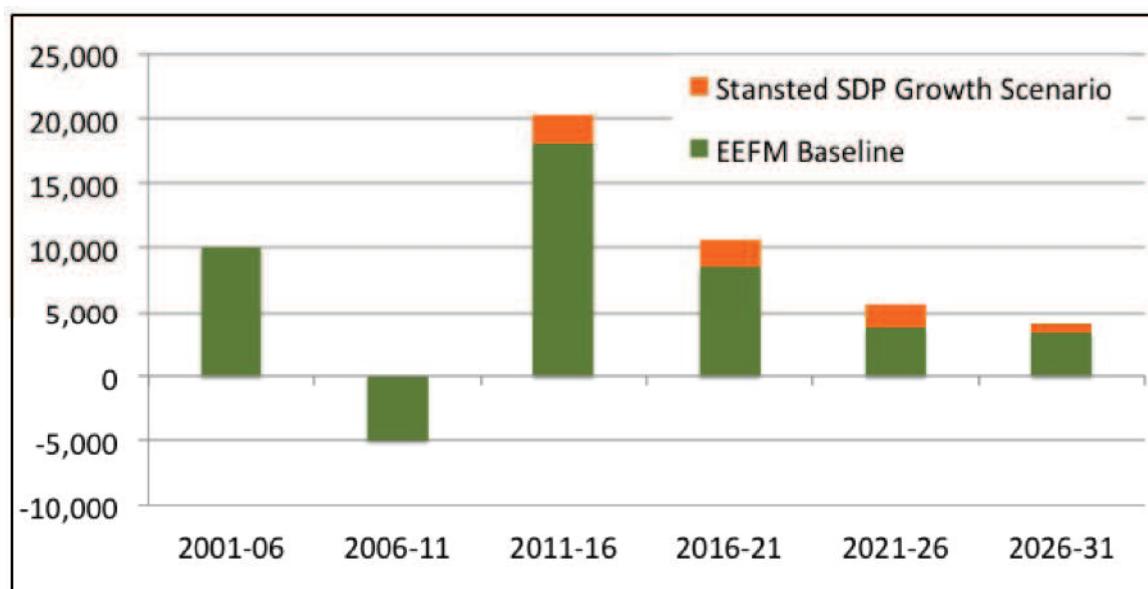
Local authority	Employment change	Period	Annual change
East Herts	9,700	2012-2031	510
Epping Forest	9,000	2011-2033	410
Harlow	8,000 – 12,000	2011-2031	400 - 600
Uttlesford	9,200	2011-2031	460
<i>Cumulative total</i>	<i>35,900 – 39,900</i>		<i>1,780 – 1,980</i>

Source: Local Authorities

## 7.4 Historic actual job creation and Local Plan evidence bases

The ONS Jobs Density measure is shown to be in broad agreement with the EEFM for actual historic change in jobs. Looking forwards, the Local Plans' emerging evidence for jobs growth per year are slightly higher than the baseline projected growth from the EEFM for the whole SHMA area – of 1,590 jobs per annum. When additional future growth related to Stansted Airport is introduced this increases to 1,895 per annum. In this scenario the Local Plans' projections are similar in overall scale, but the distribution within the SHMA area is very different (discussed below). The overall scale of projected growth can be seen in the Figure below.

Figure 7.3: Historic growth and projected future growth

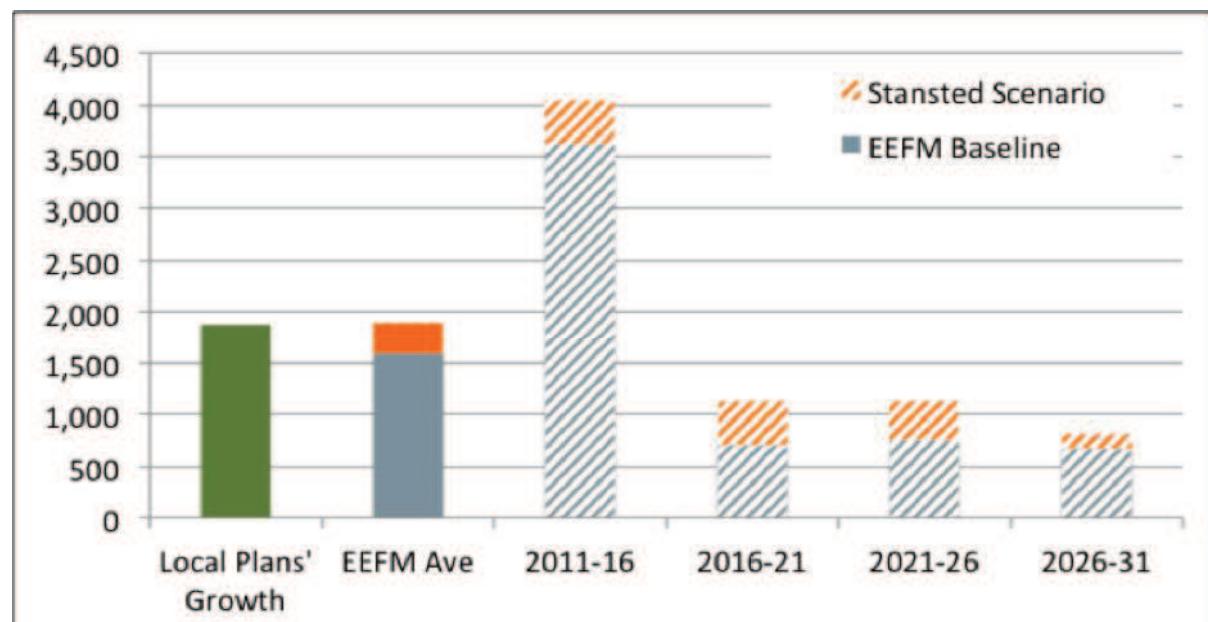


Source: EEFM (2014) and Hardisty Jones Associates analysis

## 7.5 Future job growth projections

As discussed above, the baseline projected level of jobs growth for the SHMA area as derived from the EEFM is 1,590 jobs per annum. When the impact of Stansted is included, this increases to 1,895 jobs per annum. This latter figure is similar to the scale of projected growth set out in the Local Plans' evidence bases, but the distribution within the SHMA area is very different (discussed below).

Figure 7.4 Local Plans and EEFM Baseline plus Stansted growth



## 7.6 Job growth projections at the Local Authority level

Two different scenarios have been used to distribute the overall level of jobs growth in the SHMA to the constituent Local Authority areas. The intention is to provide a starting point to inform a policy debate between the four authorities. The allocations arrived at are indicative only and are based on a business-as-usual scenario i.e. these distributions do not take account of any policy interventions or major public investments such as the Harlow Enterprise Zone. Any policy debate may therefore lead to an alternative distribution of jobs across the SHMA area, which is preferred for policy reasons.

**Figure 7.5: Job growth projections (including Stansted) and emerging evidence base figures**

	Job growth per year - based on historic share of total SHMA area jobs	Job growth per year - based on EEFM projected share of total SHMA area jobs	Target range for job growth	Job growth per year - derived from Local Plan emerging evidence bases
East Herts	505	435	435 - 505	510
Epping Forest	400	455	400 - 455	410
Harlow	325	335	325 - 335	400 - 600
Uttlesford	665	675	665 - 675	460
<b>Total</b>	<b>1,895</b>	<b>1,895</b>	<b>1,895</b>	<b>1,780 - 1,980</b>

N.b. Numbers may not sum due to rounding

## Appendix 1: Functional Economic Market Areas

### East Hertfordshire

#### Functional economic market area

A functional economic market area (FEMA) has been defined for East Herts. The District is part of the A1(M)-M11 Southern Sub Region, an integrated labour and property market. This comprises Broxbourne (Borough), Welwyn Hatfield (Borough), Stevenage (Borough), North Hertfordshire (District), Uttlesford (District), Harlow (District) and Epping Forest (District)<sup>4</sup>. This is based on functional labour market and commercial property market areas.

#### Historic job creation

No discussion of historic job creation in the information supplied.

#### Employment growth projections

Employment forecasts are derived from the 2012 EEFM<sup>4</sup>. At the time there was still great uncertainty about the state of the global and UK economies – which still exists to a certain extent. A significant increase in net out-commuting from 2006 to 2012 was noted.

Employment is projected to increase by 9,700 jobs between 2012 and 2031, as part of an increase of 60,000 jobs in the sub-region. Of these, 6,100 will be created in financial and business services and 1,600 in construction.

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<sup>4</sup> East Hertfordshire employment forecasts and strategic economic advice, DTZ, November 2012

## **Epping Forest**

### **Functional economic market area**

Epping Forest District is not a self-contained economy, but an integral part of a functional economic geography that extends well beyond its boundaries. This is best expressed at two levels:

1. A strong core geography of Epping Forest District with good links south into London, with the potential for a much stronger functional relationship with Harlow in the future
2. A less strong, but still functional wider economic geography which covers London, East Hertfordshire, Harlow, Uttlesford, Brentwood, Broxbourne, Enfield, Stansted and Cambridge.

### **Employment growth projections**

HJA has identified growth of up to 9,000 jobs over the period 2011 to 2033.

## Harlow

### Functional economic market area

Harlow has not set out a definitive FEMA, but it sees itself as the sub-regional centre for West Essex and East Hertfordshire.

*Harlow, as a planned new town, acts as an important sub regional centre for both West Essex and East Hertfordshire situated in the M11 corridor. It provides not only a range of jobs at a number of major employment locations including the town centre and two EZ sites but also provides a host of retail and service sector provision. It also has a number of secondary schools and Harlow College which has a University Centre affiliated to Anglia Ruskin University. Princess Alexandria Hospital is also a major employer that has a sub-regional catchment.*

*Consequently Harlow wishes to recapture jobs lost as a consequence of the recession but also to increase job opportunities, especially in the ICT, Advanced Manufacturing and Life Science sectors and to redress the inflow of skilled, technical and professional workers to afford aspiration for the local community. Together with improved and increased housing provision this will help secure wider regeneration across the town.*

[email from Paul McBride, Forward Planning Manager]

### Employment growth projections

Harlow has set an employment growth aspiration between 8,000 and 12,000 jobs over the period 2011 to 2031. This range is based on five options which have been considered in a future growth study.

### Harlow LDP: Emerging Strategy and Further Options, April 2014

*The Council is also planning for the creation of between 8,000 and 12,000 new jobs and will be supporting investment from new businesses to broaden the town's employment base and to provide opportunities for the town's growing workforce. The Plan will also build on Harlow's status as one of 24 Enterprise Zones set up across England to drive job creation and business growth.*

### Exec Summary

*The Employment Land Review projects employment in Harlow will increase by 3,900 jobs in the period 2011 to 2031. However, if the job losses arising from the recession are taken into account there would still be a net loss of jobs in Harlow between 2008 & 2031 despite the new firms that have recently been attracted to Harlow. ☐*

*To address this the revised strategy seeks to **capture the 4,000 forecast jobs** for the period 2011 to 2031 and to **replace the 4,000 jobs lost** over the period 2008 to 2011. This would result in a **net increase of approximately 8,000 jobs** between 2011 and 2031 giving a total of 51,000 jobs in Harlow by 2031. In order to provide sufficient number of people to support these jobs an additional 9,200 people would need to be added to the town's labour force to correlate with the jobs growth aspirations. The Council's evidence (set out in the Harlow Future Prospects Study: Linking*

*Regeneration and Growth) forecasts that an increase in the town's population of approximately 23,000 people would be needed to deliver this. This equals approximately 11,500 new dwellings. [2]*

Para 4.12 and 4.13. p.22-23

#### **Proposed level of development for Harlow**

*Development between 12,000 and 15,000 new dwellings (600 and 750 dwellings per year) and 8,000 to 12,000 jobs (400 and 600 new jobs per year) between 2011 and 2031 is considered to be an appropriate range of development to be proposed at this stage. This level of development meets Harlow's objectively assessed needs and provides a positive platform to deliver regeneration objectives. [2]*

Para 4.26, p.28

#### **Harlow Future Prospects Study, NLP, August 2013**

*The future prospects for Harlow have been assessed under five development scenarios.*

**Scenario A: Do Nothing More** (3,913 dwellings, -1,207 jobs). *Under this scenario the town would experience decline in its younger (0-17) and working age population (18-64) as these groups move out in search of employment and housing. This option increases the risk that schools would have to close and that businesses would choose not to invest due to lack of labour supply. As shown during the 1970s and 80s, the town faces a real prospect of decline under this scenario.*

**Scenario B: Meeting Development Needs** (7,485 dwellings, +3,057 jobs). *This scenario is the point at which the potential for future decline is minimised. This scenario corresponds to growth in both the younger (0- 17) and working age population (18-64) of Harlow. This scenario also corresponds to an increase in jobs over the period, albeit not enough to regain the jobs lost between 2008 and 2011. Under this scenario the town would grow but would fail to deliver sufficient growth to meet a wide number of objectives.*

**Scenario C: Jobs Led** (11,490 dwellings, 8,060 jobs). *This scenario would see an increase in 0-17 and 18-46 age groups of 23% and 25% respectively. This scenario corresponds to the ambient job growth potential of Harlow and is the point at which the town can deliver the majority of its affordable housing needs. A number of other regeneration objectives also become more likely to be delivered at this level of growth. This scenario would see Harlow growing to a similar size as Basingstoke or Crawley.*

**Scenario D: Growing Centre** (15,000 dwellings, 12,099 jobs). *Under this scenario the town would experience significant increases in the number of 0-17 and 18-46 year olds (41% and 33% respectively). This scenario would lead to Harlow's population increasing to 114,000 people, the equivalent of Welwyn-Hatfield. This level of growth could support a substantially improved retail offer and enhanced higher education offer. [2]*

**Scenario E: Transformed Centre** (20,000 dwellings, 18,121 jobs). *This scenario sees Harlow expanding to a town of 132,000 people, larger than present day Cambridge. This would correspond to significant increases in the number of 0-17 and 18-46 year olds (81% and 49% respectively). This*

*option is considered to be the point at which multiple regeneration objectives could be delivered, including comprehensive town centre regeneration and a 'step change' in economic growth. *

## **Uttlesford**

### **Functional economic market area**

No work has been done on defining a FEMA.

### **Employment growth projections**

An employment growth of 9,200 over the local plan period of 2011 to 2031 has been proposed. However the Local Plan Examination Inspector has suggested that this needs to be carefully considered, given the growth potential of Stansted Airport.

### **Examination of the Local Plan: Inspectors Conclusions, December 2014**

*The plan's employment target set out in policy SP3 is 9,200 additional jobs for the period 2011-31. This derives from table 27 'predicted Uttlesford job changes by type 2011-2031' in the Employment Land Review (ELR) of April 2011, which is itself based on the East of England Forecasting Model of Autumn 2009. It is unclear what part the expected growth of employment Stansted Airport plays in that total, but current estimates by new owners Manchester Airport Group (MAG) indicate that Stansted could itself provide growth in jobs of that order if its traffic were to increase to 35mmpa over the plan period.*

Para 3.16, p.13

*The ELR indicates that there is little if any discernible linkage between the quantity of housing allocated in the plan and the number of jobs likely to be created over the plan period in recognised 'employment' uses (offices, industry and warehousing), especially given the nature and location of Uttlesford and its travel-to-work patterns.*

Para 3.17, p.13

### **UDC Response to the Inspector's invitation to submit statements: matter 5, October 2014**

Statement of common ground between MAG and UDC

Potential to increase on-site employment by 8,800.

### **Uttlesford Local Plan: Pre-submission consultation, April 2014**

[Withdrawn from the examination process on advice from the Inspector]

*In 2012 the Council approved an Economic Development Strategy for 2012-2014. [No explicit job growth numbers] Para 9.3 p.26*

April 2011 ELR (para. 9.6 p.27):

3. -1,700 jobs in factories
4. +1,450 jobs in warehouses
5. +2,150 jobs in offices
6. +1,900 job net

## **Employment Land Review, April 2011**

Focus on B Use Class

Net change of 9,200 jobs 2011 to 2031 (p.8). Claimed to be unfeasible, but no alternative in place, so adopted as an 'indicative' target

## Appendix 2: Adjustments for Stansted Growth

### Key Messages

- London Stansted Airport higher growth scenario is likely to generate an additional 10,000 on-site jobs over the SHMA period.
- Due to displacement effects elsewhere in the SHMA area we estimate 8,750 net additional jobs.
- We estimate that the EEFM already includes growth of around 2,200 jobs at Stansted. The EEFM is also likely to include some further indirect and induced effects across the SHMA area.
- Combining these creates an additional uplift to EEFM baseline, based on high growth at Stansted, of 6,500 jobs over the SHMA period.
- This equates to an additional 300 jobs per annum, in addition to the baseline (core growth) of 1,590 jobs per annum.
- Total average annual job growth therefore increases to 1,895 per annum.
- Oxford Economics analysis suggests there are opportunities for a high proportion of on-site jobs to be filled by in commuters. Currently 45% of airport jobs are filled by those resident outside the SHMA area. OE suggest this figure could rise with appropriate efforts.
- A fast rail link from London to Stansted would improve access for London residents to these jobs but also increase the likelihood of out commuting from the HMA into London.

### SDP Growth Plans

Planning permission has been awarded for expansion at Stansted, to accommodate up to 35 million passengers per annum (mppa). There are two core documents which have been reviewed. The SDP Economy and Surface Access report (2015) and the Economic Impact of Stansted Scenarios (2013) report prepared by Oxford Economics.

A number of scenarios are tested across the two documents with the two lead options focusing on maximising growth with a single runway. The primary variable in the two scenarios is passenger throughput. The lower scenario is based on 35 million passengers per annum (mppa) and a higher scenario based on 45 mppa. HJA has not assessed the validity of these growth ambitions.

The two documents consider both these scenarios, but state slightly different total on-site employment projections. The most substantive variance relates to the 35 mppa. At the officers meeting the higher scenario was suggested as the basis for other planning policy work being undertaken to develop the Uttlesford Local Plan. For this scenario the figures are broadly consistent.

	35 mppa	45 mppa
SDP	18,800	19,650
Oxford Economics	16,800	20,000

In total employment terms this represents an increase of onsite employment in the region of 10,000 over the analysis period 2011-33. Differing documents use differing base years and current employment levels.

The Oxford Economics report sets out a detailed economic impact analysis of expansion, taking into account the displacement effects of such growth within the LSCC. That is, the fact that substantial expansion of the airport will offset some growth that would otherwise have taken place in any event. Oxford Economics apply slightly differing rates of displacement depending on the quality of employment opportunity. For the higher growth scenario OE estimate a net additional 7,000 direct jobs, this is reduced to 4,000 for the lower growth scenario. Some of this displacement effect would lie outside the SHMA area. A figure of 50% is attributed to the HMA. Leading to an HMA effect of 8,500 additional jobs.

OE also provide an estimate of indirect and induced employment effects across the entire LSCC. They indicate the need to adjust these for displacement although detailed figures are not provided. HJA analysis suggests after taking into account displacement a further 500 jobs in the LSCC might be supported over the Plan period. Only a proportion of these would be within the HMA. The share is uncertain but is likely to be no more than 50% (250 jobs).

## **EEFM 2014 Baseline**

The EEFM 2014 Baseline has formed the basis for HJA analysis to date. It is important to understand what level of growth of Stansted employment may already be inherent within the EEFM. There is no definitive figure but an assessment can be made.

Historic employment data for Stansted has been analysed to understand the share of Uttlesford employment by sector which is at Stansted currently. These shares are then applied to the EEFM forecasts for Uttlesford. This analysis indicates a figure of 2,200 additional jobs at Uttlesford based on this share. It is uncertain as to the extent higher levels of growth for Stansted have been applied within the EEFM baseline. Therefore this baseline level of growth is assumed.

On this basis the growth of Stansted as set out within the SDP would lead to an additional 6,500 jobs within Uttlesford.

What does this mean for growth to inform the SHMA?

Spread over the 22 year SHMA period this would increase workplace based jobs by around 300 per annum above the EEFM baseline. Increasing the core figure from 1,590 to 1,895 per annum.

Considering the increase to 35 mppa the increase is lower, to around 1,750 jobs per annum.

## **Local Workforce Implications**

The scope of the HJA research is to consider the scale of workplace based jobs in the HMA. However, the following may be of interest to ORS.

The OE report considers this issue in some detail. However, it is not focused at the HMA level and therefore it needs some interpretation.

The OE analysis suggests around one third of jobs might be filled by those currently unemployed, one third by those currently inactive and one third from new migrants.

The FEMA for the airport is different to the FEMA for the SHMA area. Any additional housing provision that would be associated with accommodating additional migrant workers could be located within the catchment of the airport and not necessarily within the West Essex and East Herts HMA.

The evidence presented by OE and new evidence provided to HJA indicates that 55% of existing Stansted workforce is resident within the HMA. A starting assumption may be that this pattern continues. This suggests 45% in commuting to Stansted, higher than the average rate for the HMA (29% if including all home workers and those of no fixed place of work, 38% if only including those with a designated workplace away from the home).

It would therefore be appropriate to ensure a Stansted specific in commuting rate is applied to the additional employment.

More detailed work by OE highlights that the labour market situation in much of the HMA is already tight. It is therefore suggested a greater share of future labour to meet the growth aspirations at Stansted could come from locations with higher unemployment. This implies future in commuting for Stansted employment could be higher than the existing pattern. In order to support such an assumption there is a need to make a logical case. The potential workforce locations cited include Harlow, Peterborough, Haringey, Enfield and Waltham Forest. These latter three being London Boroughs where there is already a skills academy established. If this is not the case the report makes clear there will be a need for an increase in working age population locally and the associated housing provision.

The OE work sets out the case for a fast link to London which will improve connectivity substantially.

There is therefore a logical argument to support increased in commuting to Stansted based on:

- Available labour supply
- Improved transport infrastructure
- Specific skills and workforce engagement activities in target locations.

There is no quantification of this effect. However, it may be appropriate to test some alternative scenarios in order to inform policy development. HJA would recommend the following for the uplift in jobs above baseline:

- Existing Stansted in-commuting rate – 45%
- Low increase – 50%
- Medium increase – 55%
- High increase – 60%

These scenarios could be tested against the 35 and 45 mppa scenarios. The following table provides a summary. Percentage figures show the in commuting ratio to be applied to the uplift in jobs only. The ORS baseline assumption applies to the core job growth at all times.

	<b>EEFM Baseline</b>	<b>35 mppa</b>	<b>45 mppa</b>
Jobs (Workplace based)	1,590 per annum	1,750 per annum	1,895 per annum

	<b>EEFM Baseline</b>	<b>35 mppa</b>	<b>45 mppa</b>
Uplift on baseline		160 per annum	300 per annum
Existing commuting	ORS Baseline model	45%	45%
Low increase	n/a	50%	50%
Medium increase	n/a	55%	55%
High increase	n/a	60%	60%

Such scenario testing will identify the scale of sensitivity to varying assumptions.

It should also be noted that the OE analysis identifies that improvements to fast rail routes to Stansted will likely increase the propensity to commute into London, particularly from the HMA districts that will benefit from reduced travel times to central London. A figure of 7,000 additional out commuters is estimated by OE. The implications of this are uncertain, will that create a further drain on local labour supply to meet employment growth?

It is also noted that if Stansted grows to the higher scenario it will require a mix of both short and long haul flight destinations. This is likely to boost the attractiveness of the area to FDI.

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## EAST HERTS COUNCIL

### DISTRICT PLANNING EXECUTIVE PANEL – 22 OCTOBER 2015

#### REPORT BY THE LEADER OF THE COUNCIL

#### DISTRICT PLAN TRANSPORTATION – A414, HERTFORD

WARD(S) AFFECTED: ALL

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#### Purpose/Summary of Report

- This report discusses the transportation issues related to the A414, Hertford which have been identified by Hertfordshire County Council as Transport Authority, and the consequential implications that arise in respect of progressing the District Plan.

<b><u>RECOMMENDATION FOR DISTRICT PLANNING EXECUTIVE PANEL:</u></b> That Council, via the Executive, be advised that:	
(A)	<b>the contents of the letter dated 27 July 2015 from Hertfordshire County Council Highways Development Management in respect of transportation issues identified on the A414, Hertford, be noted; and</b>
(B)	<b>Hertfordshire County Council be urged to give highest priority to expediting the completion of its COMET transportation model and publication of its emerging Transportation Vision and that East Herts Council is most willing to assist this process, if considered appropriate.</b>

#### 1.0 Background

- 1.1 In papers at 'Item 8' later on the agenda, a report is included on the Delivery Study. This important Study will form a key part of the wider evidence base to support the preparation of the emerging District Plan as it progresses towards Pre-Submission, and thereon to the Examination stage.
- 1.2 As part of the Delivery Study, a Transport Note has been appended which discusses wide-ranging transport issues in

respect of the context of potential site delivery across the district. At certain points, within both the main Delivery Study and the appended Transport Note, reference is made to a letter dated 27<sup>th</sup> July sent by Hertfordshire County Council (HCC) to this Council regarding the A414, Hertford.

1.3 Prior to reading the Delivery Study report, it is considered appropriate that Members should be made aware of the contents of the HCC letter, the background to it, and the potential consequences of the matters it raises.

## 2.0 Report

2.1 Paragraph 182 of the National Planning Policy Framework, March 2012 (NPPF) details that Local Plans should be:

- *Positively prepared – the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development;*
- *Justified – the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;*
- *Effective – the plan should be deliverable over its period and based on effective joint working on cross-boundary strategic priorities; and*
- *Consistent with national policy – the plan should enable the delivery of sustainable development in accordance with the policies in the Framework*

2.2 In the context of these NPPF requirements, the ability of the highways network to accommodate additional traffic movements therefore forms a key part of the assessment process in considering any potential development sites for inclusion in the emerging District Plan.

2.3 Furthermore, the later issued Department for Transport (DfT) Planning Practice Guidance update 'Transport evidence bases in plan making' (October 2014) (NPPG) provides further information to assist local planning authorities assess strategic transport

needs to reflect and, where appropriate, mitigate these in their Local Plan.

2.4 Paragraph 003 of that guidance details key issues which should be taken into consideration in developing a transport evidence base to support a local plan. These include the need to:

- *assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms;*
- *assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport;*
- *highlight and promote opportunities to reduce the need for travel where appropriate;*
- *identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate;*
- *consider the cumulative impacts of existing and proposed development on transport networks;*
- *assess the quality and capacity of transport infrastructure and its ability to meet forecast demands; and*
- *identify the short, medium and long-term transport proposals across all modes.*

2.5 At a local level East Herts Council has worked with HCC, as transport authority, to ensure that potential development options are considered within the terms of Government Guidance.

2.6 Under the emerging District Plan 'Stepped Approach' sieving process, a series of 'traffic light' Topic Assessments were carried out and these were reported to the District Planning Executive Panel in 2012 as part of the early consideration of the possible options for spatial distribution of development. HCC Highways officers were heavily involved in the conclusions reached on the two highways related assessments for the Areas of Search at that stage.

2.7 Sub-sections within Areas of Search were considered on an individual basis in terms of the potential traffic impacts. However,

particularly in respect of Hertford, it became apparent that these individual assessments would not be sufficient on their own and that cumulative impacts of development in and around the town and in the wider locale would also need to be considered, especially in relation to additional movements on the A414 through the town, which is already subject to peak time congestion.

2.8 At the time of the Preferred Options Consultation, which ran between February 27th and May 22nd 2014, work had been commissioned by HCC to, *inter alia*, better understand the likely impact of future development on the A414 corridor in this location. However, at that time the AECOM work had not yet concluded. Therefore, the transport element of the HCC response to the Preferred Options Consultation was couched in terms of the information available at that time:

*A414 Hertford - The A414 is one of the strategic east-west routes across the County. It will therefore be impacted by all the proposed developments in Hertford and other developments proposed in the wider area. In Hertford, issues on the A414 put additional pressure on the Ware Road bus corridor which is the main access route for buses serving the area. As a consequence, and following the adoption of the Inter Urban Route Strategy, a Paramics transport model of the A414 corridor through Hertford has been prepared to test the cumulative impacts of growth in Hertfordshire against the suggested online interventions in the Hertford and Ware Urban Transport Plan.*

*The tests have shown that the road is currently operating close to capacity, with the A414 roundabouts at Hale Road / Parliament Square and Ware Road / London Road / Fore Street (Bluecoats) junction in particular, having capacity issues. These areas form critical parts of the local bus network and would have significant issues for local bus operators in terms of service provision and the viability of services.*

*Though the work undertaken to date has indicated that the A414 corridor performance between the A10 and Hale Road can potentially be improved by the combination of individual junction improvement options, the potential release of latent demand is likely to lead to pinch-points elsewhere along the corridor.*

*These measures tested to date would not free up enough capacity to accommodate large volumes of additional development and hence the issues on the A414 are therefore a potential constraint on growth. A clearer understanding of this issue will be required prior to submission, hence further transport analysis work is therefore required to consider what further mitigation measures exist and their respective feasibility.*

- 2.9 The final iteration of the options testing in the A414 Study (see **Essential Reference Paper 'B'**) was released to this Council in January 2015 and this concurred with HCC's previous Preferred Options response position that there were very limited opportunities for online improvements to significantly increase capacity on the A414 at Hertford.
- 2.10 Since that time, officers of East Herts Council have been in dialogue with HCC and have pressed for clarification on their position in order to understand what the potential implications of these findings might be for the emerging Development Strategy.
- 2.11 In particular, there was a need to understand how HCC would view these options in relation to applying the 'severity test' for assessing the residual cumulative impacts of growth proposed in the emerging District Plan. The need for this test is established both within the NPPG and NPPF as follows:
  - NPPG (paragraph 003) which highlights the need for Local Plan transport evidence bases to "*consider the cumulative impacts of existing and proposed development on transport networks*";
  - and
  - NPPF (paragraph 32) which states that "*development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe*".
- 2.12 Given that no definition of what constitutes "severe" has been acknowledged by the Government, and in the absence of relevant case law, this is therefore currently generally accepted as a matter of local determination. Therefore, the importance of understanding HCC's position in relation to the severity of any proposed development which would impact on the A414 through Hertford is crucial in taking forward the emerging District Plan.

2.13 To this end, and following several discussions on the subject in relation to the form of the A414 Study as it currently stands not including all necessary information, a written request was sent in June 2015 seeking written clarification of HCC's position (see ***Essential Reference Paper 'C'***). This set out the key matters which were viewed as being essential to be addressed in order to allow East Herts Council to have a sufficiently robust evidence base on the A414 issue to allow progression to the Pre-Submission stage.

2.14 Following further clarification to HCC regarding the information being sought, a letter of response was received on 27<sup>th</sup> July (see ***Essential Reference Paper 'D'***).

2.15 There are several key messages in this letter of response that need to be understood.

2.16 Firstly, it is likely that it would be possible for planned development identified in the first five years of the emerging District Plan to be accommodated, subject to detailed assessment and suitable mitigation measures being identified.

2.17 However, beyond that period, congestion (occasioned both by traffic movements generated by development as proposed in the Preferred Options consultation and from wider areas outside of the district) would be such as to preclude delivery without a strategic intervention for the A414 through Hertford.

2.18 In particular, the letter highlights that indicators of the anticipated severe traffic congestion identified from HCC's studies on the A414 beyond the first five years' level of growth would include:

- Regular instances of traffic blocking key junctions and queuing back on the current free flowing lanes of the A10.
- Significant increases in delays were also predicted on the wider local road network that would result in
  - subsequent impacts on key public transport routes,
  - inappropriate routing of traffic through the town centre and residential roads (including villages)
  - The likely expansion of the existing traffic related air quality management area (AQMA).

2.19 Furthermore, the letter acknowledges that further work is required to ascertain further information to plug the evidence gap and that HCC is currently developing a Countywide Transport Model (COMET) which will provide a platform to test strategic mitigation measures to growth scenarios across Hertfordshire. This model will feed into the emerging HCC 'Transport Vision' (a successor to Local Transport Plan 3), which will then identify packages of transport interventions to enable growth across the county to 2050.

2.20 Unfortunately, while currently under development, the COMET model is not due to be available to test options until early 2016 and the subsequent draft 'Transport Vision' will not be published until Summer 2016. This draft document, which will (when adopted) become the replacement for the current Local Transport Plan (LTP3), will include a draft list of prioritised schemes that will then be subject to public consultation. It is anticipated that the final prioritised list of schemes will then be agreed by HCC by October/November 2016 to inform the bidding process for funding to enable delivery.

2.21 While Essex County Council's VISUM transportation model, which is under development and due to be completed in a shorter timescale, can provide some evidence on the A414 to the east of the district, it is not detailed enough in the Hertford area (especially to the west of the town) to provide a robust evidence base that would be fit for purpose to enable the District Plan to satisfy an Inspector at Examination. To seek to progress without such evidence in place would be most likely to result in the Plan being found unsound.

2.22 In order to try to expedite the progress of the COMET model to enable publication of the 'Transport Vision' in a shorter timescale East Herts officers have therefore explored the possibility of providing assistance to HCC. However, HCC officers consider that the timescale cannot be reduced due to the technical procedure involved in building the model and that additional resources would not advance the process.

2.23 Therefore, to summarise, the HCC position as it currently stands is that:

- a. the identified congestion resulting from proposed development in the draft District Plan Preferred Options version would be such as to preclude the delivery of that Strategy beyond the first five years in the locations currently

proposed without a strategic intervention for the A414 at Hertford;

- b. any potential mitigation measures will not become clear until the COMET model is available and the subsequent 'Transport Vision' is published;
- c. the 'Transport Vision' will not be available until at least mid-2016, with public consultation to follow, which will then result in a final prioritised list of schemes being available by October/November 2016.

2.24 However, although HCC has confirmed that it will not have all the information and modelling tools that will be required to fully test the highway network implications of the potential growth identified across the whole plan period until the middle of next year, it is important to note that HCC is keen to continue to work with this Council to agree an interim position for the next stage of consultation on the District Plan and to agree what material will be available by the time of the Examination. So that this Council is able to demonstrate full deliverability of the emerging District Plan, HCC has given assurances that it considers it a priority to work together to ensure that it can provide the most effective support to East Herts over the next 12 months and through into implementation and delivery.

### 3.0 Implications/Consultations

3.1 Information on any corporate issues and consultation associated with this report can be found within **Essential Reference Paper 'A'**.

### Background Papers

- National Planning Policy Framework (NPPF) (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>)
- Planning Practice Guidance (PPG) (General) (<http://planningguidance.planningportal.gov.uk/>)
- Planning Practice Guidance (PPG) (Transport Evidence Bases) (<http://planningguidance.planningportal.gov.uk/blog/guidance/transport-evidence-bases-in-plan-making/transport-evidence-bases-in-plan-making-guidance/>)

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## ESSENTIAL REFERENCE PAPER 'A'

### IMPLICATIONS/CONSULTATIONS

Contribution to the Council's Corporate Priorities/ Objectives (delete as appropriate):	<p><b>People – Fair and accessible services for those that use them and opportunities for everyone to contribute</b></p> <p>This priority focuses on delivering strong services and seeking to enhance the quality of life, health and wellbeing, particularly for those who are vulnerable.</p> <p><b>Place – Safe and Clean</b></p> <p>This priority focuses on sustainability, the built environment and ensuring our towns and villages are safe and clean.</p> <p><b>Prosperity – Improving the economic and social opportunities available to our communities</b></p> <p>This priority focuses on safeguarding and enhancing our unique mix of rural and urban communities, promoting sustainable, economic opportunities and delivering cost effective services.</p>
Consultation:	Acting Chief Executive, Head of Planning and Building Control, Planning Policy Team, HCC Officers.
Legal:	None
Financial:	None
Human Resource:	None
Risk Management:	To seek to progress the District Plan to Examination without a robust transport evidence base in place would represent a significant risk that the District Plan would be found unsound.
Health and wellbeing – issues and impacts:	The link between planning and health has been long established. The built and natural environments are major determinants of health and wellbeing. There is already an AQMA declared on the A414 Gascoyne Way, Hertford.

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# Technical Note

Project:	<b>Hertfordshire County Council Transport Planning Contract</b>	Job No:	<b>60304737</b>
Subject:	<b>A414 Transport Strategy, Strategic Study – Feasibility Review – Stage 3</b>		
Prepared by:	<b>Anwar Yusuf/Humphrey Hodge</b>	Date:	<b>1 December 2014</b>
Checked by:	<b>Steven Ward</b>	Date:	<b>4 December 2014</b>
Approved by:	<b>Ian Burrows</b>	Date:	<b>5 December 2014</b>

## 1. Introduction

- 1.1. Hertfordshire County Council (HCC) is currently considering options for a transport strategy along the A414 corridor through Hertford, between the junction of Hertingfordbury Road/Thieves Lane in the west and the A414/A10 in the east.
- 1.2. The first part of the study focused upon on-line solutions at junctions identified in the Urban Transport Plan and stakeholder workshops. This 'Corridor Study' involved S-Paramics microsimulation model testing of proposed on-line option packages, assessing prospective design options to reduce congestion and delay and to provide additional junction capacity as 'headway' to accommodate planned growth in the short to medium term.
- 1.3. Following this initial work, AECOM were commissioned by HCC to carry out a 'Strategic Study' in parallel with the Corridor Study with both studies complementing each other. The Strategic Study is intended to consider the high level feasibility and costs of prospective alternative, wider solutions which could provide additional corridor capacity and look to alleviate existing and potential future congestion and delay experienced along the A414 within the vicinity of Hertford in the longer term. The 'Strategic' and 'Corridor' studies have been run in parallel and aim to support each other.
- 1.4. Stage 1 involved collating all previous evidence and scheme proposals relevant to the A414 Hertford Corridor. Stage 2 entailed the collection, processing and analysis of ANPR data collected across the corridor to identify the current patterns of vehicle movements.
- 1.5. The purpose of this technical note is to review the schemes identified during the Stage 1 of the study and to determine how these prospective schemes could cater for observed movements identified during Stage 2 and potentially resolve identified problems along the corridor.
- 1.6. This technical note summarises stage 3 of the Strategic Study - the Feasibility Review and will be presented in the following format:
  - Existing traffic patterns observed in Stage 2;
  - Review of public transport improvement schemes;
  - Review of pedestrian and cycle improvement schemes;
  - Review of online schemes; and
  - Review of offline schemes.

## 2. Existing Problems

- 2.1. Stage 2 of this study, Data Collection and Analysis, identified vehicle movement patterns along the A414 corridor during the peak periods.
- 2.2. To set the context for the purposes of this note, a selection of the key findings identified from Stage 2 are as follows:
  - 20% of all corridor movements passing the ANPR cordon boundary can be classed as external to external 'through' trips.
  - A significant number of vehicles using the A414 are of a strategic nature travelling through the A414 corridor (for example 40% of westbound matched trips in the morning peak);
  - As observed during the corridor modelling and during the ANPR data collection, there is a considerable conflict in movements at Hale Road Roundabout between traffic travelling from east to west on the A414 and vehicles travelling from the west, turning right to employment and education sites on Hale Road;
  - Hagsdell Road and Queens Road are used as an alternative route to avoid the Bluecoats Roundabout in the morning peak;
  - In Bengeo, Byde Street is observed to be used as an alternative route to the A414 during the morning and evening peak.
  - Welwyn Road (B1000) and Ware Road (A119) were identified as significant eastbound and westbound alternative routes running parallel to the A414;
  - Lower Hatfield Road (B158) was also observed as being used as an alternative to the A414 to access the Hale Road employment sites;

## 3. Feasibility Review

- 3.1. The feasibility review considers the previously identified schemes (Stage 1) against the current travel patterns observed along the corridor (Stage 2). Prospective on-line schemes, off-line schemes, public transport and pedestrian/cycling schemes are reviewed in turn against existing travel patterns.

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## Online Schemes

- 3.2. A detailed summary of the Paramics microsimulation modelling undertaken to assess the online option packages was provided in the document 'Junction Testing and Option Packages - results and analysis' (A414ModelSummaryReport\_V4.pdf, August 2014). This report suggested that the A414 corridor performance between the A10 and Hale Road can potentially be improved by the combination of previously tested individual junction options. However the potential release of latent demand was likely to lead to pinch-points elsewhere within the corridor under both Package 1 and 2.
- 3.3. Therefore it was considered the additional capacity created by the junction improvement options is likely to be taken up by trips along the corridor which are currently re-routeing to avoid existing congestion. Based on the limited scale of additional capacity potentially created along the A414 and considering both current and future year demand, it is felt that the effectiveness of the junction improvement options modelled was unlikely to be sufficient. The identified packages of measures were unlikely to solve the issues identified from the previous stage. The online solutions focussed on increasing the capacity of the current network (within the highway boundary), alongside more efficient traffic control systems to relieve congestion along the A414 in Hertford. Working within the current highway boundary limits the scale to which the online solutions are able to provide additional capacity, meaning key issues, such as the Hale Road roundabout, cannot be dealt with sufficiently unless significant capacity improvements are made.
- 3.4. The findings from the ANPR data collection and analysis confirm the movement patterns underpinning the Paramics model testing undertaken for the Corridor Study. The conflicts identified causing traffic delays along the A414 route are also observed in the ANPR data (31% of vehicles travelling from the west are observed to turn right onto Hale Road).
- 3.5. The model testing considered various online improvements to junctions along the A414 including increasing circulatory capacity, full or part signalisations at roundabouts, converting roundabouts to four arm signalised junctions and dualling sections of the A414 that are currently single carriageways. The testing found some benefits regarding journey times but were forecast to transfer delays elsewhere in the network.

## Offline Schemes

- 3.6. Offline schemes potentially provide the most suitable solutions to the congestion issues identified in the data collection stage. A southern or northern bypass could cater for journeys observed to be travelling through Hertford, with the potential to significantly relieve congestion in the town, by transferring trips to alternative routes. Additionally there could be an opportunity to make use of capacity created on the Hertford section of the A414, potentially providing new sustainable transport infrastructure; this is discussed in more detail later in this note.
- 3.7. A southern bypass based on current travel trends, would potentially serve more journeys than a northern bypass. Not only could a southern bypass serve journeys directly across Hertford but also towards employment and education sites around Hale Road, which was identified in the corridor and strategic studies as an area that attracts a large number of journeys during the morning peak, causing delays and vehicle conflicts at the Hale Road roundabout. East to west travel accounts for 66% of external to external trips from the east (1482 vehicles observed in the morning peak), with west to east travel accounting for 69% (926 vehicles) from the west.

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3.8. A northern bypass on the other hand, could potentially prove useful in respect of serving planned development sites to the north of Hertford. Any northern bypass could potentially serve as an alternative route around Hertford, as opposed to through Hertford, potentially relieving the existing high levels of traffic on the A414 corridor and possibly providing capacity for future growth.

3.9. It is felt that further options such as a northern relief road, may have a negligible effect on vehicle numbers on the A414, but could be useful in the future if combined with public transport improvements and if a potential link between the two railway stations in Hertford is introduced, particularly if combined with the proposal for Crossrail 2 to connect to the town. The Stage 1 report identified the cost of a northern bypass at approximately £35m to £46m, not taking into account any compulsory purchase orders, and a maximum of a 2 lane road without the need for extensive re-building. Data analysis results from stage two show the road is unlikely to be suitable for addressing the key issues identified, but this would benefit from more detailed model testing.

3.10. Extensive infrastructure projects such as flyovers, underpasses or tunnelling could also be considered. However, despite potentially providing significant potential to reduce congestion on the A414 within Hertford, high costs may mean these options are not feasible. High level costing per kilometre of tunnel provision has been estimated in the table below.

**Table 1: Tunnelling Cost Estimates**

Traffic Lanes	Tunnel cost per metre length
Single 2 lane	£0.15Million
Dual 2 lane	£0.30Million
Dual 3 lane	£0.40Million

3.11. These costs are in 2012 prices and allow for project and programme risk, although no allowance for inflation has been made. These high level costs are been based our recent experience working on HA/ DfT Major scheme projects.

*Public Transport Improvements*

3.12. There is the potential for public transport improvements to change travel habits within and to/from Hertford. Current service levels are low, and do not provide a viable and convenient alternative to travel by car. A combination of well-run Park and Ride schemes, with bus corridors and improved bus priorities in Hertford could increase patronage and in-turn reduce the number of external to internal and internal to internal car trips. External to Internal trips were recorded as being 41% of observed movements (9,158 movements) during the morning peak, hence there is an opportunity here to reduce this and relieve congestion on the A414 in the centre of Hertford through public transport provision.

3.13. These schemes would potentially complement prospective offline highway schemes, capacity released on the A414 could be made available to alternative modes. Increasing the provision and quality of public transport would be expected to reduce trips made by car. It is felt that in their own right public transport schemes are unlikely to relieve congestion to the same degree as alternative offline solutions might provide.

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3.14. As previously discussed, there is the possibility to improve interchange between Hertford North and Hertford East stations by potentially using a Northern Relief Road alignment maximising the benefits of any future extension of Crossrail 2 to Hertford East.

## *Pedestrian and Cycle Improvements*

3.15. In parallel with any future offline solution there is an opportunity to improve pedestrian and cycle routes within Hertford. Potential improvements to pedestrian and cycle facilities could encourage use of these alternative modes and remove local, short distance car trips on the A414.

3.16. The data collection highlighted a number of conflicting movements along the A414 at various points such as at Hale Road and Bluecoats. It should be noted that whilst pedestrian and cycle trips are likely to be shorter distance compared to other modes, the data collection exercise did not directly collect this information and did not identify internal movements within Hertford.

3.17. Schemes to re-route these trips and reduce the number of conflicts, could possibly make the A414 a more attractive route for cyclists and pedestrians. For example at Hale Road, as identified, 31% of vehicles from the west turn right conflicting with the major east to west route. In combination with an offline solution, these vehicles could be removed following the implementation high quality pedestrian and cycle schemes.

3.18. Improved, safe access to schools could encourage a switch to cycling and walking, whilst a better cycle path between Ware and Hertford could encourage more users to cycle between the towns as a viable alternative to car use. External to Internal trips from the A119 Ware Road do contribute a high number of vehicles, data analysis suggests that of 1203 vehicles that were captured at the ANPR site on the A119 Ware Road during the morning peak, 448 vehicles were captured again having passed through Hertford. From this it can be inferred the majority of the remaining 755 vehicles have stayed within Hertford, so a scheme to incentivise people to switch from driving to Hertford to alternative modes of transports is likely to be beneficial.

3.19. Additional schemes to consider here could include options to take advantage of the reduced numbers of vehicles on the A414 following the introduction of an offline scheme (as already mentioned for public transport improvements). There is a potential here to reduce the number of lanes on the current A414 alignment and to introduce segregated cycle paths or walkways in parallel. In addition, options such as reducing access to Town Centre streets could be implemented to encourage greater levels of walking and cycling in Hertford thus reducing the number of journeys into the Town Centre by car.

3.20. These improvements have the potential to provide attractive and safe alternatives to those making local trips and further reduce vehicle numbers along the A414.

3.21. More detailed analysis for individual schemes is presented in Table 2.

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**Table 2: Review and Recommendations for proposed schemes**

A - Changes to existing road layout:

Description	Review	Recommendations
On-line options previously assessed in the Corridor Study	<ul style="list-style-type: none"> <li>- Findings of the ANPR data collection are comparable with data collected to inform Paramics modelling of potential online options. Issues such as the conflict at the Hale Road roundabout were observed, benefits for junction packages at one location were modelled to cause delays elsewhere in the network, hence overall improvement to network capacity was found to be limited.</li> </ul>	<ul style="list-style-type: none"> <li>- Potential benefits are countered by resulting problems elsewhere in the network. Limitations within highway boundary to increase capacity along the A414.</li> <li>- Consider offline solutions to increase capacity and reduce traffic volumes using the A414.</li> </ul>
Dedicated left-turn lane at Bluecoats Roundabout	<ul style="list-style-type: none"> <li>- In line with the Paramics modelling, a free flow lane at Bluecoats could reduce delays experienced on the A414 from the A10. Introduction of this layout in Paramics modelling leads to delays on Ware Road westbound.</li> </ul>	
Signal controlled crossroads at Parliament Square, Hertfordbury Road, Baldock Street and A414 junctions with the B1197 and Cross Lane.	<ul style="list-style-type: none"> <li>- These options were not considered during the Paramics modelling.</li> </ul>	

Description	Review	Recommendations
Closure of Hertford town centre streets to motorised traffic except buses, cycles, taxis, loading (at specific times) at Market Street/The Wash and Fore Street	<ul style="list-style-type: none"> <li>- Observations suggest relatively low numbers of vehicles are travelling into the town centre during the peak periods as compared to other destinations. Closing town centre streets to motorised traffic is likely to have limited impact on congestion issues on the A414.</li> </ul>	<ul style="list-style-type: none"> <li>- Solutions such as closing the Town Centre to motorised traffic except for specified vehicles should be used as a complementary measure. It is unlikely to reduce the number of vehicles using the existing A414 by a sufficient number of vehicles, but may provide additional benefits by providing a modal shift.</li> </ul>
Variable Message Signs (VMS) for car parking and other congestion issues	<ul style="list-style-type: none"> <li>- Potential to encourage further rat-running.</li> <li>- No other real alternatives to the A414 during peak hours.</li> </ul>	<ul style="list-style-type: none"> <li>- Similarly the VMS and UTC system using SCOOT could complement larger scale interventions, but are unlikely to resolve delay and congestion problems in isolation.</li> </ul>
Urban Traffic Control (UTC) system using SCOOT to signalise and link roundabouts on the A414 Hertford section	<ul style="list-style-type: none"> <li>- An efficient traffic control system has the ability to reduce congestion and conflict issues caused by certain roundabouts along the A414 but ultimately the improvements are limited to the actual capacity of the A414 itself, discussion with HCC suggests that signals have been recently optimised, recent operational modelling suggests there is little room for growth along the corridor.</li> </ul>	

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## Technical Note



Description	Review	Recommendations
A119 Ware Road, Hertford junction improvements (IURS)  Upgrade / Increase Capacity of Ware Road	<ul style="list-style-type: none"> <li>- Could potentially encourage more cars to use this route and potentially add to delays along the route towards Hale Road, with the possibility to create further conflicts with vehicles on the A414</li> </ul>	<ul style="list-style-type: none"> <li>- The A119 Ware Road improvements, along with the B1000/A119 North Road improvements ultimately could increase the capacity of the routes loading onto the A414, further adding to the delays along the A414. With the limited scope for improvements on the A414, these options are unlikely resolve capacity issues.</li> </ul>
Upgrade / Increase Capacity of Lower Hatfield Road	<ul style="list-style-type: none"> <li>- Lower Hatfield Road capacity increase could be a more attractive option for vehicles travelling towards the Hale Road employment and education sites. Already well utilised from the west, but can be better used as a route to remove vehicles from the A414</li> </ul>	<ul style="list-style-type: none"> <li>- The increase in capacity of Lower Hatfield Road is an alternative option to consider. It is currently well used by vehicles looking to access the Hale Road employment and education sites, and an increase in the capacity could attract more vehicles to use this route, removing journeys on the A414 from the west of Hertford.</li> </ul>
Upgrade / Increase Capacity of North Road and B1000	<ul style="list-style-type: none"> <li>- An increase in capacity of North Road and the B1000 could lead to increased traffic volumes entering the A414 at Cross Lane roundabout creating further conflicts, congestion and delays. Already there is a conflict in traffic from this direction turning right at the Hale Road roundabout, and this could further add to the problem.</li> </ul>	

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## B - Major new road construction:

Description	Review	Recommendations
Rowley Link Road	<ul style="list-style-type: none"> <li>- Rowley Link Road is unlikely to have any impact on the observed A414 capacity issues.</li> </ul>	<ul style="list-style-type: none"> <li>- This option should only be considered if it is combined with Northern by-pass option</li> </ul>
A414 bypass to the south of Hertford (Rush Green Link to Cole Green By-pass)	<ul style="list-style-type: none"> <li>- Has the potential to significantly reduce the number of vehicles using the A414 - 40% of vehicles from the A10 Junction at Rush Green were observed travelling through Hertford and continuing along the A414. A new access to the Hale Road employment/education sites would have the potential to remove vehicles from the A414 westbound and eastbound direction, potentially further easing congestion.</li> </ul>	<ul style="list-style-type: none"> <li>- Further, detailed assessment and strategic modelling of this option is recommended to assess the alternative east-west route through the A414 Corridor.</li> </ul>
Northern Relief Road	<ul style="list-style-type: none"> <li>- Current traffic flows suggest this option is unlikely to cater for a significant amount of vehicles as an alternative to the A414.</li> <li>- Potential to become a transport link connecting the railway stations in light of proposals for Crossrail 2 to serve Hertford East.</li> </ul>	<ul style="list-style-type: none"> <li>- Unlikely to significantly impact on the vehicle levels on the A414 therefore unlikely to resolve current capacity issues.</li> <li>- Potential to improve interchange between Hertford stations.</li> <li>- Suggest detailed assessment and strategic modelling.</li> </ul>

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## Technical Note



Description	Review	Recommendations
<p>New alignment to Northern By-pass to connect with proposed developments to the west and north of the town e.g. linking B1000, North Road and the A10/A602</p>	<ul style="list-style-type: none"> <li>- As with the southern bypass option, this route has the potential to remove a high number of vehicles travelling east-west through Hertford. Will not serve journeys towards the Hale Road employment/education sites to the south of Hertford, so these vehicles will remain on the network.</li> <li>- External to External trips between the north and east of Hertford, are relatively low (at 15% of 764 from the north, and 5% of 2248 from the east during the morning peak) compared with other movements, but still could remove these vehicles from the A414, freeing up capacity.</li> <li>- Due to the length of the route, the less congested A414 could attract vehicles back as a quicker route across Hertford; along with vehicles previously rat running.</li> </ul>	<ul style="list-style-type: none"> <li>- As with the southern bypass this option could cater for a high number of vehicles and trips made. Routes would include from, East to North, East to B1000, North to West and vice-versa, (approximately 1660 vehicles observed in the morning peak). Should be considered as an option for more detailed assessment and strategic modelling.</li> <li>- Would be important to combine this option with further schemes to discourage users from using the A414 for through trips.</li> <li>- Would potentially attract more vehicles if alignment extends back to the A414 in the West.</li> </ul>

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Description	Review	Recommendations
Add additional lanes to the A414 Hertingfordbury Road	<ul style="list-style-type: none"> <li>- Adding additional lanes at the A414 Hertingfordbury Road, could compound problems further along the A414 route.</li> </ul>	<ul style="list-style-type: none"> <li>- Unlikely to provide relief for identified problems on the A414, mainly the Hale Road roundabout, and in fact potentially encourage more routes through the A414, worsening the conflict of movement at this location.</li> </ul>
Flyovers and underpasses at Hale Road and Bluecoats roundabouts  Demolition of either the Hertford Telephone Exchange or Stag House to allow significant improvements to the Bluecoats roundabout	<ul style="list-style-type: none"> <li>- Tunnelling, flyovers and underpasses, could address east-west travel and conflicts at Hale Road and Bluecoats roundabouts.</li> </ul>	<ul style="list-style-type: none"> <li>- Excessive costs and extensive closures required to carry out such work put the suitability of the schemes into question.</li> </ul>
Tunnelling (cut and cover or wider route)	<ul style="list-style-type: none"> <li>- Demolition of the Telephone Exchange or Stag House, alongside other potential Bluecoats roundabout improvements, may be limited in what could be achieved due to identified congestion issues further along the A414, such as at Hale Road.</li> </ul>	

# Technical Note



C - Pedestrian and cycle improvements:

Description	Review	Recommendations
Improved crossing facilities on A414; focussing on the Foxhole Estate and Waterways	<ul style="list-style-type: none"> <li>- The pedestrian and cycle improvements identified should be implemented in conjunction with highway options</li> </ul>	
New town cycle/pedestrian routes (linking Hertford Town Centre / Mead Lane and Bengoe – UTP Routes 7 and 18)		
Improved access to schools, pedestrian routes and signing	<ul style="list-style-type: none"> <li>- The prospect of reduced vehicle numbers following highway interventions, mean the A414 route could be revised to allow for safe cycle routes for example.</li> </ul>	
Extension of cycle route from Cole Green Way to Hertford North Station (route 1 in Urban Transport Plan)		
Cycle and pedestrian route linking Bramfield Road, North Road, Hertford North Station and Hertfordbury	<ul style="list-style-type: none"> <li>- Improving pedestrian walkways, including the underpasses along the A414 could potentially encourage more users.</li> </ul>	
Hertford to Ware via river path		
Extension of cycle route from Cole Green Way to Town Centre and Ware		
Implementation of more schemes in the pedestrian network		
Investigation of additional footpath links		
Town wide cycle rental scheme		

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D - Public transport solutions:

Description	Review	Recommendations
Improved east-west links outside the town	<ul style="list-style-type: none"> <li>- Current east-west links have been identified as under provided, with little alternative but to drive through Hertford. 2206 vehicles were observed make the journey through Hertford, for which an east-west link could potentially provide an alternative.</li> </ul>	<ul style="list-style-type: none"> <li>- Changing transport habits may prove difficult, whilst any reduction of vehicles on the A414 may be taken-up again through drivers diverting back to the A414 from alternative routes. Would need to be pursued in combination with alternative schemes.</li> </ul>
Promote Hertfordshire Better Bus – a new service between Watford and Stansted Airport (UTP)	<ul style="list-style-type: none"> <li>- Park and Ride facilities could reduce the numbers of external to internal trips into Hertford. Currently a high number of external to internal trips (9158 and 8414 vehicles in morning and evening peaks respectively), Park and Ride could ease congestion into Hertford.</li> </ul>	<ul style="list-style-type: none"> <li>- Potential to remove external to internal trips.</li> </ul>
Hertford Bus Station improvements (UTP)		
Park & Ride facility (including interchange for school bus and coach services) between Ware and Hertford, including bus priority (UTP)		
Hertford North Station improvements, bus interchange (UTP)		
Hertford East Station improvements, bus interchange (UTP)		
A119 North Road / B1000 Welwyn Road Quality Bus Corridor (UTP)		
A119 Quality Bus Corridor between Hertford and Ware including bus lane and priority gate on Ware Road (UTP)		
Area Wide – Real Time Passenger Information System (UTP)		
More direct service of bus routes to County Hall (UTP)		
Improved Bus Priority – area wide (UTP)		

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## Technical Note



Description	Review	Recommendations
30mph speed limit past the multi-storey car park including County Hall roundabout	- As above	- As above
Parking review and strategy to discourage long stay parking, linked to Park and Ride (UTP)		

.E - Marketing and information:

Description	Review	Recommendations
TravelWise information to encourage changes to non-car use		
Encouragement of employers to develop commuter plans	- Limited impact on congestion on as standalone schemes.	- Use in combination with other potential schemes.
Develop passenger transport info systems		
Hertfordshire Council Staff Travel Plan		
Extension of BigHerts Big Ideas LSTF programme		

## 4. Conclusions, Recommendations and Next Steps

- 4.1. The feasibility review has identified a number of possible solutions for reducing congestion and delays along the A414 corridor within Hertford. These have been grouped into 'Online' and 'Offline' road improvements and Public Transport, Pedestrian and Cycling improvements. These have been summarised in the preceding text and are discussed in Table 2. Indeed, there may be combined packages of sub-options which may merit further investigation and analysis.
- 4.2. This process has identified offline solutions as providing the greatest potential in reducing delays and congestion along the A414 corridor. In addition Public Transport, Pedestrian and Cycle improvements could be introduced in parallel to complement the benefits of any potential offline scheme.
- 4.3. The review provides an initial outline of different scheme options. There is however no certainty that these schemes would be the right solution to the existing problems, or indeed considering planned growth aspirations and the additional pressures this may bring. The review provides a basis for HCC to discuss initial thoughts and schemes with other stakeholders.
- 4.4. This review also highlights the need for a strategic modelling evidence base to be developed to provide a greater understanding of the prospective impact, performance and economic feasibility of the schemes discussed. It is noted no such model exists for Hertford although one has been developed which incorporates Welwyn Hatfield, Stevenage and Hitchin. AECOM understands that Hertfordshire County Council are currently considering the possibility of developing a countywide model which would provide a greater understanding on the distribution of trips throughout the county possibly including Public Transport use. As such this would be a valuable tool to assess the prospective schemes, possibly identify alternatives or hybrids, but would also allow sifting to take place.
- 4.5. The next stage of the Strategic Study is Stage 4 'Options Consolidation' which will aim to:
  - To include high level summary of planning, design and build cost of identified prospective schemes;
  - Build upon discussion/knowledge gained in stages 1, 2 and 3 to determine potential traffic impacts of prospective schemes and identify a package of measures to be investigated further;
  - Provide high level costs, qualitatively summarising economic viability; and
  - Provide an economic commentary and qualitative appraisal of prospective schemes, which in turn could form a shortlist worth considering further.

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**Mead Kay**

**From:** Mead Kay  
**Sent:** 10 June 2015 16:42  
**To:** David Burt; 'Chris.Allen-Smith@hertfordshire.gov.uk'  
**Cc:** Drinkwater Simon; Steptoe Kevin; Rupert Thacker; Neil French; 'Paul Donovan'; Jonathan Tiley; Juliet.Cromack@hertfordshire.gov.uk; Roger Flowerday; 'Sue Jackson'; Sime Claire  
**Subject:** A414 Issues Requiring Written Response  
**Attachments:** Trajectory 26.3.15.xlsx  
**Importance:** High  
**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Chris/Dave,

Following yesterday's meeting and your agreement to respond to the points made during the discussion within the next week, which were largely based around matters raised in my previous email dated 19<sup>th</sup> May, I think that it would be helpful to you in drafting a reply if I restate the issues to which we require a written response, in order to avoid any potential ambiguity or misunderstanding going forward.

The key issues are:

Firstly, as it has been established that the study does not currently factor in all of the planned growth in the district, and also may not deliver all the answers that are needed from it at this time to enable us to progress our Plan, these omissions really must be addressed to enable us to the Plan to move forward.

Secondly, the Study so far concludes that the potential for online improvements to provide any significant additional capacity is limited and not cost effective. Therefore, an appreciation of potential route/costs/delivery timescales associated with an offline option/options is required, as it is most unlikely that the Study in its current form will provide enough evidence to underpin the Plan to enable us to reach Examination stage.

As has been stated several times over the past couple of years, to move our Plan forward we need to understand in particular:

- a) What the capacity of the A414 through Hertford will be in relation to accommodating the likely planned development in the district (confidential draft trajectory previously supplied to you, but attached to this email for clarity).
- b) If the likely planned level of development cannot be accommodated, then we need to know what level of development would be acceptable before safety implications for queuing on the A10 (and possibly the safe operation of other roads/junctions) would prove severe and thus preclude further development.
- c) If b) were to apply then, in respect of the proposed delivery trajectory, we need to know the point in time in the Plan period when it is considered likely that the critical point when no further development could be accommodated would be reached.
- d) If b) were to apply, then, as online mitigations appear limited, we also need to know what work will be undertaken by your department\* to ascertain a viable offline solution (or alternative strategies more generally) to enable planned development both in East Herts and neighbouring authority areas to progress and what timescale will this be achieved in.

*\*Although the Hertford stretch lies within East Herts, the A414 is a key element of the strategic route network with wider implications for the whole county and beyond (i.e. designated M25 alternative diversion route), and therefore it is considered that the issue should be viewed in this route-corridor context.*

We are most anxious to avoid a situation where either progress on the Plan is stalled over this issue, or that your Council would not be in a position to support the Plan as it reaches Examination stage.

As a matter of urgency, we would therefore welcome assurances from HCC (as highway authority and lead on this project) regarding how these matters will be addressed through the A414 Study, the likely timeframe for completion, and suggestions regarding the manner in which we can work together to provide robust outcomes to enable us to comply with requirements and reach Examination.

Beyond these original matters, other issues were discussed yesterday to which we also require a written response from you:

Firstly, we need you to set out the exact timelines proposed for the delivery of both the COMET model and the VISION.

Secondly, we need to understand exactly what the implications of these timescales are on moving potential mitigation measures forward (i.e. the timeline for progressing off-line solutions to Hertford A414 constraints e.g. via a bypass).

Thirdly, if it were to appear unlikely that satisfactory mitigation measures for the levels of development currently proposed could be delivered within the Plan period, what your Council's stance would be likely to be at Examination.

Yesterday, you promised to respond with answers to these issues within the week. I therefore look forward to receiving your written reply within this timescale.

Kind regards,

Kay

Kay Mead (Mrs), BA (Hons), Dip TP, MRTPI  
Principal Planning Officer, Planning Policy



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27 July 2015

Dear Kay,

### **East Herts Local Plan Transportation Issues - A414 Hertford**

Following your letter of July 6<sup>th</sup> we have reviewed the revised draft Local Plan trajectory against the information we currently have regarding the capacity of the network at this location.

Whilst the full Plan growth is undeliverable without a strategic intervention at Hertford, the assessment we have undertaken indicates that the traffic growth associated with the sites in your current first 5 year housing trajectory (up to 2021) is likely to be acceptable in terms of traffic impact on the A414. However, further detailed localised traffic assessments will need to be undertaken, and mitigation measures developed, as part of the planning process.

In detail:

- There is currently room for the traffic growth on the A414 corridor associated with committed development in Hertford.
- In terms of the proposed development in the next 5 years, the change in figures has led to a change in the conclusions; traffic from the sites west and north of Hertford (HERT3 & 4) are unlikely to have a significant impact on the critical sections of the A414 on Gascoyne Way and around the Pegs Lane / Bluecoats junctions.
- The additional development in the Mead Lane area (a further 200 or so dwellings) will require further detailed transport work to ensure additional vehicle trips are limited as far as possible. Whilst Mead Lane appears to be a more sustainable location, the amount of already committed development in this area, and the restricted access, will bring increased pressure on the Mill Road / Ware Road junction and Bluecoats roundabout, leading to a likely increase in queueing / delay on the approaches. In the development of these sites, further modelling work will be required to define the exact impacts and mitigations required to limit journeys from the site and improve the transport network. Whilst this is unlikely to lead to a complete breakdown in conditions there is likely to be a discernible impact on traffic conditions as a result, particularly if background traffic also rises, therefore it is

critical that a proper assessment of the impacts on the critical junctions as part of any Transport Assessment work associated with Mead Lane.

- The tipping point is likely to come with the completion of development in the Mead Lane area, along with the larger scale developments elsewhere on the corridor. Post 2021, the EHDC trajectory shows 850 dwellings east of WGC and 1000 North and East of Ware between 2021-2026, and we would suggest that this level of development could not be accommodated by the existing A414 corridor in Hertford. Further consideration will also need to be given to the current TfL proposals to bring Crossrail 2 to Hertford East within the plan period.

The indicators of the anticipated severe traffic congestion from our studies on the A414 beyond this level of growth include:

- Regular instances of traffic blocking key junctions and queuing back on the current free flowing lanes of the A10.
- Significant increases in delays were also predicted on the wider local road network that would result in
  - subsequent impacts on key public transport routes,
  - inappropriate routing of traffic through the town centre and residential roads (including villages)
  - The likely expansion of the existing traffic related air quality management area (AQMA).

As highlighted previously, Hertfordshire County Council is developing a 'Transport Vision' to identify packages of transport interventions to enable growth across the county to 2050. The accommodation of East West movements will be a key consideration in this work. As you are also aware, to provide an appropriate evidence base for this work a new Countywide Transportation Model (COMET) is being developed, and this will provide a platform for testing strategic mitigations to growth across the County. This technical work is already underway, and is considered to be the logical next step to progress the evidence base, and seek the necessary approvals to progress strategic transport improvements in Hertfordshire.

It is currently anticipated that the COMET will become available to test scenarios in early 2016 and the Transport Vision work will be presented to our members for approval in the summer of 2016, following a round of public and stakeholder consultations. Once adopted, this document will set out Hertfordshire's approach to dealing with strategic transport and will include a prioritised list of interventions. These will then subsequently be developed to Strategic Business Case level to enable funding bids to be put forward to the LTB, LEP and DFT. It will also be a key document in supporting the transport evidence base for Local Plans. Unfortunately we are unable to accelerate this work due to the technical process of building the transport model and subsequent consultation on the vision.

In the shorter term, tests could be undertaken with Essex County Council's VISSUM model, however, it is unlikely to provide a robust evidence base to move forward with, due to the limited extents of the model west of Hertford.

Also, as mentioned in our previous correspondence, the County Council is also seeking to establish clear working arrangements between all authorities on the A414 in Hertfordshire to address the emerging challenges associated with growth in a managed way along the corridor. Whilst this will be a good forum to discuss potential solutions we will not be able to be definitive in terms of solutions until the model is in place thus enabling the cumulative impacts of all the development along the corridor to be fully assessed. Furthermore, without the model we would not have sufficient evidence to support any bids to government for investment along the corridor.

Our priority must be to work together to ensure that the County Council can support your emerging Plan most effectively over the next 12 months, and through to implementation and delivery. To this effect we have an officer meeting set up on August 5<sup>th</sup> to discuss these issues further. It is important for the two authorities to agree on an interim position for the next stage of consultation on the Plan.

I hope this is helpful in providing a way forward. We have appended a further technical response to provide comments on the specific questions you raised (see attached)

Yours sincerely

Roger Flowerday  
**Development Manager**

## Response to Specific Questions Raised.

a) What the capacity of the A414 through Hertford will be in relation to accommodating the likely planned development in the district (confidential draft trajectory previously supplied to you, but attached to this email for clarity).

Traffic monitoring sites on the A414 on the approach to the Rush Green roundabout and on the A414 Cole Green bypass west of Hertford indicate that traffic flows peaked around 2006 before declining with the recession. The most recent data shows that traffic volumes are still below 2006 levels indicating there is further room for growth.

Table 1 shows the level of traffic flows recorded at HCC's traffic monitoring site at Rush Green. In the morning peak hour 2015 data indicates flows on an average weekday around 300 vehicles lower than those recorded in 2006 / 07 in each direction. In theory therefore additional vehicles could be accommodated in the morning peak before conditions deteriorate to what was previously experienced (frequent queueing back from the Bluecoats roundabout to the A10 junction at Rush Green).

In the evening peak hour in 2015 there were around 150 less vehicles in the westbound direction and around 130 in the eastbound direction compared to those measured in 2006/07.

**Table 1 – Peak hour traffic flows at HCC monitoring site at A414 at Rush Green**

Year	AM peak 0800-0900		PM peak 1700 - 1800	
	Eastbound	Westbound	Eastbound	Westbound
2006	1118	1915	1744	1315
2007	1119	1919	1711	1340
2008	1028	1825	1634	1322
2009	1056	1801	1572	1277
2010	1011	1801	1555	1249
2011	1003	1830	1579	1289
2012	939	1654	1543	1214
2013 /14*	N/A	N/A	N/A	N/A
2015	815	1629	1615	1161
2006-2015	-27% (-303)	-15% (-286)	-7% (-129)	-12% (-154)

Monitoring site was not operational during 2013 & 2014

The traffic data also indicates the strong tidality of flow. In the morning peak westbound flows are double the eastbound flows leading to issues with queueing back from the Bluecoats roundabout towards Rush Green. In the evening peak eastbound flows are greater leading to queues on the approach to Hertford from the west.

The latest East Herts Housing Trajectory indicates 467 residential commitments in Hertford by 2016 with a further 167 in the 5 year period from 2016-2021. There is also extant permission for 107 residential units south of Mead Lane by 2021. A number of these are conversions from existing uses and in theory will not generate any additional trips on the network compared with previous uses. Based on information supplied in available transport assessments / transport statements these could potentially generate up to around 220 two way vehicle trips on the road network in Hertford in the peak periods. However, only a proportion of this traffic would be expected to use the A414. Given the previously higher levels of traffic on the network even up to half this traffic ended up on the A414 this traffic should be capable of being accommodated). It should however be noted that a large

proportion of the committed development is located in the Hertford East / Railway Street / Ware Road area and traffic from these developments is likely to impact on the operation of the Ware Road / Mill Road traffic signals and the adjacent Bluecoats roundabout, potentially increasing queueing on the A414 corridor.

The A414 is a strategic east west route which carries vehicles across the county and therefore would be potentially used by traffic from developments elsewhere in East Herts and in neighbouring districts such as Welwyn Hatfield and Harlow in addition to development within Hertford itself. The data collection for the A414 wider study indicated around 40% of the traffic on the route was through traffic without an origin or destination in Hertford.

There are also a number of committed sites elsewhere in the district, a number of these are located in Bishops Stortford and Buntingford which given their distance from the A414 would be expected to have relatively little impact. There are however 181 committed dwellings in Ware which potentially would add further stress to the network.

In addition to the committed sites there are also a number of large proposed sites in the Hertford area which could potentially come forward over the next 5 years which would also be expected to have a direct impact on the A414 (HERT2, HERT3, HERT4 and HERT5). In total these would add an extra 873 dwellings to the town on sites to the West, North and south of Hertford as well as additional development in the Mead Lane area (beyond the 107 units already committed). Using information from available transport assessments on trip generation and trip distribution it is estimated that these developments would add around 120 vehicle trips to the A414 at Rush Green in the critical AM peak hour and almost 200 vehicle trips on the A414 to the west of the town.

A test has been undertaken in the base Paramics model of the impact of uplifting traffic flow on the A414 corridor and throughout Hertford by 10%. This is roughly equivalent to allowing for the impact of the committed and proposed development in the 5 year housing trajectory plus an allowance of 0.5% background growth per annum (to allow for the impact of development elsewhere in East Herts plus neighbouring authorities in addition to factors such as changes car ownership and general economic growth). This indicates the following impacts:

- Queuing of westbound traffic on the A414 back to Rush Green roundabout for large portions of the AM peak period (from around 8:15 to after 0900). This will add to large increases in journey time for vehicles travelling westbound through Hertford.
- This means that traffic unable to exit A10 off slips onto Rush Green leading to queueing back onto the A10 mainline (both northbound and southbound) leading to safety issues.
- This is likely to lead to increased traffic diversion along the B1197 through Hertford Heath and along the A119 Ware Road as traffic from the east seeks to avoid the queues.
- Lengthening queues on Gascoyne Way leading to a further reduction in air quality.

- In the evening peak, increased incidence of queueing in the eastbound direction back to the Hertingfordbury roundabout leading to traffic diversion through Hertingfordbury village and the alternative parallel routes (B1000 Welwyn Road and B158 Lower Hatfield Road).
- subsequent impacts on key public transport routes
- inappropriate routing of traffic through the town centre and residential roads (including villages)
- The likely expansion of the existing traffic related air quality management area (AQMA).

b) If the likely planned level of development cannot be accommodated, then we need to know what level of development would be acceptable before safety implications for queuing on the A10 (and possibly the safe operation of other roads/junctions) would prove severe and thus preclude further development.

The assessment undertaken indicates that there is some room for traffic growth on the A414 and the already committed sites in the 5 year housing trajectory (up to 2021) should be acceptable in terms of their traffic impact on the A414, although there is expected to be a worsening of queueing around the Bluecoats roundabout / Ware Road area.

There is however a number of additional potential development sites which could come forward before 2021. Based on information supplied by developers, in traffic terms the sites to the west and north of Hertford would have the least impact on the critical sections of the A414 along Gascoyne Way and on the section between Bluecoats roundabout and Rush Green. These sites add up to 600 residential units.

Traffic from the other proposed sites at Mead Lane and to the South of Hertford would access the A414 at the more sensitive locations and therefore would be expected to have a greater potential impact on the operation of both the Pegs Lane and Bluecoats roundabouts leading to a likely increase in queuing and delay on the junction approaches including the A414 back towards Rush Green.

If b) were to apply then, in respect of the proposed delivery trajectory, we need to know the point in time in the Plan period when it is considered likely that the critical point when no further development could be accommodated would be reached.

This is partly dependent on the level of background growth on the A414 corridor over the next 5 years. It is however likely that the proposed level of post 2021 development on key sites such as East of WGC and North of Ware will lead to a breakdown in traffic conditions on the A414 corridor based upon the current evidence.

c) If b) were to apply, then, as online mitigations appear limited, we also need to know what work will be undertaken by your department\* to ascertain a viable offline solution (or alternative strategies more generally) to enable planned development both in East Herts and neighbouring authority areas to progress and what timescale will this be achieved in.

*\*Although the Hertford stretch lies within East Herts, the A414 is a key element of the strategic route network with wider implications for the whole county and beyond (i.e. designated M25 alternative diversion route), and therefore it is considered that the issue should be viewed in this route-corridor context.*

See main response

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## EAST HERTS COUNCIL

### DISTRICT PLANNING EXECUTIVE PANEL – 22 OCTOBER 2015

#### REPORT BY THE LEADER OF THE COUNCIL

#### DELIVERY STUDY, SEPTEMBER 2015

WARD(S) AFFECTED: ALL

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#### Purpose/Summary of Report

- This report presents the findings of the Delivery Study, September 2015.
- The report seeks agreement that the Delivery Study, September 2015 should form part of the evidence base to inform and support preparation of the District Plan.

#### **RECOMMENDATION FOR DISTRICT PLANNING EXECUTIVE PANEL:** That Council, via the Executive, be advised that:

<b>(A)</b>	<b>The Delivery Study, September 2015, be agreed as part of the evidence base to inform and support preparation of the East Herts District Plan.</b>
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#### 1.0 Background

1.1 Peter Brett Associates (PBA) was commissioned in July 2014 in order to prepare a document known as the Delivery Study. The overall aim of the study is to assess the deliverability and viability of the draft proposals contained within the District Plan Preferred Options document which was published for a period of public consultation in February 2014.

1.2 The basis for undertaking a technical study of this nature is set out within national planning policy. In particular, Paragraph 182 of the National Planning Policy Framework (NPPF) states that Local Plans should be:

- *Positively prepared – the plan should be prepared based on a strategy which seeks to meet objectively assessed*

*development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development;*

- *Justified – the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;*
- *Effective – the plan should be deliverable over its period and based on effective joint working on cross-boundary strategic priorities; and*
- *Consistent with national policy – the plan should enable the delivery of sustainable development in accordance with the policies in the Framework*

1.3 The Delivery Study therefore seeks to assess whether the proposals identified within the District Plan Preferred Options document are '*Effective*', in terms of their deliverability over the course of the Plan period.

1.4 The information and recommendations contained within the Delivery Study should not be considered in isolation, and in itself, the study does not provide the sole basis for the inclusion of any particular development proposal or policy within the District Plan. However the study does form a key part of the wider evidence base which will support the preparation of the emerging District Plan as it progresses towards Pre-Submission stage, and subsequently, Examination by an independent Inspector.

## 2.0 Report

2.1 Members may recall that the original specification for the Delivery Study identified a requirement to undertake eight specific tasks. These are as follows:

Task 1: To undertake a review of transport evidence and requirements;

Task 2: To review site specific concept Masterplanning;

Task 3: To draw together evidence in order to inform the preparation of an Infrastructure Delivery Plan;

Task 4: To advise on the content of Local Plan policies;

Task 5: To undertake an assessment of Plan wide viability;

Task 6: To undertake a viability appraisal of strategic sites;

Task 7: To advise on matters relating to the Community Infrastructure Levy (CIL); and

Task 8: To review the approach to identifying Objectively Assessed Housing Need.

- 2.2 The specification can be read in full on the Council's website at: [www.eastherts.gov.uk/deliverystudy](http://www.eastherts.gov.uk/deliverystudy). In order to address the requirements of the specification, PBA has prepared two separate reports, namely: a 'Strategic Sites Delivery Study' and a 'Plan Viability, Affordable Housing and CIL Study'. This report presents the content and findings of the two studies.
- 2.3 It should be noted that in addressing Task 8, PBA did produce some informal advice regarding an initial draft of the Strategic Housing Market Assessment (SHMA). However, the SHMA has evolved considerably since the advice was received, and it has therefore not been presented as part of this report.

#### Strategic Sites Delivery Study

- 2.4 The District Plan Preferred Options document was based on an Objectively Assessed Housing Need figure of 15,000 dwellings, to be provided between 2011 and 2031. In order to assist with meeting this challenging housing requirement, the draft Plan identified three 'Broad Locations for Growth':
  - North and East of Ware (200 – 3,000 dwellings);
  - Gilston Area (5,000 – 10,000 dwellings); and
  - East of Welwyn Garden City (1,700 dwellings).
- 2.5 In addition, land to the South of Bishop's Stortford was also identified in order to provide a further 750 - 1,000 dwellings.
- 2.6 Paragraph 173 of the NPPF states that:

*'Pursuing sustainable development requires careful attention to viability and costs in plan-making and decision-taking. Plans should be deliverable. Therefore, the sites and the scale of*

*development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable’.*

2.7 Furthermore, in order to understand when a site may come forward for development, the NPPF distinguishes between deliverability and developability. In particular, the footnotes to Paragraphs 47 to 55 state:

*‘To be considered deliverable, sites should be available now, offer a suitable location for development now, and be achievable with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable’.*

*‘To be considered developable, sites should be in a suitable location for housing development and there should be a reasonable prospect that the site is available and could be viably developed at the point envisaged’.*

2.8 Therefore a site that is expected to come forward for development within the first 5 years of the Plan period is considered to be ‘deliverable’, while a site that is likely to come forward in year 6 of the Plan period or later is considered to be ‘developable’.

2.9 The four strategic sites identified above form a fundamental part of the District Plan Preferred Options document. Should the sites continue to be identified within the final ‘Submission’ version of the Plan, the ability of the Council to demonstrate their deliverability or developability will form a critical part of the Examination in due course. The Strategic Sites Delivery Study, which forms **Essential Reference Paper B**, therefore seeks to address this issue based on information and data that is currently available.

2.10 In undertaking the study, PBA has had regard to the requirements of the NPPF and Planning Practice Guidance (PPG). Specific guidance on viability has also been considered, notably ‘Viability Testing in Local Plans, Advice for Planning Practitioners’ (known

as the Harman Report), and 'Financial Viability in Planning' (known as the RICS Guidance).

- 2.11 The identification of infrastructure requirements forms a key aspect of assessing the overall deliverability of strategic sites. This process involves understanding what infrastructure is needed to support the proposed development, how much it would cost, and when it could be delivered. In order to understand these issues, PBA held a series of workshops with the respective site promoters as well as service providers such as Hertfordshire County Council, NHS England and Thames Water. Through these workshops, and further subsequent work, PBA was able to critically analyse the level of infrastructure that would likely be required to support the proposed development schemes.
- 2.12 It should be noted that the Strategic Sites Delivery Study represents an assessment of deliverability at a specific point in time. The Council's understanding of infrastructure requirements will continue to evolve as further evidence based work is undertaken. For instance, at present, it is not yet possible to fully understand the level of transport infrastructure that maybe required to support the planned level of development. This is due to the fact that VISUM transport modelling, led by Essex County Council, is still ongoing, while, as noted in the previous agenda item, Hertfordshire County Council will also be preparing a new transport model known as COMET. The findings of the Study may therefore need to be reviewed in the coming months as work on the District Plan continues to progress.
- 2.13 The identification of likely infrastructure requirements has informed an overall appraisal of viability for each of the four strategic sites. In order to achieve this, PBA has had to gain a clear understanding of the local housing market by interrogating existing sources of data and liaising with developers and estate agents. Evidence based assumptions were subsequently made on land values, sales values, housing mix and density. This information was then combined with likely infrastructure and policy requirements, including affordable housing, in order to inform an assessment of viability.
- 2.14 The conclusions and recommendations arising from the study in relation to the four strategic sites are discussed briefly in turn below. It is important to reiterate that the findings of the study need to be read in the context of ongoing transport modelling work, the results of which could affect the deliverability of the

strategic sites. Appendix E identifies current understanding in terms of capacity issues on the strategic transport network.

### North and East of Ware

- 2.15 The District Plan Preferred Options document identified land to the North and East of Ware as having the potential to provide between 200 and 3,000 dwellings. PBA has indicated that including such a broad range within the final Submission version of the Plan is unlikely to be considered an acceptable approach by an Inspector at Examination.
- 2.16 Given the existing pressure on secondary education capacity in the Hertford and Ware school planning area, it is likely that any substantial development within the North and East of Ware Broad Location would require the provision of a new school. PBA has indicated that a minimum of 2,000 dwellings would be required to facilitate the delivery of a new school in this location. Two quanta of development have therefore been appraised through this study: 2,000 dwellings and 2,972 dwellings. The latter figure is reflective of the scheme put forward by the site promoters.
- 2.17 Overall both schemes are considered to be 'developable' in that they could come forward for development outside of the first 5 years of the Plan period. PBA has noted that there does not appear to be any land ownership issues which may impact on delivery, and critical infrastructure schemes, in particular school provision and the requirement for a link road and sewer, have been shown to be achievable.
- 2.18 Should the Council wish to pursue the implementation of a Community Infrastructure Levy (CIL) funding schedule, then the study shows that, based on an affordable housing requirement of 40%, a total of £150 per square metre of floorspace could be secured from this development in order to contribute towards strategic infrastructure schemes. PBA has assumed a reasonably broad timeframe for commencement of development (2020 to 2025) and it is likely that 150 to 175 dwellings would be completed per annum.

### Gilston Area

- 2.19 In a similar fashion to North and East of Ware, PBA assessed two levels of development for the Gilston Area. The first, a scheme of 10,000 dwellings, is reflective of the scheme being promoted

jointly by Places for People and City and Provincial Properties. A second smaller scheme of 2,500 dwellings has also been assessed.

2.20 PBA has concluded that a development of 2,500 dwellings is likely to be considered to be 'developable'. The larger scheme of 10,000 dwellings has the potential to become 'developable' subject to two key issues being resolved, namely, the approach to sewage treatment and the provision of a second road crossing of the River Stort. A number of other issues also need to be resolved in co-operation with the site promoters and service providers. These are identified in Paragraph 11.6.6 of the Study.

2.21 Both schemes are concluded to be viable although the viability of the larger scheme becomes marginal when factoring in an affordable housing requirement of 40%. Due to the complex nature of this scheme, and the development costs involved, it is likely that only a nominal CIL charge could be secured for this site. PBA has indicated that, due to unresolved infrastructure issues, development is most likely to commence towards the middle or end of the plan period with a probable completion rate of 200 to 250 dwellings per annum.

#### East of Welwyn Garden City

2.22 A scheme of 1,700 dwellings was found to be 'developable'. Again, this is reflective of the scheme being promoted through the District Plan process by Gascoyne Cecil and Lafarge Tarmac.

2.23 A requirement to provide 40% affordable housing is considered to be viable and would allow the Council to secure a CIL charge of £150 to £200 per square metre. An estimated start date for development of 2022-2023 is reflective of the fact that there is a need for a period of minerals extraction on site which Lafarge Tarmac estimate will take around 5 years to complete. Following the commencement of development it is likely that approximately 150 to 175 dwellings would be completed per annum.

2.24 PBA has noted the importance of continued close co-operation with Welwyn Hatfield Borough Council on cross boundary infrastructure issues.

### South of Bishop's Stortford

- 2.25 A scheme of 750 dwellings was assessed by PBA in this location. This reflects the likely need to provide a secondary school on site in order to meet the education needs arising from the wider Bishop's Stortford area as well as this development itself.
- 2.26 PBA has concluded that the site is 'developable' and could move towards being 'deliverable' dependent on the timing of a planning application. A start date for development of 2018 to 2019 has been assumed with a potential delivery rate of 75 to 100 dwellings per annum. Based on the provision of 40% affordable housing, a CIL charge of £150 per square metre could be secured.
- 2.27 In terms of design, PBA has recommended that particular attention is given to mitigating any impact of development on the Hertfordshire Way footpath.

### The approach to the Broad Locations

- 2.28 The District Plan Preferred Options document indicated that the favoured approach with regards to the Broad Locations was to not seek to allocate them through the District Plan, but rather to prepare subsequent Development Plan Documents (DPD's). This approach would allow the Council to review the Green Belt in these locations at a later date, having resolved any remaining uncertainties regarding infrastructure delivery and undertaken a process of masterplanning the proposed developments.
- 2.29 Through the Strategic Sites study, PBA has suggested that they do not support this approach on the basis that the site promoters for each of the Broad Locations have already undertaken considerable masterplanning work. In addition, with regards to the Gilston Area, PBA has suggested that uncertainties relating to infrastructure delivery should not be left unanswered until after the District Plan Examination.
- 2.30 If the Council decides to continue to identify these sites within the next stage of the Plan making process, further consideration will be required in order to determine whether they should be removed from the Green Belt and allocated, or whether to maintain the current approach of identifying the sites as Broad Locations and preparing future DPD's.

## Plan Viability, Affordable Housing and CIL Study

2.31 The second part of the Delivery Study, **Essential Reference Paper C**, assesses the viability of District Plan Preferred Options document as a whole.

2.32 Paragraph 174 of the NPPF states:

*'Local planning authorities should set out their policy on local standards in the Local Plan, including requirements for affordable housing. They should assess the likely cumulative impacts on development in their area of all existing and proposed local standards, supplementary planning documents and policies that support the development plan, when added to nationally required standards. In order to be appropriate, the cumulative impact of these standards and policies should not put implementation of the plan at serious risk, and should facilitate development throughout the economic cycle'.*

2.33 As a starting point, PBA analysed all of the draft policies contained within the District Plan Preferred Options and identified those that would have a cost implication for future development. The policy areas that are considered most likely to impact on development viability are:

- Affordable housing
- Infrastructure provision
- Water efficiency standards
- Provision for Gypsies and Travellers and Travelling Showpeople.

2.34 The study aims to assess the impact of the policy requirements identified above on the viability of development schemes in East Herts. PBA identified sixteen different residential site typologies to test based on different levels of development and housing mix. PBA also directly assessed the viability of two key brownfield regeneration sites; Mead Lane in Hertford and the Goods Yard in Bishop's Stortford. While the housing market in East Herts is generally considered to be strong, for the purposes of this study, PBA has split the District into two value zones. This has been done to reflect the fact that sales values are marginally higher in the south of the district when compared to the north.

2.35 Table 8.8 on Page 48 of the study identifies the viability assessments for each of the site typologies. Crucially, for each

typology, if the residual land value (the value generated by a scheme) is greater than the threshold land value (the cost of the land) then the scheme is considered to be viable. The study demonstrates that all typologies are viable apart from flatted schemes where there is a requirement for 40% affordable housing.

2.36 Importantly this means that, based on the appraisal of site typologies, all of the sites identified within the first 5 years of the housing trajectory contained in the District Plan Preferred Options document are considered to be viable. In terms of the two specific brownfield sites, both are considered to be viable, albeit the Goods Yard only marginally so.

2.37 Table 10.1, reproduced below, shows PBA's recommendations on the level of affordable housing that could be sought from different development types. The table also suggests the level of CIL charge that could be sought should the Council choose to introduce a charging schedule. Of particular note is the fact that the study is suggesting that only a small percentage of affordable housing can be secured from flatted schemes. It will be for the Council to decide how to translate the findings of this study into policy in a way that ensures that a sufficient level of affordable housing is delivered over the plan period.

Use	Affordable housing policy / refinements	CIL charge per sq. m
Residential (less than 5 dwellings)	0%	Up to £200 per sq.m
Residential (5 – 14 dwellings)	Amend to 35%	Up to £150 per sq.m*
Residential (15 dwellings or more)	40%	£100 per sq.m
Southern Zone flats	20%	£50 per sq.m
Northern Zone flats	Either 10%	Or £40 per sq.m
Convenience retail	n/a	£80 per sq.m
All other developments	n/a	£0 per sq.m

2.38 PBA also assessed the viability of a number of generic non-residential schemes. Apart from convenience retail schemes these typologies were generally shown to be unviable. This is reflective of previous viability work undertaken on behalf of the Council. However PBA has caveated this by indicating that the typologies tested are based on speculative developments that would be made available for rent. In reality most non-residential schemes are developed with a specific end user in mind. In addition, the District Plan Preferred Options document generally seeks to provide new employment space as part of larger mixed use schemes rather than standalone developments.

### Next steps

2.39 As a whole, the Delivery Study offers valuable advice with regards to the overall deliverability of the proposals and policies contained within the District Plan Preferred Options document. Following receipt of the study, it will be necessary to undertake the following steps as the Plan moves towards Examination and beyond:

- The infrastructure schedules that formed the basis of the study should be used in order to inform an Infrastructure Delivery Plan (IDP). The IDP will identify all of the strategic infrastructure schemes that will be necessary to support planned development;
- The study raises a number of issues to be addressed in relation to the Broad Locations, particularly in relation to Gilston. Officers will need to continue to seek a resolution to these issues through further discussions with site promoters and service providers;
- The draft policies contained with the District Plan Preferred Options document should be reviewed in light of the study, particularly in terms of the recommendations on affordable housing;
- A review of the study's conclusions will be required following receipt of further transport modelling data;
- The findings will need to be considered alongside the rest of the evidence base in order to inform the identification of a final development strategy, including the approach to the Broad Locations; and
- Following the adoption of the District Plan, the Council will need to decide whether to pursue the introduction of CIL in East Herts.

### 3.0 Implications/Consultations

3.1 Information on any corporate issues and consultation associated with this report can be found within **Essential Reference Paper 'A'**.

### Background Papers

- National Planning Policy Framework (NPPF)  
(<https://www.gov.uk/government/publications/national-planning-policy-framework--2>)
- Planning Practice Guidance (PPG)  
(<http://planningguidance.planningportal.gov.uk/>)

Contact Member: Cllr Linda Haysey – Leader of the Council  
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## ESSENTIAL REFERENCE PAPER 'A'

### IMPLICATIONS/CONSULTATIONS

Contribution to the Council's Corporate Priorities/ Objectives (delete as appropriate):	<p><b>People – Fair and accessible services for those that use them and opportunities for everyone to contribute</b></p> <p>This priority focuses on delivering strong services and seeking to enhance the quality of life, health and wellbeing, particularly for those who are vulnerable.</p> <p><b>Place – Safe and Clean</b></p> <p>This priority focuses on sustainability, the built environment and ensuring our towns and villages are safe and clean.</p> <p><b>Prosperity – Improving the economic and social opportunities available to our communities</b></p> <p>This priority focuses on safeguarding and enhancing our unique mix of rural and urban communities, promoting sustainable, economic opportunities and delivering cost effective services.</p>
Consultation:	None
Legal:	None
Financial:	The cost of the Delivery Study, September 2015 has been met within existing budgets.
Human Resource:	None
Risk Management:	To seek to progress the District Plan to Examination without a robust evidence base in place would represent a significant risk that the District Plan would be found unsound.
Health and wellbeing – issues and impacts:	The link between planning and health has been long established. The built and natural environments are major determinants of health and wellbeing.

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# East Herts Strategic Sites Delivery Study

**Final Report September 2015**

**Peter Brett Associates**

With:



On behalf of East Hertfordshire District Council



Project Ref: 31122 Date: September 2015

## Document Control Sheet

**Project Name:** East Herts District Council Local Plan

**Project Ref:** 311002-002

**Report Title:** East Hertfordshire Strategic Sites Delivery Study – Final Report

**Date:** September 2015

	Name	Position	Signature	Date	
<b>Prepared by:</b>	Shilpa Rasaiah	Senior Associate	SR	14/09/2015	
<b>Reviewed by:</b>	Elliot Page	Senior Associate	EP	14/09/2015	
<b>Approved by:</b>	John Baker	Partner	JB	15/09/2015	
<b>For and on behalf of Peter Brett Associates LLP</b>					
Revision	Date	Description	Prepared	Reviewed	
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## EXECUTIVE SUMMARY

1. This report by Peter Brett Associates (PBA) and Gardiner and Theobald sets out the findings of an exploration of the developability and deliverability of four strategic sites currently included in the Draft Preferred Options District Plan 2014. The work has followed an approach to testing developability and deliverability consistent with the terms of the Framework.
2. The following strategic sites were assessed in terms of infrastructure and viability:
  - Bishop's Stortford has been tested at 750 dwellings
  - North and East of Ware have been tested at 2,972 dwellings and at 2,000 dwellings (the latter based on generic assumptions as agreed by EHDC)
  - East of Welwyn has been tested at 1,700 dwellings
  - Gilston Area has been tested at 10,000 dwellings and at 2,500 dwellings (the latter based on generic assumptions as agreed by EHDC).
3. The final EHDC Local Plan spatial strategy will be refined following an assimilation of a number of critical studies currently underway including the recently announced Countywide COMET transport modelling and Transport Vision. Although there are references to strategic transport requirements in this study, an important caveat is that any recommendations relating to transport will be deferred to the Transport Vision 2016 and the Countywide COMET modelling.
4. This study has been informed by a considerable body of work that has been undertaken and provided by (or on behalf of) landowners and developers promoting schemes in the general locations that the Council is considering. This information and assistance has been invaluable as full consideration can only occur effectively through a collaborative process. We have independently reviewed and verified the information and provided our own professional judgement where necessary and taken account of inputs from EHDC and ATLAS (who are acting as impartial advisors on this study) to inform our assessment.
5. Inevitably large scale schemes such as those covered by this study are by their nature very complex, and the evidence to inform their developability will evolve over time as options are explored and refined. Our assessment has reflected the stage of development that the sites have reached. We have sought to ensure that there is sufficient evidence in place to provide the Local Authority with assurance that the strategic sites are developable and then to provide recommendations to support delivery considerations following adoption of the local plan.
6. On the basis of information received and reviewed and the assumptions made (and subject to the findings relating to the COMET modelling and Transport Vision), we are of the view that the North and East of Ware, East of Welwyn Garden City, and South of Bishop's Stortford are 'developable'. We do not have the same confidence to assess the Gilston Area strategic site as developable at present and consider further assessment is required in relation to the proposed sewerage infrastructure and site access options. It is likely that the lower scale of growth assessed for Gilston Area (at 2,500 units) could be found to be developable, utilising capacity over the existing bridge (to be confirmed) and existing sewerage capacity at the Rye Meads Plants (to be confirmed). This could then provide the time to explore further work on securing a suitable access and solutions to longer term sewerage infrastructure needed to support the higher growth scenario.
7. The conclusions set out recommendations to support the delivery of the strategic sites and highlight the need to present a strong evidence base on infrastructure planning and delivery. Careful consideration will need to be given as to how best to fund the delivery of strategic infrastructure to enable the planned growth to take place. The viability assessment begins to consider the options for strategic site Community Infrastructure Levy and has begun to distinguish the appropriate use of CIL and S106 payments. This list is intended as a starting point and is expected to be refined as more information becomes available about the infrastructure and sites.

# 1 STUDY SCOPE AND APPROACH

## 1.1 Introduction

1.1.1 Peter Brett Associates (PBA) and Gardiner and Theobald were commissioned in June 2014 by East Herts District Council (the Council) to assess the deliverability and viability of the strategic sites proposed in the Draft Preferred Options District Plan 2014 and informs the setting of a Community Infrastructure Levy.

1.1.2 For ease of presentation the following two inter-related reports have been prepared by PBA as part of the overall commission:

- Report one, this report, which is abbreviated in this report to the 'Delivery Study', focuses on assessing the deliverability of the four strategic sites known as the Gilston Area, North and East of Ware, East of Welwyn Garden City and South of Bishop's Stortford.
- Report two looks at the Plan Viability, Affordable Housing and Community Infrastructure Levy options to support the delivery of infrastructure and wider plan policies.

## 1.2 Status of this study and how it will inform the next steps

1.2.1 From an initial urgency to complete this study within two months of commission in autumn of 2014, the final preparation of this report had been delayed pending the outcome of the VISUM transport modelling. This culminated with a letter from Hertfordshire County Council (HCC) to East Hertfordshire District Council on 27<sup>th</sup> July 2015. In that letter, HCC stated that they consider that following the first five year delivery of the planned trajectory, the anticipated severe traffic congestion on the A414 arising from the scale of planned development cannot be accommodated by the existing A414 corridor in Hertford.

1.2.2 As such HCC have now commissioned work on a new Countywide Transportation Model (COMET) which will provide a platform for testing strategic mitigations to growth across the County. This will inform a Transport Vision and identify packages of transport interventions to enable growth across the county to 2050. The accommodation of East West movements (in East Hertfordshire) will be part of the consideration in this COMET and vision work.'

### How does ongoing transport modelling affect this study?

1.2.3 Three of the four strategic sites assessed as part of this study are affected to varying degrees by the east-west movements referred to above. This means it is not possible to draw conclusions on the transport element of the assessment until the findings from the HCC Transport Vision are available sometime in 2016. Note that VISUM modelling is also currently ongoing. The Transport Assessment set out in Appendix E presents the current position with regards to key transport issues identified as part of this study. This study should be read with the transport issues outlined in Appendix E in mind.

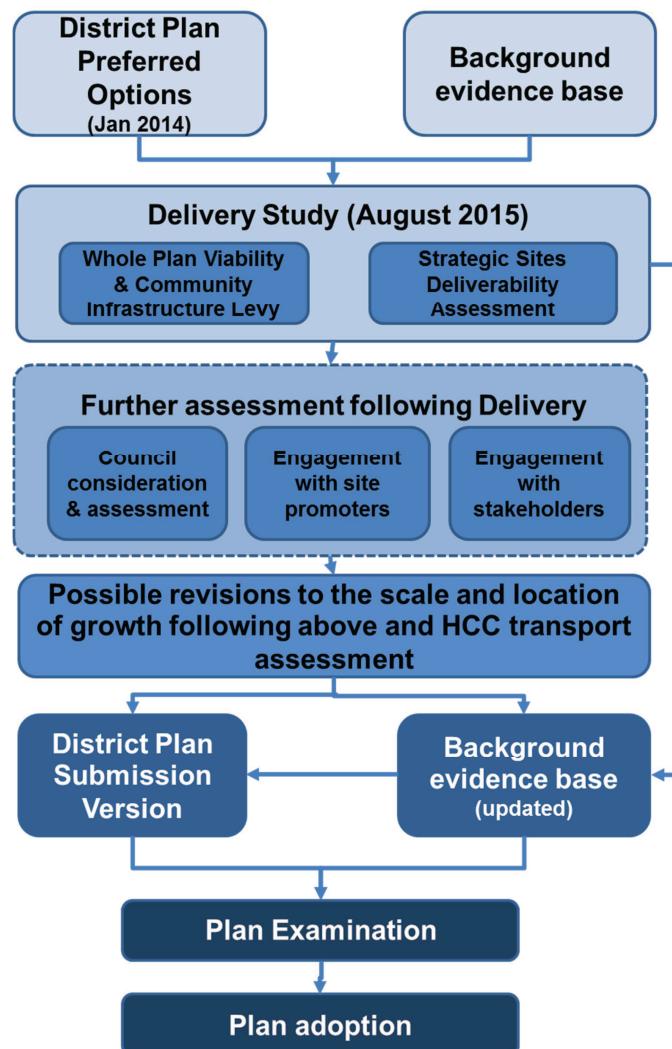
1.2.4 It has been agreed with East Herts District Council to complete this study with a proviso that there is important transport assessment work currently underway which will further inform the conclusions of this study. In the meantime, there is now an opportunity, where appropriate, to address some of the emerging recommendations from this study. Any conclusions and recommendations that are proposed in this study should be treated with caution as there could be significant changes to either the planned growth or the emerging transport solutions.

1.2.5 As timescales and evidence informing the deliverability assessment have changed, the role of this study has changed. Instead of being the final evidence base to inform the delivery and developability of the Draft Preferred Options District Plan as part of the Examination, there is

now time to adopt a more iterative approach using the finding from this study to refine some of the issues identified (whilst parallel work takes place on the transport assessment).

1.2.6 The inputs informing this study and how it will now be used to inform further refinements to the Local Plan preparation are summarised in Figure 1.1 below. This shows there will be further stages of assessment and consultation, together with possible revisions to the scale and location of growth based on the various assessments, leading up to the submission of the District Plan, and its examination and adoption.

Figure 1.1 Strategic Sites Delivery Study inputs and next steps



Source: ATLAS / PBA 2015

1.2.7 This Delivery Study has been prepared based upon the evidence and material that was available in the autumn of 2014. Already further work has overtaken the publication of this report. Strategic sites such as those covered by this study are complex and detailed delivery considerations will be constantly refined as differing levels of technical assessment work are undertaken. In some instances there are alternative approaches to providing infrastructure which may be equally appropriate.

1.2.8 This study should be used as the basis for further discussions with the relevant stakeholders, notably the promoters of each of the strategic sites involved in infrastructure planning and delivery. This study makes certain assumptions and professional judgements based upon our

knowledge of comparable situations and the evidence submitted by site promoters as it currently stands.

### Identifying the strategic sites for this Delivery Study

1.2.9 The National Planning Practice Guidance states that 'evidence should be proportionate to ensure plans are underpinned by a broad understanding of viability. Greater detail may be necessary in areas of known marginal viability or where the evidence suggests that viability might be an issue – for example in relation to policies for strategic sites which require high infrastructure investment'.<sup>1</sup>

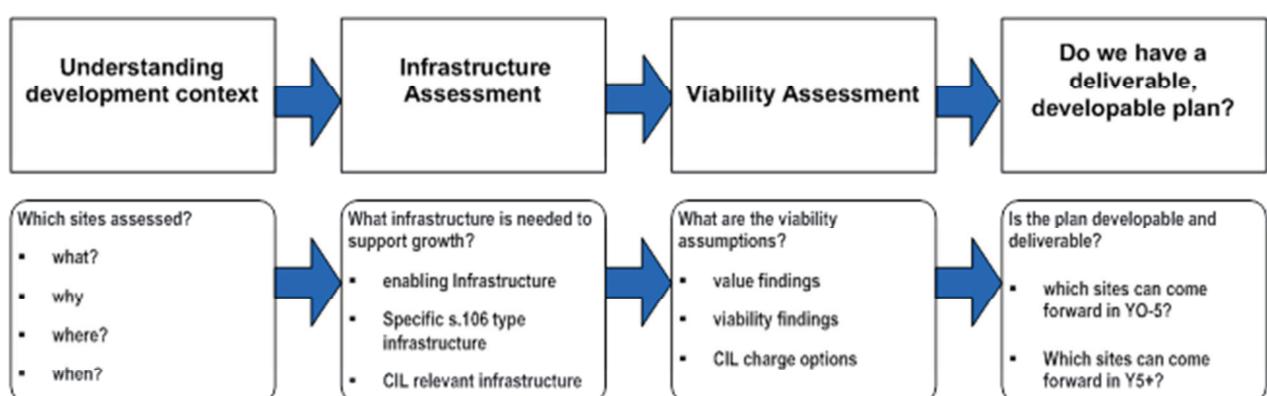
1.2.10 Various possible development sites were put forward as part of the Preferred Options within the Draft Plan. The selection of sites for consideration as part of this report was made according to a planning judgment as to the scale and complexity of each site. The following four sites were identified as 'strategic' in this sense and therefore meriting assessment as part of this study:

- **Gilston Area (5,000 to 10,000 dwellings):** selected because of the scale of on and off-site infrastructure required, including at least one secondary school and expensive crossings of the Stort Valley, sewage treatment costs, and the potential requirement for extensive transport infrastructure upgrades in the vicinity and also to the strategic road network;
- **North and East of Ware (200 to 3,000 dwellings):** selected because of the scale of on and off-site infrastructure required, including provision of a new link road and sewer between the north and east of the town, a potential new secondary school, and neighbourhood centre(s);
- **East of Welwyn Garden City (1,700 dwellings):** selected because of the cross-boundary infrastructure requirements including a secondary school, and the potential for expensive road infrastructure upgrades;
- **South of Bishop's Stortford (750-1,000 dwellings):** selected because of the possible requirement for an on-site secondary school, neighbourhood centres, and a healthcare facility;

### 1.3 The study approach

1.3.1 Figure 1.2 illustrates the broad approach adopted to assess the strategic sites.

Figure 1.2 Study approach process diagram



<sup>1</sup> NPPG Viability, Paragraph: 005 Reference ID: 10-005-20140306

1.3.2 The study approach shown in Figure 1.2 is briefly explained below.

#### **Understanding of the development context**

1.3.3 The starting point for this assessment was to establish an understanding of the wider development context and to undertake a review of various reports informing the need, supply, direction and scale of growth. These documents included the East Herts Draft District Plan 2014, the District Plan Interim Development Strategy Report January 2014, the Infrastructure Topic Paper and Transport Update and the numerous documents submitted by site promoters.

1.3.4 A 'light touch' review of the three larger site Concept Plans was undertaken at commencement of this study. The review did not assess the quality of the plans in urban design terms. Instead, the focus of the reviews was to inform the capacity of the site to accommodate the scale of growth (achievability considerations) and inform site opening up costs, including access and main spine roads, any possible abnormal features and phasing options. The findings from this review subsequently informed discussions at the developer surgeries and the viability assessments.

#### **Stakeholder consultation**

1.3.5 Stakeholder engagement has been invaluable, particularly the input provided by the site promoters at a series of structured developer surgeries, including the presence of a representative from the Advisory Team for Large Applications (ATLAS). See Appendix A for a list of promoter surgery dates and stakeholders consulted.

1.3.6 PBA has undertaken service provider interviews with representatives from Hertfordshire County Council (with regard to highways, minerals and education), Thames Water, the NHS, site promoters' specialist transport and viability teams and agents active in the area, in order to gain a view on viability assumptions. Numerous transport meetings with Highways England (formerly the Highways Agency) and HCC, and others have taken place, as well as a workshop with EHDC members.

#### **The infrastructure assessment**

1.3.7 The site promoters provided their assessment of the infrastructure requirements, including costs and likely developer contributions. The cost estimates have been reviewed by cost consultants Gardiner & Theobald (G&T), working with PBA. In general, our approach has been to accept the cost estimates provided by the promoters, but to highlight areas for further investigation and consultation with infrastructure providers at future stages if there appears any difference of opinion.

#### **The viability assessment**

1.3.8 To inform the viability assessment, we have reviewed the site commencement and delivery rate assumptions, and refined the viability assumptions provided by the site promoters and explained where we have amended these. A site viability assessment has been undertaken, including a cashflow analysis that takes into account the phasing of development and payments for key infrastructure items. The viability assessment sets out the level of financial contributions which could be sought for site specific requirements and strategic infrastructure (through a Community Infrastructure Levy).

#### **Deliverability assessment of the strategic sites**

1.3.9 The final stage in this study has been to pull together the findings from the infrastructure and viability assessment to inform the conclusions and recommendations for the study as far as is possible in the light of the current work taking place on the District wide transport modelling and particularly the assessment of how to address the challenges for the east-west transport corridors. Our conclusions cannot be finalised until the finding from the HCC Transport Vision work is completed.

## 2 DEVELOPMENT CONTEXT

### 2.1 Introduction

2.1.1 This section sets out the development context for the strategic sites, outlining our understanding of the reason for selecting the general location and scale of growth for each of the strategic sites and the wider influences that are impacting on this.

#### **Understanding the nature of East Herts and influences on growth**

2.1.2 The study area presents a unique set of challenges. Whilst the majority of the District is very rural in character, with parts serviced by single lane tracks, and poor access. There are over 100 small villages and hamlets in the District in addition to the five historic market towns of Bishop's Stortford, Buntingford, Hertford, Sawbridgeworth and Ware. The larger town centres are in Bishop's Stortford, Hertford and Ware, though the smaller settlements support a healthy number of shops and related services. The District is bordered by larger towns, with Stevenage and Welwyn Garden City to the west and Harlow to the south-east.

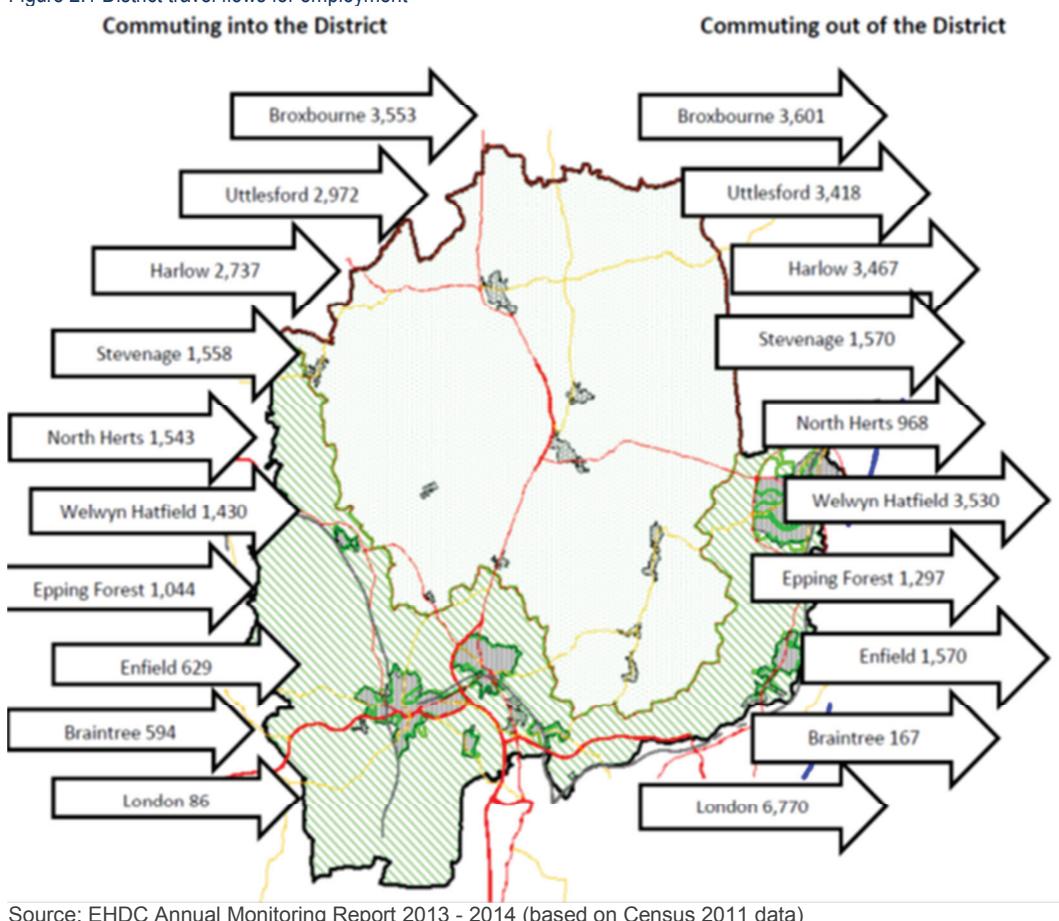
2.1.3 Much of the southern third of the District lies within the London Metropolitan Green Belt. There are numerous special landscape, natural and built heritage features including three sites of international nature conservation importance and six rivers, most notably, the river Stort.

2.1.4 Politically, the District is affected by two Local Enterprise Partnership (LEP) areas, two County Councils and seven district councils, thus bringing a range of interesting cross border 'duty to cooperate', development pressure, and cross border infrastructure influences, particularly from neighbouring towns of Harlow, Welwyn Garden City and Stevenage.

2.1.5 The District has good road and rail transport links and is well connected to the wider area. The A1 (M) and M11 run close to the western and eastern boundaries of the District respectively. In addition, the M1 and M25 are located in close proximity. Within the District, the A414 and the A10 run from west to east and north to south respectively. The District benefits from two mainline rail links into London. Stansted Airport lies adjacent to the north-eastern boundary of the District within Uttlesford. The District's excellent transport links (albeit with poor east-west connections) make it an attractive place to live and commute to work to London and Cambridge and as such continue to create pressure for new development.

2.1.6 Figure 2.1 below, shows that, although the District is a net exporter of its workforce (fifty percent of the workforce commutes out of the District for work, with the majority travelling into London and the surrounding local authority areas), there are considerable inter-dependencies with neighbouring authorities and large numbers also commute into the District for work.

Figure 2.1 District travel flows for employment



## 2.2 The Interim Development Strategy for East Herts

2.2.1 The District Plan Interim Development Strategy Report - Jan 2014 (abbreviated as the Development Strategy in this study) sets out the thinking that has informed the direction and scale of growth for the draft District Plan. We outline the reasons guiding the overarching Development Strategy in so far as it informs our assessment of infrastructure and viability.

### What is the demand for growth?

2.2.2 The Preferred Options District Plan is based upon an Objectively Assessed Housing Need figure of 15,000 dwellings for the period 2011 – 2031. This figure will be refined through an update of the Strategic Housing Market Assessment. It should be noted at this stage that the figure of 15,000 dwellings does not include any additional projected need stemming from the Duty to Co-operate with neighbouring authorities. The Development Strategy identifies four main transport corridors that inform the housing market areas (HMA's), including the A10, M11, A1 (M) Stevenage and A1 (M) Welwyn Hatfield.

2.2.3 East Herts commissioned Edge Analytics to undertake an assessment of housing need at parish grouping level within the HMA's. The assessment identified demand in the following areas (numbers rounded):

- Ware and Central Southern – 4,200
- Hertford and Central South Western – 3,600
- Buntingford and Central Northern – 400

- Bishop's Stortford and North Eastern – 5,900
- Sawbridgeworth and South Eastern – 500

2.2.4 This shows that there is considerable demand in Bishop's Stortford and the North Eastern villages, presumably due to its accessibility and rail communications to London and Cambridge and access to the motorway and airport and the slightly lower sales values compared to other parts of the District.

#### **The greatest demand is along the A414 'London commuter' corridor**

2.2.5 The greatest assessed demand is along the existing settlements of Hertford, Ware, and the Central South Western and Southern Rural Settlements. This is not surprising, based on the economic geography of this demand in relation to where the greatest proportions of the District's residents travel to work for. The strong access connections provided by the A414 transport corridor to London via the A10 the A1 (M) and to railway stations at Ware, Hertford, and Welwyn Garden City is likely to be a major factor in contributing to this demand. Any growth along this 'London commuter' corridor is likely to have a high level of demand and likely to command some of the highest values in the District. The M11 and Harlow town stretch of the A414 could also perform as part of this A414 London commuter' corridor - particularly if access from the A414 to the M11 is made more direct with the proposed new M11 junction 7a.

#### **Where is the supply for housing growth?**

2.2.6 The Interim Development Strategy Report (January 2014) includes a table<sup>2</sup> entitled 'Need and potential supply by housing market area'. The report includes the following headline conclusions relating to the distribution of housing supply to meet the projected demand:

- **Bishop's Stortford** should meet the majority of its own housing need, with any residual need provided for by the Gilston Area which is within the same housing market area.
- **Sawbridgeworth** can provide for its own need.
- **Buntingford** should meet its own need and some of the need arising from the surrounding villages.
- Due to the physical constraints of **Hertford**, part of its housing need will need to be provided within the Broad Location at **East of Welwyn Garden City**.
- **Ware** should meet its own needs, and possibly some of the demand from villages within its hinterland, through the provision of development to the North and East of the town.
- The Interim Development Strategy Report notes that the **Rural Areas** cannot meet their own needs, and these will be met elsewhere.

2.2.7 The determination of the 'suitable location' element has been undertaken by EHDC as set out above.

#### **The proposed housing growth and strategic sites in the Draft Preferred Options District Plan**

2.2.8 East Herts District Council completed consultation on the Draft District Plan Preferred Options Consultation in May 2014. This includes the provision for 15,000 homes in the District for the Plan period 2011-2031. The quantum of housing growth is currently being reviewed, in parallel with this study. For this study, we have used the figures outlined in the Draft Preferred Options District Plan 2014.

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<sup>22</sup> Table number 4.8 on page 40 of the Interim Development Strategy report and paragraph 4.5.15

2.2.9 Due to the limited capacity to accommodate the growth within the existing settlements, the bulk of the future housing supply is to be met through the designation of major new developments in the form of urban extensions, potentially ranging from 750 units to 10,000 units. These include the strategic sites assessed as part of this study at South of Bishop's Stortford, North and East of Ware, East of Welwyn Garden City and the Gilston Area. All of these major developments will require a change to the existing inner Green Belt boundary which is the subject of a separate study by PBA.

**When are the strategic sites expected to be delivered?**

2.2.10 Table 2.1 identifies when the strategic sites are expected to be delivered (this information is based on the Draft Preferred Options District Plan 2014 housing supply policy DPS3). Our independent review of estimate commencement and delivery rate is set out in section 9 and that has been used to inform the viability assessment.

Table 2.1 Timing and quantum of the strategic sites

Strategic site	Housing supply 2016 - 2021	Housing supply: up to 2031 (and beyond)	Where does the need stem from?	Employment
North and East of Ware	0	200 - 3,000	Growth stemming from Ware, but uncertainty about delivery has meant including a range of 200 – 3000 dwellings.	Appropriate levels of local retail and employment opportunities to promote self-containment and sustainability, including provision for home working
East of Welwyn Garden City	0	1,700	Unmet 1,700 dwellings stemming from Hertford demand and that of villages in the south-west of the District - location based on Duty to Co-operate assessment of shared infrastructure with Welwyn Garden City's growth at this location.	Appropriate levels of local retail and employment opportunities to promote self-containment and sustainability, including provision for home working
Gilston Area	0	3000 by 2031 (5000 – 10,000)	Demand arising from unmet need at Bishop's Stortford and the rural area. Growth beyond 2031 will help to meet future housing needs and will ensure that Green Belt boundaries will not need to be reviewed again at the end of the plan period in accordance with the NPPF.	Appropriate levels of local retail and employment opportunities to promote self-containment and sustainability, including provision for home working
South of Bishop's Stortford	500	750 – 1000	Meeting own demand. Land reserved for secondary school – if need for this is later removed scale will increase to 1,000 units.	Includes provision for an employment site of 4 - 5 ha

Source: East Herts Draft District Plan Preferred Options Consultation 2014

**2.3 The scale of growth assessed by this study**

2.3.1 The scale of growth indicated for three of the strategic sites is presented as a range in table 2.1 and is awaiting the outcome of this study to inform the achievable scale of growth based on the tipping point assessment of infrastructure costs, thresholds and viability. Based on

confirmation with East Herts District Council, the following growth levels have been assessed in this study:

- Bishop's Stortford has been tested at 750 dwellings
- North and East of Ware have been tested at 2,972 dwellings based and at 2,000 dwellings (the later based on generic assumptions as agreed by EHDC).
- East of Welwyn has been tested at 1,700 dwellings
- Gilston Area has been tested at 10,000 dwellings and at 2,500 dwellings ((the later based on generic assumptions as agreed by EHDC).

### **The role and nature of the strategic sites in relation to their surroundings**

2.3.2 The strategic sites South of Bishop's Stortford, North and East of Ware and East of Welwyn Garden City are identified in the Draft Preferred Options District Plan 2014 as extensions to existing settlements, and it is expected that future residents in these locations would access the wider strategic infrastructure in the respective town centres.

2.3.3 The development at the Gilston Area is described as requiring a degree of a 'self-containment' in the Draft Preferred Options District Plan 2014, but also as an urban extension to Harlow in the Development Strategy. The promoter's concept plan for just over 10,000 dwellings describes the proposal as a series of linked villages. The proposed linked 'villages' are described as being connected to Harlow, including access to Harlow town centre, Enterprise Zone (EZ) and railway station across the River Stort, with the objective of supporting the regeneration ambitions for Harlow town. As such Draft Preferred Options District Plan Policy GA1 does not include a requirement to provide any substantial level of employment at the Gilston Area apart from local opportunities to promote self-containment and sustainability.

2.3.4 If however, there is an assumption that Harlow will meet the much of the employment needs for Gilston, then any assumption about EHDC's labour supply utilising Harlow's job's<sup>3</sup>, will need to be agreed with Harlow under the Duty to Co-operate requirements and reflected in Harlow's overall job and housing numbers. If however, Harlow has a deficit in job capacity and is relying on the jobs created by the EZ to meet its own growth requirements, then EHDC cannot double count the jobs at the EZ and will need to make provision for this. So there is a possible cross boundary complication here about whose growth is being met at Gilston. In short, further consideration is needed about the scale of employment included at Gilston Area to reflect its needs based on an understanding of commuting flows. This will have an impact on land available to meet housing growth and infrastructure.

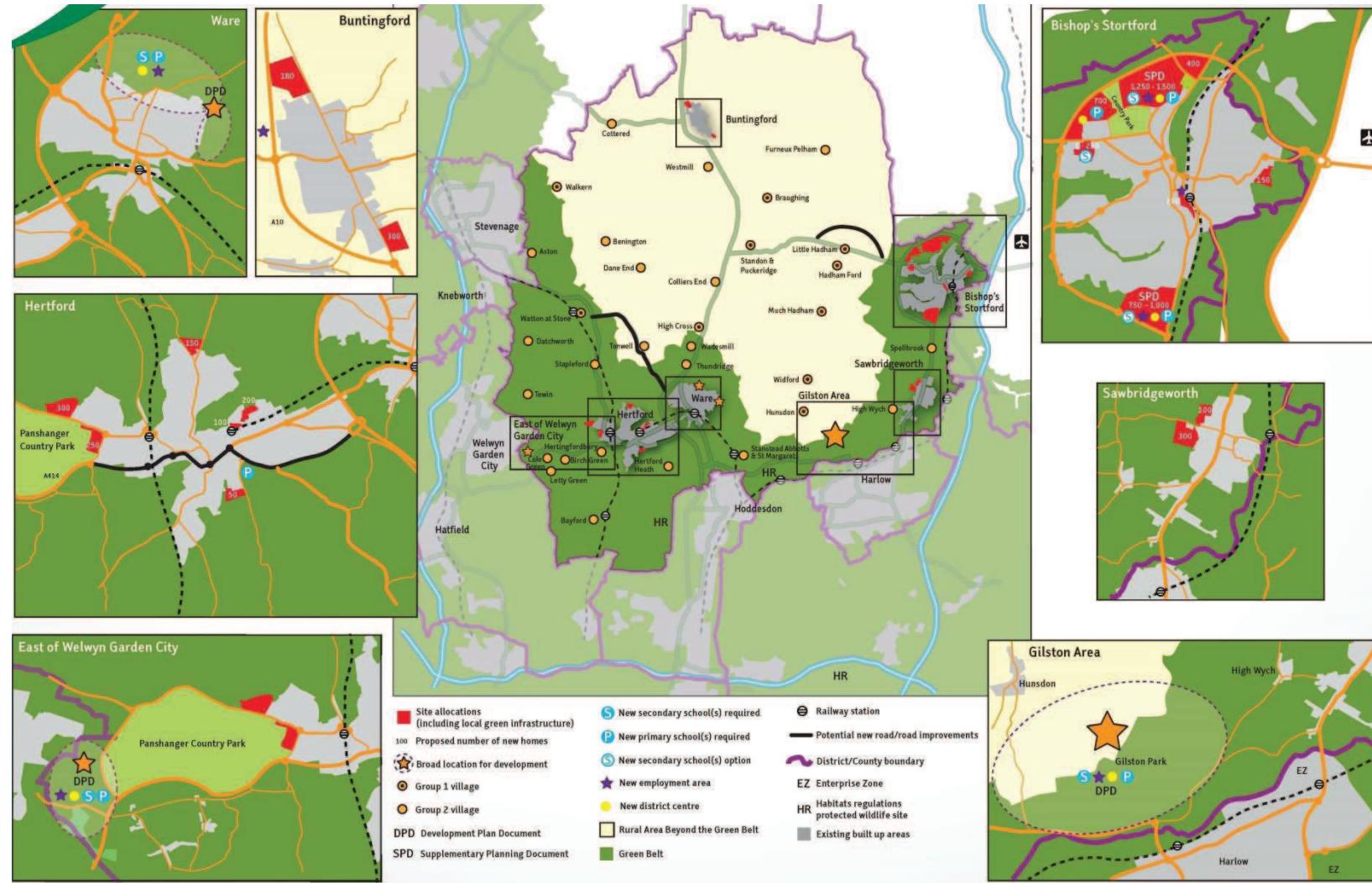
### **Differentiating between site allocations and broad locations**

2.3.5 Figure 2.2 overleaf is an extract from the District Preferred Options Consultation Draft Plan document showing the location of the strategic sites. All but South of Bishop's Stortford have been designated as Broad Locations for Growth and are depicted by an orange star to illustrate the general location of growth. Delivery of the Broad Locations is not expected in the first five years of the Plan due to various complications such as infrastructure delivery, uncertainty over scale, cross boundary issues, physical constraints, and determining the site specific boundary. South of Bishop's Stortford is designated as a Site Allocation, and it has a clearly defined boundary and there is an expectation that part of this site will be delivered in the first five years.

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<sup>3</sup> NPPG Housing and economic development needs assessments – should employment trends be taken in account? states any cross-boundary migration assumptions, particularly where one area decides to assume a lower internal migration figure than the housing market area figures suggest, will need to be agreed with the other relevant local planning authority under the duty to cooperate' paragraph 18.

Figure 2.2 Location of the strategic sites proposed in the District Preferred Options Consultation Draft Plan



### **Duty to Co-operate and impact on cross boundary infrastructure**

2.3.6 As part of the Duty to Cooperate, a number of Member level meetings have taken place with neighbouring local authorities to discuss the planned growth. The various neighbouring authorities have raised a range of issues relating to the planned growth in the Draft Plan. The following sentences provide an indication of the main cross-boundary issues stemming from consultations undertaken by EHDC.

- Broxbourne Borough Council has identified that transport needs continued co-operation between the councils, particularly with regard to the A10.
- Epping Forest District Council raised concern about the impact of the Gilston Area on air quality in Epping Forest Special Area of Conservation (SAC) and the cumulative impact of traffic accessing Junction 7 of the M11.
- Harlow District Council recognised the potential benefits of growth to the north of Harlow in helping to provide critical mass and a transformation of the image of Harlow, as set out in their recent study<sup>4</sup>. As such Harlow Council supports the growth at the Gilston Area, provided the necessary infrastructure is in place, particularly transport infrastructure to address the cumulative impact of growth on congestion within Harlow town. For this reason a new road linking the A414 to Junction 7a of the M11 is supported to alleviate pressure on Harlow town centre, although there are uncertainties over the funding and feasibility of such a road.
- Uttlesford District Council have raised concerns about the cumulative impact on strategic roads linked to growth at Bishop's Stortford, particularly Junction 8 of the M11 which serves both Districts and Stansted Airport and there is a need for mitigation measures to increase the capacity of this.
- Welwyn Hatfield Borough Council has confirmed that an urban extension to the south and east of Welwyn Garden City is consistent with the Borough Council's identification of the area for expansion, and there is recognition that there will be cross boundary infrastructure implications requiring a joint approach.

2.3.7 Most of the above issues relate to transport infrastructure and is assumed will now be taken account of in the latest COMET work being undertaken by HCC

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<sup>4</sup> Harlow Future Prospects Study 2013 by Nathaniel Lichfield Partners

## 3 THE POLICY CONTEXT

### 3.1 Introduction

3.1.1 This section outlines the key policies relevant to this strategic sites study. The accompanying Whole Plan Viability Report provides a review of plan relevant policies which have also informed this assessment (but are not re-iterated in this report).

### 3.2 The importance of viability testing to ensure Draft Plan is deliverable

3.2.1 The setting of strategic priorities within the Local Plan is set out within the National Planning Policy Framework (NPPF) para 156. This advocates strategic policies to deliver the homes and jobs needed in the local authority, using broad locations<sup>5</sup> for strategic development as well as additional specific site allocations for promoting development (para 157).

3.2.2 In addition, the NPPF requires a proportionate evidence base to be submitted to support the plan (para 158). In particular, the NPPF requires that Local Plans pay careful attention to viability to ensure that the plan is deliverable. With regards to this, paragraph 173 of the NPPF states:

*'The sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing standards, infrastructure contributions or other requirements should when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.'*

### 3.3 Deliverability and developability considerations of the Plan

3.3.1 Specifically in relation to housing, NPPF (para. 47) requires local planning authorities to:

- identify and update annually a supply of specific deliverable sites sufficient to provide five years' worth of housing against their housing requirements and
- identify a supply of specific, developable sites or broad locations for growth, for years 6-10 and, where possible, for years 11-15;

3.3.2 The NPPF uses the two concepts of 'deliverability' (which applies to residential sites in Years 0-5 of the plan) and 'developability' (which applies to year 6 onwards of the plan). The NPPF defines these two terms as follows:

- To be deliverable, '*sites should be available now, offer a suitable location for development now, and be achievable, with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable.*' Paragraph 47 footnote 11
- To be developable, sites expected in Year 6 onwards should be able to demonstrate a '*reasonable prospect that the site is available and could be viably developed at the point envisaged.*' Paragraph 47 footnote 12

3.3.3 The NPPF advises that a more flexible approach may be taken to the sites coming forward in the period after the first five years. Sites coming forward after Year 6 might not be viable now

<sup>5</sup> It is for EHDC to determine if the strategic sites currently identified as broad locations can move toward site allocations depending on what constitute 'significant uncertainties'. The strategic sites infrastructure assessment will help to inform this.

and might instead be only viable at that point in time. This recognises the impact of economic cycles and variations in values and policy changes over time.

3.3.4 The National Planning Practice Guidance (PPG) provides further guidance on viability and delivery aspects of plan making. It states that the development of plan policies should be iterative in that the draft policies tested against evidence of the likely ability to deliver the plan's policies and revised as part of a dynamic process, and that the evidence should be proportionate to ensure plans are underpinned by a broad understanding of viability. Greater detail may be necessary in areas of known marginal viability or where the evidence suggests that viability might be an issue for example in relation to policies for strategic sites which require high infrastructure investment.

3.3.5 In respect of delivering land for housing development the PPG sets out what should be considered deliverable and developable. In particular it states that assessments should identify:

- The potential type and quantity of development that could be delivered on each site/broad location;
- Reasonable estimate of build out rates;
- How any barriers to delivery could be overcome and when;
- An indicative trajectory of anticipated development and consideration of associated risks.

3.3.6 It is within the NPPF and PPG context that we assess the deliverability of the strategic sites. The 'suitable location' element of this assessment has been undertaken by EHDC (see section two of this study) as part of the 'Interim Development Strategy Report – January 2014'. This identified the sites which offer a suitable location for development together with an indicative scale or range of growth.

#### **Other guidance reports on plan viability**

3.3.7 It should also be noted that there are two other main guidance reports of relevance to viability and Local Plans. They are:

- Viability Testing in Local Plans, Advice for Planning Practitioners (LGA/HBF & Sir John Harman) June 2012, often referred to as the 'Harman Report', and
- Financial Viability in Planning, RICS guidance note, 1st edition (August 2012), often referred to as the 'RICS Guidance'.

3.3.8 Whilst not statutory or formal guidance, there is a general appreciation of the principles toward assessing viability set out in these reports and they are often quoted at Examinations, and have informed this assessment.

### **3.4 Infrastructure planning**

3.4.1 Infrastructure planning needs to be part of the 'strategic priorities' for the Local Plan preparation. The NPPF requires authorities to demonstrate that infrastructure will be available to support development. The NPPF at paragraph 177 states:

*'It is equally important to ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion. To facilitate this, it is important that local planning authorities understand district-wide development costs at the time Local Plans are drawn up.'*

3.4.2 It is within this context of the NPPF that we have assessed the infrastructure delivery of the strategic sites.

### **3.5 Mineral policy**

3.5.1 The NPPF at paragraph 143 states that in preparing local plans, local planning authorities should:

*'Set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place.'*

3.5.2 Hertfordshire County Council (HCC) has an adopted Minerals Local Plan and Minerals Consultation Areas (MCA) Supplementary Planning Document<sup>6</sup>. The Minerals Local Plan includes a Mineral Sterilisation Policy. The effect of the policy is particularly important to the strategic sites as they are all within the identified MCA for sand and gravel (see Appendix B for a map of the sand and gravel belt).

3.5.3 In appropriate cases, HCC will encourage mineral extraction in an MCA area prior to other development taking place where any significant mineral resource would otherwise be sterilised, or where despoiled land would be improved following restoration. The need to extract mineral and restore a site to a suitable land form will take time and may impact on the phasing and layout of any housing delivery.

3.5.4 A desk based minerals extraction assessment should be undertaken to establish a scoping report which will consider what minerals are present and recommend next steps to assess the consequential viability for extraction prior to development.

3.5.5 In informing our assessment of the commencement date estimates, we have taken account of the possible impact of this policy and recommended early actions be taken (particularly scoping and consideration of the economic viability of extraction) by all concerned to ensure unnecessary delays to delivery are avoided.

### **3.6 Community infrastructure levy and strategic sites**

3.6.1 The Community Infrastructure Levy (CIL) is a planning charge that became available to local authorities on 6 April 2010. The levy allows local authorities in England and Wales to raise contributions from development to help pay for infrastructure that is needed to support planned development. Local authorities who wish to charge the levy must produce a draft charging schedule setting out CIL rates for their areas.

3.6.2 The impact of higher development costs sometimes associated with strategic sites is recognised by the CIL guidance; this states that a charging authority should take development costs into account when setting its levy rates, particularly those likely to be incurred on strategic sites or brownfield land. A realistic understanding of site specific requirements for strategic sites is essential to the proper assessment of viability and charge setting. The apportionment of infrastructure to a CIL Regs 123 list or S106 will part of an on-going discussion with the site promoters, this study has made some informed assumptions about the most appropriate mechanism that might be adopted but this is expected to be refined over time and dialogue.

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<sup>6</sup> <http://www.hertsdirect.org/services/envplan/plan/hccdevplan/mlp/>

## 4 INFRASTRUCTURE ASSESSMENT

### 4.1 Introduction

4.1.1 The proposed strategic sites will require substantial investment in infrastructure to deliver the sustainable communities which are planned. It is important that the main infrastructure requirements are identified and tested in this report. EHDC is undertaking an assessment of the future infrastructure needs of the planned growth which will be informed by this study.

### 4.2 Approach to strategic site infrastructure assessment

#### Consultation with the site promoters

4.2.1 A series of joint surgeries were hosted with each of the strategic site promoters during autumn 2014 to understand the site promoters' assessment of infrastructure requirements, phasing and scale of infrastructure needed to support the delivery of each strategic site. The notes of these surgeries are available on the EHDC web site ([www.eastherts.gov.uk/deliverystudy](http://www.eastherts.gov.uk/deliverystudy)).

#### Review of evidence documents submitted by promoters

4.2.2 The site promoters have produced high level infrastructure schedules of varying degree of detail (see Appendix C). Where possible, the assumptions provided by the site promoters were reviewed by our cost consultants Gardiner and Theobald (G&T) and by ourselves and commentaries have been included where any variances are suggested. At this early stage of the plan making process, this type of cost estimation is to be expected and will be refined as the plan reaches closer to delivery stage.

4.2.3 Various reports have also been submitted to EHDC by the site promoters to help inform the assessment of deliverability or developability. These include concept plans incorporating phasing, green infrastructure and social infrastructure provision (including, schools, health, sports and play provision, as well as informal open space). These reports have been based on inputs from the site promoter's specialist utilities, transport, and social infrastructure teams, who in turn have assessed current capacity based on some engagement with utilities and other service providers (e.g. transport, education, Thames Water, Environment Agency etc). These reports are available on the EHDC web site ([www.eastherts.gov.uk/deliverystudy](http://www.eastherts.gov.uk/deliverystudy)).

#### Consultation with service providers

4.2.4 It is often the case that the supply of sewerage infrastructure can affect the timely delivery of growth and the cost of transport and education often constitute the highest percentage of the infrastructure delivery costs, whilst locally, the capacity of health (GP facilities) has been identified as a key issue from the community consultations undertaken by EHDC. Interviews with service providers responsible for these infrastructure items were undertaken by PBA to inform the infrastructure assessment (see Appendix A for a list of individuals interviewed). The findings on specific elements of infrastructure include:

- **Transport** - We have sought to understand the site specific and cumulative impact on town centres and strategic transport networks arising from the proposed growth based on documented evidence, modelling and consultation with a wide range of stakeholders and this has informed our initial inputs for each of the strategic sites. This assessment is summarised in Appendix E.
- The final transport requirements will be informed by the Transport Vision stemming from HCC's countywide transport assessment using the COMET Model, which should provide a clearer understanding of the cumulative impact of growth and proposed solutions to meet the delivery of growth will come forward through the proposed Transport Vision which is expected sometime in 2016.

- **Education** The response from HCC was that most schools in East Herts are stretched, and existing consented development sites will absorb any available capacity. The service providers are exploring options for expanding capacity at present and new growth, including the first five year delivery will need additional capacity. The initial assessment indicates this will be created through both the expansion of existing schools and the provision of new schools as part of the development of the strategic sites
- **Health** The response from the NHS Property Team was that most GP surgeries in East Herts are stretched, particularly in Bishop's Stortford and Hertford. The service providers are exploring options for expanding capacity and new growth, including the five year delivery will need additional capacity. Each of the strategic sites will require new provision on site. Work on wider health facilities by the Clinical Commissioning Group is ongoing.
- **Sewage infrastructure** The response from Thames Water was that existing capacity from unrealised growth due to the downturn in housing development and ongoing works to change the way the sewage is treated have provided foul water capacity to accommodate planned growth upto 2021 (and depending on the rate of take up of capacity, could support the planned growth up to 2026). After that time it is likely that additional infrastructure will be needed. Additional plant capacity could be provided at Rye Meads Sewage Treatment Works site without any encroachment into the adjacent SSSI. However, it is important to note that the overall impact and treatment requirement will be affected by the cumulative effects of development from all the adjacent local authority areas and so capacity impact on delivery of growth should be monitored.

#### **Categorising infrastructure requirements to inform viability cost inputs**

4.2.5 Although we are focusing on assessing infrastructure requirements and costs here, we draw on the infrastructure funding categories to help distinguish the different types of infrastructure identified by the site promoters. This will help to provide clarity in informing the viability assessment and help EHDC review their developer contributions policy and start to inform a draft CIL Regs 123 of relevant infrastructure.

4.2.6 The distinction between infrastructure categories adopted by developers is not always clear; there are some grey areas between the categories adopted. We have set out our suggested approach to categorising the infrastructure for the strategic sites based on consultation with the site promoters and used our judgement where it is not possible to be certain of the categories at this stage. Further refinements of the infrastructure assessment as sites move towards delivery will no doubt refine the categories following wider consultation with infrastructure providers and strategic site promoters. We have adopted the following categories:

- **Site enabling infrastructure costs** - this relates to those items of infrastructure required in creating fully serviced developable sites, and usually consist of utilities, drainage, SUDs, green infrastructure, open space, internal roads, and site preparation. These are costs required to prepare the site for development and it is assumed these costs will be borne by the developer to create saleable plots of land, but would typically be in excess of what could be absorbed within a typical plot externals allowance.
- **Site relevant infrastructure (S106 costs)**, infrastructure items are focused on addressing the specific mitigation required by a new development. S 106 projects must be a) directly related to the proposed development, b) reasonable in scale and kind and c) necessary to make the development acceptable in planning terms. We have used these tests as a general guide to the projects which are included in this category and mindful of the pooling restriction on S106 contributions. We have generally confined this category to projects funded by a single development within the strategic sites. It is crucial to avoid any duplication between this category and the CIL Regs 123 list (the next category).

- **Strategic or cumulative infrastructure** (Community infrastructure levy Regs 123 list), relates to strategic infrastructure requirements that arise due to the cumulative impact of development such as town centre congestion and strategic transport corridors, libraries, sports centres, strategic flood defence measures, schools, parks, and strategic green infrastructure. It is possible for development to be in either the S106 or CIL 123 list – this decision will be guided by a local assessment of the infrastructure.

4.2.7 Note the strategic site promoters have included some contribution towards off site transport and other strategic infrastructure projects based on their estimate of what is considered 'appropriate'. In our appraisal model, only the developer enabling and site specific infrastructure costs are included as a 'cost input' whilst the strategic infrastructure costs are not factored into the costs and instead are treated as an 'output' in the viability appraisal, and their funding will be informed by the scale of CIL charge from the cumulative delivery of growth and not just from the strategic sites. Going forward, EHDC will assess the cost estimates for the strategic infrastructure requirements needed to support growth as part of their IDP and these will be included in their Regs 123 list. The items included as strategic infrastructure and site specific S106 infrastructure will be refined further in consultation with the various stakeholders (see para 4.3.3 below).

4.2.8 In addition to the above categorisation of infrastructure, each of the strategic sites will also be expected to accommodate a range of housing tenures to create mixed and balanced communities. This includes the provision of affordable housing and accommodation for Gypsy and Travellers and Travelling Show people. Such items have not been itemised or categorised as infrastructure for the purposes of this study, but have been considered as part of the overall viability assessment.

### **4.3 The infrastructure assessment will continue to evolve**

4.3.1 It should be noted that each promoter is at a different stage in their assessment of infrastructure requirements. As sites progress through the planning process the level of detail will become more refined. For example some infrastructure such as utilities, transport, open space, leisure and play is an unknown quantity at this stage and the level of requirements will become more apparent during the detailed masterplanning stages, which take account of the specific mitigation and consultation with the service providers.

4.3.2 EHDC has prepared an Infrastructure Topic Paper which identifies various issues in relation to infrastructure requirements. This together with the Local Plan provides a starting point in informing the infrastructure capacity and future requirements to support planned growth. It is important to note that an Infrastructure Delivery Plan is being prepared by EHDC to inform the Local Plan. Whilst the findings of this report will inform the preparation of the IDP, it will be the IDP that will be kept up to date through the plan period to reflect changing circumstances.

4.3.3 Infrastructure planning is not static - any assessment is based on information available relating to capacity at a point in time and this will be continuously changing. Thus the IDP should be treated as a 'live document'. As such, it will be important for EHDC to continue to maintain an ongoing dialogue with service providers, to proactively manage the delivery of planned growth. Similarly this will be the place to review and refine items that are included as 'strategic infrastructure (part of the CIL Regs 123 list) or site specific infrastructure (S106 or CIL Regs 122 list).

## 5 WARE STRATEGIC SITE INFRASTRUCTURE ASSESSMENT

### 5.1 Introduction

5.1.1 The Draft Preferred Options District Plan 2014 Policy WARE 3: Land North and East of Ware<sup>7</sup> states:

*'To meet long-term housing needs, land to the north and east of Ware is identified as a broad location for Development. East Herts Council will work with site promoters, Ware Town Council, Wareside Parish Council, Hertfordshire County Council, and other appropriate public and regulatory bodies to prepare a Development Plan Document to shape and refine opportunities for strategic scale development of between 200 and 3,000 home and supporting uses and infrastructure in accordance with Policy DPS4 (broad locations for development). Development shall not proceed until the adoption of the DPD.'*

5.1.2 The outcome of this study will inform the scale of growth that can be effectively supported by the necessary infrastructure.

5.1.3 A developer surgery took place in October 2014 to provide an opportunity for PBA to discuss with the promoters the deliverability of the scheme. A considerable amount of work has been undertaken by the promoters in helping to inform the preparation of a concept plan and presentations for the developer surgery.

#### What quantum of growth have we assessed?

5.1.4 The developers have provided infrastructure cost information for a scheme of 2,972 units and this has informed the cost input for the viability assessment. In addition a 2,000 unit scenario has been assessed at the request from EHDC. For this scenario a generic cost assumption informed by the analysis of costs provided by the promoters for this study. This latter scale reflects the discussion set out in section two of this study relating to the scale, role and timeframes for this strategic site.

#### Is there clarity over scheme and landownership?

5.1.5 The two site promoters have come to a common agreement to promote a single masterplan thus addressing any concerns relating to piecemeal delivery of this site. The site promoters have carried out various site investigations to inform the preparation of a masterplan.

#### Initial concept plan

5.1.6 The emerging concept plan (see figure 5.1 overleaf) for an urban extension connecting the north and east of Ware by the link road has been prepared by the site promoters based on an assessment of the landscape, topography, ground conditions, listed buildings and infrastructure mitigation measures (which were identified by EHDC and other service providers at a previous meeting). The proposal will require the release of Green Belt land.

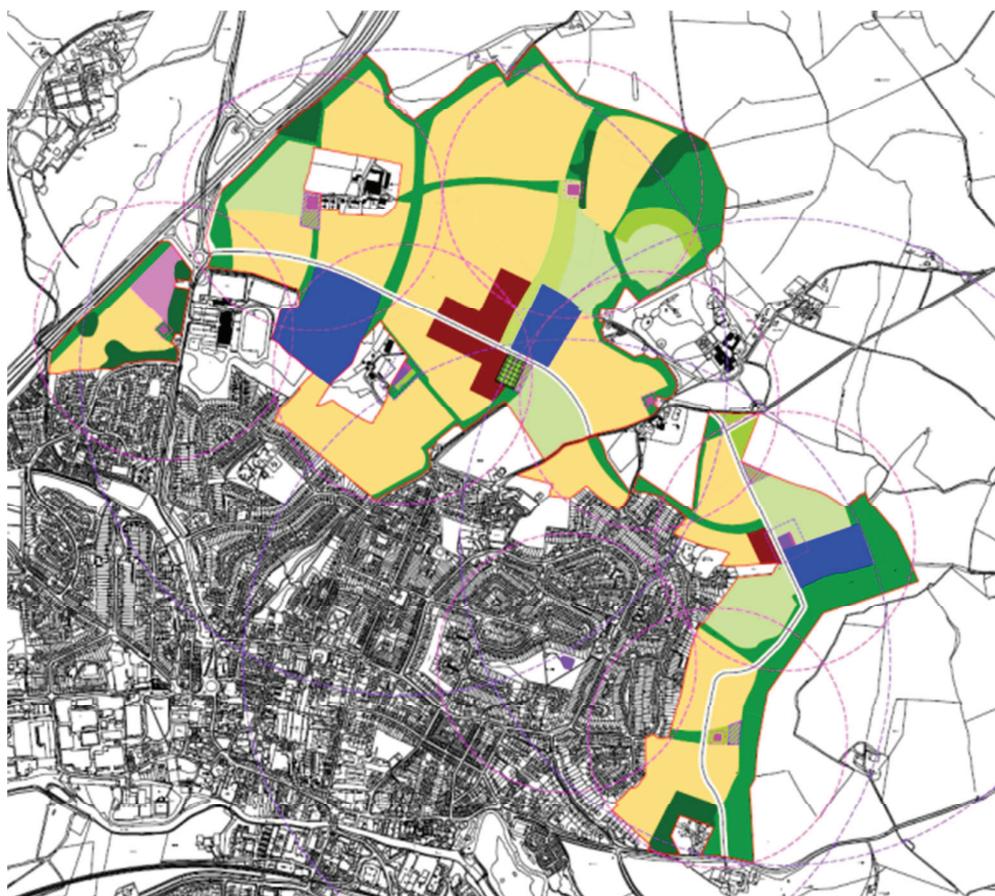
5.1.7 The concept plan is starting to define a site boundary for the scheme, but this will need further consideration by EHDC before this can be finalised and as yet remains 'indicative'. Detailed work on the merits of the layout, landscape and greenbelt assessment will be a matter for consideration by EHDC and is not part of this assessment.

5.1.8 HCC has identified this site as being within the minerals sand and gravel belt - if a mineral extraction was required it could impact on the scheme layout and commencement date.

<sup>7</sup> Note all references to Ware in this section relate to land north and east of Ware.

Advice from the HCC should be sought to establish a minerals scoping report which will consider the type of minerals present and recommend next steps to assess the consequential viability for extraction prior to development. A view will be required from EHDC on the economics of extraction and potential impact on delays to any housing delivery.

Figure 5.1 Indicative concept plan for 2972 homes with infrastructure



Source: Ptarmigan and Leach Homes (2014)

### What are the infrastructure requirements?

- 5.1.9 The site promoters have submitted a high level infrastructure schedule setting out the necessary infrastructure requirements to support the planned growth, including cost estimates. These will be refined as further detailed investigations are undertaken at future stages of the planning process.
- 5.1.10 Table 5.1 is a summary of the infrastructure cost schedule. This highlights the developer enabling cost of approximately £59m and development infrastructure costs of approximately £60m which will be a cost input to inform the viability appraisal. The north and east of Ware cost schedule also includes an allowance of £15m towards off site strategic infrastructure costs such as library, public transport etc. As explained earlier, these will not be included as a cost input in the viability appraisal and will be assessed based on the level of CIL coverage instead.
- 5.1.11 However, it should be noted that the final list of strategic infrastructure relevant for CIL and S106 will be refined in consultation with the developers and service providers (see section 4) if EHDC decides to adopt a CIL. If a CIL is not adopted, then some of these costs may be captured via a S106 mechanism instead.

Table 5.1 Summary of infrastructure costs for North and East of Ware

Infrastructure Type	Sum of Developer enabling works	Sum of Development specific infrastructure (S106 / s278 site specific)	Sum of Strategic infrastructure cost ( CIL Regs 123 list)
Ware	£58,826,625	£59,600,000	£15,000,000
Community	£0	£1,000,000	£0
Education	£0	£46,000,000	£0
Green infrastructure / outdoor sport	£0	£10,000,000	£0
Health	£0	£2,000,000	£0
Site preparation	£34,147,500	£0	£0
Transport highway	£5,536,425	£600,000	£0
Transport other	£0	£0	£15,000,000
Utilities & drainage	£19,142,700	£0	£0

Source: North and east of Ware site promoters and PBA 2014

5.1.12 In addition to the above infrastructure, a cost input for the provision of accommodating 15 pitches (scale determined by EHDC) for Gypsy and Travellers and Travelling Show people has also been included as a cost input in the viability assessment.

### When will the infrastructure be required, phasing and cashflow?

5.1.13 Based on our very high level assessment of when the infrastructure is likely to be required, an initial estimate has been incorporated but this is likely to change considerably as plans are refined. This identifies the following:

- Trigger points for infrastructure
- Cost estimates for the infrastructure
- Funding options for the infrastructure provision.

5.1.14 The information in table 5.2 has informed the cash flow assessment for the viability appraisal. It should be noted that this cashflow assessment is highly likely to change as plans are refined with further inputs from the site promoters and service providers. Where possible, costs have been ‘pushed back’ and delivery timescales extended to help with the cashflow. The CIL relevant infrastructure costs are not factored into the appraisal cashflow and an instalments policy is likely to be introduced to help support cashflow.

Table 5.2 Infrastructure requirements, costs, funding and cashflow

Project	Funding Source	Enabling works	S106 / s278	Cost start date	Cost end date	Delivery duration (years)
Ware Internal link road and associated works	Developer	£5,536,425	£0	2021	2026	6
Ware Northern Access roundabout works	S278	£0	£350,000	2018	2020	3
Ware Widbury Hill access roundabout	S278	£0	£250,000	2018	2020	3
Shared footway/cycleway between site and town centre via Fanhams Hall Road - assumed cost included in Ware scheme	S278					
Shared footway/cycleway between site and High Oak Road area - assumed cost included in Ware scheme	S278					
Ware - 1No. 6FE Secondary School based upon 3,000 units and land	S106	£0	£26,000,000	2020	2022	3
Ware - 2no. 3FE Primary Schools based upon 3,000 units and land	S106	£0	£20,000,000	2026	2031	6
Health Centre / GP Surgery @ Ware	S106	£0	£2,000,000	2030	2031	2
Ware -Community centre @ Ware	S106	£0	£1,000,000	2030	2031	2
Ware landscaping, playareas, allotments, outdoor sports, green infrastructure	S106	£0	£10,000,000	2026	2031	6
Ware on site utilities	Developer	£6,991,000	£0	2020	2030	11
Ware - New foul water connection to outfall sewer, reinforcement and pumping station. Detailed proposal awaited from TW	Developer	£5,000,000	£0	2020	2021	2
Ware off site utilities upgrades	Developer	£7,151,700	£0	2020	2021	2
Ware site preparation costs / scheme enabling costs	Developer	£34,147,500	£0	2021	2026	6
Ware off site contributions for strategic infrastructure	Developer	£0	£0	2021	2031	11

## 5.2 Infrastructure assessment and the deliverability of the scheme

5.2.1 Some infrastructure items are considered as necessary to enable development to take place – such as securing adequate access, utilities and drainage, and sewage infrastructure. There are other items of infrastructure that are also necessary to secure sustainable development such as education, health etc. The ability to meet these requirements will inform the deliverability or developability of the strategic sites. Here we focus on key infrastructure items that have shaped the delivery assessment of this strategic site.

5.2.2 There are three big infrastructure items required to serve this development – these are:

- **Education** - the assessed requirement, based on guidance provided by HCC is to provide for two 3 Form Entry primary schools and a 6 Form Entry secondary school (note it is likely that a secondary school on this site could serve a wider catchment). For now a cost allowance of £26m for a secondary school and £10m each for the primary schools has been included in the cost schedule. Once further details are known about the size of the scheme a more refined cost estimate which apportions costs to possibly other sites also using this secondary school will be taken account of.
- The Ware **internal link road** estimated at £5.5m is necessary to reduce the traffic routing through the town centre to reach the A10.
- **A new sewer** estimated at a cost of £6m is necessary because the diameter of the pipework in the existing network within the town centre is insufficient to accommodate the growth and the new proposed sewer would obviate the need for disruptive works to the existing main sewer under the High Street. The infrastructure schedule allows for a connection to the outfall sewer, reinforcement and pumping station based on an initial estimate cost provided by Thames Water. This will include a new pipe around the northern and eastern perimeters of the town, with a pumping station to the north to address the slight dip in the valley to the north. The site promoters are awaiting more detailed engagement with, and expecting to commission a Pre Development Report from, Thames Water.

5.2.3 The requirements for these items have been informed by the service providers and have been factored into the emerging concept plan for the site. No constraints have been identified to providing these infrastructure items in terms of physical delivery.

### Strategic infrastructure considerations

5.2.4 It is likely that the growth will impact on a range of strategic off site, and often cross border transport infrastructure requirements. The precise nature of this will be informed following the HCC COMET modelling and Transport Vision in 2016. Some of the key challenges that are likely to require addressing are outlined below.

5.2.5 Given the significant levels of traffic expected to use the A10 and A414, the following infrastructure requirements are likely to be required on area-wide basis to address the cumulative impacts of development:

- Signalisation of, or other capacity improvements for, the of the Great Amwell Roundabout (A414/A1170);
- Improvements to the wider capacity of the A414 corridor;
- Enhancements to the walk, cycle and public transport networks with a focus on east west connectivity to relieve pressure on the A414 wherever possible.
- Exploration of the need or otherwise for potential improvements to A10 at Cheshunt to increase traffic flow towards M25 J25 in cooperation with Broxbourne Borough Council.

5.2.6 It should be noted that all off site strategic transport interventions need to be identified and assessed using an appropriate District or Countywide model so that proportionate impacts, as part of a wider cumulative growth impact assessment, can be identified. The final details of the offsite strategic infrastructure will be informed by the HCC Transport Vision. The above interventions are based on our understanding of the transport networks in the area and the likely impacts that would be realised from the development proposals.

### **5.3 Moving towards a delivery strategy beyond Examination**

5.3.1 As part of the on-going dialogue with the site promoters, based on our assessment of the infrastructure, we would draw EHDC's attention to the following areas for further investigation.

5.3.2 Strategic transport requirements that will be necessary to support the delivery of the various strategic sites, their costs and how this infrastructure will be funded is currently being assessed by HCC and a response to this is expected sometime in 2016. This will form an important element for further assessment of this work to inform deliverability considerations.

5.3.3 The promoters have recognised that other strategic infrastructure such as public transport measures, libraries, recycling facilities are likely to be required and offered a contribution of £5k per unit (£15m in total) towards such strategic off site works. EHDC should compile a Regulation 123 list of strategic off site infrastructure to inform a future CIL charging schedule should the Council introduce CIL. Work on this list has been commenced by this study based on inputs such as the items provided by the site promoters for strategic infrastructure, but this will need refining.

5.3.4 A cost estimate of £10m has been included to cover a range of open space provision, including outdoor sports, parks, green space, children's play areas, and allotments as part of the on-site S106 contribution. These costs could change once more detailed masterplans are prepared and costs refined, though it is possible that some of the green spaces and woodland could be part of the drainage and site enabling costs. This will need to be clarified as the scheme progresses to planning application stage. Three long term management options are suggested for the open space infrastructure, including transferring responsibility and a commuted sum to either EHDC or the Parish Council. Alternatively, the developer would transfer all public open space to a private management company who would then levy a service charge across the site which every house would pay. The private management company would be fully responsible for all maintenance responsibilities going forward. This will need to be considered as part of the detailed masterplanning considerations beyond the Plan Examination.

5.3.5 Based on our review of the utilities infrastructure schedule it has been assumed that point of connection and indicative costs of reinforcement have been provided to the promoters by the utility companies. The estimate is accepted with caution. EHDC should seek confirmation from the promoters as to the basis for the upgrades required in arriving at their offsite utilities connection costs. The most effective way to determine capacity would be for the site promoter to make an application to the utility company to confirm the point of connection for the demand and understand any upstream network reinforcement required. This will determine whether the utility costs which have been identified in the infrastructure cost schedules are based on a realistic assessment of capacity.

## 6 GILSTON AREA STRATEGIC SITE INFRASTRUCTURE ASSESSMENT

### 6.1 Introduction

- 6.1.1 Policy GA1 of the Draft Preferred Options District Plan 2014 states:
- 6.1.2 'East Herts Council will test through a Development Plan Document (DPD) the feasibility of land in the Gilston Area to accommodate between 5,000 and 10,000 new homes (overall looking beyond this plan period) and supporting uses and infrastructure in accordance with Policy DPS4 (broad locations for development). Development shall not proceed in the Gilston Area until the adoption of the DPD'
- 6.1.3 A developer surgery took place in November 2014 to provide an opportunity for PBA to discuss with the promoters the deliverability of the scheme in terms of known constraints, infrastructure requirements, phasing and viability assumptions. A considerable amount of work has been undertaken by the promoters in helping to inform the presentation of a 10,000 homes scheme at the developer surgery.

#### Is there clarity over landownership?

- 6.1.4 Places for People (PFP) and City and Provincial Properties (CPP) are the two main landowners promoting development in the Gilston Area. Following a request by EHDC to consider joint working in promoting any scheme at this broad location, discussions between the two landowners have resulted in an agreement to promote a single joint concept plan. However, there are some third party land interests in relation to upgrading the existing River Stort crossing and in delivering the second river.

#### What quantum of growth have we assessed?

- 6.1.5 The infrastructure cost schedule prepared by the promoter is for 10,181 dwellings and this is the basis for the infrastructure cost estimates that have informed the PBA assessment, though the viability assessment has been undertaken for 10,000 units.
- 6.1.6 In addition a 2,500 unit scenario has been assessed at the request from EHDC. For this scenario a generic cost assumption informed by the analysis of costs provided by the promoters for this study. This latter scale reflects the discussion set out in section two of this study relating to the scale, role and timeframes for this strategic site.

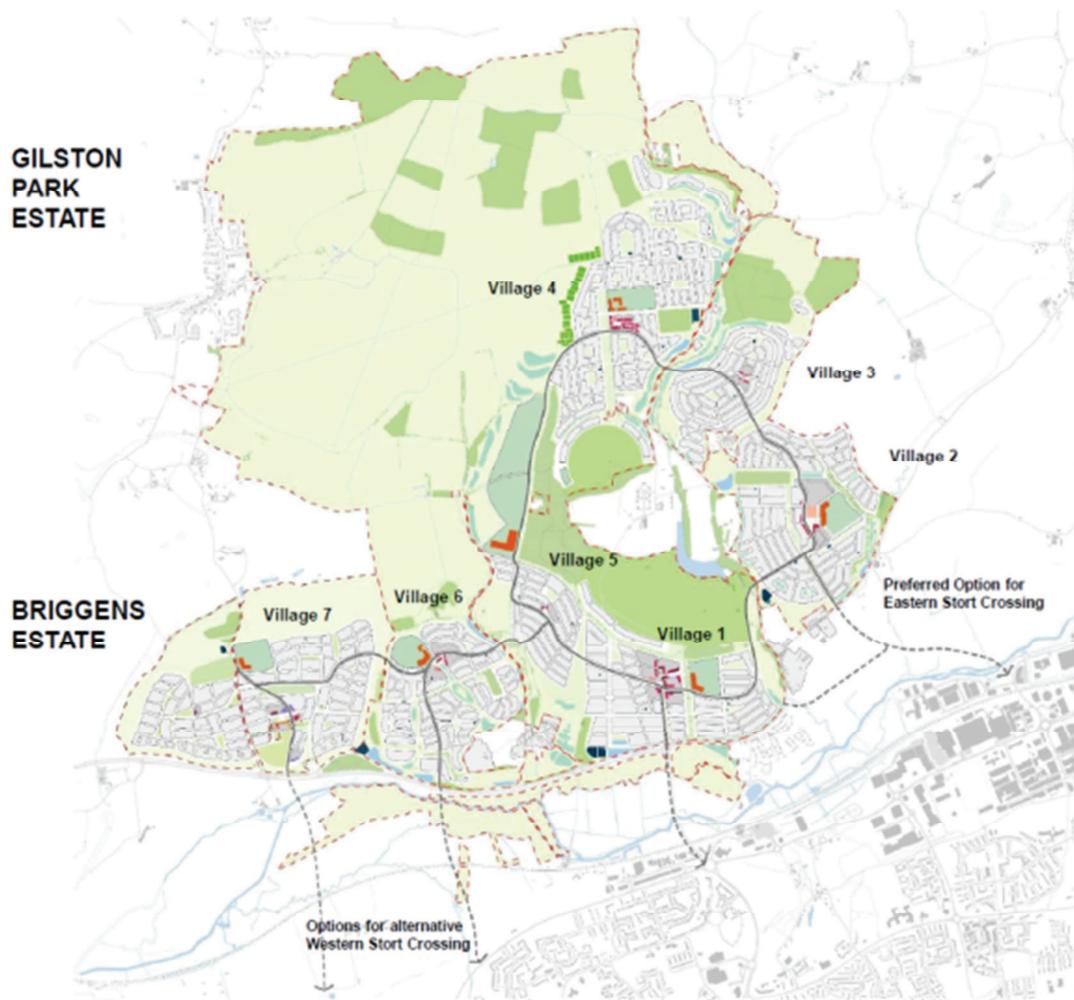
#### Initial concept plan

- 6.1.7 The emerging concept plan as shown in figure 6.1 overleaf has been based on an assessment of the landscape, topography, ground conditions, constraints, opportunities and infrastructure mitigation measures. Some of these assessments have been informed by EHDC and other service providers at previous meetings with the promoters.
- 6.1.8 The concept plan is starting to define the site boundary and layout for the scheme. Work on this will be refined based on further discussions with EHDC. Detailed work on the merits of the layout, density, form, landscape and Green Belt assessments will be a matter for consideration by EHDC and is not part of this assessment. The site is shown as a series of 'linked villages'. It is not described as either an urban extension to Harlow or a new settlement within East Herts.
- 6.1.9 The design considerations and layout have not been assessed as part of this study. Currently a density of 47 dwellings per net hectare (dph) is proposed which does not reflect the density for village type settlements in the Draft Preferred Options District Plan. EHDC have advised us to adopt a density of 37.5 dph for this study which is similar to one of the other strategic

sites and at the upper end of what the Council is likely to consider acceptable. The final density and design considerations will be discussed in more detail with the promoters. Notwithstanding the design considerations, given the likely demand from the commuter market to London and the proximity to Harlow train station, we consider there could be a strong market for some high density flat type development at this location. As such PBA has advised the client to be mindful of this in shaping the future design and density assumptions for this site as it could assist with creating a more mixed residential offer and support the speed of delivery at this location.

6.1.10 HCC has identified this site as being within the minerals sand and gravel belt - if a mineral extraction was required it could impact on the scheme layout and commencement date. Advice from the HCC should be sought to establish a minerals scoping report which will consider the type of minerals present and recommend next steps to assess the consequential viability for extraction prior to development. A view will be required from EHDC on the economics of extraction and potential delays to any delivery.

Figure 6.1 Concept plan for the Gilston Area



Source: PFP and CPP 2014

### What are the infrastructure requirements?

6.1.11 The site promoters have submitted a high level infrastructure schedule setting out the necessary infrastructure requirements to support the planned growth, including estimate costs.

6.1.12 Table 6.1 is a summary of the infrastructure cost schedule, this highlights the developer enabling cost of approximately £228m and development infrastructure costs of approximately £287m which will be incorporated as a cost input to inform the viability appraisal. The cost schedule also includes a cost of approximately £22m towards off site strategic infrastructure costs – these costs have not been factored in as a cost input in the viability appraisal and instead will be assessed based on the CIL coverage instead.

6.1.13 However, it should be noted that the final list of strategic infrastructure relevant for CIL and S106 will be refined in consultation with the developers and service providers (see section 4) if EHDC decides to adopt a CIL. If a CIL is not adopted, then some of these costs may be captured via a S106 mechanism instead.

Table 6.1 Summary of infrastructure costs for the Gilston Area

Infrastructure Type	Sum of Developer enabling works	Sum of Development specific infrastructure (S106 / s278 site specific)	Sum of Strategic infrastructure cost ( CIL Regs 123 list)
<b>Gilston</b>	<b>£227,569,721</b>	<b>£286,629,339</b>	<b>£21,796,686</b>
Community	£0	£10,432,644	
Education	£0	£106,830,942	
Green infrastructure / outdoor sport	£0	£51,032,192	
Health	£0	£14,794,978	
Indoor sports	£0	£4,520,250	
Management & adoption	£0	£28,191,866	
Site preparation	£58,854,922	£0	£0
Transport highway	£69,046,000	£70,826,467	£12,712,654
Transport other	£0	£0	£9,084,032
Utilities & drainage	£99,668,799	£0	

Source: Gilston site promoters and PBA 2014

6.1.14 In addition to the above infrastructure, a cost input for the provision of accommodating 15 pitches (scale determined by EHDC) for Gypsy and Travellers and Travelling Show people has been included as a cost input in the viability assessment.

### **When is the infrastructure required, phasing and cashflow?**

6.1.15 Based on our very high level assessment of when the infrastructure is likely to be required, an initial estimate has been incorporated but this is likely to change considerably as plans are refined. This identifies the following:

- Trigger points for infrastructure,
- Cost estimates for the infrastructure
- Funding options for the infrastructure provision

6.1.16 The information in table 6.2 has informed the cash flow assessment for the viability appraisal. It should be noted that this cashflow assessment is highly likely to change as plans are refined with further inputs from the site promoters and service providers. Where possible, costs have been ‘pushed back’ and delivery timescales extended to help with the cashflow. The CIL costs are not factored into the appraisal cashflow and an instalments policy is likely to be introduced to help support cashflow.

6.1.17 The infrastructure schedules included are based on the promoter’s assessment of what is required and how this will be delivered, however service providers may have a different view on how some of this infrastructure might be delivered (see section 6.6 below).

Table 6.2 Infrastructure requirements, costs and cashflow

Project	Funding Source	Enabling works	\$106 / s278	Cost start date	Cost end date	Delivery duration (years)
On Site Roads - Gilston	Developer	£69,046,000	£0	2016	2038	23
Eastern Crossing - Stort River Valley - Gilston	S278	£0	£38,212,972	2026	2031	6
Central Crossing - Stort River Valley - Gilston	S278	£0	£12,915,000	2021	2026	6
Off-site Works and Junction Improvements - Gilston	S278	£0	19,698,495	2016	2038	23
Signalisation of A1184-Station Road-West Road double-mini roundabout in Sawbridgeworth	CIL					
Highways improvements to A1184-High Wych (TBC)	CIL					
Hammarkjold/Fifth Ave/Velizy Ave 'Longabout'	CIL					
A414 dedicated left-turns at the A414/Second Avenue roundabout TBD	CIL					
Dualling of A414 towards M11 Junction 7 between A1169 Southern Way and M11 J7	CIL					
Second Ave/Velizy Ave 'Throughabout'	CIL					
Signalisation of the Great Amwell Roundabout (A414/A1170)	CIL					
Western site access roundabout off Eastwick Road west of the Eastwick Road roundabout-in	S278					
A414 (Fifth Avenue) dualling -included in Gilston S278 off site works	S278					
A414 Burnt Mill roundabout capacity improvements -included in Gilston S278 off site works	S278					
A414 Eastwick Road roundabout signalisation -included in Gilston S278 off site works	S278	£0	£0			
Proposed northern access to Harlow train station / footbridge extension	CIL					
Shared footway/cycleway over Fifth Avenue-included in Gilston S278 off site works	S278					
High-frequency bus links to town centre, Harlow rail station, employment areas (Pinnacles and London Road)	S278	£0	£0	0	0	
Transport & Travel Gilston	CIL	£0				
Harlow Town Station and Adjoining Areas - Gilston	CIL	£0	£0	0	0	0
• Health Centre - Village 1 Gilston	S106	£0	£3,851,366	2022	2024	3
• Primary Care Health Centres (x2) Villages 4 and 7 Gilston	S106	£0	£4,793,612	2027	2029	3
• Primary Care Health Centres (x2) Villages 4 and 7 Gilston	S106	£0	£6,150,000	2025	2026	2
• Gilston Park North	S106	£0	£3,209,310	2019	2026	8
• Gilston Park South	S106	£0	£7,304,355	2019	2026	8
• Stort Valley River Park	S106	£0	£4,225,324	2018	2026	9
Other - open space areas - Gilston	Developer	£0	£28,005,581	2018	2038	21
• Secondary School Playing Fields - Gilston	S106	£0	£4,657,249	2022	2026	5
• Primary School Playing Fields - Gilston	S106	£0	£3,630,372	2021	2026	6
• Leisure Centre with 25m swimming pool - Gilston	S106	£0	£4,520,250	2026	2031	6
Primary School V1; 3FE (3,337m <sup>2</sup> ) - Village 1 Gilston	S106	£0	£8,014,400	2016	2021	6
Primary School V2; 3FE (3,337m <sup>2</sup> ) Village 2 Gilston	S106	£0	£8,014,400	2026	2031	6
Primary School V4; 3FE (3,337m <sup>2</sup> ) - Village 4 Gilston	S106	£0	£8,014,400	2021	2026	6
Primary School V6; 3FE (3,337m <sup>2</sup> ) - village 6 Gilston	S106	£0	£8,014,400	2033	2035	3
Primary School V7 - Village 7 Gilston	S106	£0	£9,230,000	2021	2026	6
Creches x 6 - Villages 1 - 6 Gilston	S106	£0	£892,848	2018	2029	12
Secondary School 11FE (1 Nr x 21717m <sup>2</sup> ) Gilston	S106	£0	£61,547,603	2021	2038	18
Temporary Secondary School On-Site (2FE) - Gilston	S106	£0	£3,102,891	2019	2023	5
Community centre (6 Nr x 166m <sup>2</sup> ) Villages 1- 6 - with creche buildings - Gilston	S106	£0	£1,457,037	2021	2038	18
Community centre Village 7 - Gilston	S106	£0	£1,975,000	2021	2026	6
Libraries (1 Nr @ 400m <sup>2</sup> ) - Gilston	S106	£0	£704,170	2025	2026	2
Places of Worship - Gilston	S106	£0	£1,239,736	2020	2022	3
Police station (1 Nr @ 200m <sup>2</sup> ) - Gilston	S106	£0	£427,709	2021	2026	6
Waste Management - Gilston	S106	£0	£2,118,867	2018	2038	21
Public Art - Gilston	S106	£0	£2,510,125	2021	2038	18
Drainage - water, foul water pumping stations and sewage treatment works - Gilston	Developer	£20,889,481	£0	2016	2038	23
Utilities - on site diversions and new plant Gilston	Developer	£48,132,868	£0	2016	2038	23
• SUDS Allowances - Gilston	Developer	£9,513,635	£0	2016	2038	23
Utilities diversions in connection with road diversions - Gilston	Developer	£1,614,375	£0	2016	2038	23
Miscellaneous off-site drainage works - Gilston	Developer	£979,388	£0	2016	2038	23
Utilities Upgrades - off site Gilston	Developer	£18,539,052	£0	2016	2038	23
Strategic Earthworks - Gilston	Developer	£4,746,263	£0	2016	2026	11
Noise Mitigation - Gilston	Developer	£237,313	£0	2018	2020	3
Enabling works - Gilston	Developer	£5,706,263	£0	2016	2026	11
Section 38 Agreement - On Site Roads/Drainage Gilston	Developer	£0	£13,558,380	2024	2038	15
Section 278 Agreement - Off Site Roads/Drainage Gilston	Developer	£0	£14,633,486	2024	2038	15
Professional Fees & Survey Costs - Gilston	Developer	£48,165,084	£0	2020	2027	8

Source: Gilston site promoters and PBA 2014

## 6.2 Infrastructure assessment and the deliverability of the scheme

6.2.1 Some infrastructure items are considered as necessary to enable development to take place, such as securing appropriate access, utilities and drainage and sewage infrastructure. The ability to provide necessary infrastructure requirements helps to inform the developability of the strategic sites. Here we highlight a few infrastructure issues identified through the review of this assessment.

**There is a need to clarify an acceptable plan for the River Stort crossings**

- 6.2.2 Securing strong transport linkages between the development and Harlow town centre are considered critical to the delivery of this scheme, (as well as other transport linkages within East Herts, and the motorway network). As such securing an upgrade to the existing bridge and an appropriate new bridge crossing across the River Stort will be vital to the delivery of the 10,000 dwellings scheme.
- 6.2.3 For the 2,500 dwelling scenario a view is needed from Essex County Council as to whether there is sufficient capacity for the existing bridge to accommodate the planned growth and also a cross border view from HCC about the scale of growth and its impact on the east west corridor.
- 6.2.4 The infrastructure schedule (for the 10,000 dwelling scenario) includes the following cost estimates for a new bridge and upgrade of the existing:
  - Upgrade of the existing central river Stort crossing - £13m
  - A second new eastern crossing linking to Temple Fields employment area - £38m
- 6.2.5 The landownership for securing this second preferred eastern crossing is currently in third party ownership and at the developer surgery, PBA were informed that negotiations on securing this access were ongoing. We understand there may also be scope for an alternative western crossing, but it is unclear if this alternative route will be acceptable to Essex County Council (the highway authority). Any third party land ownership issues would also need to be resolved in order to secure this alternative access.

**The sewage infrastructure strategy is evolving but questions remain over its delivery**

- 6.2.6 Due to the uncertainty surrounding the timing of capacity upgrades to the Rye Meads sewerage infrastructure, the promoters have proposed to manage waste infrastructure onsite using waste water treatment plants. This would be independent of Thames Water, so the promoters will require either a water company to adopt the infrastructure, or alternatively to identify some company to own and manage this plant and works – the approach to longer term management of this onsite infrastructure will need to be detailed to inform the masterplan stage.
- 6.2.7 The proposed sewage infrastructure strategy is documented in a report titled Sewage Treatment and Drainage Strategy prepared by AECOM in December 2013. This identifies a solution based on four sewage treatment works and four treatment plants. Site topography has been taken into account to demonstrate this infrastructure can be accommodated. The cost assessments provided for this work appear broadly reasonable for the individual plant and works proposed, though specific details are not included. In broad terms, the identified solution to manage the sewage on site appears deliverable in terms of the technology, cost and physical capacity. However, this type of infrastructure and its discharge is severely regulated by the Environment Agency (EA) and so we need to understand how the EA might respond to this proposal.
- 6.2.8 Initial consultations by AECOM with the Environment Agency (EA), the licensing authority responsible for issuing permits to allow appropriate discharge into the River Stort, have been taken account of in assessing the level of phosphorus discharge into the River Stort. The promoters recognise that the discharge consents set by the EA are tight, and have acknowledged the need to mitigate for this. However, a copy of an e-mail correspondence from the EA, dated 16th Dec 2008, as part of the appendix to the Sewage Treatment and Drainage Strategy report by AECOM states the following:

*'The Stort is a BAP Chalk Stream. Early indications from a sampling point near Burnt Mill would indicate that the current Phosphate levels are well above the current suggested levels under the Water Framework Directive limits set by UKTAG. We do not yet know what our*

*policy will be on allowing further discharges into waterbodies that are not meeting "good" status. It may be that we could object to them. Ideally we would recommend that some sort of catchment Phosphorus analysis should be completed. We would like to stress that we are currently trying to reduce Phosphate in the Stort and will be carrying out ongoing investigations into how best this can be achieved.' Rachel Keen, EA Dec 2008.*

6.2.9 The proposed sewage infrastructure strategy is based on treating the foul water on site and discharging into the River Stort. This will need a permit from the EA. However, the concerns highlighted above by the EA could pose a threat to the delivery of this sewage treatment option. As the advice from the EA is somewhat dated. It is recommended that EHDC should consult with the EA to confirm that a permit to discharge into the River Stort would be forthcoming if the on-site waste treatment plan option is pursued.

6.2.10 If for any reason the On-site option cannot be progressed, based on discussions with Thames Water (see para 4.2.4), it is possible that an offsite solution based on an upgraded Rye Mead Wastewater Plant could be provided, but this could pose a delay to the delivery of the proposed scheme and would need an assessment of how the connecting infrastructure would be accommodated across the Stort Valley. The option for off-site delivery was not included as part of the proposal and so has not been assessed as part of this study and will need further review to confirm it can be physically connected and delivered.

#### **Is there upstream capacity for the utilities infrastructure?**

6.2.11 On site utilities costs appear sensible at this level of estimation. Given the scale of this scheme we having not seen the correspondence from the utilities companies to inform the offsite infrastructure costs, and the estimates currently include large lump sum unit figures. There is no indication of the scale of capacity and infrastructure required. We are assuming these costs and capacities are based on consultation with the utilities companies and determined by making an application to the utility company to confirm the point of connection for the demand and understand any upstream network reinforcement required and their costs. This will verify if the costs which have been identified in the cost schedules provided by the site promoters are appropriate and that capacity can be created to meet the needs of growth. Correspondence from the utilities companies should be submitted to show this scale of growth can be met in a timely manner to inform the delivery assessment.

#### **Off-site strategic transport infrastructure considerations**

6.2.12 The site promoters have developed a microsimulation model for the site and north Harlow. This model has been provided to ECC for agreement and should, subject to ECC agreeing to its suitability, be used to understand local traffic impacts and associated suitable mitigation. This model should be aligned with the HCC COMET modelling and Transport Vision to be prepared in 2016 so that consistent scenarios and forecasts are used.

6.2.13 However, and in lieu of the COMET model being used the recent results from the ECC VISUM modelling relating to J7a of the M11 indicate where some of the key challenges that are likely to require addressing and these are outlined below:

- A414 Eastwick Road where flows are likely to increase and increase further as a result of the junction 7a scheme;
- Junctions along Gilden Way
- A414 from Eastwick to Burnt Mill
- Capacity and management of the A1184 corridor and improvements to improve traffic flow at the A1184-High Wych junction;
- A414 Second Avenue to M11 J7 although flows reduce if J7a were to be delivered.

6.2.14 Away from the immediacy of the site, it is likely that the growth will impact on a range of strategic off site, and often cross border transport infrastructure requirements. There is a need for greater understanding of the cumulative impact of traffic movements along the A414 and an assessment of potential wider mitigation measures that need to be put in place to manage this and other development along the corridor can then be explored to see how the impact of this development can be mitigated. The precise nature of this will be informed following the HCC COMET modelling and Transport Vision to be prepared in 2016 with the impacts on the A10 and through Hertford warranting consideration. From this work, all off site strategic transport interventions need to be identified and assessed.

#### **Further work before Plan Examination**

6.2.15 The issues identified above relating to the deliverability of infrastructure for the 10,000 dwellings should be reviewed further with the site promoters and infrastructure delivery providers / licensing authorities prior to Examination and cannot be left for a future DPD document as they are fundamental and affect the deliverability of the scheme.

6.2.16 We consider that a scheme of upto 2,500 dwellings is more likely to be able to overcome the issues identified above relating to sewage infrastructure and bridge crossing. The Rye Meads Waste Treatment Plant has capacity and may be able to accommodate some of the 2,500 units upto 2021 – 2026 (see paragraph 4.2.4) providing connection can be secured. It is also likely that the existing river crossing may be able to accommodate the 2,500 dwelling scenario without the need for a new second river crossing, however an impact assessment would be needed to inform this scale of growth that can be accommodated by upgrading the existing road bridge crossing to Harlow and this will inform the threshold size for this smaller scenario. Evidence of utilities network capacity should be confirmed as these have not been previously provided or confirmed via the IDP.

### **6.3 Moving towards a delivery strategy beyond Plan Examination**

6.3.1 As part of the future on-going dialogue beyond the Plan Examination (assuming suitable solutions can be identified and the scheme is classed as developable), we would draw EHDC's attention to the following areas for further investigation:

#### **Understanding wider transport impacts and mitigation measures**

6.3.2 There is a need to explain the implications on the wider East Herts transport, particularly, highway network, especially as this scheme is with East Herts and members and residents wish to understand the impact and mitigations within the East Hertfordshire area as well as Harlow. The Gilston Area assessment should also ensure that suitable analysis of railway infrastructure capacity is undertaken to ensure that the modal shift is deliverable, particularly for a scheme of 10,000 dwellings. There is no evidence that this scale of growth has been assessed by the rail service providers.

#### **Will the scale of secondary school be acceptable to HCC?**

6.3.3 The infrastructure schedule includes the provision of a single 'super' secondary school that will be extended out to an 11FE capacity when complete, to serve all seven villages. The secondary school will be delivered in phases. The estimated cost of this secondary school is approximately £62m. Gardiner and Theobald cost consultants have estimated the build cost for this size of school at £36m. We recommend early consultation with HCC to assess the acceptability of an 11 FE secondary education school, better understand the cost differentials and the potential traffic impact of a school of this size on the local area. Consideration also needs to be given to both Primary and Secondary education provision, in terms of whether or not the planned supply would be sufficient to meet the level of demand that would be expected from such a large development.

### **What is the requirement for outdoor leisure infrastructure?**

- 6.3.4 Part of the development strategy is to create three substantial parks which appear to result in 171ha of park land. This has an impact on the gross amount of land needed for this development and will affect the viability assessment of gross to net land area and the dwellings per hectare assumption, which are discussed in the viability assumptions section.
- 6.3.5 There is a need to fully understand the impact of such a major parkland investment – it is appreciated that this is an important part of the overall place making vision by the promoters, and has been carefully developed, and could be part of a significant feature in helping to lift the values of the development in this area and contribute to the provision of accessible open space for both Harlow, and East Herts residents. However, it will require substantial ongoing maintenance resources and how this is to be funded and managed should be considered as part of the ongoing masterplan process.

### **Is the indoor leisure infrastructure required?**

- 6.3.6 The proposal includes the provision of a leisure centre with a 25m swimming pool. Clarity will be needed on whether such provision would form part of the infrastructure requirement for this scheme as part of the developer contributions or whether this would be a private facility. For now it has been assumed as part of the site infrastructure in the viability assessment. However, detailed consultation is required with EHDC leisure services team to assess whether this infrastructure is required as an ‘infrastructure item’ and how it will be managed. The infrastructure cost review includes some detailed comments relating to the cost assumptions which should be refined over time.

### **Social and community infrastructure**

- 6.3.7 The infrastructure cost schedule includes a comprehensive list of social and community infrastructure including a library, place of worship, police stations and community centres. The detailed requirements for this will be refined as masterplan is developed, including the longer term management of some of these facilities.

### **Cross border infrastructure**

- 6.3.8 The development will impact on the wider transport networks in Harlow, East Herts and the M11, (which, going forward is likely to be part funded via a CIL in the future and may need to take account of paying over CIL receipts collected by East Herts to support infrastructure needed in adjoining Harlow.
- 6.3.9 The cumulative impacts of development at Gilston need to be considered along with Sawbridgeworth and development at Bishops Stortford South along the A1184 and M11 J7 corridor as well as with development at Hertford, Ware and East of Welwyn in terms of the impacts on both the A414 through Hertford and the A414/A10 junction.

## 7 EAST OF WELWYN GARDEN CITY STRATEGIC SITE INFRASTRUCTURE ASSESSMENT

### 7.1 Introduction

7.1.1 Policy EWEL1 Land East of Welwyn Garden City of the Draft Preferred Options District Plan 2014, states that:

*'To meet long-term housing needs Land East of Welwyn Garden City is identified as a broad location for development. East Herts Council will test through a Development Plan Document (DPD) the feasibility of Land East of Welwyn Garden City to accommodate around 1,700 new homes and supporting infrastructure in accordance with Policy DPS4 (broad locations for development). Development shall not proceed until the adoption of the DPD.'*

7.1.2 A developer surgery took place in October 2014 to provide PBA an opportunity to discuss with the site promoters the deliverability of the scheme in terms of known constraints, infrastructure requirements, phasing and viability assumptions. A considerable amount of work has been undertaken by the promoters in helping to inform the presentation at the developer surgery.

#### Is there clarity over landownership?

7.1.3 This scheme considered as part of this study is being jointly promoted by Lafarge Tarmac and Gascayne Cecil. Lafarge Tarmac stated at the developer surgery held in October 2014 that there is a memorandum of agreement between the two land owners to produce a single masterplan, thus addressing any obstacles and concerns relating to piecemeal delivery of this site. The site promoters have carried out various site investigations and as part of their proposal have submitted a number of accompanying reports (see East Herts web site).

#### What quantum of growth have we assessed?

7.1.4 This scheme straddles the Welwyn Hatfield and East Herts administrative boundary. In order to inform the infrastructure and viability assessment, the scheme has been divided between the two administrative areas. The development within the Welwyn Hatfield area is known as WGC5 and is estimated to include 1,400 to 1,800 dwellings – though decisions on this are pending further investigation into land condition assessments.

7.1.5 The infrastructure cost schedule that has been submitted is for 1,700 dwellings in East Herts and this is the scale of growth that has been assessed by PBA.

#### Initial concept plan

7.1.6 The emerging concept plan as shown in figure 7.1 has been based on an assessment of the landscape, topography, ground conditions, constraints, opportunities and infrastructure mitigation measures. These assessments have been informed by EHDC and other service providers at previous meetings with the promoters.

7.1.7 The concept plan is starting to define the site boundary and layout for the scheme. Work on this will be refined as the plan moves towards a masterplan. Detailed work on the merits of the layout, form, landscape and any Green Belt release will be a matter for consideration by EHDC and is not part of this assessment.

7.1.8 The promoters are already engaged with HCC to discuss the sand and gravel extraction strategy as the site is within the sand and gravel belt, and the emerging concept plan will be informed by the any emerging minerals extraction strategy.

Figure 7.1 Original East of Welwyn Garden City concept plan



Source: Lafarge Tarmac 2014

### What are the infrastructure requirements?

- 7.1.9 The site promoters have submitted a high level infrastructure schedule setting out the necessary infrastructure requirements to support the planned growth, including estimate costs.
- 7.1.10 Table 7.1 is a summary of the infrastructure cost schedule, this highlights the developer enabling cost of approximately £32m and development infrastructure costs of approximately £30m which will be incorporated as a cost input to inform the viability appraisal. The cost schedule includes an allowance of £3.6m towards off site strategic infrastructure costs such as library, public transport etc. These have not been included as a cost input in the viability appraisal and instead will be informed by the level of CIL overage.
- 7.1.11 However, it should be noted that the final list of strategic infrastructure relevant for CIL and S106 will be refined in consultation with the developers and service providers (see section 4) if EHDC decides to move towards adopting a CIL. If a CIL is not adopted, then some of these costs will be captured via a S106 mechanism instead.

Table 7.1 Summary of infrastructure costs for East of Welwyn Garden City

Infrastructure Type	Sum of Developer enabling works	Sum of Development specific infrastructure (S106 / s278 site specific)	Sum of Strategic infrastructure cost ( CIL Regs 123 list)
<b>East of Welwyn</b>	<b>£32,216,287</b>	<b>£30,450,088</b>	<b>£3,564,566</b>
Community	£0	£561,957	£286,488
Education	£0	£10,082,158	£0
Green infrastructure / outdoor sport	£0	£9,269,634	£0
Health	£0	£3,636,188	£0
Management & adoption	£0	£2,153,212	£0
Site preparation	£11,970,075	£0	£0
Transport highway	£6,803,717	£4,102,342	£0
Transport other	£0	£644,597	£3,278,078
Utilities & drainage	£13,442,495	£0	£0

Source: Lafarge Tarmac and PBA – 2014 (Note East of Welwyn = East of Welwyn Garden City)

7.1.12 In addition to the above infrastructure, a cost input for the provision of accommodating 15 pitches (scale determined by EHDC) for Gypsy and Travellers and Travelling Show people has also been included as a cost input in the viability assessment.

#### **When is the infrastructure required?**

7.1.13 An estimate of when infrastructure is likely to be required has been incorporated based on our initial assessment. This identifies the following:

- Trigger points for infrastructure
- Cost estimates for the infrastructure
- Funding categories for the infrastructure provision.

7.1.14 The information in table 7.2 has informed the cash flow assessment for the viability appraisal. It should be noted that this cashflow assessment is highly likely to change as plans are refined with further inputs from the site promoters and service providers. Where possible, costs have been ‘pushed back’ and delivery timescales extended to help with the cashflow. The CIL costs are not factored into the appraisal cashflow and an instalments policy is likely to be introduced to help support cashflow.

7.1.15 The infrastructure schedules included are based on the site promoter’s assessment of what is required and how this will be delivered, however infrastructure service providers may have a different view on how some of this infrastructure might be delivered and this will be refined at the next round of stakeholder consultations.

Table 7.2 Infrastructure requirements, costs and cashflow

Project	Funding Source	Enabling works	S106 / s278	Cost start date	Cost end date	Delivery duration (years)
Welwyn Access/roundabout junctions into Birchall Farm that includes drainage,	S278	£0	£826,406	2018	2023	6
East of Welwyn Primary Roads (1620m x 12m)	Developer	£2,549,034	£0	2018	2023	6
East of Welwyn Secondary Roads (2704 x 12m)	Developer	£4,254,683	£0	2018	2023	6
East of Welwyn - new alignment of Birchall Lane/ Cole Green Lane (1048m x 12m)	S278	£0	£2,309,530	2018	2023	6
East of Welwyn - new alignment of A414/Holwell Lane roundabout	S278		£140,000			
East of Welwyn - new Roundabouts on Birchall/ Cole Green Lane	S278	£0	£826,406	2018	2023	6
Pedestrian and cycle linkage through the new Panshanger Country Park - assumed included in strategic site costs	S278	£0	£0			
Welwyn - Library Facilities	CIL	£0	£0	2020	2027	8
Welwyn - Bus service contribution (Annual contribution)	CIL	£0	£0			1
Welwyn - Accessibility contribution	CIL	£0	£0			1
Welwyn - Travel Plan Measures	S106	£0	£644,597	2020	2027	8
Welwyn - sports & leisure facilities	S106	£0	£1,085,347	2019	2026	8
East of Welwyn green infrastructure, openspace, sports & woodland	S106	£0	£8,184,287	2022	2027	6
Welwyn - new 2 FE Primary School (based on 2000 m2)	S106	£0	£4,517,688	2020	2027	8
Welwyn - Playing Fields - school	S106	£0	£771,313	2020	2027	8
Welwyn Servicing and delivery of site for Secondary School	S106	£0	£275,469	2020	2027	8
Welwyn - Contribution to Secondary School	S106	£0	£3,636,188	2020	2027	8
Welwyn - Nursery Education and childcare	S106	£0	£881,500	2020	2027	8
Welwyn - Contributions to Youth Facilities	S106	£0	£0	2020	2027	8
Welwyn - Health Centre	S106	£0	£3,636,188	2020	2027	8
Welwyn - Community centre	S106	£0	£451,769	2020	2027	8
Welwyn - Recycling facilities	S106	£0	£110,188	2023	2024	2
East of Welwyn on site utilities	Developer	£8,739,692	£0	2018	2023	6
East of Welwyn - off site utilities upgrades	Developer	£4,702,803	£0	2018	2023	6
East of Welwyn - drainage	Developer	£4,443,642	£0	2018	2023	6
East of Welwyn earth works	Developer	£1,254,869	£0	2018	2020	3
East of Welwyn off site drainage	Developer	£452,210	£0	2018	2020	3
Welwyn - Acoustic Barrier	Developer	£220,375	£0	2018	2020	3
Welwyn - Section 38 Agreement - applied to on-site roads Welwyn	Developer	£0	£1,526,025	2022	2030	9
Welwyn - Section 278 Agreement - applied to off-site road Welwyn	Developer	£0	£627,187	2020	2027	8
Welwyn -Professional fees and survey costs	Developer	£5,598,979	£0	2016	2038	23

Source: Lafarge Tarmac and PBA – 2014 (Note East of Welwyn and Welwyn = to East of Welwyn Garden City)

## 7.2 Infrastructure assessment and the deliverability of the scheme

7.2.1 Some infrastructure items are considered as necessary to enable development to take place, such as securing appropriate access, utilities, drainage and sewage infrastructure. There are other items of infrastructure that are necessary to secure sustainable development such as education, health, transport etc. The ability to provide these infrastructure requirements helps to inform the developability of the strategic sites.

### Sewage infrastructure delivery options

7.2.2 To gain an understanding of the existing wastewater network capacity and impact of the large scale development, Lafarge Tarmac commissioned THDA, who submitted a Developer's Enquiry to Thames Water Utilities Ltd (TWU). The outcome of the enquiry, (outlined in the accompanying TWU Sewer Impact Study and File Note prepared by THDA), confirmed that whilst the existing network has insufficient capacity and there are two suitable upgrade options that could help deliver large-scale development in this location that would enable Birchall Garden Suburb to come forward in good time to facilitate an earlier delivery of the scheme. These options are as follows.

7.2.3 Option 1 to provide an additional pipe of 1200 mm diameter immediately downstream of the development site for a total length of 342m. This would provide approximately 410m<sup>3</sup> of on-line storage. Pass-forward flows to the trunk sewer would continue to be controlled by the flow control device in the downstream network.

7.2.4 Option 2 to construct an off-line storage tank with a volume of 180m<sup>3</sup>, with an adopted return pump arrangement, connecting to the trunk sewer, near Poplars Green Lodge. The volume would need to be stored for a maximum of 3.5hrs, which is the time taken for the trunk sewer to return to dry weather flow conditions following the critical duration of 1 in 20 year return period event. The volume would then be pumped back to the trunk sewer during dry weather flow.

7.2.5 These options confirm that whilst there is an insufficient capacity in the network, two storage options are available to provide a local solution to the capacity issue in case upgrades to the waste water and sewage treatment works do not take place to facilitate the planned growth. THDA have provided cost estimates for the foul drainage infrastructure which have been included in the cost schedule. These costs may require review as more detailed information becomes available and further information is known about Thames Water's investment strategy to accommodate the planned growth.

### **Off-site strategic transport infrastructure considerations**

7.2.6 Welwyn Hatfield Borough Council (WHBC) are currently preparing their Local Plan which considers the allocation of 12,500 new houses by 2031 the public consultation for which is due to commence in early 2015. Circa 2,500 houses are proposed on 6 sites East of Welwyn Garden city north of the A414 and west of Birchall Lane. Various infrastructure requirements are likely on area-wide basis. Some of these are outlined below.

7.2.7 The Welwyn Hatfield modelling has concluded that measures to improve Junction 3 of the A1M should be required to include signal optimisation and potential capacity improvements on the southbound off-slip. These measures should be pursued with appropriate cross-boundary cooperation between Welwyn Hatfield District Council and EHDC. The following measures have been identified:

- A1(M) Junction 3 improvements - segregated left turn lane from A414 North Orbital Road to Comet Way to provide additional signal capacity at junction; duelling of northbound carriageway along Comet Way to remove pinch point and provide additional capacity on approach to Comet Way;
- A1(M) Junction 4 improvements - satellite roundabout enlargement to accommodate HGV turns;

7.2.8 The cumulative impacts east of the site and particularly the pinch-points on the A414, will be assessed through the HCC COMET modelling and Transport Vision to be prepared in 2016. At this stage and prior to this work it is not possible to establish what strategic interventions are likely to be required but it is likely to include the following:

- Improvements to widen capacity of the A414 corridor;
- Enhancements to the walk, cycle and public transport networks with a focus on east west connectivity to relieve pressure on the A414 wherever possible.

### **Is there upstream capacity for the utilities infrastructure?**

7.2.9 On site utilities costs appear sensible at this level of estimation. However for the offsite costs, which include large lump sum unit figures, there is no indication of the scale of capacity and infrastructure required. We are assuming these costs and capacities are based on consultation with the utilities companies. The Infrastructure Topic Paper did not confirm existing capacity. The only way to determine capacity would be to make an application to the utility company to confirm the point of connection for the demand and understand any upstream network reinforcement required. This will verify if the costs which have largely been identified in the cost schedules provided are appropriate and that capacity can be created to meet the needs of growth. Generally any costs associated with the provision of utilities will be met by the developer and the utility provider, however, as the assessments have been

undertaken it would be prudent to review the correspondence from the utilities companies to ensure they have confirmed that this scale of growth can be met in a timely manner to inform the delivery assessment.

### **7.3 Moving towards a delivery strategy beyond Examination**

7.3.1 For the dialogue beyond the Plan Examination, the review comments in the cost schedule have included areas for further refinements and we would draw EHDC's attention to the following areas for more detailed assessment.

#### **Education infrastructure**

7.3.2 The secondary school provision will be shared with the adjoining development based within the Welwyn Hatfield area. For now the cost assessment has been based on the HCC guidance and land has also been included in the cost assumptions for the school and school playing fields. There will need to be close liaison with the neighbouring authority over the funding and timely delivery of the secondary school.

#### **Landscaping, parks, and woodland**

7.3.3 Approximately £9m has been included for various play areas, allotments, pavilion, woodland, outdoor sports and amenity green space<sup>8</sup>. 26 ha of land are allocated for woodland and an allowance has been included for the management of this. The majority of the open space for sports and recreation and indeed the potential playing pitches may be provided within the former landfill part of the site (i.e. on the Welwyn Hatfield side of the border). So care and pragmatism will be needed when assessing the scale of infrastructure required as each authority is likely to have different standards and the provision may be higher than might be expected. The key will be to have a strong mechanism in place for the sustainable management of the woodland and open space in place, either via a trust that has some income generating mechanism attached to support the on-going revenue liability or by local authority adoption with a commuted sum for managing it. As part of further ongoing refinements of the infrastructure schedule, it would be helpful to understand what elements of green infrastructure and outdoor sports provision has been accounted for in the infrastructure cost assessment.

#### **Cross border issues**

7.3.4 The location and funding of infrastructure such as schools, public transport, play areas, and community centre has been costed and incorporated in the viability assessment. However, as plans are refined, the approach to funding this will need to clarify which authority should secure the contribution and which funding mechanism to use. For instance, both authorities may seek S106 contributions towards the school or alternatively require the developer to build the schools. In the case of CIL funded items such as the library and possibly some of the public transport schemes, CIL may be collected by East Herts but the infrastructure may be situated in Welwyn Garden City – East Herts can contribute CIL proceeds towards the cost of infrastructure across different district boundaries, but there will need to be member agreement to fund this.

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<sup>8</sup> With regard to the playing fields, the original costs assumed 15ha of playing pitches which is too high, we have been informed that this cost have been reduced by £2m. PBA were informed of this amendment after the cash flow model for the viability appraisal was set up and so have not included this reduction.

## 8 BISHOP'S STORTFORD SOUTH STRATEGIC SITE INFRASTRUCTURE ASSESSMENT

### 8.1 Introduction

8.1.1 Policy BISH7 South of Bishop's Stortford states that:

*'As part of the mixed-use development of this area, between 750 and 1,000 homes will be provided between 2016 and 2026', Policy Bish 1*

8.1.2 Land for 250 dwellings is dependent on whether land is required to meet the wider needs for secondary education infrastructure; if this need is removed the site can provide additional dwellings.

8.1.3 A developer surgery took place in October 2014 to provide PBA an opportunity to discuss with the site promoters the deliverability of the scheme in terms of known constraints, infrastructure requirements, phasing and viability assumptions. The promoters are preparing to submit a planning application imminently and have prepared a briefing note to inform the developer surgery.

#### Clarity over land ownership, site boundary and size of scheme assessed

8.1.4 The site is being promoted by Countryside Properties figure 8.1, for a mixed use scheme including 750 residential units, employment, and neighbourhood centre and community infrastructure. The scheme is required to safeguard land for a secondary school. If after an agreed timescale, the school site is no longer required, then the land can be released for a further 250 units. PBA have assessed the 750 unit scheme for this study.

Figure 8.1 South of Bishop's Stortford Concept plan



Source: Countryside Properties (2014)

### What are the infrastructure requirements?

8.1.5 An infrastructure cost schedule has not been provided by the site promoter for this scheme, though some information setting out the onsite enabling cost and contributions towards specific infrastructure items have been provided. Therefore a review of the cost assumptions relating to individual infrastructure items has not been undertaken, though some commentary is provided on the costs provided by the promoter.

8.1.6 Table 8.1 is a summary of the infrastructure cost schedule based on the information provided. This highlights the developer enabling cost of approximately £28m and development infrastructure costs of approximately £11m. The cost schedule includes an allowance of £1m towards off site strategic infrastructure costs such as library and public transport – these have not been included as a cost input in the viability appraisal and instead will be assessed based on the level of CIL coverage instead.

8.1.7 However, it should be noted that the final list of strategic infrastructure relevant for CIL and S106 will be refined in consultation with the developers and service providers (see section 4) if EHDC decides to move towards adopting a CIL. If a CIL is not adopted, then some of these costs will be captured via a S106 mechanism instead.

Table 8.1 Summary of infrastructure costs for Bishop's Stortford South

Infrastructure Type	Sum of Developer enabling works	Sum of Development specific infrastructure (S106 / s278 site specific)	Sum of Strategic infrastructure cost ( CIL Regs 123 list)
<b>South of Bishop's Stortford</b>	<b>£27,700,000</b>	<b>£11,160,000</b>	<b>£910,000</b>
Community	£0	£700,000	£220,000
Education	£0	£8,160,000	£0
Health	£0	£500,000	£0
Transport highway	£23,000,000	£1,800,000	£0
Transport other	£0	£0	£690,000
Utilities & drainage	£4,700,000	£0	£0

Source: South of Bishop's Stortford site promoters and PBA 2014

8.1.8 In addition to the above infrastructure, a cost input for the provision of accommodating seven pitches (scale determined by EHDC) for Gypsy and Travellers and Travelling Show people has been included as a cost input in the viability assessment.

### South of Bishop's Stortford site enabling costs revised for this study

8.1.9 In all but the South of Bishop's Stortford infrastructure cost summary (table 8.1), the developer enabling costs are within a range of £19k to £22k per unit (this includes Gilston and Ware which have some high site specific infrastructure requirements). At South of Bishop's Stortford we estimate the cost per unit at approximately £37k per unit for onsite enabling costs, which is considered unusually high (based on what we currently know about the site as we are not aware of the need for any major link road or sewer to service this site which would account for the unusually high onsite enabling costs). No further details are provided by the promoter as to the assumptions informing these cost estimates.

8.1.10 For the purpose of informing the viability assessment we have adjusted the transport highway costs to approximately half the cost quoted above, this has the effect of bringing the overall site enabling cost to approximately £20k per unit instead of the £37k per unit (this is within the Harman range for strategic infrastructure costs). No change is proposed to the S106 costs, which remain at just under £15k per unit giving a total on site cost allowance £36k per unit. As work progresses in refining the detailed masterplan and cost estimates, there should be further discussion with the site promoter to better understand the basis for the cost estimates and the viability inputs can be adjusted accordingly.

### When is the infrastructure required?

8.1.11 An initial estimate of when infrastructure is likely to be required has been incorporated based on our initial assessment of when the infrastructure is likely to be required. This identifies the following:

- Trigger points for infrastructure
- Cost estimates for the infrastructure
- Funding categories for the infrastructure provision.

8.1.12 The information in table 8.3 has informed the cash flow assessment for the viability appraisal. It should be noted that this cashflow assessment is highly likely to change as plans are refined with further inputs from the site promoters and service providers. Where possible, costs have been ‘pushed back’ and delivery timescales extended to help with the cashflow. The CIL costs are not factored into the appraisal cashflow and an instalments policy is likely to be introduced to help support cashflow.

Table 8.3 Infrastructure requirements, costs and cashflow

Project	Funding Source	Enabling works	S106 / s278	Cost start date	Cost end date	Delivery duration (years)
Bishop's Stortford South onsite transport /SUDs / green spaces	Developer	£23,000,000	£0	2018	2023	6
Works on Whittington Way and parking management works on London Road Bish South	CIL	£0	£0	2018	2023	6
Bish South Libraries	CIL	£0	£0	2018	2023	6
Education - secondary schools (HCC Toolkit 2008 rounded and indexed)	S106	£0	£3,500,000	2018	2023	6
Education - primary schools (HCC Toolkit 2008 rounded and indexed)	S106	£0	£4,200,000	2018	2023	6
Education - other - early years (HCC Toolkit 2008 rounded and indexed)	S106	£0	£460,000	2018	2023	6
GP Surgery and other wrap around care (Countryside estimate)	S106	£0	£500,000	2018	2023	6
Bish SS Community centre (Countryside estimate)	S106	£0	£700,000	2018	2023	6
Bishop's Stortford South onsite - utilities	Developer	£4,700,000	£0	2017	2019	3

## 8.2 Infrastructure assessment and the deliverability of the scheme

8.2.1 Some infrastructure items are considered as necessary to enable development to take place, such as securing appropriate access, utilities, drainage and sewage infrastructure. There are other items of infrastructure that are necessary to secure sustainable development such as education, health, and transport. The ability to provide these infrastructure requirements helps to inform the developability of the strategic sites.

8.2.2 The promoters have appointed consultants to undertake a drainage assessment and further investigations are ongoing regarding off site works relating to the ditch / culvert under London Road. Surface water drainage will be attenuated on-site at greenfield runoff rates, plus 30% for climate change, again indicating that no major investment is required for onsite drainage infrastructure.

8.2.3 Thames Water have stated that the East Herts area and neighbouring districts area served by the Rye Meads Sewage Treatment Works. The Water Cycle Study that was undertaken in 2008/9 forecast growth and the consequential impact on Rye Meads Sewage Treatment Works. However, the planned growth has not realised due to the downturn in housing development, hence there is capacity in terms of sewage infrastructure to serve this site up to a period between 2021 – 2026 (depending on rate of take-up), though this will need to be kept under review.

8.2.4 It was confirmed that Triconnex have reviewed the availability of services and utilities on behalf of Countryside Properties and their work demonstrates that all key services are available and that there is scope to upgrade connections, where necessary – thus supporting the deliverability of the site should this need to come forward in the first five years of the Plan.

### **Transport infrastructure considerations**

8.2.5 The site has previously been subject of a Planning Appeal decision where an Inspector declared the site was suitable to accommodate two relocated secondary schools. This appeal decision has been used by the current site promoters to justify supporting transport infrastructure.

8.2.6 The final determination of the offsite impacts of the site and its contribution to cumulative impact will be established through the HCC COMET modelling and Transport Vision to be prepared in 2016. However, and in lieu of the COMET model being used the recent results from the ECC VISUM modelling relating to J7a of the M11 indicate where some of the key challenges that are likely to require addressing and these are outlined below:

- Capacity constraints along the Bishop's Stortford Bypass;
- Growth of traffic within Bishops Stortford Town Centre;
- Growth in traffic within Sawbridgeworth;
- Traffic growth along the A120 Hadham Road;
- Traffic flow increases through M11 Junction 8.

8.2.7 However, the results of the Junction 7a VISUM modelling indicate that some substantial benefits are likely to be realised with improvements to Junction 7a – this seems to have benefits on Bishop's Stortford town centre as traffic does not then use Bishop's Stortford to get to junction 8 of the M11.

### **8.3 Moving towards a delivery strategy beyond Examination**

8.3.1 As part of this on-going dialogue, the review comments in the cost schedule have included areas for further refinements and we would draw EHDC's attention to the following areas for more detailed assessment.

#### **The need for health and education infrastructure on site**

8.3.2 Due to the lack of existing capacity in the area, NHS England has stated that a GP surgery facility will be required on site. A cost contribution for a GP surgery and other wrap around care has been included in the cost assumptions for the site specific infrastructure cost assessment. The site promoters confirmed at the developer surgery that this facility can be accommodated in the neighbourhood centre.

8.3.3 Land has been reserved on this site to provide a secondary school - should the need arise, in the longer term, to serve a wider catchment area. For now the assumption is that this site will make a S106 contribution towards the cost of secondary school<sup>9</sup> places based on the HCC toolkit. A primary school and early year's provision will be provided on site.

#### **Site layout and transportation**

8.3.4 The site offers potential to contribute to more sustainable travel within the town and the detail design and layout of the masterplan should reflect this. The location of the site inside of the Bishops Stortford bypass is positive in accessibility terms, and offers opportunity to create real modal choice. The masterplanning should reflect this location with sustainable linkages being provided and prioritised towards the town centre (aligning the accesses so that there is a bias towards walk and cycle and public transport connections towards town and cars are directed towards the bypass.

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<sup>9</sup> As the planning application is expected to come in before a CIL will be in place.

8.3.5 Further consideration may be needed on the layout with regard to landscape quality assessment and a re-think about how to treat the Hertfordshire Way may be needed; we draw attention to the Nene Way which goes through the centre of a development in Upton in Northampton as an example for consideration. This could assist in reducing land take and improve overall site design and layout as well as viability. Given the importance of the treatment of this and the previous Inspector's report for this site, it is recommended that the site promoters and EHDC may consider submitting this scheme for a Design Review Panel consideration prior to detailed masterplanning.

## 9 SITE COMMENCEMENT AND DELIVERY RATE

### 9.1 Introduction

- 9.1.1 Reviewing delivery rates and commencement dates is important in informing the cash flow elements of the viability appraisal and informing the Local Plan trajectory. This section sets out a revised commencement date and delivery rate to that included in the Draft Preferred Options District Plan 2014 (as set out in the trajectory included in section two of this study).
- 9.1.2 Clean, ready to assemble sites with little in the way infrastructure constraints, can generally commence much more swiftly, and depending on the number of access points / outlets at any one time, the rate of delivery can be increased. However this will be influenced by the scale of 'effective demand' and number of other sites on the market at any point in time.
- 9.1.3 A range of factors will affect the commencement date and estimates of the delivery rates at the strategic sites, including the number of outlets (builders involved on a site at any point in time), market demand and supply of sites at any point in time, the economy, the complexity in the delivery of infrastructure, site conditions, the impact of the mineral extraction policy, pre-application and developer contribution negotiations.

### 9.2 Research into delivery rates of strategic sites

- 9.2.1 ATLAS undertook research<sup>10</sup> on build out rates to inform the EHDC Interim Strategy Report. Table 9.1 below is an extract of the ATLAS research showing the total capacity, average build out rates and highest sales rates achieved. This shows that the average delivery ranges from 77 units per annum to 358 per annum.

Table 9.1 Research by ATLAS showing average per annum delivery rates for strategic sites

Local Authority	Site Name	Capacity	Average pa	Highest pa
Thurrock UA	Chalford Hundred	5307	205	677
Peterborough	Hampton – Southern Township	5200	321	548
Bedford	Wixams	4500	265	496
Milton Keynes	Broughton Gate & Brocklands	4000	281	439
Colchester	Highwoods	3910	77	257
Basildon	The Wick, Wickford	3555	93	306
Harlow	Church Langley	3528	167	513
South Cambridge	Cambourne	3300	234	620
Suffolk Coastal	Grange Farm	3150	83	146
South Glos	Emersons Green Village Area	2870	358	564
Broadland	Thorpe Marriot	2854	79	279
Stevenage	Great Ashby	2191	184	319
Brantree	Great Notley Garden Village	1766	131	282
Huntingdonshire	Lowes Farm, St Neots	1400	215	336
Ipswich	Ravenswood	1200	136	226
Aylesbury	Fairford Leys (Coldharbour)	1200	133	349

Source: ATLAS July 2014

<sup>10</sup> ATLAS Notes on build out rates for strategic sites (July 2014) undertaken for EHDC

- 9.2.2 The ATLAS research assessment note states 'Our experience indicates that developers and promoters often tend to overstate trajectories and underestimate the timescales required to bring sites forward. Forecasts could be based upon an ambitious "best case scenario" and/or presented in a positive way to fit to Local Authority land/housing supply needs and aspirations. Care is needed to independently verify whether forecast trajectories would be realistic'.
- 9.2.3 We have reviewed research<sup>11</sup> on delivery rates since 1980 which indicates that the rate of development historically achieved for strategic sites in the vicinity of East Herts is approximately 200 dwellings per annum for individual sites, whilst the average time between application submission and first build year is about five years.
- 9.2.4 To ensure that EHDC's revised housing trajectory reflects a realistic housing delivery rate and commencement period, we have reviewed and adjusted some of the assumptions proposed by the strategic site promoters based on our assessment of the likely impacts of the minerals extraction policy, complexity of infrastructure requirements, market supply, and general feedback from developers on delivery rates. We acknowledge that these are estimates at a very early stage and various factors could affect the commencement and delivery rates.
- 9.2.5 It is sensible to assume a minimum time lag of about three to five years between approval of detailed application and commencement for providing strategic infrastructure. This will of course vary between sites depending on the scale, capacity of existing infrastructure, ease of connections to utilities and sewage infrastructure, and the need for any accompanying permits.

### **9.3 Effect of mineral assessment and extraction on commencement**

- 9.3.1 We understand from the Minerals authority that all of the strategic sites, apart from South of Bishop's Stortford will need to assess the scope of possible mineral extraction on site prior to development. Most of the promoters (apart from East of Welwyn Garden City) are in the process of undertaking minerals assessments to inform any sand and gravel mineral extractions that may be needed.
- 9.3.2 If extraction is deemed to be economically viable (which often in these situations it is not otherwise the market would have already identified this opportunity), it could take anything from three years to much more depending on the extent of reserves and the extraction plan agreed with HCC. More complicated sites with high upfront infrastructure requirements and or greater mineral deposits could take considerably longer to deliver than the three to five years and account of this has been factored into our estimates.
- 9.3.3 To expedite matters and reduce uncertainty over timescales, we recommend that HCC and EHDC should work with the site promoters to establish a scoping report based on determining the site boundary and desk research on what minerals are present. This should also recommend next steps to assess the consequential viability for extraction prior to development. A decision will then be required, balancing the trade-offs between the economic viability of possible mineral extraction, impact on sensitive areas of landscape, the time delay this might add to the housing delivery and the effect of this on the housing trajectory.

#### **A consolidation of national developers could impact on delivery rates**

- 9.3.4 There has also been a consolidation of house builders nationally and whereas it would have been sensible to assume 5 - 6 developers operating on a large site at any one time, it is more realistic to expect 2 – 4 national developers operating at any one site and this is what we have assumed. We are informed that each housebuilder is currently selling between 3 – 4 units per month, resulting in annual sales of between 70 to 200 market dwellings per site, which is within the rates identified in the previous research.

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<sup>11</sup> Research based on information supplied by East of England Local Authorities since 1980 to 2005 – Housing Delivery of Strategic Sites – Research Study by Collin Buchanan on behalf of Countryside Properties (2005)

9.3.5 Although we do not rule out higher delivery rates than this, indeed the ATLAS evidence does suggest some sites delivering an average above 200 units, for now we have adopted a cautious approach which can be reviewed through the annual monitoring report process.

9.3.6 Based on the above assumptions, table 9.2 sets out our estimated commencement date and average delivery per annum assumptions for each of the strategic sites. This has been informed by our understanding of the complexity of infrastructure, mineral sterilisation policy and general planned supply in the area.

Table 9.2 PBA estimate commencement date and delivery rate for the strategic sites

Site	Masterplan	Est planning app	Est start date	No of outlets	Aver delivery pa
South Bishop's Stortford	2015 - 2016	2017	2018 - 2019	2	75 - 100
PBA assumptions only, no indication from site promoter, though they have said they are working up towards submitting a planning application soon.					
East of Welwyn Garden City	2015 - 2017	2017	2022 - 2023	2 – 3	150 - 175
The PBA assumptions on delivery rate in line with the feedback from Savills on behalf of the site promoter. We are informed by EHDC, that having undertaken a minerals assessment, Lafarge Tarmac have estimated the need to allow 5.5 years for minerals extraction before any commencement can take place. They have indicated a start date in year 7 of the plan – which is realistic, especially as infrastructure delivery is not complicated, but approach to cross boundary delivery needs to be developed.					
Gilston Area	2015 – 2020	2020	2021 – 2030+	3 - 4	200 - 250
We note that the promoter considers a start date in the first five years of the plan and has suggested a delivery rate of 500 unit's pa. PBA considers this start date and delivery rate as very optimistic given the range of uncertainties over infrastructure delivery, wider strategic infrastructure capacity, mineral sterilisation policy, density and design, wider landscape considerations and the overall scale of development proposed at this location.					
PBA view is that the commencement date for Gilston is more likely to be around the mid to later part of the plan. It is difficult at this stage to be more precise until further details on infrastructure and minerals extraction are ascertained as part of the masterplanning work. Given the difference in start date and delivery rates between the PBA estimates and the site promoters' forecasts, it would be helpful to better understand the plans in place by the promoters in resolving the infrastructure delivery issues identified in this study to inform start date and delivery rate.					
Ware	2015 - 2018	2018	2020 - 2025	2-3	150 - 175
PBA assumptions are similar to the site promoters for Ware, though a more cautious approach is taken to the annual delivery rate to allow for the number of strategic sites coming forward. Initial delivery is based on existing capacity of infrastructure; however, concerted project management will be needed to maintain the trajectory on track after this capacity is absorbed. Further refinements may be needed once the findings of the minerals assessment are known.					

Source PBA 2014

9.3.7 The commencement dates and delivery rates set out in table 9.2 have been used to provide a very broad estimate of the timing of infrastructure in the previous section and cash flow to inform the viability assessment in the next stage of this study. Please note the assumptions informing these delivery rates will be continuously refined as more evidence is established and cyclical changes in market demand take effect. This will need to be updated prior to Examination once further information is available on some to the issues identified in this section and after discussion with the infrastructure providers and site promoters.

## 10 VIABILITY ASSESSMENT

### 10.1 Introduction

- 10.1.1 This section sets out the approach to development viability appraisals, a commentary on the market assessment and value zones, and the appraisal assumptions and appraisal findings.
- 10.1.2 The viability appraisals have been prepared in line with RICS valuation guidance. However, it is first and foremost a supporting document to inform the District Plan evidence base and planning policy.
- 10.1.3 As per Professional Standards 1 of the RICS Valuation Standards – Global and UK Edition<sup>12</sup>, the advice expressly given in the preparation for, or during the course of negotiations or possible litigation does not form part of a formal “Red Book” valuation and should not be relied upon as such. No responsibility whatsoever is accepted to any third party who may seek to rely on the content of the report for such purposes.

#### Approach to development viability appraisal

- 10.1.4 The PBA development viability models for residential development use the residual approach to development viability. The approach takes the difference between the development values and costs and compares the ‘residual land value’ with a threshold (or benchmark) land value to determine the balance that could be available to support strategic infrastructure cost and policy contributions.
- 10.1.5 In the case of the strategic sites, the model has been adapted to test for a range of different infrastructure requirements and when they are likely to be required. This is then built into the cashflow modelling to assess viability through the lifetime of the development, where costs and returns will be flowing through the development cycle.

### 10.2 Viability assumptions

- 10.2.1 As there has been little delivery of a major strategic site of the scales being considered by this study, and because we are still assessing at concept plan stage and expect much of the detail will be refined as the schemes are developed through to masterplan stage, it is not possible to have a perfect fit between the site profile and cost / revenue assumptions.
- 10.2.2 The site promoters have informed the viability assumptions for this assessment, these were reviewed by PBA and where appropriate adjustments have been amended to reflect a degree of consistency between the sites, local plan policies, wider stakeholder consultations, and desk based research by PBA, including previous viability assessment for the area<sup>13</sup>. The threshold land values adopted for this study have been informed by ATLAS and EHDC and have taken account of the threshold land values being adopted for viability work underway at neighbouring Welwyn Garden City. It is important to note that the viability assumptions will be refined as the concept plans for these strategic sites move closer to detailed masterplans and further discussions on these are expected to take place between the site promoters and EHDC following the publication of this report.

#### Sales value zones

- 10.2.3 An important determinant of viability of a site is its location and accompanying value zone, particularly for residential use. This feeds through into house prices and land values and thus site viability. So the starting point is to articulate the market value zones affecting the bulk of

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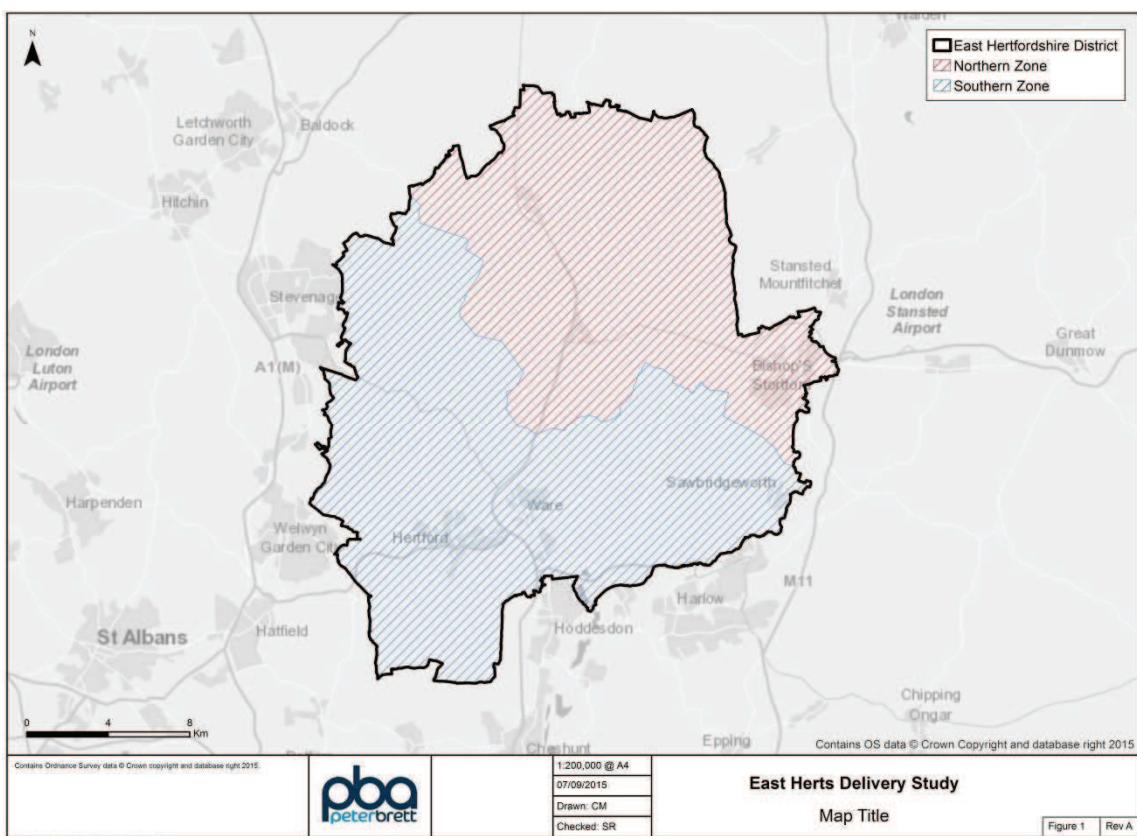
<sup>12</sup> RICS (January 2014) Valuation Professional Standards, PS1 Compliance with standards and practice statements where a written valuation is provided

<sup>13</sup> Assessing Viability by Lambert Smith Hampton – December 2012

the development. The value zones are based on 'appropriate available evidence' available from a range of sources.

10.2.4 Sales values are a reasonable, though imperfect proxy for value zones. An average house value range may be broadly correct however, it is possible to have some individual house price variations. Even between areas with different average prices, the prices of similar houses in different areas may considerably overlap. Therefore, to keep the process simple, account is taken of the likely future patterns of growth, and where appropriate broader value zones are merged. Figure 10.1 shows the value zone areas and values adopted for this study.

Figure 10.1 East Herts Value Zones for Residential Development



Source: PBA 2014 /15

10.2.5 The Whole Plan Viability report provides a summary of recent sales values for new properties being transacted. Based on this, stakeholder consultations and a review of background information relating to values and viability studies in the area we have adopted the following value zones have been adopted for whole plan viability study and this study:

- Northern zone consisting of Buntingford, Central rural villages and Bishop's Stortford @ £3,500 per sq. m
- Southern zone consisting of Ware, Hertford and western rural villages @ £3,700 per sq.m

10.2.6 It is important to highlight that these are approximations of values aimed at creating a simplified approach at this plan level assessment - however we acknowledge there are considerable variations which will be picked up at planning application stage. The research did identify some exclusive developments for very large, expensive properties in the central rural villages in the northern zone, however given the scale of development proposed in these

locations, it is suggested this area is best grouped with the northern zone in order to avoid complexity.

10.2.7 The table 10.1 below sets out the values that the strategic site promoters have suggested, and the generic value zones adopted by PBA.

Table 10.1 Sales values for the strategic sites

Strategic site	Promoter sales value	PBA values used
East of Welwyn Garden City	£3,767sq.m	£3,700 sq.m
North and East of Ware	£3444 sq.m	£3,700 sq.m
Gilston Area	£3,401 sq.m	£3,700sq.m
South of Bishop's Stortford	Not specified	£3,500 sq.m

Source: Site promoters and PBA 2014 / 15

10.2.8 The sales values proposed for the strategic sites adopt the PBA Whole Plan Viability assessment value zones. As can be seen from table 10.1 these sales values vary from the assumptions provided by the site promoters. The PBA assessment is based on the recent sites on the market and agent interviews. PBA is of the view that the strategic sites at North and East of Ware and Gilston Area will be affected by place making value zones and will be well connected for train stations serving a wider employment market, including London and Cambridge markets. For this reason, and as also noted by LSH (in their viability study for this area), values in this area are likely to be higher than those for Harlow.

### Scale, site density and land coverage

10.2.9 The scenarios tested for the viability assessment have been informed by EHDC. For South of Bishop's Stortford 750 housing scheme was assessed, and for East of Welwyn Garden City a scenario of 1,700 housing scheme was assessed. For the remaining two strategic sites, two scenarios were tested as the Draft Preferred Options District Plan 2014 includes a range of growth for the broad allocation. So for North and East of Ware, a scheme of 2972 dwellings was tested based on inputs provided by the site promoter and a generic scheme of 2,000 dwellings was tested based on a generic cost input reflecting development of this scale. Similarly for the Gilston Area, a scheme of 10,000 dwellings was tested and a generic scheme of 2,500 dwellings was tested based on a generic cost input reflecting development of this scale.

10.2.10 Policy HOU2 on housing density in the Draft Preferred Options District Plan 2014 notes that densities will vary according to the relative accessibility and character of locations. This density policy has informed the net developable area required to accommodate the scale of units proposed. For now we have made some revisions to the proposed land take and density assumptions proposed by the site promoters to reflect the density policy and EHDC clarification.

10.2.11 These revisions will be subject to more detailed discussions between the site promoters and EHDC to reflect the housing market and vision for the strategic site. It is possible at masterplan stage that average densities might be increased, or the percentage of net developable land to gross land might be increased or alternatively the overall number of units might be amended. These decisions will be informed at the Master planning stage based on a review of the landscape and wider design considerations.

10.2.12 The density, gross area, net developable areas and number of units adopted for this study are shown in table 10.2.

Table 10.2 Summary of the planned growth, land take and density assumptions

Site	Gross area (ha)	Net Area (Ha)	% of Gross area	Number of dwellings	Density (net ha) Policy / EHDC input
South of Bishop's Stortford	50	25	60%	750	30+
PBA/EHDC classification: Development classed as 'edge of settlement'. No change is proposed to the density for 30+ dph, but refinements expected once actual developable area is known.					
East of Welwyn Garden City	91	45.5	60%	1700	37.5
PBA/EHDC classification: Development classed as 'edge of settlement', Policy density is for 30 dph, 37.5 dph is considered at the upper end of what EHDC may consider acceptable, so no change proposed, but will need to demonstrate how this will be acceptable at in masterplan and layout stage.					
North and East of Ware	184	93	60%	2972	32
North and East of Ware generic	104	62.5	60%	2000	32
PBA/EHDC classification: Development classed as 'edge of settlement', hence the density is for 30 dph, no change is proposed to the 32 dph, but will need to demonstrate how this will be acceptable at in masterplan and layout stage.					
Gilston Area	444	267	60%	10,000	37.5
Gilston Area generic	111	67	60%	2,500	37.5
<p>This site is promoted as a series of linked rural villages. The submitted concept plan is based on a density of 47 dph (net). However, for now, EHDC have confirmed that a density of 37.5 dph should be adopted for the viability assessment as 47 dph is much higher than the policy for either a rural or edge of settlement development. Further discussions will be required following the publication of this report to assess the suitability of the higher density.</p> <p>From a market perspective, the higher density reflecting the inclusion of apartment style developments, could work well in this location given the easy commute to London as it would widen the new property offer which would help increase the rate of delivery. From our review of the previous housing assessment analysis commissioned by EHDC, the greatest shortage in supply was in the southern rural settlements, and so from a market perspective, creating a series of linked 'villages' is likely to be attractive to the market. However, we have not assessed this scheme from a design perspective, and how it fits within the landscape and other constraints and opportunities identified by the promoters at this stage in the study.</p>					

Source PBA 2014

10.2.13 Table 10.2 shows that the main change proposed is the reduction in density from 47 dph to 37.5 dph (net) for the Gilston Area and this is accompanied with a corresponding amendment to the land area assumptions to accommodate the scale of planned growth. Further work is clearly needed to assess the acceptable density for this site, which does not reflect the policy designations very well. The PBA response above is provided from a market and delivery perspective only. EHDC will need to come to a view on the overall capacity of the site when further design and layout considerations are taken into account.

### Build costs

10.2.14 The sources used for typical development costs include the Build Cost Information Service (BCIS) data from new builds which is published by the Royal Institution of Chartered Surveyors (RICS). The tender price data is rebased to East Herts prices using BCIS defined adjustments.

10.2.15 We note that at there are a variety of developers operating in the East Herts housing delivery market. It is widely considered that national developers are generally building at lower than BCIS cost rates, whilst local developers may not have the same economies of scale benefits and are more likely to be closer to the BCIS rates.

10.2.16 Approximations to represent the average over a range of scheme types have been used for costs such as external works, fees, finance and developers' profit margins. The development costs associated with the strategic sites are summarised in table 10.3.

Table 10.3 Cost summary

Type of cost	Assumption	Unit
Build cost (BCIS Dec 2014 Median rebased for East Herts)	£1036	Sq.m
Externals cost allowance	10%	Of build cost
Contingency allowance	5%	Of build costs & externals
Finance costs	7%	On net costs monthly cashflow
Professional fees	10%	Of build costs
Sales costs	3%	GDV
Developers' profit – market units	20%	GDV
Developers' profit – affordable units	6%	GDV

Source: PBA 2014

### 10.3 Plan policy costs

10.3.1 The review of the local plan policies for the whole plan viability assessment has informed the assessment of policy costs arising from the draft plan. Going forward developers will need to factor in policy and infrastructure costs in the value offered to purchase land.

### **Affordable housing policy**

10.3.2 One of the most significant items that impact on viability is the requirement to provide affordable housing. For all the strategic sites, 40% of affordable housing provision has been assumed in the viability assessment as a cost input. Different percentages of affordable housing have been tested to enable the EHDC to understand the effect of affordable housing on viability and the overage available to fund strategic infrastructure.

### **Gypsy and Travellers and Travelling Show people pitches**

10.3.3 There is an emerging requirement for the strategic sites to provide for Gypsy and Travellers and Travelling Show people pitches. It is anticipated that each pitch will on average be around 0.05 net hectares, this is based on general design guidance on pitch provision. This includes space for turning vehicles, storage and sufficient room for the average number of caravans per pitch (one and two caravans per pitch). The capital cost assumed for providing a serviced and 'ready to go' plot is estimated at £100,000 per pitch. Note this is a broad level estimate, and based on consultations and cost estimates undertaken by PBA in the Kent and Guildford area where there was a similar policy requirement. The actual costs could vary depending on site conditions, pitch and plot size. However, at this stage, the cost estimate provides a sensible assumption and is in keeping with the Harman guidance.

10.3.4 We have assumed that the pitches will be accommodated through sensitive masterplanning and phasing of delivery so as not to impact on general sales values of market housing. It is assumed that there will be no value in the transfer of the land for Gypsy and Travellers and Travelling Show people pitches to a public sector provider, whether that is a local authority or a registered provider. It is also assumed that the land will be made over as a serviced plot with land preparation, including access and hard standings and utilities all provided. Based on guidance from EHDC, a cost allowance of 15 pitches has been added to the three larger strategic site appraisals and 7 pitches for the South of Bishop's Stortford site. The final scale of pitches will be determined at the masterplan stage.

### **Water efficiency measures**

10.3.5 The Government has stated that in water stressed areas, it is possible to request additional water efficiency measures. As East Herts is in such a water stressed area, the Draft Preferred Options District Plan 2014 includes a policy (WAT 3) to seek a higher water efficiency standard.

10.3.6 Housing Standards Review<sup>14</sup> includes cost estimates based on Government assessment of water efficiency measure. These cost estimates have been applied to this appraisal based on an additional cost of £68 for a house and £43 for a flat to reach a water efficiency standard of 110 litres per day / per person.

### **Decentralised or District Heating system / low carbon heating**

10.3.7 Draft Preferred Options District Plan 2014 required all the strategic sites to provide a decentralised or District Heating system, or other low carbon heating system for residential and commercial use throughout the development, using locally sourced fuel. As part of the developer surgeries, all four strategic site promoters stated that they would not be providing any other form of low carbon heating system, or other low carbon measures beyond what is required in the Building Regulations.

### **Approach to infrastructure costs and site opening costs**

10.3.8 The approach to infrastructure costs matters as some infrastructure costs (such as site enabling costs and site specific infrastructure costs) are treated as a cost input in the PBA

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<sup>14</sup>DCLG Housing Standards Review – Illustrative Technical Standards Developed by the Working Groups August 2013 – Standard 4: Water Efficiency pages 87 – 92

viability model, whilst other costs such as strategic costs commonly funded by the community infrastructure have not been included as a cost input in the PBA viability appraisal and instead will be assessed based on the level of CIL coverage instead.

10.3.9 However, it should be noted that the final list of strategic infrastructure relevant for CIL and S106 will be refined in consultation with the developers and service providers (see section 4) and is dependent on EHDC deciding to move towards adopting a CIL (a decision on this has not been confirmed). If a CIL is not adopted, then some of these costs will be captured via a S106 mechanism instead.

10.3.10 The site promoters have produced high level infrastructure assessments to inform their concept plans reflecting development enabling and S106/ S278 costs for creating fully serviced sites. For now, most of the costs provided by the site promoters have been factored into the viability assessment as a cost input for the strategic sites, apart from the estimates provided by South of Bishop's Stortford<sup>15</sup>. It is assumed that ongoing discussions with the site promoters will help to refine the infrastructure cost assumptions as further details emerge and the plan progresses to masterplanning stage.

10.3.11 For the two generic scenarios at North and East of Ware 2,000 dwellings and Gilston area 2,500 dwellings PBA have assumed a site opening cost allowance of £20,000 per dwelling and a developer contribution allowance for S106 infrastructure of £20,000 per dwelling. This was based on a review of the range of costs and scale of development provided by the site promoters.

10.3.12 Going forward, if EHDC adopts a CIL, then in order to be compliant with the CIL regulations, the Council will prepare a CIL Regs 123 list and future contributions towards the cost of strategic infrastructure will be assessed based on viability and not on the scale of impact attributable to the site (though note there is scope to use S106 instead providing it is compliant with the clearly identified legislation). Duplication in developer contributions will be avoided by having a clearly defined Regs 123 list.

### **Approach to threshold land values**

10.3.13 There are two land values that are important to informing viability, the 'residual' land value and the 'threshold' land value. If the residual land value exceeds the threshold land value, the development is viable and can support a CIL charge. The distinction between the two is explained as follows:

- The residual land value is the value generated by a scheme, assuming that affordable housing and other policy costs are paid, and the developer makes a target profit after deducting development costs;
- The threshold land value is the price that a landowner will require to supply the land. For an unserviced site, as in the case of the strategic sites, without planning permission, a landowner will receive considerably less for the site, in order to allow the master developer / promoter to first service the site and fund the initial promotion costs to secure the planning consent to a fully serviced state.

10.3.14 The appraisal model assumes threshold land value based on an uplift from the existing use value (EUV) for the strategic sites that require greater opening up costs. A consistent approach has been applied to the threshold land values. Thus for all four strategic sites a threshold land value of £150k per gross acre has been applied, this value was provided by EHDC and ATLAS to reflect sites of this nature and ensure a competitive return to a willing landowner. It is important to appreciate that assumptions on threshold land values can only be broad approximations, subject to wide variations. This is taken account of in drawing conclusions and recommendations on whether sites are viable and overage and buffer to pay for any CIL relevant infrastructure costs.

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<sup>15</sup> See paragraph 8.24 and 8.25 in section eight for the approach to South of Bishop's Stortford.

## 10.4 Strategic site appraisal outputs

10.4.1 Part of the purpose of this assessment is to inform a possible CIL charge that the strategic sites can contribute towards the cost of strategic infrastructure. The PBA appraisal model has been set up to factor in the higher site enabling and S106 costs relating to the strategic sites, however, any infrastructure items judged in our opinion to be CIL relevant has not been included as a cost input in the viability assessment, instead these will be informed by the appraisal output and subsequent Regulation 123 list of CIL relevant infrastructure. A summary of the viability appraisal for each site based on 40% affordable housing is included at Appendix D.

10.4.2 The following is an explanation of how to interpret the information contained in the summary appraisal table 10.4 and 10.5. Reading the tables from left to right, successive columns are as follows:

- Site typology
- The value zone area the strategic site is in.
- Yield – the number of estimated dwellings assumed for the viability appraisal.
- The threshold land value is then deducted from the residual land value to arrive at the CIL balance or ‘overage’ available to contribute towards any infrastructure costs. The CIL balance is an estimate of the ‘maximum theoretical CIL’ i.e. the maximum CIL that could be charged consistent with the development being financially viable. Given the variations surrounding strategic viability appraisals, we consider this maximum as an approximate indicator, and as such we seek to have a considerable buffer between the overage and any CIL charge. It is not recommended that this theoretical maximum be directly translated into a CIL charge

10.4.3 Note that the CIL overage is not a direct calculation of deducting the threshold value from the residual land value. As affordable housing is not liable to CIL charge, an allowance for this is included in the analysis. The CIL overage / or CIL liable figure is calculated from the CIL chargeable floor area (total GIA minus GIA of the affordable units).

### The viability findings

10.4.4 The appraisal output tables 10.4 summarises the impact of the full policy cost of 40% affordable housing, gypsy and traveller sites, water efficiency, estimated S106 and developer enabling costs. This shows that at 40% affordable housing and at the assumed threshold land values, all the schemes are viable. Most of the strategic sites (apart from Gilston Area) can contribute up to £100 - £150 per sq.m towards the cost of strategic infrastructure costs in the form of a CIL charge.

Table 10.4 Viability appraisal summary based on affordable housing at 40%

Site typology	Dwellings	Affordable housing	Net site area	Total floorspace	chargeable floorspace	Residual land value	Threshold land value	Headroom	
	No.	%	Ha	Sqm	Sqm	Per Ha	Per Ha	Per Ha	CIL liable
North and East of Ware	2,972	40%	92.88	258,564	169,404	£1,396,614	£617,775	£778,839	£427
North and East of Ware - generic 2000	2,000	40%	62.50	174,000	114,000	£1,484,391	£617,775	£866,616	£475
East of Welwyn Garden City	1,700	40%	45.33	147,900	96,900	£2,111,553	£617,775	£1,493,778	£699
Gilston Area	10,000	40%	266.67	870,000	570,000	£723,250	£617,775	£105,475	£49
Gilston Area generic 2,500	2,500	40%	66.67	217,500	142,500	£1,658,114	£617,775	£1,040,339	£487
South of Bishop's Stortford	750	40%	23.44	65,250	42,750	£1,183,545	£617,775	£565,770	£310

Source: PBA 2015

10.4.5 Aside from the cost impact of affordable housing on scheme delivery, a very high proportion of affordable housing (say over 30%) on large strategic sites can lead to community cohesion

challenges due to the very large concentration of low income residents and this should be taken into account when considering the affordable housing policy for large strategic sites.

10.4.6 The appraisal output tables 10.5 summarises the impact of 30% affordable housing, gypsy and traveller sites, water efficiency, estimated S106 and developer enabling costs. This shows that at 30% affordable housing and at the assumed threshold land values and adopted threshold land values, all the schemes are viable. Most of the strategic sites (apart from Gilston Area) can contribute up to £150 - £200 per sq.m towards the cost of strategic infrastructure costs in the form of a CIL charge and still have a considerable buffer to reflect variations in assumption inputs. For an average house, scale of CIL charge equates to approximately £14,000 to £19,000 CIL contribution per dwelling.

Table 10.5 Viability appraisal summary based on affordable housing at 30%

Site typology	Dwellings	Affordable housing	Net site area	Total floorspace	chargeable floorspace	Residual land value	Threshold land value	Headroom	
	No.	%	Ha	Sqm	Sqm	Per Ha	Per Ha	Per Ha	CIL liable
North and East of Ware	2,972	30%	92.88	264,508	197,638	£1,649,729	£617,775	£1,031,954	£485
North and East of Ware - generic 2000	2,000	30%	62.50	178,000	133,000	£1,746,470	£617,775	£1,128,695	£530
East of Welwyn Garden City	1,700	30%	45.33	151,300	113,050	£2,410,932	£617,775	£1,793,157	£719
Gilston Area	10,000	30%	266.67	890,000	665,000	£1,020,393	£617,775	£402,618	£161
Gilston Area generic 2,500	2,500	30%	66.67	222,500	166,250	£1,955,818	£617,775	£1,338,043	£537
South of Bishop's Stortford	750	30%	23.44	66,750	49,875	£1,412,189	£617,775	£794,414	£373

10.4.7 The capacity for the Gilston Area (10,000) scheme to contribute to a CIL charge at 30% affordable is about £50 per sq.m, given the scale of development this would equate to something in the region of £47.5m. The reason for the lower coverage for this scheme is due to the substantial site opening costs and wide range of onsite infrastructure included to create a development of this scale.

10.4.8 The East of Welwyn Garden City has lower on site infrastructure cost and this is reflected in the higher coverage available. The cost allowance relating to the Bishop's Stortford South scheme appear to be high for a 'clean greenfield site' of this nature and it would be worth exploring the scheme further with the site promoter. The scheme also includes a lower density assumption which will affect the viability.

10.4.9 The two generic scenarios assessed are shown to be viable but it should be noted that they are based on generic cost assumptions. In the case of North and East of Ware generic scenarios, our costs assumptions have allowed for £80m towards developers enabling and S106 costs. However, further work will be needed with the site promoter and service provider to come to a view on the actual site costs for this scale of growth, and whether the £80m is sufficient to cover. We expect it is likely that other sites sharing the education facilities provided at this site will need to contribute towards the cost of this facility and some variations to the density and open space assumptions maybe required to ensure the scheme is able to meet any costs above the allowance assumed.

10.4.10 The Gilston Area 10,000 scheme scenario has some of the highest on site infrastructure requirements (due to the wider range of infrastructure being provided on site) and so has the lowest headroom to contribute as much towards strategic infrastructure costs in the form of a CIL contribution. This will be an important consideration at masterplanning stage, as the impact of the development on the wider transport network in particular is likely to be considerable and measure to fund upgrades will be an essential part of the consideration of deliverability. The Gilston Area generic 2,500 scenario includes an allowance of £100m towards the cost of developer enabling and site specific (S106) infrastructure and there is a healthy coverage to support a CIL charge in line with the other sites. At this stage, this cost allowance is based on our review of the per unit costs of a number of similar schemes, however, further review of infrastructure for this scheme would be necessary to refine this cost estimates.

10.4.11 The viability assessment, based on our initial assessment of the likely build rates and infrastructure requirements suggests that there will be a considerably long lead time, before

any positive revenue is generated. It will be important at the masterplanning stage to work with the site promoters to understand what measures are to be in place to manage the long period, when there is no income coming in, and high costs are being incurred, and how EHDC can support this by possibly reviewing the timeframes when policy requirements and S106 contributions are paid.

## 10.5 Strategic site CIL charge options

10.5.1 The CIL Regulations allow the charging authority to introduce charge variations by strategic sites. Given these are strategic sites are at an early stage in the planning process, we tend to allow for a buffer from the overage to reflect the potential for unknown costs that could arise at detail masterplanning stage. On the basis of an assessment of costs and values informing the appraisals, our findings suggest the CIL charge range options as summarised in Table 10.6 below.

Table 10.6 CIL charge options

Strategic site	% Affordable	CIL range per sq.m
All other strategic sites	40%	£100 to £150
Gilston Area	40%	£0
All other strategic sites	30%	£150 - £200
Gilston Area	30%	£50

Source: PBA 2014/15

10.5.2 Given the large unknowns in costs for strategic sites, we have sought to include a significant buffer from the maximum possible CIL charge, and to adopt a simple approach to the CIL charging schedule.

## 11 A DEVELOPABLE AND DELIVERABLE PLAN

### 11.1 Introduction

11.1.1 This section sets out conclusions on whether the strategic sites are developable and outlines where further work is required to inform this. Some site specific actions are set out here to inform deliverability, whilst the next section outlines recommendations that are common to all the strategic sites.

### 11.2 Are the strategic sites developable?

11.2.1 On the basis of information received and reviewed and the assumptions made (and subject to the findings relating the COMET modelling and Transport Vision), we are of the view that the North and East of Ware, East of Welwyn Garden City, and South of Bishop's Stortford are 'developable'. We do not have the same confidence to assess the Gilston Area strategic site as developable at present and consider further assessment is required in relation to the proposed sewerage infrastructure and site access options. Based on the now dated response from the Environment Agency (EA) it is not clear that the chosen option for the sewerage infrastructure will receive the discharge consents from the EA. Some further testing and engagement with the EA is needed or an alternative off site option needs to be explored, possibly linked to the Rye Meads Plant. Secondly for a scheme of 10,000 dwellings, to be considered as developable, it is necessary to have greater clarity about the route to access the site in terms of the river crossing and certainty over land ownership. These two aspects of infrastructure will require further analysis.

11.2.2 For Gilston area, we were also asked by EHDC to assess a 2,500 dwelling generic scenario. This smaller scale development may be easier to resolve in terms of site access. Although at a generic level this is found to be as viable, further work is needed to determine the capacity of the existing River Stort crossing to accommodate this scale of growth without necessitating the need for a second river bridge crossing, and how sewerage, utilities and other social infrastructure will be provided.

#### Progressing the strategic sites towards delivery

11.2.3 Each strategic site has been assessed in respect of its prospect to come forward over the plan period in terms of infrastructure requirements, viability and policy contributions. This section draws together the findings and makes suggestions for progressing work on delivery for each of the strategic sites based on the findings from our assessment.

### 11.3 North and East of Ware

11.3.1 A scheme of 2,972 dwellings has been assessed with infrastructure costings provided by the site promoter and a generic scheme of 2,000 dwellings has been appraised for viability based on high level cost assumptions. The land ownership is in place and we are informed that there is an agreement in place between the two site promoters to develop a single masterplan for the scheme. There are no known third party land ownership constraints impacting on the delivery of any critical infrastructure.

11.3.2 Deliverable solutions to critical infrastructure (particularly sewage, utilities, site access and provision of a secondary education) needed to enable the development to take place have been identified and shown to be achievable for the larger scheme.

11.3.3 Strategic transport requirements (before the findings from the Transport Vision are known) include improvements to the A10/A1170 roundabout as well as the provision of a new link road between this junction and the Widbury Hill area to provide a northern bypass of the development to distribute traffic away from the town centre and between the site and the strategic road network.

- 11.3.4 The scheme viability appraisal has factored in costs of infrastructure, policy requirements including S106/S278 infrastructure, affordable housing and other policies and at this stage is considered to be viable over the lifetime of the development. Strategic infrastructure requirements have not been factored into the viability assessment as a cost input and will instead be informed by a CIL charge. Current viability assessment suggests that if a CIL mechanism to delivery strategic infrastructure was adopted by EHDC, then a CIL charge of around £150 per sq.m may be possible depending on the scale of affordable housing policy and viability assumptions adopted. Further discussion should take place with the promoters and infrastructure providers to consider the most suitable infrastructure funding mechanism.
- 11.3.5 Tipping point viability assessment to inform the minimum scale of units to support the same scale of infrastructure suggests that the scheme can be reduced to 2000 units. For the 2,000 unit generic scheme, an allowance of £80m has been factored into the appraisal to support site opening and infrastructure costs. However, further infrastructure planning work is required, working with the site promoters and service providers to assess the cost of infrastructure needed to support this reduced scheme. Although broadly it looks viable, it may require other developments to contribute to the cost of some of the major infrastructure such as the secondary school and some flexibility on the development density and affordable housing policy.
- 11.3.6 Both scheme scenarios are in our opinion is considered to be developable, though more detailed assessment will be needed on the scale of infrastructure required for the 2,000 dwelling scenario. The scheme as the potential to move to deliverable status with concerted effort from all stakeholders, then building work could perhaps commence in 2020. The early scheme delivery is predicated on utilising existing capacity of critical infrastructure; however, a strong project management of infrastructure delivery will be needed to ensure the annual delivery remains on track.

## 11.4 East of Welwyn Garden City

- 11.4.1 The site in our opinion is developable and could move towards 'deliverable' status with concerted action, however, feedback from the site promoter suggests that commencement is likely to take place in year seven and so this site will remain as having 'developable' status.
- 11.4.2 The overall scheme straddles across the boundary of the two adjoining local authorities of Welwyn Hatfield Borough and East Hertfordshire District Council. This assessment has focused on the element relating to East Hertfordshire for 1,700 units. The land ownership is in place and we are informed that there is a formal agreement between the two site promoters to develop a single masterplan for the scheme. There are no known third party land ownership constraints impacting on the delivery of any critical infrastructure.
- 11.4.3 Deliverable solutions to critical infrastructure, particularly sewage, utilities, site access and secondary education<sup>16</sup>, needed to enable the development to take place have been identified and shown to be achievable. A mineral extraction assessment has been undertaken and this has informed the concept plan and delivery trajectory.
- 11.4.4 Strategic transport infrastructure requirements include improvements to both Junctions 3 and 4 of the A1M to provide additional junction capacity including signalisation, carriageway dualling and realignment measures. Other roundabout improvements are required to the A414 junctions with Holwell and Birchall Lane to provide additional capacity between Welwyn Garden City and Hertford. However, further details will come from the COMET modelling and Transport Vision work currently underway.
- 11.4.5 The appraisal has factored in the costs of infrastructure and policy requirements, including S106 infrastructure and affordable housing and at this stage the scheme is considered to be viable over the lifetime of the development. Strategic infrastructure requirements across both

<sup>16</sup> Currently included in the Welwyn Hatfield element of the concept plan but the details will be refined at masterplan stage.

local authority areas have not been factored into the viability assessment as a cost input and will instead be informed by a CIL charge. Current viability assessment suggests that if a CIL mechanism to delivery strategic infrastructure was adopted by EHDC, then a CIL charge of around £150 to £200 per sq.m may be possible depending on the scale of affordable housing policy and viability assumptions adopted. Further discussion should take place with the promoters and infrastructure providers to consider the most suitable infrastructure funding mechanism.

11.4.6 There are a number of cross boundary infrastructure matters, relating to transport, education, open space and green infrastructure which will require a joint delivery strategy between East Herts Council, Welwyn Hatfield Council and HCC - particularly the delivery of upgrades to transport in Welwyn Garden City town centre. The creation of the major public open spaces as part of the place shaping and the reclamation of former minerals extraction and landfill sites will also need collaborative work between the two adjoining authorities. This work will need to consider how to maximise connectivity into existing centres and how the long term management of the strategic open spaces will be funded.

## 11.5 Gilston Area

11.5.1 A scheme for 10,000 dwellings (for delivery in part beyond the plan period) and a further generic scheme of 2,500 dwellings were assessed for the Gilston Area scheme. Land ownership for the development currently being promoted is in place and we are informed that there is an agreement between the two site promoters to develop a single masterplan for the scheme.

11.5.2 The Gilston Area scheme (10,000) is assessed as having the potential to become 'developable' but is not there yet as satisfactory solutions need to be identified to the delivery of sewage infrastructure and suitable crossings across the River Stort.

11.5.3 It is likely that the lower scale of growth assessed for this site at 2,500 units is more likely to be found as developable, utilising capacity over the existing bridge (to be confirmed) and existing sewage infrastructure capacity at the Rye Meads Plants (to be confirmed). This could then provide the time and space to explore further work on securing a suitable access and solutions to longer term sewage infrastructure needed to support the higher growth scenario.

11.5.4 EHDC has suggested that these infrastructure items are not likely to be required for at least ten years or more (for the 10,000 dwelling scenario), hence having less clarity is to be expected and there is time to work up solutions possibly through the preparation of a further DPD<sup>17</sup>. We have considerable reservations about this possible approach and we are concerned at the uncertainties created by the gap in the evidence on the deliverability of essential infrastructure. We do not think that decisions on the infrastructure needed to make the scheme work and an assessment of the deliverability of this infrastructure can be expected to be left until after the Examination of the District Plan.

11.5.5 Further work is needed to address the following issues before the Gilston Area (10,000) scheme is considered as developable:

a) In respect of the on-site sewage treatment infrastructure, confirmation is needed that any discharge permits into the River Stort will be forthcoming from the Environment Agency (EA). If the solution currently presented by the promoters cannot be delivered, an alternative solution should be identified. We understand that there is likely to be an alternative off-site solution based on the Thames Water plant at Rye Meads. If the off-site solution is adopted, some assessment should be included on how connecting infrastructure can be brought to the site given the various landscape designations. In providing a general view, we consider a solution to the sewage infrastructure ought to be found, but it could impact on cost and timing, which will need to be further reviewed.

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<sup>17</sup> We do not recommend the preparation of a future DPD as the way forward in helping to progress this scheme towards delivery (see recommended next steps section).

b) With regard to securing the eastern crossing over the River Stort, (the preferred location by Essex County Council), confirmation is yet to be provided that access to the land to provide the crossing is in place. PBA have been informed that negotiations on securing this access continue. We understand there may also be scope for an alternative western crossing, but it is unclear if this alternative route will be acceptable to Essex County Council, or whether all relevant land ownerships are in place to secure this alternative access. Confirmation of an acceptable River Stort crossing solution is needed together with an assessment of the impact on viability of the provision of this solution.

11.5.6 If suitable solutions are identified to enable the scheme to be assessed as 'developable', then as part of developing a masterplan we recommend discussions should take place with the site promoters to explore the following considerations as the site moves towards delivery:

- a) Clarify the design concept and acceptable density assumptions; this will inform the overall land take (the net to gross land take required). The viability assessment has highlighted the importance of agreeing the approach to development density that would be acceptable to EHDC. This site is promoted as a series of linked rural villages. The submitted concept plan is based on a density of 47 dph (net). However, for now, EHDC have confirmed that a density of 37.5 dph should be adopted for the viability assessment as 47 dph is much higher than the policy for either a rural or edge of settlement development. Further discussions will be required following the publication of this report to assess the suitability of the higher density. From a market perspective, the higher density reflecting the inclusion of apartment style developments, could work well in this location given the easy commute to London as it would widen the new property offer which would help increase the rate of delivery. From our review of the previous housing assessment analysis commissioned by EHDC, the greatest shortage in supply was in the southern rural settlements, and so from a market perspective, creating a series of linked 'villages' is likely to be attractive to the market. However, we have not assessed this scheme from a design perspective, and according to whether it is conceived and promoted as either an urban extension to Harlow or a stand alone settlement.
- b) Explore the optimal connectivity, access and long term management of the three major parks proposed as part of the place making strategy and consider whether the scale of parkland proposed is actually required for this development. This will impact on the gross to net land area and overall viability assessment.
- c) Revisions to the site boundary based on a review of the landscape character and determine the appropriate location for the community infrastructure, scale and location of employment.
- d) A single very large secondary school is proposed to serve the development and the acceptability of this in terms of scale, cost, location and transport impacts needs consultation with the various stakeholders. Our cost team have suggested a significant cost difference between the cost provided by the site promoters and that considered by Gardiner and Theobald. A service provider input is needed to inform the scale and cost consideration. If there is to be a single large secondary school, the impact this will have on local transport movements (given its scale) should be understood in broad terms.
- e) There are various cross boundary infrastructure requirements in particular transport, regeneration, affordable housing, and green infrastructure delivery which would benefit from a joint delivery strategy between EHDC, Harlow Council (HC), HCC and ECC.
- f) Parallel to the infrastructure strategy there should be further work on viability and the cash flow strategy, refining the appraisal to demonstrate how delivery of infrastructure will be supported, particularly given the scale of enabling infrastructure, phasing strategy and timescale of delivery.
- g) The critical piece of transport infrastructure that is required for both the scheme and wider cumulative growth is the new Junction 7a of the M11 as well as associated and major capacity improvements at Junction 7 of the M11. In addition to strategic road access, the cumulative pressures and site specific pressures on the A414 need consideration and the strengthening

of non-car based strategies along this corridor need exploration. The site promoters are aware of the need to bridge the River Stort at an additional location to the existing Fifth Avenue Bridge and have been committed to exploring a location east of this existing crossing. However, further details on transport will come from the COMET modelling and Transport Vision work currently underway.

- h) A scheme of this scale will need take account of the capacity of the existing rail infrastructure particularly at Harlow station, and planned upgrades to accommodate this growth.
- i) The scheme viability appraisal has factored in costs for the enabling infrastructure, and policy requirements including S106 infrastructure, on the basis of current expectations and best estimates. At this stage the scheme is considered to be viable at 30% affordable housing, but marginal with a policy requirement for 40% affordable housing.
- j) Various strategic infrastructure requirements across both Harlow and East Hertfordshire have not been factored into the viability assessment as a cost input and these will instead be informed by a CIL charge. Though further discussion on the assumptions adopted and the most suitable infrastructure funding mechanism will need to take place with the various stakeholders following the publication of this study. Current viability assessment suggests that a CIL charge of up to £50 per sq.m may be possible depending on the scale of affordable housing policy.
- k) The generic 2,500 dwelling scenario has been assessed based on a cost input of £40k per dwelling for all enabling and developer requirements. Going forward this will need to be informed by an infrastructure assessment for this scale of growth and could be affected by the cost of secondary education and securing sewage infrastructure at this location.
- l) For the offsite utilities infrastructure assessment it is assumed that the site promoters will have already made an application to the utility company to confirm the point of connection for the demand and off site reinforcement requirements have informed their cost schedule. However, given the scale and general location of this development, EHDC should seek to see evidence of confirmation from the utility companies to ensure that any upstream network reinforcements required can be delivered and the costs already factored into the assessment are an accurate reflection of the likely costs.

## 11.6 South of Bishop's Stortford

- 11.6.1 The proposal at South of Bishop's Stortford is in our opinion developable and could readily move towards 'deliverable' status.
- 11.6.2 A proposal for 750 units has been assessed on the basis that land has been reserved for a possible future secondary school to serve the wider area. Land ownership is in place and we are informed that the promoter intends to submit a planning application imminently. There are no known third party land ownership issues impacting on the delivery of any critical infrastructure. The promoters have confirmed that deliverable solutions to critical infrastructure needed to enable the development to take place can be delivered.
- 11.6.3 The scheme appraisal has factored in revised costs of infrastructure, policy requirements including S106 infrastructure, affordable housing and other policies and at this stage is considered viable at 40% affordable housing. Strategic infrastructure requirements have not been factored into the viability assessment as a cost input and will instead be informed by a possible CIL charge. The current viability assessment suggests that if a CIL mechanism to deliver strategic infrastructure was adopted by EHDC, then a CIL charge of up to a maximum of £150 per sq.m may be possible depending on the scale of affordable housing policy and viability assumptions adopted. Further discussion should take place with the promoters and infrastructure providers to consider the most suitable infrastructure funding mechanism.

11.6.4 In moving towards deliverability, further consideration should be given to the treatment of the Hertfordshire Way<sup>18</sup> and land safeguarded for a possible secondary school. Further thought on how to treat the Hertfordshire Way may be appropriate, so that the route does not sever the overall site into two.

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<sup>18</sup> We note the example of the Nene Way, which goes through the centre of the Upton development in Northampton and has incorporated an 'urban design' treatment of a national right of way within the development so as not to sever the development.

## 12 CONCLUSIONS AND RECOMMENDATIONS

### 12.1 General conclusions

- 12.1.1 This report has set out the findings of an exploration of the developability and deliverability of four strategic sites currently envisaged by East Herts District Council as forming a major part of the planned provision included in the Draft Preferred Options District Plan 2014. The work has followed an approach to testing developability and deliverability consistent with the terms of the Framework and hence reflecting the way a planning inspector examining the soundness of the submitted plan might be expected to address the matter.
- 12.1.2 The study has been informed by a considerable body of work that has been undertaken and provided by landowners and developers promoting schemes in the general locations that the Council is considering. This information and assistance has been invaluable. We have independently reviewed and verified the information, provided our own professional judgement where necessary and taken account of input from EHDC and ATLAS (who are acting as impartial advisors on this study).
- 12.1.3 At this stage whilst the Council has put forward proposals for a spatial strategy as part of its programme of community and stakeholder engagement in preparing the plan, it has not finalised its proposals. There is further work to do in establishing the level of development it is seeking to provide through the plan; as well as related studies that will have an influence upon which locations and sites will ultimately come forward; not least the Countywide COMET transport modelling and Transport Vision, a review of the Green Belt, and the wider strategic infrastructure planning.
- 12.1.4 Inevitably large scale schemes such as those covered by this study are by their nature complex, and the evidence to inform their developability will evolve over time as options are explored, appraised and refined. Our assessment has reflected the stage of development that the sites have reached and limited to reviewing the options to meeting strategic infrastructure requirement that have been submitted by the site promoters. We have sought to ensure that there is sufficient evidence in place to provide the Local Authority with assurance that the strategic sites are developable, and then to provide recommendations to support delivery considerations following adoption of the local plan.
- 12.1.5 There has been some delay in preparing this report due in part to various other transport modelling. In the mean time, we are aware that some of the issues identified in this study are already being actioned by the Council and promoters and some information that might be reported in this study may have moved on.
- 12.1.6 On the basis of information received and reviewed and the assumptions made (and subject to the findings relating to the COMET modelling and Transport Vision), we are of the view that the North and East of Ware, East of Welwyn Garden City, and South of Bishop's Stortford are 'developable'. We do not have the same confidence to assess the Gilston Area strategic site as developable at present and consider further assessment is required in relation to the proposed sewerage infrastructure and site access options. It is likely that the lower scale of growth assessed for Gilston Area at 2,500 units could be found to be developable, utilising capacity over the existing bridge (to be confirmed) and existing sewerage capacity at the Rye Meads Plants (to be confirmed). This could then provide the time to explore further work on securing a suitable access and solutions to longer term sewerage infrastructure needed to support the higher growth scenario.

### 12.2 Important caveats

- 12.2.1 Although a considerable amount of effort has been placed in engaging with various stakeholders and gaining a detailed understanding of the findings of the various transport models that have been commissioned to date which inform current deficit and future transport

infrastructure requirements, and challenges (which included inputs from HCC), the findings from this study cannot pre-empt the findings from the recently commissioned Countywide COMET transport modelling and Transport Vision work by HCC which is expected in 2016. This will form the basis for informing the strategic transport requirements to enable the planned growth to take place. Therefore, although reference is made to some strategic transport requirements, an important caveat to this study is that any recommendations relating to transport will be deferred to the Transport Vision 2016 and the Countywide COMET modelling.

12.2.2 Similarly a number of the strategic sites are affected by parallel work undertaken by PBA on the Green Belt review. Any recommendations in the delivery study relating to development on sites within the Green Belt do not override the study findings of the Green Belt review and it will be for the Council to determine where sites might be acceptable within the Green Belt based on a consideration of all the evidence. It will be for the Council to continue to develop its proposals on the location, scale and form of development to be part of its overall spatial development strategy in the Plan after taking account of the findings from these various studies.

### **12.3 Recommended next steps**

12.3.1 It will be for the Council to take a view on the findings of this study, especially with regard to critical infrastructure necessary to enable the development to take place, and engage with the site promoters and key stakeholders to progress the assessment of any constraints in informing the developability of the strategic sites proposed in the District Plan.

12.3.2 We cannot see the additional value to be gained from developing a further Development Plan Document for the Broad Locations, as considerable work in shaping the site strategy has been undertaken as part of the concept plans prepared by the three affected strategic site promoters in informing this study. Council resources might instead be invested in a proactive delivery mechanism intended to help support the delivery of the strategic sites. With this in mind, EHDC should consider establishing a Planning Performance Agreement<sup>19</sup> (PPA) or similar approach to the delivery of each of these sites. The PPA should include engagement with key service providers and establish an approach to community consultation and also the early engagement of a Design Review Panel to inform the scheme design.

12.3.3 Following publication of this study we recommend that the site promoters and EHDC jointly review the viability and infrastructure assumptions adopted in this study. Further consideration should be given to the most suitable infrastructure funding mechanism to help deliver the range of strategic and cross border infrastructure requirements (many of which are still to be identified through the Transport Vision work). Consideration should also be given to how to support the delivery of the strategic sites in terms of helping with cash flow for upfront strategic infrastructure investment. It is recommended that the assumptions and conclusions of this study are used as the basis for further discussions with the relevant service providers involved in infrastructure planning and delivery to ensure the emerging infrastructure proposed is of the right scale, to review estimated costs, and where necessary suggest possible refinements.

12.3.4 We also recommend that a more detailed Infrastructure Delivery Plan (IDP) be prepared by EHDC building on work done as part of this study. We know from experience that Examiners place great store in understanding the infrastructure needs and how such requirements are to be delivered and funded. This should be kept as a 'live document' and will include an assessment of the strategic infrastructure needed to support growth, cost estimates and an assessment of how this will be funded.

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<sup>19</sup> A planning performance agreement is a project management tool which the local planning authorities and applicants can use to agree timescales, actions and resources for handling particular applications. It should cover the pre-application and application stages. See <http://planningguidance.planningportal.gov.uk/blog/guidance/before-submitting-an-application/planning-performance-agreements/> for further details.

- 12.3.5 The IDP will need to be accompanied with a delivery mechanism that is responsible for prioritising and managing the delivery of infrastructure and coordination and regular engagement with various infrastructure service providers. As part of this IDP delivery mechanism, there should be a detailed consideration of the best approach to the use of S106 and/or CIL for all items of infrastructure, drawing on stakeholder views and reviewing the initial proposals set out in this study. The Council will also need to consider whether it will implement a CIL charging regime and if so, which items it will include within a Regulation 123 list.
- 12.3.6 Once the findings from the revised transport modelling are known, there will need to be a credible infrastructure funding package identified to support the delivery of the strategic infrastructure to support the planned growth, and a robust mechanism put in place for collecting developer contributions to part fund the strategic infrastructure.
- 12.3.7 EHDC may wish to revisit and update this Delivery Study prior to Examination to ensure that it provides an up to date and agreed position on site deliverability, viability and infrastructure delivery approach. Ideally any such update would incorporate the views and further evidence derived from direct engagement with promoters and infrastructure providers following publication of this study. Such an approach would assist to demonstrate that a thorough, robust and collaborative approach had been adopted by the Council to the issue of deliverability, and to build confidence in the Council's submitted plan.
- 12.3.8 EHDC should work with the HCC minerals team to prepare a minerals assessment scoping note for North and East of Ware and Gilston Area based on the emerging concept plan for these sites. EHDC should work with the site promoters to determine whether any mineral extraction in these locations could be considered as economically viable propositions taking account of the impact on delivery timescales for housing.
- 12.3.9 The policies in the Draft Preferred Options District Plan 2014 were reviewed to assess the cost implication of policies included in the plan. As such, any additional costs stemming from plan policies have been factored into the viability assessment and EHDC have been informed of areas where the plan policies should be aligned with the national building regulation standards in order to avoid adding any additional policy cost to delivery. If going forward any plan policies are revised then the cost implications on viability should be reviewed.

## Appendix A Stakeholder consultations

A.1.1 Telephone interviews were held with the following infrastructure service providers:

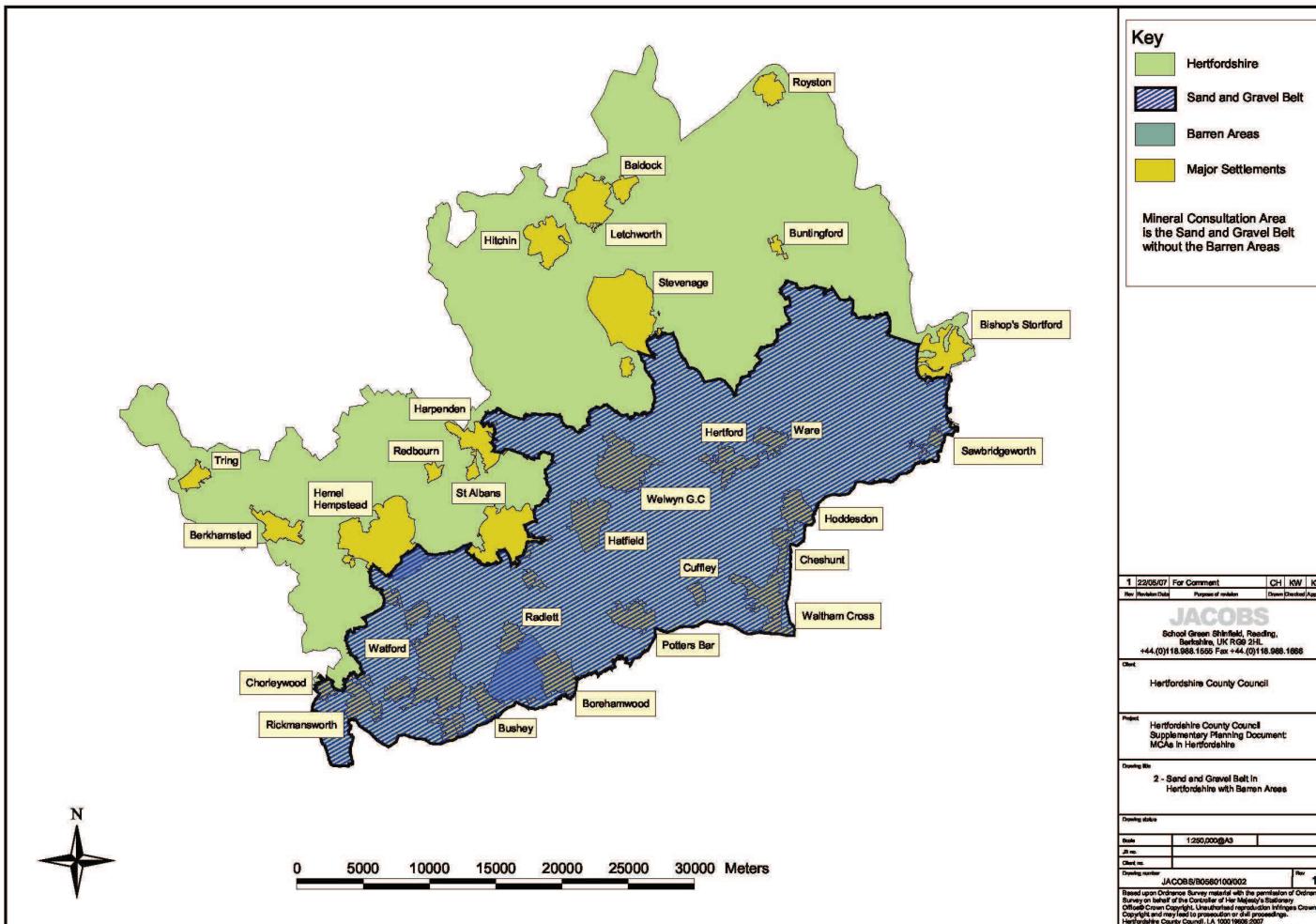
- Richard Reeves of Thames Water (sewage infrastructure) held on 23<sup>rd</sup> September 2014
- Andrea Gilmour of HCC (education infrastructure) held on 26<sup>th</sup> September 2014
- Laura Griggs, Lin Dalton and James Gleed (health infrastructure) held on 13<sup>th</sup> October 2014
- Joan Hancock Hertfordshire LEP held on 9<sup>th</sup> December 2014

A.1.2 Dates of promoter surgeries, transport meetings and Parish Council meetings:

- Bishop's Stortford Neighbourhood Plan Group (13 November 2014)
- Gilston Area - Places for People/City and Provincial Properties (3 November 2014)
- East of Welwyn Garden City - Lafarge Tarmac Ltd (8 October 2014)
- South of Bishop's Stortford - Countryside Properties (8 October 2014)
- Viability Developer Workshop (9 October 2014)
- Transport meeting on M11 Junction 8 assessment/modelling (27 August, 13 November 2014)
- Initial transport workshop with adjoining Local Planning Authorities, Highways Agency, and Hertfordshire County Council (9 September 2014)
- Transport meeting with Hertfordshire County Council (10 October, 24 November 2014)
- East Herts Association of Parish and Town Councils (6 November 2014)

A.1.3 The notes of these meetings have been posted to East Herts Council's website at:  
[www.eastherts.gov.uk/deliverystudy](http://www.eastherts.gov.uk/deliverystudy)

## Appendix B Sand and gravel belt map



## Appendix C Infrastructure assumptions

### C.1 Summary of Infrastructure Costs

- C.1.1 Table C1.1 is a summary by infrastructure costs. This shows that the total costs identified to date for the strategic sites comes to approximately £775m.
- C.1.2 The site enabling costs (i.e. costs incurred by the developer in opening up the site), are just under 45% of the total costs. Whilst the site specific infrastructure costs, relating to costs to support the residents such as schools, crèche facilities, health, community centres, leisure facilities and open space account for 50% of the total cost.
- C.1.3 Contributions towards off site strategic infrastructure such as those arising from the cumulative impacts of growth such as on wider strategic and local transport networks, public transport, cycleways, green infrastructure, cultural and community facilities, town centre congestion, etc currently account for 5% (£41m of the total costs).
- C.1.4 The assessment of the off-site strategic infrastructure costs is currently being assessed by EHDC and will also be informed by further work on cumulative transport infrastructure assessment. For now, this assessment is based on the cost information provided by the strategic promoters and relates to those costs identified by the promoters as a 'contribution towards libraries, or generic off site infrastructure.' This element will be refined as further work on cumulative off-site infrastructure is undertaken by EHDC.

### General comments on infrastructure assessment

- C.1.5 The site enabling costs (i.e. costs incurred by the developer in opening up the site), are just under 45% of the total costs. Whilst the site specific infrastructure costs, relating to costs to support the residents such as schools, crèche facilities, health, community centres, leisure facilities and open space account for 50% of the total cost.
- C.1.6 Due to the location and scale of development proposed at Gilston and Ware, both schemes have particularly challenging requirements to provide site specific infrastructure in terms of foul water and transport infrastructure as part of their site opening costs. Due to their scale, they also have a requirement to provide secondary school provision on site.
- C.1.7 Contributions towards off strategic infrastructure such as those arising from the cumulative impacts of growth such as on wider strategic and local transport networks, public transport, cycleways, green infrastructure, cultural and community facilities, town centre congestion, etc currently account for 5% (£41m of the total costs).

Table C1.1 Summary of infrastructure costs for the strategic

Strategic Site	Sum of Funded by developer enabling works	Sum of Funding by developer S106 / s278 site specific contributions	Sum of Strategic infrastructure cost - CIL
<b>East of Welwyn</b>	<b>£32,216,287</b>	<b>£30,450,088</b>	<b>£3,564,566</b>
Community	£0	£561,957	£286,488
Education	£0	£10,082,158	£0
Green infrastructure / outdoor space	£0	£9,269,634	£0
Health	£0	£3,636,188	£0
Management & adoption	£0	£2,153,212	£0
Site preparation	£11,970,075	£0	£0
Transport highway	£6,803,717	£4,102,342	£0
Transport other	£0	£644,597	£3,278,078
Utilities & drainage	£13,442,495	£0	£0
<b>Gilston</b>	<b>£227,569,721</b>	<b>£286,629,339</b>	<b>£21,796,686</b>
Community	£0	£10,432,644	
Education	£0	£106,830,942	
Green infrastructure / outdoor space	£0	£51,032,192	
Health	£0	£14,794,978	
Indoor sports	£0	£4,520,250	
Management & adoption	£0	£28,191,866	
Site preparation	£58,854,922	£0	£0
Transport highway	£69,046,000	£70,826,467	£12,712,654
Transport other	£0	£0	£9,084,032
Utilities & drainage	£99,668,799	£0	
<b>South of Bishops Stortford</b>	<b>£27,700,000</b>	<b>£11,160,000</b>	<b>£910,000</b>
Community	£0	£700,000	£220,000
Education	£0	£8,160,000	£0
Health	£0	£500,000	£0
Transport highway	£23,000,000	£1,800,000	£0
Transport other	£0	£0	£690,000
Utilities & drainage	£4,700,000	£0	£0
<b>Ware</b>	<b>£58,826,625</b>	<b>£59,600,000</b>	<b>£15,000,000</b>
Community	£0	£1,000,000	£0
Education	£0	£46,000,000	£0
Green infrastructure / outdoor space	£0	£10,000,000	£0
Health	£0	£2,000,000	£0
Site preparation	£34,147,500	£0	£0
Transport highway	£5,536,425	£600,000	£0
Transport other	£0	£0	£15,000,000
Utilities & drainage	£19,142,700	£0	£0
<b>Grand Total</b>	<b>£346,312,633</b>	<b>£387,839,427</b>	<b>£41,271,252</b>

C.1.8 The costs in table C1.1 clearly illustrate that the strategic sites will require considerable 'developer enabling works' in preparing substantial areas of land for development, incorporating drainage, utilities and landscaping to create the 'place making attractive environments' that help to establish the site values.

### Comparison of development costs

C.1.9 Due to the location and scale of development proposed at Gilston and Ware, both scheme have particularly challenging requirements to provide site specific infrastructure in terms of foul water and transport infrastructure as part of their site opening costs. Due to their scale, they also have a requirement to provide secondary school provision on site.

C.1.10 Table C1.2 provides a summary of the infrastructure costs for the four strategic sites.

Table C1.2 Comparison of costs on a per unit and per hectare basis

Gilston	Site units / area (Ha)	Developer enabling works	Developer s106/ s278 site specific works per unit/ Ha	comparison of CIL strategic works psqm
<b>Total cost</b>		£227,569,721	£286,629,339	£21,796,686
Per unit cost	10,181	£22,352.39	£28,153.36	£2,141
<b>Per gross ha</b>	427	£532,950.17	£671,263.09	
<b>per net ha</b>	226	£1,006,946	£1,268,271	

Ware	Site units / area (Ha)	Developer enabling works	Developer s106/ s278 site specific works per unit/ Ha	comparison of CIL strategic works psqm
<b>Total cost</b>		£58,826,625	£59,600,000	£15,000,000
<b>Per unit cost</b>	2,972	£19,794	£20,054	5,047
<b>Per gross ha</b>	480	£122,555	£124,167	
<b>per net ha</b>	228	£258,012	£261,404	

East of Welwyn	Site units / area (Ha)	Developer enabling works	Developer s106/ s278 site specific works per unit/ Ha	comparison of CIL strategic works psqm
<b>Total cost</b>		£32,216,287	£30,450,088	£3,564,566
<b>Per unit cost</b>	1,700	£18,951	£17,912	£2,097
<b>Per gross ha</b>	99	£325,417	£307,577	
<b>per net ha</b>	48	£671,173	£634,377	

South of Bishop's Stortford	Site units / area (Ha)	Developer enabling works	Developer s106/ s278 site specific works per unit/ Ha	comparison of CIL strategic works psqm
<b>Total cost</b>		£27,700,000	£9,360,000	£2,710,000
<b>Per unit cost</b>	750	£36,933	£12,480	£36
<b>Per gross ha</b>	51	£543,137	£183,529	
<b>per net ha</b>				

South of Bishop's Stortford	Site units / area (Ha)	Developer enabling works	Developer s106/ s278 site specific works per unit/ Ha	comparison of CIL strategic works psqm
<b>Total cost</b>		£27,700,000	£11,160,000	£910,000
<b>Per unit cost</b>	750	£36,933	£14,880	£1,213
<b>Per gross ha</b>	50	£554,000	£223,200	
<b>per net ha</b>	25	£1,108,000	£446,400	

### Site specific infrastructure costs

C.1.11 The site specific infrastructure costs are a reflection of the provision of additional site specific infrastructure. Gilston has the highest S106 / S278 cost at £28k per unit. As can be seen from table C1.2 the main contributors to this cost are education, transport, green infrastructure and management and adoption costs. We have raised a query relating to the assessment of secondary school space and cost estimates included in the promoters cost schedule. It would be helpful to discuss this with HCC as the education authority to further understand the requirement and any possible cost savings.

### Strategic infrastructure cost contributions

C.1.12 It is important to note that the items identified in the strategic infrastructure category (to be funded by CIL) have not been included in the viability appraisal as a cost input. In compliance with CIL regulation, the assessment of any CIL contribution will be based on viability, and so the actual CIL levy will be an outcome of the viability appraisal. For now we acknowledge the contribution being proposed by the site promoters towards the strategic off site infrastructure, in the emerging Regs 123 List.

C.1.13 CIL contributions towards strategic infrastructure costs will be based on viability evidence and so costs have not been factored into the appraisals. However, we have sought to calculate the scale of contributions towards CIL related infrastructure currently included in the site promoters cost schedules. Converting the contributions to a per sq.m charge shows that all four promoters have currently allowed for a CIL contribution of between £20psqm to £50 sq.m.

### An analysis of some of the big kit infrastructure items

C.1.14 The following tables provide a snap shot of some of the ‘big kit’ infrastructure items required to support the planned growth.

#### Education

Strategic Site	Sum of Funded by developer enabling works	Sum of Funding by developer S106 / s278 site specific contributions	Sum of Strategic infrastructure cost - CIL
East of Welwyn	£0	£10,082,158	£0
Education	£0	£10,082,158	£0
Gilston	£0	£106,830,942	
Education	£0	£106,830,942	
South of Bishops Stortford	£0	£8,160,000	£0
Education	£0	£8,160,000	£0
Ware	£0	£46,000,000	£0
Education	£0	£46,000,000	£0
<b>Grand Total</b>	<b>£0</b>	<b>£171,073,100</b>	<b>£0</b>

#### Transport

Strategic Site	Sum of Funded by developer enabling works	Sum of Funding by developer S106 / s278 site specific contributions	Sum of Strategic infrastructure cost - CIL
East of Welwyn	£6,803,717	£4,746,939	£3,278,078
Transport highway	£6,803,717	£4,102,342	£0
Transport other	£0	£644,597	£3,278,078
Gilston	£69,046,000	£70,826,467	£21,796,686
Transport highway	£69,046,000	£70,826,467	£12,712,654
Transport other	£0	£0	£9,084,032
South of Bishops Stortford	£23,000,000	£1,800,000	£690,000
Transport highway	£23,000,000	£1,800,000	£0
Transport other	£0	£0	£690,000
Ware	£5,536,425	£600,000	£15,000,000
Transport highway	£5,536,425	£600,000	£0
Transport other	£0	£0	£15,000,000
<b>Grand Total</b>	<b>£104,386,142</b>	<b>£77,973,406</b>	<b>£40,764,764</b>

C.1.15 Transport accounts for £223m of the total cost of the development, which is just slightly above the cost of education infrastructure at £171m.

C.1.16 Note the South of Bishop's Stortford transport highway figure of £23k also includes an allowance for SUDs and green spaces and we have already questioned the amount.

### Site preparation, utilities and landscaping

Strategic Site	Sum of Funded by developer enabling works	Sum of Funding by developer S106 / s278 site specific contributions	Sum of Strategic infrastructure cost - CIL
<b>East of Welwyn</b>	<b>£25,412,570</b>	<b>£11,422,846</b>	<b>£0</b>
Green infrastructure / outdoor sport	£0	£9,269,634	£0
Management & adoption	£0	£2,153,212	£0
Site preparation	£11,970,075	£0	£0
Utilities & drainage	£13,442,495	£0	£0
<b>Gilston</b>	<b>£158,523,721</b>	<b>£79,224,058</b>	<b>£0</b>
Green infrastructure / outdoor sport	£0	£51,032,192	
Management & adoption	£0	£28,191,866	
Site preparation	£58,854,922	£0	£0
Utilities & drainage	£99,668,799	£0	
<b>South of Bishops Stortford</b>	<b>£4,700,000</b>	<b>£0</b>	<b>£0</b>
Utilities & drainage	£4,700,000	£0	£0
<b>Ware</b>	<b>£53,290,200</b>	<b>£10,000,000</b>	<b>£0</b>
Green infrastructure / outdoor sport	£0	£10,000,000	£0
Site preparation	£34,147,500	£0	£0
Utilities & drainage	£19,142,700	£0	£0
<b>Grand Total</b>	<b>£241,926,491</b>	<b>£100,646,904</b>	<b>£0</b>

C.1.17 It is often difficult to completely separate out landscaping and open space costs from site preparation as these are frequently included in the same categories. For simplicity, the table above brings together the various costs involved in 'opening up the site' including site preparation, utilities and drainage and green infrastructure. The combined cost of this element is £343m.

C.1.18 Note the cost for Bishop's Stortford is light on this as a cost breakdown was not provided. Instead all site opening costs were merged into a single category for transport highway, SUDs and green infrastructure and is captured in the transport table above.

### Non developable land should be reviewed as it impacts on land values

C.1.19 There are substantial place making costs involved in creating the setting for the new developments such as parks and green infrastructure. This impact on the price paid for land; incur upfront costs in their creation and then longer term management and adoption costs. There may be scope for refining these costs, particularly relating to the scale of open space and woodland /parkland infrastructure being created. The service providers responsible for the adoption of open space at EHDC and the landscape and design team need to engage in a detailed assessment of the emerging masterplan to inform the scale of provision 'required' and the promoters will also have a view on what they consider is necessary as part of the 'place making' vision.

### Utility infrastructure cost reduction measures to be explored

C.1.20 The delivery of utilities and energy infrastructure in the land development sector traditionally focusses on connection and supply as a cost burden, and does not ordinarily recognise the end value of the energy market. The planning, phasing and delivering of energy infrastructure is often considered as a burden on development viability.

C.1.21 However, the strategic sites will establish a large new energy market that has a long term intrinsic value. Assuming each home has an energy bill of approximately £500 a year (typical of a modern energy efficient home) the development of 15,500 homes will generate an annual income of just under £8,000,000 a year. This makes it an attractive proposition to energy suppliers and investors.

C.1.22 Typically, a proportion of the costs of a heat network could be picked up by the developer, and the remainder of the cost could be met by an energy supplier (such as a multi utilities

company - MUSCO), similarly some costs towards telecommunications infrastructure will be met by providers such as BT Openreach. Thus although we have factored in the cost of utilities (including energy and telecommunications infrastructure) as a cost input, it will be worth working with the strategic developers to consider how these costs can be reduced in order to support the delivery of wider strategic infrastructure.

## Appendix D Viability appraisal summaries

### D.1 East of Welwyn Garden City

**East of Welwyn Garden City** 1,700 Units 11.33

**pba** peterbrett

ITEM	Residual Value	Technical Checks:
Net Site Area 45.33	£2,410,932 per net ha	Sqm/ha 151,300 Dwgs/ha 37,50 Units/ha 149 GDV=Total costs -
Nr of units Private 1190.00 Affordable 510.00	Affordable rent 60% 306.00 Intermediate 40% 204.00	
<b>1.0 Development Value</b>		
1.1 Private units	No. of units 1,190 Size sq.m 95 Total sq.m 113,050 £psm £3,700 Total Value £418,285,000	
1.2 Affordable rent	No. of units 306 Size sq.m 75 Total sq.m 22,950 £psm £1,850 Total Value £42,457,500	
1.3 Intermediate	No. of units 204 Size sq.m 75 Total sq.m 15,300 £psm £2,405 Total Value £36,796,500	
	<b>Gross Development value</b> 151,300	<b>£497,539,000</b>
<b>2.0 Development Cost</b>		
2.1 Site Acquisition	Total RLV net of costs assume 11 phasing of land drawdown	£109,295,580 5.75% £115,580,076
2.1.1 Site value (residual land value)		
		<b>£115,580,076</b>
<b>2.2 Build Costs</b>		
2.2.1 Private units	No. of units 1190.00 Size sq.m 95 Total sq.m 113,050 Cost per sq.m £1,036 Total Costs £117,119,800	
2.2.2 Affordable units	Affordable rent No. of units 306.00 Size sq.m 75 Total sq.m 22,950 Cost per sq.m £1,036 Total Costs £23,776,200 Intermediate No. of units 204.00 Size sq.m 75 Total sq.m 15,300 Cost per sq.m £1,036 Total Costs £15,850,800	
	<b>1700.00</b>	<b>151,300</b>
<b>2.3 Extra over construction costs</b>		<b>£156,746,800</b>
2.3.1 Externals	10% on build cost	£15,674,680.00
		<b>£15,674,680</b>
<b>2.5 Site specific costs</b>		
2.5.1 Transport highway	£10,766,059	£10,766,059
2.5.2 Transport other	£0	£0
2.5.3 Education	£10,082,158	£10,082,158
2.5.4 Health	£3,636,188	£3,636,188
2.5.5 Community	£628,070	£628,070
2.5.6 Utilities & drainage	£13,442,495	£13,442,495
2.5.7 Management & adoption	£2,153,212	£2,153,212
2.5.8 Site preparation	£11,970,075	£11,970,075
2.5.9 Green infrastructure / outdoor sport	£1,085,347	£1,085,347
2.5.10 Indoor sports	£0	£0
		<b>£53,763,604</b>
<b>2.4 Professional Fees</b>		
2.4.1	10% on build costs	£15,674,680
2.4.2 developer has already included some professional fees in 2.5 above sum deducted to avoid double counting	£5,598,979 minus	£10,075,701
		<b>£10,075,701</b>
<b>2.5 Contingency</b>		
2.5.1	5% on build costs (incl: externals)	£8,621,074
		<b>£8,621,074</b>
<b>2.6 Developer contributions</b>		
2.6.1 Water efficiency	£68 per unit	£115,600
2.6.2 Section 106 standard typologies	£0 per unit	£0
2.6.3 G&T pitch	£100,000 per pitch	No. of pitches 15 £1,500,000
		<b>£1,615,600</b>
<b>2.7 Sale cost</b>		
2.7.1 Private units only	3.00% on OM GDV	£12,548,550
		<b>£12,548,550</b>
<b>TOTAL DEVELOPMENT COSTS (including land)</b>		<b>£374,626,085</b>
<b>3.0 Developer's Profit</b>		
3.1 Private units	20% on OM GDV	Total scheme profit £63,657,000
3.2 Affordable units	6% on Affordable GDV	£5,230,764
		<b>£68,887,764</b>
<b>TOTAL PROJECT COSTS (EXCLUDING INTEREST)</b>		<b>£463,513,849</b>
<b>TOTAL INCOME - TOTAL COSTS (EXCLUDING INTEREST)</b>		<b>£34,025,151</b>
<b>4.0 Finance Costs</b>		
4.1 Finance	APR 7.00% on net costs	PCM 0.55% £34,025,151
		<b>£497,539,000</b>
<b>TOTAL PROJECT COSTS (INCLUDING INTEREST)</b>		

This appraisal has been prepared by Peter Brett Associates for the Council. The appraisal has been prepared in line with the RICS valuation guidance. The purpose of the appraisal is to inform the Council about the impact of planning policy has on viability at a strategic level. This appraisal is not a formal 'Red Book' (RICS Valuation – Professional Standards January 2014) valuation and should not be relied upon as such.

## D.2 North and East of Ware

North and East of Ware		2,972 Units		20		pba peterbrett					
ITEM		Residual Value		Technical Checks:							
Net Site Area		£1,649,729 per net ha		Sqm/ha 264,508							
Nr of units		Private 2080.40 Affordable 891.60		60% Affordable rent 534.96 40% Intermediate 356.64		Dwgs/ha 45					
				Units/ha 152							
				GDV=Total costs -							
1.0 Development Value											
1.1 Private units		No. of units 2080.40		Size sq.m 95		Total sq.m 197,638					
		2080.40		£psm £3,700		Total Value £731,260,600					
1.2 Affordable rent		No. of units 534.96		Size sq.m 75		Total sq.m 40,122					
		534.96		£psm £1,850		Total Value £74,225,700					
1.3 Intermediate		No. of units 356.64		Size sq.m 75		Total sq.m 26,748					
		356.64		£psm £2,405		Total Value £64,328,940					
Gross Development value				264508		£869,815,240					
2.0 Development Cost											
2.1 Site Acquisition											
2.1.1 Site value (residual land value)				Total RLV net of costs		£153,218,617					
				assume 20 phasing of land drawdown		5.75%					
						£162,028,687					
2.2 Build Costs											
2.2.1 Private units		No. of units 2080.40		Size sq.m 95		Total sq.m 197,638					
		2080.40		Cost per sq.m £1,036		Total Costs £204,752,968					
2.2.2 Affordable units		Affordable rent 534.96		Size sq.m 75		Total sq.m 40,122					
		Intermediate 356.64		£1,036		Total Costs £41,566,392.00					
		891.60		£1,036		£27,710,928.00					
2972.00				264508.00		£274,030,288					
2.3 Extra over construction costs											
2.3.1 Externals		10% on build cost				£27,403,028.80					
£27,403,029											
2.5 Site specific costs											
2.5.1 Transport highway		£6,136,425				£6,136,425					
2.5.2 Transport other		£0				£0					
2.5.3 Education		£46,000,000				£46,000,000					
2.5.4 Health		£2,000,000				£2,000,000					
2.5.5 Community		£1,000,000				£1,000,000					
2.5.6 Utilities & drainage		£19,142,700				£19,142,700					
2.5.7 Management & adoption		£0				£0					
2.5.8 Site preparation		£34,147,500				£34,147,500					
2.5.9 Green infrastructure / outdoor sport		£10,000,000				£10,000,000					
2.5.10 Indoor sports		£0				£0					
£118,426,625											
2.4 Professional Fees		10% on build costs				£27,403,028.80					
£27,403,029											
2.5 Contingency											
2.5.1		5% on build costs (incl: externals)				£15,071,666					
£15,071,666											
2.6 Developer contributions											
2.6.1 Water efficiency		£68 per unit				£202,096					
2.6.2 Section 106 Strategic sites		£0 per unit				£0					
2.6.4 G&T pitch		£100,000 per pitch		No. of pitches 15		£1,500,000					
£1,702,096											
2.7 Sale cost											
2.7.1 Private units only		3.00% on OM GDV				£21,937,818					
£21,937,818											
TOTAL DEVELOPMENT COSTS (including land)				£648,003,238							
3.0 Developer's Profit											
3.1 Private units		20% on OM GDV		Total scheme profit		£146,252,120					
3.2 Affordable units		6% on Affordable GDV				£9,144,606					
20 tranches paid at end of phase											
£155,396,726											
TOTAL PROJECT COSTS (EXCLUDING INTEREST)				£602,200,064							
TOTAL INCOME - TOTAL COSTS (EXCLUDING INTEREST)				£66,415,276							
4.0 Finance Costs											
4.1 Finance		APR 7.00% on net costs		PCM 0.565%		-£66,415,276					
TOTAL PROJECT COSTS (INCLUDING INTEREST)				£869,815,240							
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### D.3 North and East of Ware – Generic 2,000

North and East of Ware - generic 2000		2,000 Units					
		13					
<b>ITEM</b>							
Net Site Area	62.50		Residual Value	£1,746,470	per net ha	Technical Checks:	
Nr of units	Private	Affordable	Affordable rent	60%	40%	Sam/ha 178,000 Dwgs/ha 32 Units/ha 152 GDV=Total costs -	
	1400.00	600.00		360.00	240.00		
<b>1.0</b>	<b>Development Value</b>						
1.1	Private units		No. of units	Size sq.m	Total sq.m	£psm	Total Value
			1400.00	95	133,000	£3,700	£492,100,000
			1400.00		133000		
1.2	Affordable rent		No. of units	Size sq.m	Total sq.m	£psm	Total Value
			360.00	75	27,000	£1,850	£49,950,000
			360.00		27000		
1.3	Intermediate		No. of units	Size sq.m	Total sq.m	£psm	Total Value
			240.00	75	18,000	£2,405	£43,290,000
			240.00		18000		
	<b>Gross Development value</b>			178000			£585,340,000
<b>2.0</b>	<b>Development Cost</b>						
2.1	<b>Site Acquisition</b>						
2.1.1	Site value (residual land value)				Total RLV net of costs assume 20 phasing of land drawdown		
						£109,154,398 5.73%	£115,430,776
							£115,430,776
<b>2.2</b>	<b>Build Costs</b>						
2.2.1	Private units		No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs
			1400.00	95	133,000	£1,036	£137,788,000
			1400.00		133000		
2.2.2	Affordable units	Affordable rent Intermediate	No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs
			360.00	75	27,000	£1,036	£27,972,000.00
			240.00	75	18,000	£1,036	£18,648,000.00
			600.00		45000		
	2000.00			178000.00			£184,408,000
<b>2.3</b>	<b>Extra over construction costs</b>						
2.3.1	Externals			10%	on build cost		£18,440,800.00
							£18,440,800
<b>2.5</b>	<b>Site specific costs</b>						
2.5.1	Site opening up costs			£20,000	per unit		£40,000,000
							£40,000,000
<b>2.4</b>	<b>Professional Fees</b>						
2.4.1				10%	on build costs		£18,440,800.00
							£18,440,800
<b>2.5</b>	<b>Contingency</b>						
2.5.1				5%	on build costs (incl: externals)		£10,142,440
							£10,142,440
<b>2.6</b>	<b>Developer contributions</b>						
2.6.1	Water efficiency			£68	per unit		£136,000
2.6.2	Section 106 Strategic sites			£20,000	per unit		£40,000,000
2.6.4	G&T pitch			£100,000	per pitch	No. of pitches 15	£1,500,000
							£1,500,000
							£4,636,000
<b>2.7</b>	<b>Sale cost</b>						
2.7.1	Private units only			3.00%	on OM GDV		£14,763,000
							£14,763,000
	<b>TOTAL DEVELOPMENT COSTS (including land)</b>						£443,261,816
<b>3.0</b>	<b>Developer's Profit</b>						
3.1	Private units			20%	on OM GDV	Total scheme profit	£98,420,000
3.2	Affordable units			6%	on Affordable GDV		£6,153,840
							£6,153,840
							£104,573,840
	<b>TOTAL PROJECT COSTS [EXCLUDING INTEREST]</b>						£547,835,656
	<b>TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]</b>						£37,504,344
<b>4.0</b>	<b>Finance Costs</b>						
4.1	Finance			APR 7.00%	on net costs	PCM 0.565%	£37,504,344
	<b>TOTAL PROJECT COSTS [INCLUDING INTEREST]</b>						£585,340,000

## D.4 South of Bishop's Stortford

pbo  
peter brett

South of Bishop's Stortford	750 Units	
10		
ITEM		
Net Site Area	23.44	
		Residual Value
		£1,412,189 per net ha
		60% 40%
Nr of units	Private 525.00 Affordable 225.00	Affordable rent 135.00 Intermediate 90.00
		Technical Checks:
		Size/ha 66,750
		Days/ha 22
		Units/ha 76
		GDV=Total costs -
1.0	Development Value	
1.1	Private units	No. of units 525.00 Size sq.m 95 Total sq.m 49,875 Epsm £3,500 Total Value £174,562,500
1.2	Affordable rent	No. of units 135.00 Size sq.m 75 Total sq.m 10,125 Epsm £1,750 Total Value £17,718,750
1.3	Intermediate	No. of units 90.00 Size sq.m 75 Total sq.m 6,750 Epsm £2,275 Total Value £15,356,250
	Gross Development value	66750 £207,637,500
2.0	Development Cost	
2.1	Site Acquisition	Total RLV net of costs £33,098,182.83
2.1.1	Site value (residual land value)	assume 10 phasing of land drawdown 5.75% £35,001.328
		£35,001,328
2.2	Build Costs	
2.2.1	Private units	No. of units 525.00 Size sq.m 95 Total sq.m 49,875 Cost per sq.m £1,036 Total Costs £51,670,500
2.2.2	Affordable units	Affordable rent No. of units 135.00 Size sq.m 75 Total sq.m 10,125 Cost per sq.m £1,036 Total Costs £10,489,500
	Intermediate	No. of units 90.00 Size sq.m 75 Total sq.m 6,750 Cost per sq.m £1,036 Total Costs £6,993,000
		750 66750 £69,153,000
2.3	Extra over construction costs	
2.3.1	Externals	10% on build cost £6,915,300.00
		£6,915,300
2.5	Site specific costs	
2.5.1	Transport highway	Developers £24,000,000 Infrastructure costs are high PBA has reduced figure PBA adjusted £12,400,000
2.5.2	Transport other	£0 £0
2.5.3	Education	£8,160,000 £8,160,000
2.5.4	Health	£500,000 £500,000
2.5.5	Community	£700,000 £700,000
2.5.6	Utilities & drainage	£4,700,000 £4,700,000
2.5.7	Management & adoption	£0 £0
2.5.8	Site preparation	£0 £0
2.5.9	Green infrastructure / outdoor sport	£0 £0
2.5.10	Indoor sports	£0 £0
		£38,860,000 £26,460,000
2.4	Professional Fees	
2.4.1		10% on build costs £6,915,300
		£6,915,300
2.5	Contingency	
2.5.1		5% on build costs (incl: externals) £3,803,415
		£3,803,415
2.6	Developer contributions	
2.6.1	Water efficiency	£68 per unit £51,000
2.6.2	Section 106 standard typologies	£0 per unit £0
2.6.3	G&T pitch	£100,000 per pitch No. of pitches 7 £700,000
		£751,000
2.7	Sale cost	
2.7.1	Private units only	3.00% on OM GDV £5,236,875
		£5,236,875
	TOTAL DEVELOPMENT COSTS (including land)	£154,236,218
3.0	Developer's Profit	
3.1	Private units	20% on OM GDV £34,912,500
3.2	Affordable units	6% on Affordable GDV £2,162,950
	10 tranches paid at end of phase	
		£37,095,450
	TOTAL PROJECT COSTS (EXCLUDING INTEREST)	£191,331,660
	TOTAL INCOME - TOTAL COSTS (EXCLUDING INTEREST)	£16,305,832
4.0	Finance Costs	
4.1	Finance	APR 7.00% on net costs PCM 0.565% -£16,305,832
	TOTAL PROJECT COSTS (INCLUDING INTEREST)	£207,637,500

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## D.5 Gilston Area

**Gilston Area** 10,000 Units 40

**ITEM**

Net Site Area		Residual Value		Technical Checks:			
267		£1,020,392.77	per net ha	Site/ha	890,000		
Nr of units	Private Affordable	1800	1200	Dwgs/ha	38		
	7000 3000			Units/ha	254		
				GDV=Total costs	0		
<b>1.0 Development Value</b>							
1.1 Private units		No. of units 7000.00 7000.00	Size sq.m 95	Total sq.m 665,000 665,000	£psm £3,700	Total Value £2,460,500,000	
1.2 Affordable rent		No. of units 1800.00 1800.00	Size sq.m 75	Total sq.m 135,000 135,000	£psm £1,850	Total Value £249,750,000	
1.3 Intermediate		No. of units 1200.00 1200.00	Size sq.m 75	Total sq.m 90,000 90,000	£psm £2,405	Total Value £216,450,000	
Gross Development value						890,000	£2,926,700,000
<b>2.0 Development Cost</b>							
2.1 Site Acquisition		Total RLV net of costs assume 40 phasing of land drawdown RLV plus costs				£272,104,740	
2.1.1	Site value (residual land value)					5.75%	
						£287,750,762	
						£287,750,762	
<b>2.2 Build Costs</b>							
2.2.1 Private units		No. of units 7000.00 7000.00	Size sq.m 95	Total sq.m 665,000 665,000	Cost per sq.m £1,036	Total Costs £688,940,000	
2.2.2 Affordable units		No. of units 1800.00 1200.00 3000.00	Size sq.m 75	Total sq.m 135,000 90,000 225,000	Cost per sq.m £1,036 £1,036	Total Costs £139,860,000 £93,240,000	
10000.00						890000	£922,040,000
<b>2.3 Extra over construction costs</b>							
2.3.1	Externals	10% on build cost				£92,204,000.00	
						£92,204,000	
<b>2.5 Site specific costs</b>							
2.5.1	Transport highway	£139,550,929				£139,550,929	
2.5.2	Transport other	£997,119				£997,119	
2.5.3	Education	£106,890,042				£106,890,042	
2.5.4	Health	£14,794,978				£14,794,978	
2.5.5	Community	£10,432,644				£10,432,644	
2.5.6	Utilities & drainage	£99,668,799				£99,668,799	
2.5.7	Management & adoption	£28,191,866				£28,191,866	
2.5.8	Site preparation	£58,854,922				£58,854,922	
2.5.9	Green infrastructure / outdoor sport	£51,032,192				£51,032,192	
2.5.10	Indoor sports	£4,520,250				£4,520,250	
						£514,874,641	
<b>2.4 Professional Fees</b>							
2.4.1		10% on build costs				£92,204,000	
2.4.2	developer has already included some professional fees in 2.5 above sum deducted to avoid double counting	£43,495,084 minus				£48,708,916	
						£48,708,916	
<b>2.5 Contingency</b>							
2.5.1		5% on build costs (incl. externals)				£50,712,200	
						£50,712,200	
<b>2.6 Developer contributions</b>							
2.6.1	Water efficiency	£68 per unit				£680,000	
2.6.2	Section 106 standard typologies	£0 per unit				£0	
2.6.3	G&T pitch	£100,000 per pitch		No. of pitches 15	£1,500,000		
					£2,180,000		
<b>2.7 Sale cost</b>							
2.7.1	Private units only	3.00% on OM GDV				£73,815,000	
						£73,815,000	
<b>TOTAL DEVELOPMENT COSTS (including land)</b>							£1,992,285,519
<b>3.0 Developer's Profit</b>							
3.1	Private units	20% on OM GDV				Total scheme profit £492,100,000	
3.2	Affordable units	6% on Affordable GDV				£30,769,200	
		40 tranches paid at end of phase					
						£522,869,200	
<b>TOTAL PROJECT COSTS (EXCLUDING INTEREST)</b>							£2,515,154,719
<b>TOTAL INCOME - TOTAL COSTS (EXCLUDING INTEREST)</b>							£411,545,281
<b>4.0 Finance Costs</b>							
4.1	Finance	APR 7.00% on net costs				PCM 0.565% -£411,545,281	
						£2,926,700,000	
<b>TOTAL PROJECT COSTS (INCLUDING INTEREST)</b>							

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## D.6 Gilston Area – Generic 2,500

Gilston Area generic 2,500		2,500 Units		17		pba peterbrett	
<b>ITEM</b>							
Net Site Area		66.67		Residual Value £1,955,818 per net ha		Technical Checks: Sqm/ha 222,600 Dwgs/ha 38 Units/ha 162 GDV=Total costs -	
Nr of units		Private 1750.00 Affordable 750.00		60% Affordable rent 450.00 40% Intermediate 300.00			
<b>1.0</b>	<b>Development Value</b>						
1.1	Private units		No. of units 1750.00	Size sq.m 95	Total sq.m 166,250	£psm £3,700	Total Value £615,125,000
1.2	Affordable rent		No. of units 450.00	Size sq.m 75	Total sq.m 33,750	£psm £1,850	Total Value £62,437,500
1.3	Intermediate		No. of units 300.00	Size sq.m 75	Total sq.m 22,500	£psm £2,405	Total Value £54,112,500
	Gross Development value				222500		£731,676,000
<b>2.0</b>	<b>Development Cost</b>						
2.1	Site Acquisition						
2.1.1	Site value (residual land value)				Total RLV net of costs assume 17 phasing of land drawdown		
						£130,387,835	
						5.75%	
						£137,885,135	
							£137,885,135
2.2	Build Costs						
2.2.1	Private units		No. of units 1750.00	Size sq.m 95	Total sq.m 166,250	Cost per sq.m £1,036	Total Costs £172,235,000
2.2.2	Affordable units		No. of units 450.00 300.00	Size sq.m 75 75	Total sq.m 33,750 22,500	Cost per sq.m £1,036 £1,036	Total Costs £34,965,000.00 £23,310,000.00
	2600.00				222500.00		£230,510,000
2.3	Extra over construction costs						
2.3.1	Externals			10%	on build cost		£23,051,000.00
2.5	Site specific costs						£23,061,000
2.5.1	Site opening up costs			£20,000	per unit		£50,000,000
							£50,000,000
2.4	Professional Fees						
2.4.1				10%	on build costs		£23,051,000.00
							£23,061,000
2.6	Contingency						
2.5.1				5%	on build costs (incl: externals)		£12,678,050
							£12,678,050
2.6	Developer contributions						
2.6.1	Water efficiency			£68	per unit		£170,000
2.6.2	Section 106 Strategic sites			£20,000	per unit		£50,000,000
2.6.4	G&T pitch			£100,000	per pitch	No. of pitches 15	£1,500,000
	61,670,000						
2.7	Sale cost						
2.7.1	Private units only			3.00%	on OM GDV		£18,453,750
							£18,463,750
	647,298,935						
3.0	Developer's Profit						
3.1	Private units			20%	on OM GDV	Total scheme profit	£123,025,000
3.2	Affordable units			6%	on Affordable GDV		£7,692,300
	17 tranches paid at end of phase						
	130,717,300						
	678,016,235						
	53,658,765						
4.0	TOTAL PROJECT COSTS [EXCLUDING INTEREST]						
4.1	Finance Costs			APR 7.00%	on net costs	PCM 0.565%	£53,658,765
	TOTAL PROJECT COSTS [INCLUDING INTEREST]						£731,676,000
This appraisal has been prepared by Peter Brett Associates for the Council. The appraisal has been prepared in line with the RICS valuation guidance. The purpose of the appraisal is to inform the Council about the impact of planning policy has on viability at a strategic level. This appraisal is not a formal 'Red Book' (RICS Valuation – Professional Standards January 2014) valuation and should not be relied upon as such.							

## Appendix E Transport assessment

### E.1 Introduction

E.1.1 The intention of this appendix is to provide detail of the methodology and approach to the transport requirements included in the Delivery Study. It is intended to supplement the main document and therefore is focussed on providing additional detail on the method to determine the infrastructure requirements based on existing transport assessments and consultation.

E.1.2 However, countywide transport modelling is currently being undertaken by HCC and this will provide a more comprehensive assessment of future capacity and solutions to facilitate the planned growth and ultimately provide the comprehensive evidence base upon which cumulative impact in particular can be judged. This appendix is written in advance of this evidence base.

### E.2 National transport policy and guidance

#### Department for Transport (DfT) Planning Practice Guidance update

E.2.1 Due reference has been made to the Department for Transport (DfT) Planning Practice Guidance update (October 2014) entitled 'Transport evidence bases in plan making'. This guidance was issued to help local planning authorities assess strategic transport needs to reflect and, where appropriate, mitigate these in their Local Plan.

E.2.2 Of particular relevance is Paragraph 003 which recommends that a number of "key issues" be considered in developing a transport evidence base in support of a Local Plan, including the need to:

- 'assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms;
- assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport;
- highlight and promote opportunities to reduce the need for travel where appropriate;
- identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate;
- consider the cumulative impacts of existing and proposed development on transport networks;
- assess the quality and capacity of transport infrastructure and its ability to meet forecast demands; and
- Identify the short, medium and long-term transport proposals across all modes.'

E.2.3 The emphasis given in the above is to prioritise sustainable modes of travel and mode shift in assessing the transport impacts of growth is noted.

#### National Planning Policy Framework and cross boundary coordination

E.2.4 A number of the infrastructure projects referenced within this Study extend beyond the District boundaries of East Herts and therefore require a degree of cross-boundary cooperation between EHDC and its neighbouring authorities.

E.2.5 National Planning Policy Framework (NPPF, paragraph 179) states that 'Local planning authorities should work collaboratively with other bodies to ensure that strategic priorities across local boundaries are properly coordinated and clearly reflected in individual Local Plans... as part of this process, they should consider producing joint infrastructure and investment plans.'

E.2.6 In keeping with this, there are a number of existing partnership and joint-working organisations within Hertfordshire of which East Herts is a member which ensure collaboration and the joint-planning of strategic transport infrastructure for East Herts.

E.2.7 One such organisation is the Hertfordshire Local Transport Body (LTB) which has been set up and will ensure collaboration and joint planning of local major transport schemes including local authority large projects, Highways England projects and Network Rail projects when the Department for Transport (DfT) devolves funding for local major transport schemes from April 2015. The Hertfordshire LTB is a voluntary partnership led by Hertfordshire County Council, as the Local Transport Authority, and includes all local planning authorities in Hertfordshire, the Herefordshire Local Enterprise Partnership and potentially other organisations.

E.2.8 The Uttlesford Local Plan was submitted for independent examination by the Secretary of State for Communities and Local Government via the Planning Inspectorate on 4 July 2014 and includes a number of major developments up to 2031 including development at Elsenham (2,607 units) and Great Dunmow (2,951 units). In order to ensure the cumulative cross-boundary impact of Uttlesford and East Herts joint-working has been conducted for some time between the relevant District Councils (Uttlesford and East Herts), County Councils (Hertfordshire and Essex) and Highways England to ensure that the impacts on the local and strategic transport networks at Junction 8 of the M11 in particular are managed appropriately.

E.2.9 Broxbourne Borough Council (BBC) cross-boundary cooperation with East Herts DC is already underway to discuss the key strategic impacts of combined local plan growth and necessary mitigation. These include impacts at Junction 25 of the M25 which have been discussed in meetings with Broxbourne Borough Council.

E.2.10 All conclusions drawn within this report therefore relate to the context of this cross boundary coordination.

#### **National policy on the 'severity test'**

E.2.11 Consideration has been given to the definition of the 'severity test' for assessing the residual cumulative impacts of growth as follows:

- **NPPF** - the National Planning Policy Framework paragraph 32 states that "development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe"; and
- **NPPG** - the Department for Communities and Local Government issued revised guidance on 10 October 2014 within the National Planning Practice Guidance (NPPG) entitled 'Transport evidence bases in plan making' on 10 October 2014 (paragraph 003) which highlighted the need for Local Plan transport evidence bases to "consider the cumulative impacts of existing and proposed development on transport networks."

### **E.3 Highways England protocol 'Supporting Development and Facilitating Growth'**

E.3.1 Highways England, as part of their protocol to Supporting Development and Facilitating Growth strive to ensure that within the parameters of the planning system 'developments close to or affecting the Strategic Road Network (SRN) can take place while making sure that it continues to operate safely and efficiently for all road users.'

E.3.2 As part of this remit Highways England commits to support the principle of the NPPF by encouraging and supporting co-ordinated working across boundaries and with other infrastructure providers to establish the strategic priorities for the networks for which they control.

E.3.3 The protocol goes on to state that 'in the first instance, local planning authorities should do what they can to minimise the need for changes to the strategic road network by taking opportunities to reduce the need to travel, especially by private car, and by maximising access to development sites by public transport.'

E.3.4 In many cases, it is likely that additional capacity to parts of the strategic road network will be identified as necessary to support the delivery of local plans. NPPF requires that there should be a reasonable prospect that planned infrastructure will be deliverable in a timely fashion. The HE commits to work with the relevant authorities to help develop sufficiently detailed policies and plans for the additional infrastructure and to ensure that these are reflected in planning for their network. Policies and plans should normally identify:

- What type of improvement is needed, and an early range estimate of the likely cost;
- At what point the improvement becomes necessary; and
- How the improvement is to be funded and delivered.

#### **E.4 The Traffic Management Act 2004**

E.4.1 This report also seeks to set out the timing of when the infrastructure requirements should be delivered. The Traffic Management Act 2004 imposed a duty on Councils as local traffic authorities to secure the expeditious movement of traffic on the local road networks, but this does not impose any criteria on level of 'stress' or timescales for acceptable levels of congestion. These are political judgements to inform the location of growth.

#### **E.5 Regional policy and other key documents**

E.5.1 In addition, a number of key local and regional policy documentation has also been consulted in the preparation of this assessment including:

- **Hertfordshire County Council Local Transport Plan (LTP) 3 (2011-2031)** – this key document sets out the schemes that the HCC and its partners intend to deliver over 20 year period;
- **Hertford and Ware Urban Transport Plan 3 (2010)** – this is a 'daughter' document to HCC LTP3 that identifies a detailed implementation strategy for transport schemes for Hertford and Ware. At the time of writing, an implementation strategy is lacking for the Bishop's Stortford-Sawbridgeworth corridor as the corresponding UTP for this area has yet to be published;
- **Hertfordshire County Council Inter Urban Route Strategy (2013)** – this is a 'daughter' document to HCC LTP3 that seeks to address the cross-boundary and cumulative pressures on the strategic transport network;
- **Hertfordshire County Council Transport Response (2014)** – HCC response to the proposed East Herts District Council Draft District Plan Preferred Options Consultation paper;
- **Hertfordshire County Council A414 Study (2014)** – options testing by HCC of a number of highways improvements schemes along A414 through Hertford;
- **Hertfordshire County Council Rail and Bus Strategies (2010 & 2011)** – set out HCC's aspirations for the development of the rail and bus network in Hertfordshire; and

- **London and South East Route Utilisation Strategy (2011)** – sets out Network Rail's priorities for capacity planning up to 2031 for rail routes into London.

## E.6 PBA consultation

E.6.1 As part of this study, PBA has worked closely with a number of the key local authorities and stakeholder groups in order to better understand the key transport issues and needs in the District of East Herts, including East Herts District Council, Hertfordshire County Council, Essex County Council, the Homes and Communities Agency, the Highway Agency, Network Rail, the East Herts Association of Town and Parish Councils (EHAPTC), neighbouring local authorities and various Site Promoters.

E.6.2 This has included the facilitation of and attendance at a number of consultation and workshop events which have informed the Delivery Study findings, including:

- Essex County Council Transport Modelling Review Meeting;
- Transport challenges workshop;
- Site promoter Developer surgeries;
- Hertfordshire County Council Transport Review Meeting;
- Town and Parish Council Meeting; and
- Transport Workshop.

## E.7 East Herts Transport context

E.7.1 East Herts comprises approximately one-third of the geographical area of the County of Hertfordshire.

E.7.2 It is a predominantly rural district with strong cross border connections to a number of major settlements outside its borders including the three New Towns of Stevenage, Harlow and Welwyn Garden City. There are also substantial cross-boundary influences from to the north and Essex to the east. The historical evolution of the transport networks is similar to other districts in that settlements have been developed over time around radial routes that lead to London.

E.7.3 East Herts has a dispersed settlement pattern that includes the five larger market towns of Bishop's Stortford, Buntingford, Hertford, Sawbridgeworth and Ware surrounded by a number of smaller, rural villages. In keeping with the dispersed nature of the District, the transport network between these settlements, especially along an east – west axis is heavily reliant on the private car.

E.7.4 The town centres (which are considered further in the later sub-sections of this report) are generally historic and have been retro-fitted to accommodate the private car. As car use and ownership has increased these town centres have suffered as a result. This coupled with a lack of public transport investment (in comparison to road building) has resulted in certain existing infrastructure strains becoming apparent both within the centres and the more links that connect them.

E.7.5 However, the District is well-placed for access to the strategic road and rail network, which includes the M11 to the east, the West Anglia Main Line between London and Cambridge also to the east and the A1(M) and East Coast Main Line to the west. The M25 London Orbital Motorway lies further to the south.

E.7.6 The proximity to London inevitably creates large commuting flows. The 2011 Census demonstrated that East Herts has high levels of daily out-commuting flows of 26,358 trips with corresponding daily in-commuting flows of 16,146 trips. Net outward daily commuting flows therefore total 10,212 trips per day with the 32% of flows (8,340 trips) commuting to Greater London. This is summarised in Figure 2.1 in section 2.

E.7.7 The car represents the preferred mode of choice for 42% of East Herts commuters and traffic flows on the East Herts road network increased by 3.4% between 2012 and 2013. However, this growth is trending downwards and should be compared alongside an upward trend during the same period in rail travel, which is a strong second favourite mode of choices for East Herts commuters representing a 9.4% mode share although the impact of these rail connections on the town centres needs to be considered in the context of car trips to the stations.

E.7.8 Journey distances are also favourable to mode shift towards bicycle use for commuter trips. Approximately 54% of all commuting trips across all modes are less than 5 miles in distance whilst only 0.9% of East Herts residents currently travel to work by bicycle.

#### **The strategic transport network - highways**

E.7.9 East Herts has excellent links to the strategic road network being in close proximity to the A1 (M) at junction 4, the M11 at junctions 7 and 8 and the M25 at junction 25. The A414 is a semi-strategic route that provides for east-west connectivity across the District linking the A1M and the M11. The A120 also runs east-west from the A10 at Puckeridge to Bishop's Stortford and beyond and the A602 links the A10 from Ware with the A1(M) in Stevenage. The A10, which splits the District roughly in half in a north-south direction, is a semi-strategic connection that connects London to Cambridge.

E.7.10 In keeping with typical peak hour conditions in the U.K and in particular the South East of England, much of the strategic of road network suffer from localised congestion, although there are a number of major schemes planned that will increase capacity on the nearby motorway network.

E.7.11 Peak hour congestion and delay is experienced along a number of the key strategic corridors within and close to the District including:

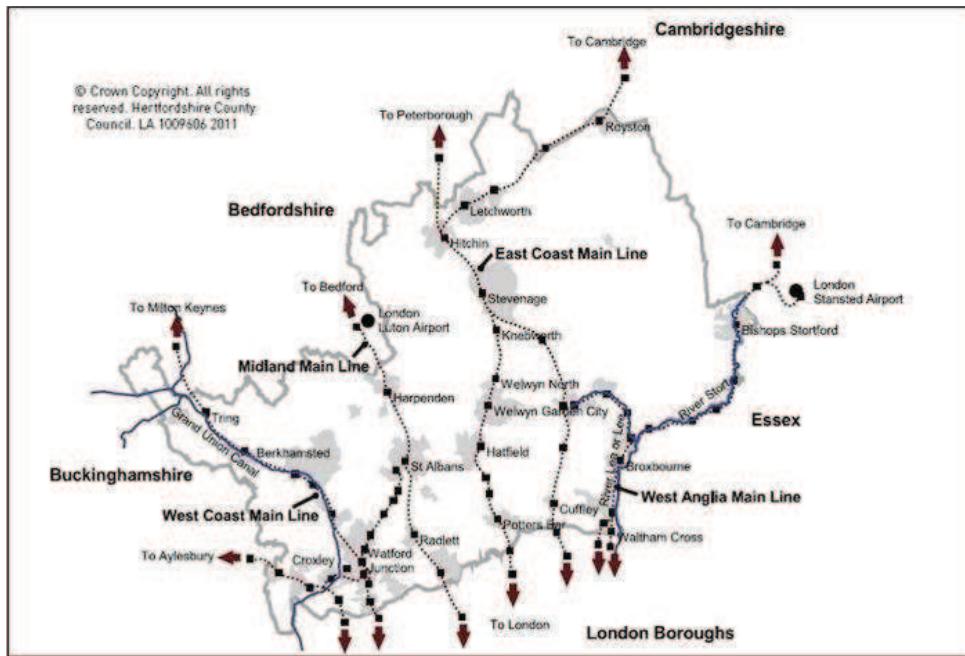
- The Eastern Corridor which contains the M11 sees peak hour congestion at Junctions 7 and 8 of the M11.
- The Western Corridor includes the A1M and this becomes stressed north of Welwyn and at its junction (4) with the A414.

#### **The strategic transport network - rail**

E.7.12 There are five railway stations within East Herts served by two major railway lines running through the District as follows.

- West Anglia Mainline (WAML) - The West Anglia Line is a major north-south line which serves the settlements of Bishop's Stortford and Sawbridgeworth. Services to Hertford East and Ware also available via the Hertford East Branch Line connection although passengers wanting to travel between the two separate branches are required to change at Broxbourne. This route provides services between a number of key destination including Stansted Airport and London Liverpool Street.
- East Coast Mainline (ECML) - The East Coast Main Line is a major north-south route serving Hertford North station and providing services between London Kings Cross station. There is no connection between the ECML and the WAML routes with any passengers wanting to make this journey required to take local bus services or walk between Hertford North (ECML) and Hertford East (WAML).

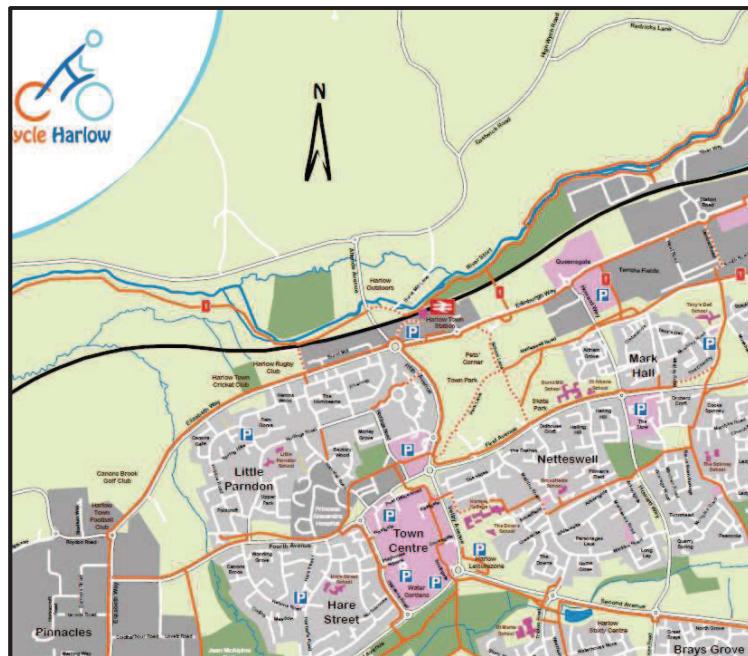
Figure E1 - Rail Network in Hertfordshire



## Strategic Cycling Routes and Connections

- E.7.13 There are three existing strategic cycle routes that operate within the National Cycle Network (NCN) and which offer direct and continuous routes to, from and within various settlements within East Herts.
- E.7.14 NCN1 – Runs south of the A414 into Harlow town centre and east towards Chelmsford. As regards western routes, connections are provided towards Roydon with NCN1 connecting with NCN61 approximately 6km west of Harlow.

Figure E2 – Proximity of NCN61 to Gilston Area (Harlow Cycle Map)



E.7.15 NCN61 – Connects with NCN1 as mentioned above and offers connections south towards Hoddesdon, Broxbourne and Cheshunt as well as continuous routes north to Stanstead Abbotts, Ware, Hertford and Welwyn Garden City; and

E.7.16 NCN16 – This provides an eastern cycle route from Birchanger north of Bishops's Stortford towards Great Dunmow and Braintree.

## **E.8 Local Transport Network**

E.8.1 Whilst the primary focus of this study is the requirement for strategic infrastructure to support Local Plan growth, in accordance with Planning Practice Guidance, all modes need to be considered and therefore there is, by definition, a need to also consider the local transport networks.

### **Highways**

E.8.2 In keeping with typical peak hour conditions in the U.K and in the South East of England, several parts of the local road network suffer from localised congestion which is based upon both Hertfordshire County Council's assessment of the levels of traffic congestion experienced in various sections of the local and strategic road network and the appreciation of the network that PBA has now established through key stakeholder engagement.

E.8.3 A summary of the existing road network hotspots are summarised below and relate to the key corridors within the study area:

- The Eastern Corridor which contains the M11 and A1184 sees peak hour congestion at Junctions 7 and 8 of the M11 and at a number of junctions along the A1184.
- The Central Corridor experiences less delay and congestion with the A10 operating within capacity for much of its length although at its junction with the A414, queuing and delay can be significant with queuing back from the slip road back towards the A10 can be experienced although it should be noted that this is only a peak hour occurrence.
- The Western Corridor includes the A1M and this becomes stressed north of Welwyn and at its junction (4) with the A414.
- The East –West Corridor includes the A414 and this indicates that junction delay and capacity is experienced in a number of locations some of which have been set out above. However, and in addition to these previously discussed junctions, the A414 also suffers from delay and congestion at the Gascoyne Way/ A119 Roundabout, the Gascoyne Way/ Hale Road Roundabout and the Gascoyne Way/ North Road Roundabout. Cumulatively these junctions in close proximity to one another limit the throughput of traffic along the A414 at peak times.

E.8.4 As well as the strategic and semi-strategic corridors congestion is also experienced in town centres where radial routes from the residential hinterlands converge and where people use the internal road network to avoid delays on more strategic routes. PBA has been made aware of traffic congestion and delay in the following District Town Centres:

- Bishops Stortford
- Sawbridgeworth
- Ware
- Hertford
- Buntingford

E.8.5 In addition to the larger market towns, 'rat-running' through rural villages and along rural roads and lanes has been brought to our attention as becoming increasingly problematic as congestion and delay on the strategic and semi-strategic network increases. We have been made aware of the following rural routes and settlements that are currently impacted by traffic using these parts of the local highway network to get to more strategic destinations:

- Aston - rat-running to avoid congestion on the A602
- Hertingfordbury / Letty / Cole / Birch / Staines Green - Rat-running occurs on a number of rural roads through small villages to avoid congestion on the A414 including through Letty, Cole, Birch and Staines Green and Hertingfordbury.
- Standon - Traffic uses Standon High Street as a short-cut to avoid delays on the A10.

### **Public Transport**

E.8.6 The local public transport network in East Herts is bus based. The bus network reflects the dispersed settlement patterns across the District, with a number of core services operating along a series of inter-urban routes providing connectivity between a number of larger settlements, with more limited provision operating between the rural villages.

E.8.7 The key inter-urban bus corridors in East Herts are:

- A414 – Ware-Hertford-Welwyn Garden City;
- A1184 – Bishop's Stortford – Sawbridgeworth – Gilston – Eastwick; and
- A10 – Buntingford – Puckeridge - Ware.

E.8.8 Buntingford in particular has been highlighted during the consultation on this Delivery Study as an area in particular need of improved inter-urban connectivity as well as improved evening time services and this will be explored, along with other rural locations for growth, as part of this Study.

### **Cycling**

E.8.9 There are a number of local cycle routes within East Herts. The relationship of these connections to the strategic sites is assessed in further detail in the site-by-site analysis that follows.

## **E.9 Main Areas Affected by Growth**

E.9.1 As this study has progressed and through consultation with a number of groups and stakeholders, PBA has been made aware of general transport infrastructure concerns around the cumulative impact on growth on the existing town centres within the District. In general terms, there is a perception that traffic congestion is already at unacceptable levels and that delays being caused to residents and workers alike will only worsen as a result of the growth allocations in the District Plan. This sub-Section of the report therefore provides a context for each of these centres to allow commentary on the impacts in the later sections of the report to be made.

### **Bishops Stortford**

E.9.2 Bishops Stortford is typified by a network of historic streets and its proximity to the M11 at junction 8 and the town is a frequent stop-off point for passengers or people picking passengers up from nearby Stansted Airport. The Airport itself can be accessed via rail or bus between there and the town.

E.9.3 Bishop's Stortford is well serviced by all forms of transport in that Bishop's Stortford station is on the WAML and London Liverpool Street can be accessed 40 minutes.. Epping tube station is around 12 miles (19 km) away from Bishop's Stortford which means some residents use London Underground services rather than the main line station at Bishop's Stortford.

E.9.4 Bishops Stortford benefits from a western ring road that is formed of the A1184 to the south and the A120 to the north. This route provides access to junction 8 of the M11. However, and despite the availability of the bypass, and in part because of delays along its length, the town still suffers from through traffic using local roads to access more strategic destinations. The 2006 Steer Davies Gleave (SDG) Town Centre Study concluded that 41% of traffic in the town centre was in fact through traffic.

E.9.5 There are a number of further key transport observations, shortcomings and/ or bottlenecks identified within the town which compromise its overall performance as a place and its ability to provide access to transport networks and these are as follows:

- There are a number of significant car parks within the town centre, including parking associated with the station and these, along with the through traffic using the town, contribute the peak hour pressures and congestion.
- Car parking costs are relatively low and therefore attractive for both shoppers and workers
- Frequency of rail services in comparison to other stations on the line results in some passengers 'railheading'.
- Poor pedestrian and cyclist connectivity over the Station Road Bridge as carriageway space is dedicated to two lanes of traffic heading west.
- One way routes to maximise vehicular throughput are to the detriment of pedestrians and cyclists and severe and fragment parts of the town centre.
- The Hockerill Junction is a significant town centre bottleneck with queues on all arms during peak periods. The physical road layout is constrained by surrounding buildings and there is not therefore scope to improve capacity via localised widening. We understand that the performance of this junction has been the subject of various transport studies over recent years, but these have not established any appropriate solutions. The only easily deliverable options for releasing capacity at the junction involve the banning of certain turning movements. The right turn from London Road to Dunmow Road would deliver the most benefit, however the results of this and any other turning bans would result in significant re-routing of traffic with potentially unacceptable impacts on surrounding routes. The limit on capacity does however constrain future demand and make the route less attractive for through traffic.
- Whilst the A1184/A120 bypass provides good access to the M11 junction 8 outside of peak periods, during the peaks, delays and congestion occur and this in part encourages through traffic to use the town centre.
- The land uses along the A1250 Dunmow Road include two schools and significant employment uses. These land uses have good access to the strategic highway network but can cause delays during the AM peak as opposed turns block traffic on route to the centre.
- Despite having a Central Railway hub, the interchange facilities and environment are poor.
- No bus priority exists on any corridors into the town.

### **Sawbridgeworth**

- E.9.6 Sawbridgeworth is four miles south of Bishop's Stortford, and lies on the A1184. The town has a railway station that links to Liverpool Street although services are less frequent than from Bishops Stortford.
- E.9.7 The linear nature of the settlement results in limited route choice, and its relationship to Bishops Stortford, Harlow and the strategic M11 means that through traffic uses the town to access these settlements and destinations and as such delays can occur during peak periods on the A1184 at the Station Road / West Road junction, Brook Road junction and in particular long delays at the A1184 / High Wych Road junction.
- E.9.8 The lack of any bus priority means that the aforementioned congestion can have impact on the existing bus network causing delays to this important bus corridor between Harlow, Bishops Stortford and Stansted Airport beyond.

### **Ware**

- E.9.9 Ware benefits from the A10 to the west and the A414 to the south. The configuration of these networks mean that strategic through traffic is not an issue for the town centre. However, the lack of any inner orbital connection and the traditional radial routes which lead to Baldock Street/ Wadesmill Road/ Westmill Road result in pressure being placed on the town centre High Street from traffic originating or terminating in Ware. This situation is worsened by the general high street friction that occurs due to kerbside activity (parking, servicing, pick-ups and drops offs etc).
- E.9.10 Ware benefits from a station at the Southern end of the town centre which provides access to Hertford and London Liverpool Street although faster and more frequent services can be accessed from Broxbourne. Frequent bus services travel between Ware town centre and Hertford along the A119 although no bus priority exists and delays occur during peak periods at the Hertford end of the journey in particular.

### **Hertford**

- E.9.11 Hertford has an extensive Conservation Area, which covers a large proportion of the town and includes areas with varying characteristics. The town centre itself retains much of its medieval core, including many listed buildings of historic significance, and has high townscape quality. This presents an attractive environment but presents challenges in transport terms.
- E.9.12 However, despite the challenges the town boasts good transport connections, including a bus station which provides access to both local and long-distance destinations, and two railway stations, which offer services into London via Liverpool Street and Kings Cross/Moorgate. Hertford's close proximity to the A1, M25 and M11 enable good regional transport links; however, the town suffers from peak time congestion in both the town centre and along the A414, which bisects the town. This congestion causes air pollution and an Air Quality Management Area (AQMA) has been declared in the Gascoyne Way area.
- E.9.13 As set out previously in this report, the A414 Hertford is a semi-strategic east-west route across the District. Analysis conducted by AECOM on behalf of HCC in November 2014 found that a "significant number of vehicles using the A414 travel all the way through the Hertford Corridor" in the AM and PM peaks, with 40% of westbound traffic in the AM peak constituting through traffic movements. The road is currently operating close to capacity, with the A414 roundabouts at Hale Road / Parliament Square and Ware Road / London Road / Fore Street (Bluecoats) junction in particular, having capacity issues. These areas form critical parts of the local bus network and would have significant issues for local bus operators in terms of service provision and the viability of services.

## E.10 Assessment of Local Plan and cross boundary growth impacts

### ‘Severity test’

E.10.1 As is required by policy, consideration has also been given to the ‘severity test’ for assessing the residual cumulative impacts of growth as follows:

- **NPPF** - the National Planning Policy Framework paragraph 32 states that “development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe”; and
- **NPPG** - the Department for Communities and Local Government issued revised guidance on 10 October 2014 within the National Planning Practice Guidance (NPPG) entitled ‘*Transport evidence bases in plan making*’ paragraph 003 highlighted the need for Local Plan transport evidence bases to “*consider the cumulative impacts of existing and proposed development on transport networks.*”

E.10.2 Consultation with stakeholders, including the Advisory Team for Large Applications (ATLAS), has also been undertaken to inform our interpretation of ‘severity’. Whilst it was established that there is no accepted definition of what a ‘severe’ transport impact constitutes at present, it is acknowledged that the cumulative impacts of growth up to 2031 in East Herts should be fully assessed on all key strategic road networks, particularly the M11, A1 (M), and cumulative impacts through the centres of Hertford (A414), Bishop’s Stortford, Ware and Sawbridgeworth as well as and local networks such as the A414 and A10 and A120.

E.10.3 The HE and HCC have both however indicated that any delay and associated queue that queues back from a junction onto the mainline strategic or semi strategic network could be considered to compromise highway safety and this could be construed as being a ‘severe’ impact. Therefore for the purpose of the Delivery Study, PBA consider a ‘severe impact’ will be something where Highway’s England objects to the scale of proposed growth on the grounds of unacceptable safety impact on the strategic highway network.

E.10.4 It should be borne in mind that the Traffic Management Act 2004 imposed a duty on Councils as local traffic authorities to secure the expeditious movement of traffic on the local road networks. However, this does not impose any criteria on level of ‘stress’ or timescales for acceptable levels of congestion and these should therefore remain as ‘political’ judgements to be determined by elected Members to inform the location of the proposed District Plan growth.

E.10.5 Therefore, the decision whether or not it is acceptable to allow further stress on the local highway and over what timescale rests with the appropriate Highway governing bodies and elected members. During the course of this study, it appears that the HCC are likely to adopt a similar test of severity as the HE and are likely to object where highway safety is compromised due to congestion.

E.10.6 HCC’s position on what would constitute ‘severe’ is further clarified by a letter from HCC to East Herts, dated 27<sup>th</sup> July 2015 regarding East Herts Local Plan Issues. Within this letter which is appended to this report and in the main to advise that a Countywide Transport Model is to be developed to provide a basis for testing of growth along the A414, provides the following indicators of the Severity test in application.

E.10.7 “Severe traffic congestion from our studies on the A414 beyond this level of growth include:

- Regular instances of traffic blocking key junctions and queuing back on the current free flowing lanes of the A10.
- Significant increases in delays were also predicted on the wider local road network that would resulting in:
  - subsequent impacts on key public transport routes,

- inappropriate routing of traffic through the town centre and residential roads (including villages)
- The likely expansion of the existing traffic related air quality management area (AQMA)."

## E.11 Transport modelling and other evidence

E.11.1 The modelling evidence base in the District is fragmented. A variety of different model types and geographical extents exist and therefore a consistent evidence base upon which to base conclusions, particularly in regard to cumulative impacts, has been a key challenge in this study.

E.11.2 HCC acknowledge this evidence gap and as such have now commissioned work on a new Countywide Transportation Model (COMET) to be developed, and this will provide a platform for testing strategic mitigations to growth across the County. This technical work is already underway, and is considered by HCC to be the logical next step to progress the evidence base, and seek the necessary approvals to progress strategic transport improvements in Hertfordshire.

E.11.3 We have been advised that it is currently anticipated that the COMET will become available to test scenarios in early 2016 and the HCC Transport Vision work which will be informed by the modelling will be presented to members for approval in the summer of 2016, following a round of public and stakeholder consultations. Once adopted, this document will set out Hertfordshire's approach to dealing with strategic transport and will include a prioritised list of interventions. These will then subsequently be developed to Strategic Business Case level to enable funding bids to be put forward to the LTB, LEP and DfT. It will also be a key document in supporting the transport evidence base for Local Plans.

E.11.4 That said, a significant amount of testing and assessment has been undertaken by both the Highways Authorities, HCC and also the site promoters and the status of this evidence are summarised below in Table E1:

Table E1 – Transport Modelling Evidence &amp; Status

Model Type/ Name	Description	Status
DIAMOND spreadsheet modelling	Diamond or Spreadsheet modelling has been undertaken by both HCC and ECC as a means to establish the impact of District Plan growth on the Districts of Uttlesford and East Herts. The ECC tests have been used to assign flows to M11 junctions 7 and 8.	This work remains valid although will be superseded by future modelling
LinSig.	LinSig models have been prepared for Junctions 7 & 8 of the M11	These models are considered acceptable by the HE with flows being derived from VISUM modelling being undertaken in parallel.
Harlow Stansted Gateway Transport Model (HSTGM).	HSGTM was prepared to assist the process in identifying locations where highway improvements were needed. There are concerns over the models validation and calibration given that only around 60% of links have a GEH value of 5% or less.	This model is superseded by the VISUM model being prepared by ECC and the COMET Modelling being prepared by HCC
VISUM modelling.	This is a strategic tool that includes variable demand and covers a geographical output area similar to the HSGTM. It will be fully WebTag compliant	Whilst some interim District Plan tests could be undertaken, HCC consider the model to not be suitably detailed in Hertford to allow robust cumulative tests to be undertaken

Countywide Transportation Model (COMET)	This will provide a platform for testing strategic mitigations to growth across the County. This technical work is already underway, and is considered to be the logical next step to progress the evidence base, and seek the necessary approvals to progress strategic transport improvements in Hertfordshire.	It is currently anticipated that COMET will become available to test scenarios in early 2016 and the Transport Vision work will be presented to our members for approval in the summer of 2016, following a round of public and stakeholder consultations.
PARAMICS modelling	A414 Hertford Corridor Study: Aecom on behalf of HCC have prepared a PARAMICS Micro-simulation model that covers the Hertford A414 corridor	Being used to test online solutions. Does not yet have benefit of a strategic model underpinning assignment, distribution or variable demand. PBA consider suitable for determining network capacity but needs to be considered in context of strategic cumulative tests in COMET
	Developer Gilston Model	Base not yet signed off by ECC
	Developer Ware Model	Base not yet signed off by HCC
Welwyn Hatfield 'WHaSH' Model	AECOM has been commissioned by Welwyn Hatfield Borough Council (WHBC) to develop a Strategic Saturn model to test Local Plan Growth in Welwyn and Hatfield.	The HE recognise that "the WHaSH model enhancement appears to have addressed a number of the issues previously raised. The Base Year model may be suitable for use as a basis from which to assess the potential impacts of development in the Welwyn-Hatfield area, with greater confidence in the AM compared to the PM."
London and South East Route Utilisation Strategy	Industry Standard documents that establish forecast passenger demand and associated network and service changes to accommodate demand	PBA Consider suitable for determining network capacity

E.11.5 PBA advise that Inspectors acknowledge that not all the modelling evidence will necessarily be available at the time of the Plan preparation, as long as there is sufficient information to inform the five year supply and there is a process in place for managing future impact then that should be sufficient to move forward. However, for any major scheme, some assessment should be provided to provide sufficient indication that the infrastructure to support the development can be delivered. It is accepted by the Planning Inspectorate that, for later years of the District Plan, providing a comprehensive picture of infrastructure requirements becomes increasingly difficult and a more generalised approach is needed. It is in this context that these impacts are assessed.

## E.12 Stakeholder Consultation

E.12.1 This review has been informed by stakeholder discussions that have including dialogue with the major site promoters, HE, HCC, ECC, neighbouring authorities, Town and Parish Councils, rail operators and EHDC. A summary of the key issues for each is shown below:

- HE – strategic impacts on the motorway network – M11, A1(M) and M25;
- HCC/ ECC – local impacts on the A414, A10 and need to fully appraise the cumulative impact of all the growth proposed;
- Town and Parish Councils – local impacts on town centres and 'rat-running' through residential streets and constrained villages; and

- Site Promoters – seeking to better understand all transport impacts of proposed growth and likely mitigation required.
- Uttlesford, East of Welwyn, Broxbourne and Harlow council officers – ensuring cross border impacts are incorporated in any assessment.

## **E.13 Corridor-Based Strategic Assessment**

E.13.1 Assessment of the transport impacts of the proposed District Plan and cross-boundary growth has been undertaken across the following 4 strategic transport corridors. This analysis therefore summarises the key 'high-level' impacts on a transport corridor basis as follows:

- Eastern Corridor (M11 and WAML);
- Central Corridor (A10);
- Western Corridor (A1M and ECML); and
- East – West Corridor (A414).

### **Eastern Corridor**

#### Junction 7a

E.13.2 ECC are currently engaged in a public consultation exercise for a new junction of the M11 (7a) north of Harlow which will significantly improve capacity along the M11 corridor at junctions 7 and 8.

E.13.3 The ECC VISUM work is not yet complete but when available will provide insight on the benefits to Junction 7 and 8 and the performance of 7a itself. At this stage the growth that can be accommodated as a result of the delivery of 7a is relative to the performance of junctions 7 and 8 considered above and below respectively.

#### Junction 7

E.13.4 Base model runs by ECC show that Junction 7 currently operates at 101% capacity in the AM peak and significantly exceeds capacity when Local Plan growth is added. The changes proposed have been modelled in LinSig up to a 2031 future year scenario, and include all committed schemes and Local Plan growth. These changes have demonstrated that junction 7 would operate within capacity until 2022. To date, the HE have indicated that they are broadly supportive of the proposed network changes at Junction 7 and are satisfied that the LinSig models are robust and fit for purpose.

E.13.5 The delivery of Junction 7a ensures that Junction 7, in 2022, would operate within capacity on all arms in the AM peak and on all arms except the northbound off slip in the PM peak. However, the VISUM tests undertaken for 7a indicate that by 2036 the junction would again be over capacity either with or without 7a and that major improvement which would may see a grade separated connection from the A414 to the M11(s) are currently being reviewed by Highways England.

#### Junction 8

E.13.6 Base model LinSig runs by Essex County Council (ECC) showed that M11 Junction 8 currently operates at 90% capacity.

E.13.7 The changes proposed have been modelled in LinSig up to a 2031 future year scenario, and included all committed schemes and Local Plan growth. These changes have demonstrated that junction 8 would operate within capacity until approximately the mid-2020s.

E.13.8 The addition of north facing slips would ensure that the junction would operate within capacity, well beyond the plan period.

E.13.9 To date, the HE have indicated that they are broadly supportive of the proposed network changes at Junction 8 and are satisfied that the LinSig models are robust and fit for purpose. It should however be noted that all tests and conclusions set out above for Junction 8 will be updated once the ECC VISUM work is complete as this will provide different demands to the DIAMOND modelling previously undertaken.

#### The A120 / A1250 Stansted Road

E.13.10 ECC's modelling of the A120/ A1250 has indicated that by 2031 the junction would be significantly over capacity by 2031 in both the AM and PM peak periods.

E.13.11 Therefore the changes which incorporate changing the junction from a roundabout into a signalised crossroads junction would result in the junction operating within capacity in 2031.

#### The A120 / B1383 Stansted Road

E.13.12 ECC modelling indicates that the junction of the A120 / B1383 Stansted Road would be over capacity by 2031 despite the changes proposed by the Bishops Stortford North scheme. However, the further changes ensure that the junction would work within capacity up to 2031 although in the AM peak there would be no practical reserve capacity with the overall junction operating at 100%.

#### The A1184 / West Road

E.13.13 Further testing is required to establish the cumulative impacts of growth at A1184 / West Road. The VISUM testing reported to date indicates that some small reductions in flow may occur as a result of Junction 7a when compared to the Do Minimum scenario.

#### A1184 / High Wych Road junction

E.13.14 Further testing is required to establish the cumulative impacts of growth at A1184 / High Wych Road Junction. The initial VISUM model testing indicates that some small reductions in flow may occur as a result of Junction 7a when compared to the Do Minimum scenario.

#### The A1184 / A414

E.13.15 Further testing is required to establish the cumulative impacts of growth at the A1184 / A414 junction. A Paramics model is being developed by the Gilston Area site promoters to bridge this gap in evidence coupled with the subsequent COMET testing.

#### West Anglia Mainline

E.13.16 As stated in Section 4 of this report, the RUS concludes that the additional capacity provided by committed schemes across the line delivers a peak hour capacity of 18,500 meaning a 97% Demand / Utilisation ratio is achieved when forecast growth up to 2031 is considered. Based on a planning capacity of 85% there is an identified capacity 'gap' of 2,300 passengers.

E.13.17 However, through the implementation of the previous RUS recommended schemes which includes lengthening all peak hour inner London services on the West Anglia line to 8 carriages and lengthening carriages on Harlow Town Line to 12 carriages, the shortfall for the outer suburban area becomes 0 which is based on a metric of seats. It is acknowledged that there remains a capacity gap on the Inner Suburban section of the line.

### **Eastern Corridor Summary**

- Strategic junctions relating to the M11 are being redesigned and modelled for District Plan growth. To date in capacity solutions have been demonstrated for the first 5 years of the Plan.
- After the first 5 years of the Plan Junction 7 requires significant improvement or requires Junction 7a to provide capacity relief.
- Junction 8 has a number of schemes that provide capacity until mid-2020's after which point north facing slips may be required.
- Capacity at key junctions along the A120 has been demonstrated until 2031.
- There are a number of critical junctions along the A1184 that have not yet been shown to have effective mitigations developed although full impacts of Junction 7a are not yet known.
- The WAML has planned capacity up to 2031
- Local Bus services will be adversely affected along A1184 if delays worsen and these need to be designed for as part of a corridor based strategy.

### **Central Corridor**

#### A10

E.13.18 Previously HCC Diamond modelling showed that 3,000 dwellings can be accommodated at Ware without any capacity issues arising along the A10 corridor. This testing was undertaken with mitigation and assumed the provision of a new link road between the A10 / A1170 junction and the Widbury Hill area.

E.13.19 The A10 performance including the proposed growth at Buntingford (500 units) also showed that this could be accommodated on the existing road network and, indeed, that growth at Buntingford up to 1,000 units could be accommodated before capacity impacts would be realised on the A10 southbound carriageway.

E.13.20 As such, testing along the A10 within East Herts has shown that all proposed District Plan growth can be accommodated without any severe capacity concerns arising.

E.13.21 However, further testing is required fusing a district wide model and the site promoter-led Paramics model which will assess corridor performance along the A10. From this work it is necessary to establish the performance of the junction of the A10 with the A1170 and the A602 with the A10/ Westmill Road which to date has not been established.

E.13.22 The within capacity performance of the A10 means that the parallel route of Ermine Street is not currently blighted by rat running through traffic and the important bus routes that connect Buntingford, Puckeridge and Ware are unaffected.

#### East Coast Mainline

E.13.23 As stated, as a result of the Thameslink ECML proposals and the shared track running of both Thameslink and Great Northern services, increases in capacity are realised meaning that a peak hour capacity of 16,300 is achieved meaning an 80% Demand / Utilisation ratio would occur in 2031. However, further consultation and assessment is needed to understand whether the proposed growth plans for this area have been fully factored into the capacity assessments by Thameslink.

### Central Corridor Summary

- Modelling to date has demonstrated that A10 can accommodate District Plan Growth.
- Further assessment awaited with regard to key junction interaction at Ware.
- Local bus services between settlements will not be affected adversely.
- The addition of Thameslink services and associated infrastructure increases rail capacity and accommodates passenger growth but requires greater understanding of the scale of growth assessed.

### Western Corridor

E.13.24 The WHaSH modelling inputs included all committed growth, proposed local plan growth in WHBC, cross-boundary local plan growth including East Herts with forecasting conducted up to 2031. A summary of the transport impacts on Junctions 3 and 4 are summarised below and include additional mitigation proposed at each junction.

#### Junction 3

E.13.25 WHaSH has tested the improvements as set in Section 4 and concluded that Signal optimisation significantly reduces delay but the actual scheme design does little in reducing delay. It is concluded that the main issue at this junction is the A1 (M) southbound off-slip and no capacity improvements are provided here as part of this mitigation measure.

E.13.26 PBA understands that further more detailed assessment will be undertaken at this junction to further reduce delays and to this end Welwyn Hatfield expect to publish the 2031 Forecasting Report shortly.

E.13.27 PBA consider that some further work is required to establish whether delays can be further reduced at this junction and how much growth can be accommodated through signal optimisation alone. However, given its relative distance from the majority of the East Herts major site allocations, except for Land East of Welwyn Garden City, it is considered that at this stage Junction 3 of the A1M is not a constraint for the first five years of East Herts District Plan growth. Beyond the first 5 years further evidence is required to determine whether appropriate mitigation has been established and demonstrated as being suitable.

#### Junction 4 and A414 between Mill Green and Tesco, the Jack Oldings Signalised Roundabout and the A414 Hertford Road / A1000 Hertford Road

E.13.28 WHaSH has tested a satellite roundabout enlargement to accommodate HGV turns. This modelling has demonstrated that the changes proposed result in no noticeable change in delays and in fact delay is increased as a result of downstream capacity increases that see more traffic arriving at the junction.

E.13.29 Given the relationship between this junction and the A414 between Mill Green and Tesco, the Jack Oldings Signalised Roundabout and the A414 Hertford Road / A1000 Hertford Road Junction, a micro-simulation model is being developed. PBA understands that to date the modelling undertaken has not demonstrated any benefit of the scheme changes.

E.13.30 At this stage PBA consider that no appropriate mitigation has been developed to accommodate growth at these interrelated junctions and that further evidence is required to demonstrate appropriate levels of growth.

#### Junction 6

E.13.31 The segregated left hand turn at the Clock roundabout segregates conflicting flows travelling south from Great North Road and Codicote Road. However, a capacity issue remains on A1000 between the two roundabouts (single lane) and a third lane at the approach provides little capacity relief. As such it has been recommended that due to the nature of this junction, microsimulation is required to fully understand the flows and interaction of movements that occur here.

E.13.32 PBA consider that further work is required to establish whether delays can be further reduced at this junction to establish how much growth can be accommodated given its relationship to the land east of Welwyn Garden City.

#### **Western Corridor Summary**

- Modelling to date has demonstrated that some junctions along A1M require further more detailed assessment before suitable mitigation can be determined. However, in advance of this more detailed work further WHaSH forecast tests are expected to clarify performance of the network.
- At this stage it is considered that the constraints, in conjunction with the committed schemes, do not currently pose a risk to the first five years of District Plan growth but further mitigation is required beyond this point.

#### **East-West Corridor**

E.13.33 Diamond testing has previously been undertaken assessing the cumulative impacts of all District Plan growth on the A414 corridor through Hertford and showed significant highway impacts along the A414 Gascoyne Way corridor.

E.13.34 The A414 through Hertford is already running close to capacity during peak periods, and further technical analysis was undertaken by HCC in September 2014 in the form of an A414 Corridor Study in September 2014 to test a series of junction capacity improvements.

E.13.35 This used an extension of the existing Paramics model, and included all proposed District Plan growth to test a number of junction improvements along the A414 between the A10 and Hale Road. The results have shown that A414 corridor performance could be potentially improved with these initial measures with limited additional capacity provided.

E.13.36 Therefore, HCC have advised in their letter dated 27th July 2015, that 'whilst the full Plan growth is undeliverable without a strategic intervention at Hertford, the assessment we have undertaken indicates that the traffic growth associated with the sites in your current first 5 year housing trajectory (up to 2021) is likely to be acceptable in terms of traffic impact on the A414. However, further detailed localised traffic assessments will need to be undertaken, and mitigation measures developed, as part of the planning process.'

E.13.37 Therefore and in order to inform further strategic interventions that may be necessary further testing is to be undertaken by HCC using the soon to be developed COMET model and therefore our initial conclusions are that, prior to mitigation being considered, the cumulative impacts of District Plan growth result in a significant impact on highway capacity along the A414 through Hertford.

E.13.38 Modelling undertaken by Welwyn Hatfield Borough Council in November 2014 also tested the proposed East Herts District Plan growth as well as the proposed WHBC proposed local plan growth in full and showed that without mitigation, there were significant impacts eastbound in the AM peak along the A414 on the approach to the Holwell Lane roundabout but otherwise, that A414 performance between both districts was satisfactory.

E.13.39 8,000 units at Gilston have been tested in Diamond whilst 10,000 have been tested in the Harlow Stansted Gateway Transport Model. The testing in HSGTM has showed that significant highway impacts at the A414/Eastwick Road roundabout north of Harlow and along the A414 between Eastwick and Burnt Mill which would need addressing as part of any proposed growth at Gilston.

#### **East –West Corridor Summary**

- The A414 corridor is stressed during peak periods. The sections within Hertford and north of Harlow are currently identified as areas that require focussed mitigation and a number of schemes have already been developed. Whilst these have been shown to have some effect in accommodating increased traffic throughput further work is still required and is ongoing.
- Particular concern has been raised with regard to traffic queuing back from Gascoyne Way in a westbound direction in the AM peak to the junction with the A10 and onto the A10 itself. This has been identified by HCC as a potential 'severe' impact and as such Gascoyne Way capacity solutions, alongside more sustainable measures are an integral part of this Study.
- At this stage and prior to the further work that is currently being undertaken for the A414 Hertford it is considered that the constraints, in conjunction with the committed schemes, currently pose a risk to EHDC District Plan delivery beyond the first five years of District Plan growth.

### **E.14 Town Centre Impacts**

#### Bishop's Stortford

E.14.1 Diamond and Paramics modelling undertaken to date and conducted by HCC has demonstrated that all District Plan growth in Bishop's Stortford can be accommodated with only a "limited impact" on Bishop's Stortford town prior to inclusion of the 1,000 units at Bishop's Stortford South and prior to any mitigation being considered.

E.14.2 With the addition of these 1,000 units, capacity and congestion concerns are manifest along the London Road corridor between Pig Lane and Thorley Hill, with further impacts at the Hockerill Street junction and Stansted Road corridor north of this.

E.14.3 However, PBA consider that the 'true' impacts need to be considered once the COMET modelling becomes available and the network can be modelled in conjunction with capacity increases along the A120 and in the context of Junction 7a as both of these interventions may reduce the volume of traffic passing through Bishops Stortford to access the strategic network at Junction 8. Given the availability of the ECC VISUM model, interim runs could be undertaken for this part of the network given that sufficient model detail is likely to exist. A lack of consistency with the COMET model may however be a concern.

E.14.4 In general, PBA does not consider highway capacity based solutions are appropriate for Bishops Stortford town centre which will inevitably attract more traffic into the town to take advantage of reduced journey times. Instead sensible town centre management coupled with investment in sustainable measures and targeted highway capacity on preferred routes external to the settlement are more appropriate. Measures that look to reflect this approach are outlined in Section 6 of this report.

#### Ware

E.14.5 The nature of Ware's road network means that traffic wanting to access the A10 is required to do so by using the Baldock Street/High Street corridor. Diamond modelling conducted by HCC and included the 3,000 units proposed at the broad location at Ware showed significant

highway impacts on the A1170 north and south of Ware and through the town centre, A119 up to London Road/Viaduct Road roundabout and along the Baldock Street/High Street.

- E.14.6 PBA consider it important that improved eastern orbital connections are developed to facilitate growth and to provide alternative routes for the existing population and therefore masterplanning that provides these connections is supported.
- E.14.7 The development of the Ware town centre Paramics model will be an important tool in understanding whether the impacts of growth can be mitigated along the High Street and how much semi-strategic traffic can make use of this western orbital connection.

#### Hertford

- E.14.8 Hertford town centre and the impacts of growth need to be considered in the context of the A414 and as such, we would refer to our previous assessment undertaken as above within the “A414/ east – west corridor” sub-section. Though the work undertaken to date has indicated that the A414 corridor performance between the A10 and Hale Road can potentially be improved by the combination of individual junction improvement options, the potential release of latent demand is likely to lead to pinch points elsewhere along the corridor.
- E.14.9 Given that the measures tested to date would not free up enough capacity to accommodate large volumes of additional development, the impact of increased traffic and congestion on the A414 could potentially result in impacts on the wider town centre as traffic rat runs and there is an increase in queues as traffic waits to access the corridor.
- E.14.10 However, PBA consider that the ‘true’ impacts need to be considered once the COMET modelling becomes available and the network can be modelled in conjunction with variable demand allowing people to change mode or the time of their journey.

- E.14.11 It is considered that whilst the maximising of traffic throughput along the A414 remains an important strategic objective and this is reflected in the infrastructure schedule contained in Section 6, further more sustainable and improved accessibility based measures should also be developed for the wider town centre and between settlements along the East-West corridor and these are also set out in Section 6.

#### Sawbridgeworth

- E.14.12 The linear nature of Sawbridgeworth, the geographical relationship to Harlow and Bishops Stortford and the lack of route choice available for travel means that any increase in traffic resulting from either population growth or car usage will have an impact on the town centre.
- E.14.13 The effect of Junction 7a on Sawbridgeworth has yet to be fully demonstrated and some traffic relief may be achieved or scope for junction improvements may be increased.
- E.14.14 PBA consider that growth in this location may have an adverse impact on the potential to deliver more strategic and larger growth sites in Bishops Stortford and Gilston given that any development in Sawbridgeworth will have a direct impact on this sensitive corridor.

### **E.15 Conclusion – Evidence Gaps**

- E.15.1 It is clear from our review of available modelling evidence that additional work needs to be undertaken with particular regard to cumulative impacts across the District.
- E.15.2 The information produced and modelling undertaken by the site promoters has generally (and understandably) been developed to reflect the impact of their growth on the immediate surrounding area but there is a lack of a consistent district wide evidence base to assess the cumulative impact of all the proposed planned growth at the broad locations (beyond the timescale of the plan), and including growth from neighbouring areas on the cumulative impact on transport. This gap will however be filled by the now commissioned COMET model

currently being developed by HCC and is set to be available in spring 2016 for Local Plan testing.

- E.15.3 In conclusion, there is therefore a gap in the assessment on the cumulative impact of District Plan and cross-boundary growth that will be required to be evidenced. This will be assessed further and final conclusions drawn at this point, and as such, the impacts assessed and conclusions drawn in this Section should be viewed as 'interim' conclusions only.
- E.15.4 It should also be noted that the decision whether or not it is acceptable to allow further stress on the local highway and over what timescale, rests with the appropriate Highway governing bodies and elected members. The timing of infrastructure delivery should therefore be viewed objectively and with this in mind.

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# **East Hertfordshire District Council**

## **Plan Viability, Affordable Housing and CIL Study**

**Final Report**  
**Peter Brett Associates**

On behalf of East Hertfordshire District Council



Project Ref: 31122-002 | September 2015



## Document Control Sheet

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# EXECUTIVE SUMMARY

## Study scope

1. Peter Brett Associates (PBA) LLP has been commissioned by East Herts District Council (EHDC) to assess the deliverability of the Draft Preferred Options District Plan 2014. This report sets out the findings for the plan viability assessment, affordable housing policy and preliminary draft Community Infrastructure Levy (CIL) charge options. A separate accompanying report focuses on the deliverability of four strategic sites.
2. The National Planning Policy Framework states that plans should be deliverable and that the sites and scale of development identified in the plan should not be subject to such a scale of obligations or policy burdens that their ability to be developed viably is threatened.

## Approach to viability assessment

3. A residual value approach to viability appraisal was undertaken for residential and non-residential schemes to inform the study recommendations.
4. The planned growth is based on residential delivery taking place in a range of predominantly greenfield sites. A number of brownfield case studies were also assessed, as well as flatted / apartment style developments. Two value zones were identified for the plan, a higher value Southern Zone and a slightly lower value Northern Zone.
5. The main policies identified as directly impacting on viability for this assessment were affordable housing, infrastructure and local water efficiency. The emerging recommendations have informed the Local Plan policies - adopting an 'iterative approach' to guide policy so that the proposed policy obligations do not threaten the plan viability, and support the delivery of development.

## Study findings and recommendations

6. Before policy costs are incorporated, all the residential development scenarios tested are viable. Once HOU 3 affordable housing and water efficiency policy requirements are introduced, some of the flatted schemes move to a position of marginal and negative viability and so further viability assessments were undertaken to inform the affordable housing and CIL options. The residential CIL charge options range from £40 per sq. m to £200 per sq.m with varying levels of affordable housing. Only speculative convenience retail is found to be viable to support a CIL charge from the non residential uses assessed.
7. At present there is a draft policy on affordable housing that has informed the viability assessment. However there is further work yet to be undertaken to inform the infrastructure delivery plan, which will include the Transport Vision work currently underway. So although this study provides an indication of the financial headroom available to support a possible CIL charge, there may need to be further iterations depending on the scale of the funding gap and need for any critical infrastructure to support the delivery of growth.
8. EHDC may need to consider the policy trade-off for delivering affordable housing and funding strategic infrastructure and maintain a viable Local Plan. This will be determined once there is a better indication on the scale of strategic infrastructure needed to support the delivery of the planned growth. At this stage a decision will also be needed on the most appropriate developer funding mechanism to adopt (CIL or S106).
9. Based on the current policy, CIL charge options have been considered as part of the wider plan viability assessment and reflect the current legislation which allows for variation by area, use and scale. We have been mindful of the cost and value variations that exist at site

specific level within the District, and, and have sought to retain a substantial CIL buffer. The recommended CIL charges and refinements to the affordable housing policy are set out in the table below.

Table 1 Proposed CIL Charge options and affordable housing policy refinements

Use	Affordable housing policy / refinements	CIL charge per sq. m
Residential (less than 5 dwellings)	0%	Up to £200 per sq.m
Residential (5 – 14 dwellings)	Amend to 35%	Up to £150 per sq.m
Residential (15 dwellings or more)	40%	Up to £100 per sq.m
Southern Zone flats	20%	Up to £50 per sq.m
Northern Zone flats	Either 10%	Or up to £40 per sq.m
Convenience retail	n/a	Up to £80 per sq.m
All other developments	n/a	£0 per sq.m

10. The affordable housing and infrastructure delivery policies (and CIL charging schedule) should be set as flexible policies which will be adjusted at regular intervals to reflect changes in viability and to manage the delivery of planned growth. Review periods could be on a 3 – 5 year basis so as to give some certainty to developers, but also allow flexibility to adapt policy to reflect changes in viability and delivery.
11. Our assessment has identified a large number of individual policies in the Draft Preferred Options District Plan which are all related to infrastructure delivery. There is a need to bring these various policies together under one overarching infrastructure policy and delivery mechanism linked to a 'live' infrastructure delivery plan and schedule.
12. The infrastructure delivery process needs to adopt a proactive approach to managing the timely delivery of infrastructure. This will start with a clear assessment of infrastructure requirements, cost and funding, and developer funding mechanisms and be supported by a strong policy which reflects the latest legislation in relation to developer contributions.
13. This will allow EHDC and its partners to have a clear handle on what infrastructure is needed to enable the timely delivery of growth. This will also provide a better understanding of the cumulative impact of infrastructure costs, and will provide clarity to developers over the scale of contributions likely to be required for their schemes, and will avoid duplication of contributions by clarifying which mechanism will be adopted to part pay for the infrastructure (S106 / S278 or CIL).

# 1 STUDY SCOPE AND APPROACH

## 1.1 Introduction

1.1.1 Peter Brett Associates (PBA) LLP has been commissioned by East Herts District Council (EHDC) to assess the deliverability of the Draft Preferred Options District Plan 2014. For ease of presentation, the following two separate reports have been prepared by PBA as part of the overall study:

- Report one, the 'Delivery Study', focuses on assessing the deliverability of the four strategic sites known as the Gilston Area, North and East of Ware, East of Welwyn Garden City and South of Bishop's Stortford.
- Report two, this report, looks at the plan viability, affordable housing and Community Infrastructure Levy options to support the delivery of infrastructure and wider plan policies.

1.1.2 The study was commissioned in June 2014 and research informing the assumption inputs for this study was undertaken mainly during autumn 2014.

## 1.2 Purpose of study

1.2.1 The main purpose of this study is to assess that the requirements of the National Planning Policy Framework (NPPF) for plan viability are met. That is, the policy requirements in the Draft Preferred Options District Plan 2014 should not threaten the development viability of the plan. The objective of this study is to inform policy decisions relating to the trade-offs between the policy aspirations of achieving sustainable development and the realities of economic viability.

1.2.2 This report and the accompanying appraisals have been prepared in line with RICS valuation guidance. However, it is first and foremost a supporting document to inform the District Plan and planning policy. As per Professional Standards 1 of the RICS Valuation Standards – Global and UK Edition<sup>1</sup>, the advice expressly given in the preparation for, or during the course of negotiations or possible litigation does not form part of a formal "Red Book" valuation and should not be relied upon as such. No responsibility whatsoever is accepted to any third party who may seek to rely on the content of the report for such purposes.

## 1.3 Defining local plan level viability

1.3.1 The 'Viability Testing Local Plans - advice for planning practitioners report prepared by the Local housing Delivery Group and chaired by Sir John Harman June 2012 (the Harman Report) defines plan viability as follows:

*'An **individual development** can be said to be viable if, after taking account of all costs, including central and local government policy and regulatory costs, and the cost and availability of development finance, the scheme provides a competitive return to the developer to ensure that development takes place, and generates a land value sufficient to persuade the land owner to sell the land for the development proposed.'*

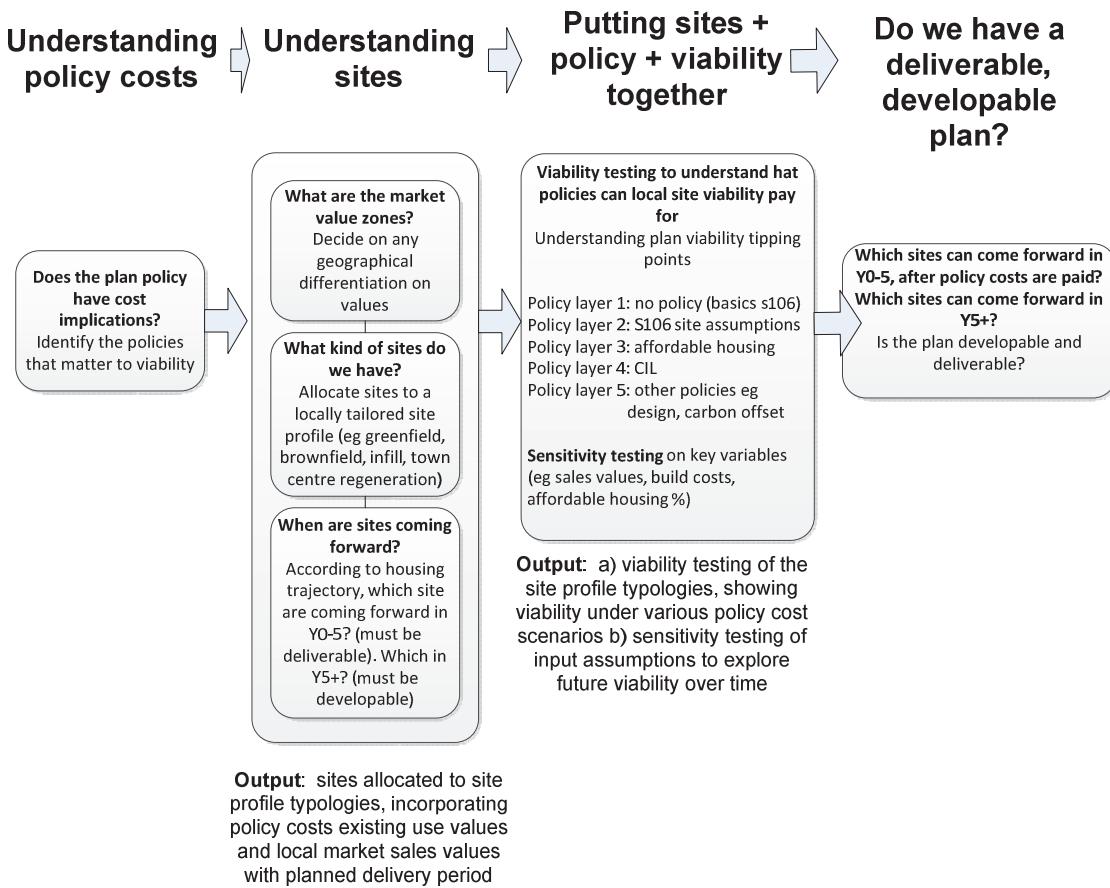
*'At a **Local Plan** level, viability is very closely linked to the concept of deliverability. In the case of housing, a Local Plan can be said to be deliverable if sufficient sites are viable (as defined in the previous paragraph) to deliver the plan's housing requirement over the plan period'.*

<sup>1</sup> RICS (January 2014) Valuation – Professional Standards, PS1 Compliance with standards and practice statements where a written valuation is provided

## 1.4 Study approach

1.4.1 The study approach is based on Government and industry guidance. Figure 1-1 illustrates the approach adopted to assess the plan level viability and this is explained further below.

Figure 1-1 Plan viability assessment process



Source: PBA 2015

### Understanding policy costs

1.4.2 Articulating the impact of policy costs provides a starting point for the analysis. All policies included in the Draft Preferred Options District Plan 2014 have been provided by the client team to assess their impact on viability. This is based on an iterative process, which considers cost implications of policy and then makes refinements to the policy until an acceptable balance between viability and sustainability is reached.

### Understanding sites

1.4.3 The next stage is to understand the sort of development sites likely to emerge through the planning process. In order to understand the sites, the following three questions are asked:

- What are the market value zones for the area? An otherwise identical development may have a very different value, depending on its location. The report seeks to understand how this economic geography might affect site viability in the area. Planned sites are allocated to these market value zones.
- What kind of sites are emerging through the plan? Different sites might have different viabilities depending on the existing use or condition of the site. This is taken into

account. Planned sites are allocated to different typologies or categories tailored to local conditions.

- When are sites coming forward? An analysis is undertaken of the emerging housing trajectory to understand the time period that different developments are expected to come forward, and explore whether a site would be considered to be 'deliverable' in Years 0-5 of the plan, or 'developable' in Years 6 onwards in accordance with the NPPF.

### **Viability testing the sites**

1.4.4 The next stage is to assess the viability of the site typologies. The approach is to add gradually escalating levels of policy costs in order to judge the point at which policy costs make development unviable.

1.4.5 Understanding the basic viability of sites and then adding policy costs such as affordable housing, infrastructure, and other policy requirements is the starting point. Further to this is to establish an understanding of the trade-offs involved between these policy choices, so that elected members and their officers may arrive at a reasoned and prioritised set of policy 'trade-offs'.

### **Assessing whether the plan is developable and deliverable**

1.4.6 The output from this stage forms the central response to the overall study question – which is do we have a deliverable and developable plan?

1.4.7 With regards to the housing supply, the National Planning Policy Framework states that evidence must show the Inspector that the plan is 'deliverable' for the first five year period following adoption. The approach required for land for years 6-10 and beyond is different to that adopted for the sites expected in Years 0-5 of the plan. These residential sites need to be 'developable' and take account of longer term timescales and proactive interventions that may be put in place.

### **Stakeholder engagement**

1.4.8 We are grateful for the valuable inputs provided by a range of stakeholders. The following stakeholder engagement has taken place as part of this study:

- A range of semi-structured interviews have been undertaken with local agents operating in the area during autumn 2014.
- A developer workshop and site promoter surgeries were held in autumn 2014.
- Interviews with some infrastructure providers were held in autumn 2014.

1.4.9 Appendix A provides details of the consultees.

## **1.5 Report structure**

1.5.1 The rest of this report is set out as follows:

- Section 2 sets out the policy and legal requirements relating to plan viability, affordable housing and community infrastructure levy.
- Section 3 outlines the planning and development context and considers past delivery.

- Sections 4 to 7 work through each stage of the study approach outlined in figure 1.1 to arrive at the assumption inputs for the viability appraisals that are specific to East Hertfordshire.
- Sections 8 and 9 set out the viability assumptions and appraisal findings for the residential and non residential developments.
- Section 10 concludes by setting out the main findings and translates this into recommendations for the plan viability, affordable housing and preliminary CIL charge schedule.

## 2 NATIONAL POLICY CONTEXT

### 2.1 Introduction

2.1.1 This Section sets out the relevant national planning policy for plan viability.

### 2.2 National planning policy framework

2.2.1 The National Planning Policy Framework (NPPF) recognises that the 'developer funding pot' or residual value is finite and decisions relating on how this funding is distributed between affordable housing, infrastructure, and other policy requirements have to be considered as a whole, they cannot be separated out.

2.2.2 The National Planning Policy Framework (NPPF) advises that cumulative effects of policy should not combine to render plans unviable:

*'Pursuing sustainable development requires careful attention to viability and costs in planning and decision-taking. Plans should be deliverable. Therefore, the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.'*<sup>2</sup>

2.2.3 With regard to non-residential development, the NPPF states that local planning authorities 'should have a clear understanding of business needs within the economic markets operating in and across their area. To achieve this, they should... understand their changing needs and identify and address barriers to investment, including a lack of housing, infrastructure or viability.'<sup>3</sup>

2.2.4 Note the NPPF does not state that all sites must be viable now in order to appear in the plan. Instead, the NPPF is concerned to ensure that the bulk of the development is not rendered unviable by unrealistic policy costs. It is important to recognise that economic viability will be subject to economic and market variations over the Local Plan timescale. In a free market, where development is largely undertaken by the private sector, the planning authority can seek to provide suitable sites to meet the needs of sustainable development. It is not within the local planning authority's control to ensure delivery actually takes place; this will depend on the willingness of a developer to invest and a landowner to release the land. So in considering whether a site is deliverable now or developable in the future, we have taken account of the local context to help shape our viability assumptions.

### 2.3 Deliverability and developability considerations in the NPPF

2.3.1 The NPPF creates the two concepts of 'deliverability' (which applies to residential sites which are expected in years 0-5 of the plan) and 'developability' (which applies to year 6 onwards of the plan). The NPPF defines these two terms as follows:

<sup>2</sup> DCLG (2012) National Planning Policy Framework (41, para 173)

<sup>3</sup> NPPF (para 160)

**To be deliverable**, “sites should be available now, offer a suitable location for development now, and be achievable, with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable.”<sup>4</sup>

**To be developable**, sites expected in Year 6 onwards should be able to demonstrate a “reasonable prospect that the site is available and could be viably developed at the point envisaged”.<sup>5</sup>

- 2.3.2 This study deals with the viability element only, the assessment of availability, suitability, and achievability, infrastructure funding gap, and the timely delivery of infrastructure is dealt with by EHDC as part of the wider evidence base for the Local Plan and infrastructure planning.
- 2.3.3 The NPPF advises that a more flexible approach may be taken to the sites coming forward in the period after the first five years. Sites coming forward after Year 6 might not be viable now – and might instead be only viable at that point in time. This recognises the impact of economic cycles and variations in values and policy changes over time.

## 2.4 National policy on affordable housing

- 2.4.1 In informing future policy on affordable housing, it is important to understand national policy on affordable housing. The NPPF states:
- 2.4.2 To deliver a wide choice of high quality homes, widen opportunities for home ownership and create sustainable, inclusive and mixed communities, local planning authorities should<sup>6</sup>:
  - plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes);
  - identify the size, type, tenure and range of housing that is required in particular locations, reflecting local demand; and
  - where they have identified that affordable housing is needed, set policies for meeting this need on site, unless off-site provision or a financial contribution of broadly equivalent value can be robustly justified (for example to improve or make more effective use of the existing housing stock) and the agreed approach contributes to the objective of creating mixed and balanced communities. Such policies should be sufficiently flexible to take account of changing market conditions over time.<sup>7</sup>
- 2.4.3 The NPPF recognises that market conditions change over time, and so when setting long term policy on affordable housing, incorporating a degree of flexibility is sensible to reflect changing market circumstances.
- 2.4.4 Note that the NPPF has not amended the definition of affordable housing to take account of the variety of first time buyer mortgage support schemes offered by both the government and developers. It is unclear how long such products will be on the market, but they are not

<sup>4</sup> NPPF (para 47, footnote 11 – note this study deals with the viability element only, the assessment of availability, suitability, and achievability is dealt with by the client team as part of the site selection process.

<sup>5</sup> NPPF (para 47, footnote 12)

<sup>6</sup> NPPF (para 50 and bullets)

<sup>7</sup> NPPF (p13, para 50)

classified as an 'affordable product'<sup>8</sup>, although they may in some areas impact on the delivery of affordable products.

### Threshold limits for affordable housing

2.4.5 At the start of this study we were working to the amended the National Planning Practice Guidance following the issue of a Ministerial Statement in November 2014<sup>9</sup> to require local authorities to adopt a national threshold for affordable housing. For areas such as East Herts the NPPG states that:

'affordable housing contributions should not be sought from developments of 10-units or less, and which have a maximum combined gross floorspace of no more than 1000sqm'<sup>10</sup>

2.4.6 During the preparation of this study the national affordable housing threshold has been successfully challenged in July 2015 at the High Court by Reading Borough Council and West Berkshire District Council. Since this High Court decision, the NPPG notes that the threshold will be removed. So for the purpose of this study, EHDC have confirmed that the appraisals should test scenarios at the policy level without the previous national affordable housing threshold.

## 2.5 National policy on infrastructure and developer contributions

2.5.1 The NPPF requires authorities to demonstrate that infrastructure will be available to support development:

*'It is equally important to ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion. To facilitate this, it is important that local planning authorities understand district-wide development costs at the time Local Plans are drawn up.'*<sup>11</sup>

2.5.2 Understanding the type of infrastructure needed for the delivery of the plan and how this is to be funded is an important element of the delivery consideration. The local authority will need to determine which mechanism will be adopted to support future infrastructure delivery via developer contributions – see CIL section below.

### Clarity on developer contributions and future SPD's

2.5.3 The Local Authority will need to clearly set out policies on developer contributions which are grounded in an assessment of viability. The NPPG states:

*'Policies for seeking obligations should be set out in a development plan document to enable fair and open testing of the policy at examination. Supplementary planning documents should not be used to add unnecessarily to the financial burdens on development and should not be used to set rates or charges which have not been established through development plan policy.'*<sup>12</sup>

2.5.5 Note the infrastructure assessment to inform the delivery considerations of the District Plan will be undertaken by EHDC. There will then be a consideration of which developer contribution mechanism to use for funding specific items of infrastructure, and ensuring that future SPD's do not introduce new financial burdens that have not been tested.

<sup>8</sup> This is because the purpose of affordable housing is to help provide affordable housing for households in need over the long term.

<sup>9</sup> Ministerial Statement in Nov 2014 DCLG Support for Small Scale Developers

<sup>10</sup> NPPG Paragraph: 012 Reference ID: 23b-012-20141128

<sup>11</sup> Ibid (p42, para 177)

<sup>12</sup> NPPG Paragraph: 003 Reference ID: 23b-003-20140306

## 2.6 National policy on community infrastructure levy

2.6.1 The Community Infrastructure Levy (CIL) is a planning charge that came into force on 6 April 2010. The levy allows local authorities in England and Wales to raise contributions from development to help pay for infrastructure that is needed to support planned development. Local authorities who wish to charge the levy must produce a draft charging schedule setting out CIL rates for their areas – which are to be expressed as pounds (£) per square metre, as CIL will be levied on the gross internal floorspace of the net additional liable development. Before it is approved by the Council, the draft schedule has to be tested by an independent examiner.

2.6.2 The requirements which a CIL charging schedule has to meet are set out in:

- The Planning Act 2008 as amended by the Localism Act 2011.
- The CIL Regulations 2010<sup>13</sup>, as amended in 2011<sup>14</sup>, 2012<sup>15</sup>, 2013<sup>16</sup> and 2014<sup>17</sup>.
- The CIL Guidance which was updated in February 2014<sup>18</sup>.

2.6.3 The 2014 Regulations have altered key aspects of setting the charge for authorities who publish a Draft Charging Schedule for consultation. The key points from these various documents are summarised below.

### Striking the appropriate balance

2.6.4 The revised CIL Regulation 14 requires that a charging authority should '*strike an appropriate balance*' between:

- The desirability of funding from CIL (in whole or in part) the... cost of infrastructure required to support the development of its area... and
- The potential effects (taken as a whole) of the imposition of CIL on the economic viability of development across its area.

2.6.5 By itself, this statement is not easy to interpret. The guidance explains its meaning. A key feature of the 2014 Regulations is to give legal effect to the requirement in this guidance for an authority to 'show and explain...' their approach at examination. This explanation is important and worth quoting at length:

*'The levy is expected to have a positive economic effect on development across a local plan area. When deciding the levy rates, an appropriate balance must be struck between additional investment to support development and the potential effect on the viability of developments.'*

*'This balance is at the centre of the charge-setting process. In meeting the regulatory requirements (see Regulation 14(1)), charging authorities should be able to show and explain how their proposed levy rate (or rates) will contribute towards the implementation of their relevant plan and support development across their area.'*

<sup>13</sup> [http://www.legislation.gov.uk/ukdsi/2010/9780111492390/pdfs/ukdsi\\_9780111492390\\_en.pdf](http://www.legislation.gov.uk/ukdsi/2010/9780111492390/pdfs/ukdsi_9780111492390_en.pdf)

<sup>14</sup> [http://www.legislation.gov.uk/ukdsi/2011/9780111506301/pdfs/ukdsi\\_9780111506301\\_en.pdf](http://www.legislation.gov.uk/ukdsi/2011/9780111506301/pdfs/ukdsi_9780111506301_en.pdf)

<sup>15</sup> [http://www.legislation.gov.uk/uksi/2012/2975/pdfs/uksi\\_20122975\\_en.pdf](http://www.legislation.gov.uk/uksi/2012/2975/pdfs/uksi_20122975_en.pdf)

<sup>16</sup> [http://www.legislation.gov.uk/uksi/2013/982/pdfs/uksi\\_20130982\\_en.pdf](http://www.legislation.gov.uk/uksi/2013/982/pdfs/uksi_20130982_en.pdf)

<sup>17</sup> [http://www.legislation.gov.uk/uksi/2014/385/pdfs/uksi\\_20140385\\_en.pdf](http://www.legislation.gov.uk/uksi/2014/385/pdfs/uksi_20140385_en.pdf)

<sup>18</sup> DCLG (February 2014) Community Infrastructure Levy Guidance

2.6.6 Achieving an appropriate balance is a matter of judgement. It is not surprising, therefore, that charging authorities are allowed some discretion in this matter. This has been reduced by the 2014 Regulations, but remains. For example, Regulation 14 requires that in setting levy rates, the Charging Authority (our underlining highlights the discretion):

*'must strike an appropriate balance...' i.e. it is recognised there is no one perfect balance; and the guidance states:*

*'Charging authorities need to demonstrate that their proposed levy rate or rates are informed by 'appropriate available' evidence and consistent with that evidence across their area as a whole.'* and

*'A charging authority's proposed rate or rates should be reasonable, given the available evidence, but there is no requirement for a proposed rate to exactly mirror the evidence ..... There is room for some pragmatism.'*<sup>19</sup>

2.6.7 Thus the guidance sets the delivery of development firmly within the context of implementing the Local Plan. This is linked to the plan viability requirements of the NPPF, particularly paragraphs 173 and 174. This point is given emphasis throughout the guidance. For example, in guiding examiners, the guidance makes it clear that the independent examiner should establish that:

*'.....evidence has been provided that shows the proposed rate (or rates) would not threaten delivery of the relevant Plan as a whole.....'*<sup>20</sup>

2.6.8 This also makes the point that viability is not simply a site specific issue but one for the plan as a whole. The focus is on seeking to ensure that the CIL rate does not threaten the ability to develop viably the sites and scale of development identified in the Local Plan. Accordingly, when considering evidence the guidance requires that charging authorities should:

*'use an area based approach, involving a broad test of viability across their area, supplemented by sampling '...an appropriate range of types of sites across its area...' with the focus '...on strategic sites on which the relevant Plan relies and those sites where the impact of the levy on economic viability is likely to be most significant (such as brownfield sites).'*<sup>21</sup>

2.6.9 This reinforces the message that charging rates do not need to be so low that CIL does not make any individual development schemes unviable (some schemes will be unviable with or without CIL). The levy may put some schemes at risk, however, in aiming to strike an appropriate balance overall, the charging authority should avoid threatening the ability to develop viably the sites and scale of development identified in the Local Plan.

### Keeping clear of the ceiling

2.6.10 The guidance advises that CIL rates should not be set at the very margin of viability, partly in order that they may remain robust over time as circumstances change:

*'.....if the evidence pointed to setting a charge right at the margins of viability.....It would be appropriate to ensure that a 'buffer' or margin is included, so that the levy rate is able to support development when economic circumstances adjust.'*<sup>22</sup>

<sup>19</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:2:4)

<sup>20</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:5:5)

<sup>21</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:2:4)

<sup>22</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:2:4)

2.6.11 We would add two further reasons for a cautious approach to rate-setting, which stops short of the margin of viability:

- Values and costs vary widely between individual sites and over time, in ways that cannot be fully captured by the viability calculations in the CIL evidence base.
- A charge that aims to extract the absolute maximum would be strenuously opposed by landowners and developers, which would make CIL difficult to implement and put the overall development of the area at serious risk.

### Varying the CIL charge

2.6.12 CIL Regulations (Regulation 13) allows the charging authority to introduce charge variations by geographical zone in its area, by use of buildings, by scale of development (GIA of buildings or number of units) or a combination of these three factors. (It is worth noting that the phrase 'use of buildings' indicates something distinct from 'land use').<sup>23</sup> As part of this, some rates may be set at zero. But variations must reflect differences in viability; they cannot be based on policy boundaries. Nor should differential rates be set by reference to the costs of infrastructure.

2.6.13 The guidance also points out that charging authorities should avoid '*undue complexity*' when setting differential rates, and '*....it is likely to be harder to ensure that more complex patterns of differential rates are state aid compliant.*'<sup>24</sup>

2.6.14 Moreover, generally speaking, '*Charging schedules with differential rates should not have a disproportionate impact on particular sectors or specialist forms of development*'; otherwise the CIL may fall foul of state aid rules.<sup>25</sup>

2.6.15 It is worth noting, however, that the guidance gives an example which makes it clear that a strategic site can be regarded as a separate charging zone: '*If the evidence shows that the area includes a zone, which could be a strategic site, which has low, very low or zero viability, the charging authority should consider setting a low or zero levy rate in that area.*'<sup>26</sup>

### Supporting evidence

2.6.16 The legislation requires a charging authority to use '*appropriate available evidence*' to inform their charging schedule<sup>27</sup>. The guidance expands on this, explaining that the available data '*is unlikely to be fully comprehensive*'.<sup>28</sup>

2.6.17 These statements are important, because they indicate that the evidence supporting CIL charging rates should be proportionate, avoiding excessive detail. One implication of this is that we should not waste time and cost analysing types of development that will not have significant impacts, either on total CIL receipts or on the overall development of the area as set out in the Local Plan.

<sup>23</sup> The Regulations allow differentiation by "uses of development". "Development" is specially defined for CIL to include only 'buildings', it does not have the wider 'land use' meaning from TCPA 1990, except where the reference is to development of the area.

<sup>24</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:2:6)

<sup>25</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2.2.2.6)

<sup>26</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:2:6)

<sup>27</sup> Planning Act 2008 section 211 (7A)

<sup>28</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:2:4)

## Chargeable floorspace

2.6.18 CIL will be payable on most buildings that people normally use and will be levied on the net additional new build floorspace created by any given development scheme<sup>29</sup>. The following will not pay CIL:

- New build that replaces demolished existing floorspace that has been in use for six months in the last three years on the same site, even if the new floorspace belongs to a higher-value use than the old;
- Retained parts of buildings on the site that will not change their use, or have otherwise been in use for six months in the last three years;
- Development of buildings with floorspace less than 100 sq.m (if not a new dwelling), by charities for charitable use, homes by self-builders' and social housing as defined in the regulations.

## Approaches to developer contributions to fund infrastructure

2.6.19 The approaches to developer contributions to fund infrastructure includes CIL and S106, as well as site enabling infrastructure provided directly by the developer. Each approach has different rules governing its application and it is important to avoid duplication.

2.6.20 The purpose of CIL is to enable the charging authority to carry out a wide range of infrastructure projects. CIL is not expected to pay for all infrastructure requirements but could make a significant contribution. However, development specific planning obligations (commonly known as S106) to make development acceptable will continue with the introduction of CIL. In order to ensure that planning obligations and CIL operate in a complementary way, CIL Regulations 122 and 123 place limits on the use of planning obligations.

2.6.21 Some developers have expressed concerns about 'double dipping' (i.e. being charged twice for the same infrastructure by requiring to pay CIL and S106). To overcome this concern, it is imperative that charging authorities are clear about the authorities' infrastructure needs and what developers will be expected to pay for and through which route. The guidance expands this further in explaining how the Regulation 123 list should be scripted to account for generic projects and specific named projects (see section 2:6:2:2 of the 2014 CIL guidance).

2.6.22 The guidance states that '*it is good practice for charging authorities to also publish their draft (Regulation 123) infrastructure lists and proposed policy for the scaling back of S106 agreements.*'<sup>30</sup> This list now forms part of the 'appropriate available evidence' for consideration at the CIL examination.

2.6.23 The guidance identifies the need to assess past evidence on developer contributions, stating '*as background evidence, the charging authority should also provide information about the amount of funding collected in recent years through Section 106 agreements, and information on the extent to which affordable housing and other targets have been met.*'<sup>31</sup>

2.6.24 Similarly, there are restrictions on using Section 278 highway agreements to fund infrastructure that is also included in the CIL infrastructure list<sup>32</sup>. This is done by placing a limit on the use of planning conditions and obligations to enter into Section 278 agreements to

<sup>29</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Sections 2:1:1, 2:1:2 and 2:3:12)

<sup>30</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:3)

<sup>31</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:2:3)

<sup>32</sup> See section 2.6.5 of the DCLG (February 2014) *Community Infrastructure Levy Guidance*

provide items that appear on the charging authority's Regulation 123 infrastructure list. Note these restrictions do not apply to highway agreements drawn up by the Highway Agency.

### **The use of S106 is now part of a statutory test**

2.6.25 The Council will levy S106 contributions in the now tightly controlled circumstances set out in CIL legislation. The CIL Regulations 2010 (as amended) Regulation 122(2) tests state that any S106 charge must meet three tests of being:

- Necessary to make the development acceptable in planning terms. For the local planning authority (LPA) to take account of S106 in granting planning permission it needs to be convinced that, without the obligation, permission should be refused.<sup>33</sup>
- Directly related to the development. If the LPA fails to show a real connection to the development in question, then it will be unlawful for the LPA to take account of S106 in granting permission.
- Fairly and reasonably related in scale to the development proposed.

2.6.26 From recent research we have undertaken elsewhere on S106 case law, we found that inspectors are now looking at:

- How the authority has taken account of infrastructure requirements (taking account of capacity evidence);
- How the authority has arrived at its infrastructure requirement.

2.6.27 A recent case that we are aware of in Chelmsford reinforces this view. At the appeal hearing, planning contributions were not at issue, but the inspector took issue at the way that contributions for open space (undertaken on a formula basis) had been applied. The Council was unable to demonstrate which project the open space funding contribution was going to be spent on, how it related to the development, and when it was going to be delivered. The inspector ruled that the tests for S106 contributions had been failed, and these contributions could not be sought. We understand that Thurrock has also been in a similar position.

2.6.28 The CIL Regulations specifically exclude affordable housing from the collection and expenditure of CIL revenues. Therefore, if affordable housing is sought as part of a development, this must still be undertaken through a S106 agreement.

2.6.29 A charging authority must be able to refer to a Local Plan policy, supporting S106 SPD, Area Action Plan for the site or similar formal policy document which says that, as a matter of policy, a Charging Authority requires the S106 costs it is taking into account. Policies would need to define not only the new developments but also the required infrastructure on a strategic site.

### **It is hard to pool S106 contributions for strategic infrastructure**

2.6.30 From April 2015, five or more separate S106 agreements cannot be pooled to pay for strategic infrastructure. If there is no CIL, a local authority has no effective mechanism to raise money for strategic infrastructure. Because of this fact, there is a risk that a large development could be broken into five or more separate planning permissions, and escape paying for necessary supporting infrastructure. To be comfortable, the Council would need to be in a position to refuse applications that came in for parts of strategic sites, or would need to be clear about

<sup>33</sup> Planning Officers Society (2011) *Section 106 Obligations and the Community Infrastructure Levy* accessed 7 June  
[http://www.planningofficers.org.uk/downloads/pdf/POS\\_Advice\\_Note\\_S106\\_and\\_CIL\\_final\\_version\\_Apr2011.pdf](http://www.planningofficers.org.uk/downloads/pdf/POS_Advice_Note_S106_and_CIL_final_version_Apr2011.pdf)

directing S106 payments to discrete elements of supporting infrastructure, but great care needs to be taken to manage this risk.

2.6.31 Some have suggested that scope of splitting a large project into smaller distinct part and then seeking contributions to that element. However, the general view from Government is to look to simplify the process in funding strategic infrastructure by using CIL to speed up the process and transparency.

### **What the CIL examiner will be looking for**

2.6.32 According to the guidance, the independent examiner should check that:

- The charging authority has complied with the requirements set out in legislation.
- The draft charging schedule is supported by background documents containing appropriate available evidence.
- The proposed rate or rates are informed by and are consistent with the evidence on economic viability across the charging authority's area.
- Evidence has been provided that shows the proposed rate or rates would not threaten delivery of the relevant Plan as a whole.<sup>34</sup>

2.6.33 The examiner must recommend that the draft charging schedule should be approved, rejected or approved with specific modifications.

<sup>34</sup> DCLG (February 2014) *Community Infrastructure Levy Guidance* (Section 2:2:5:5)

## 3 LOCAL DEVELOPMENT CONTEXT

### 3.1 Introduction

3.1.1 This Section briefly outlines the local development context in East Hertfordshire reviewing past development that has taken place, and outlining the planned growth in the emerging Local Plan. This development context has informed the viability appraisal assumptions and the study conclusions.

### 3.2 Past development patterns

3.2.1 Patterns of past development provide a guide to the likely patterns of future development (though note that this is highly dependent on the type of development sites available in the past). Table 3.1 below show the amount of residential completions over the period 2000/01 to 2011/12. The table shows that housing delivery has generally fallen short of the annual projected requirement of 750 dwellings per annum contained within the Draft District Plan Preferred Options 2014.

Table 3.1 Residential completions since 2000 - 2001

Year	Completions	Cumulative Completions
2000/01	464	464
01/02	605	1069
02/03	376	1445
03/04	250	1695
04/05	347	2042
05/06	562	2604
06/07	777	3381
07/09	557	3938
09/10	553	4491
10/11	469	4960
11/12	200	5160

Source: EHDC

### Scale and type of past delivery

3.2.2 Table 3.2 overleaf shows the scale of permission granted over the past five years. This shows that the majority of recent planning applications have tended to be for developments under 10 dwellings (below the 2014 affordable housing threshold which has now been removed due to a High Court challenge). There were just a few schemes of 15 units or more.

Table 3.2 Residential planning permission granted by unit size since 2008 – 2013

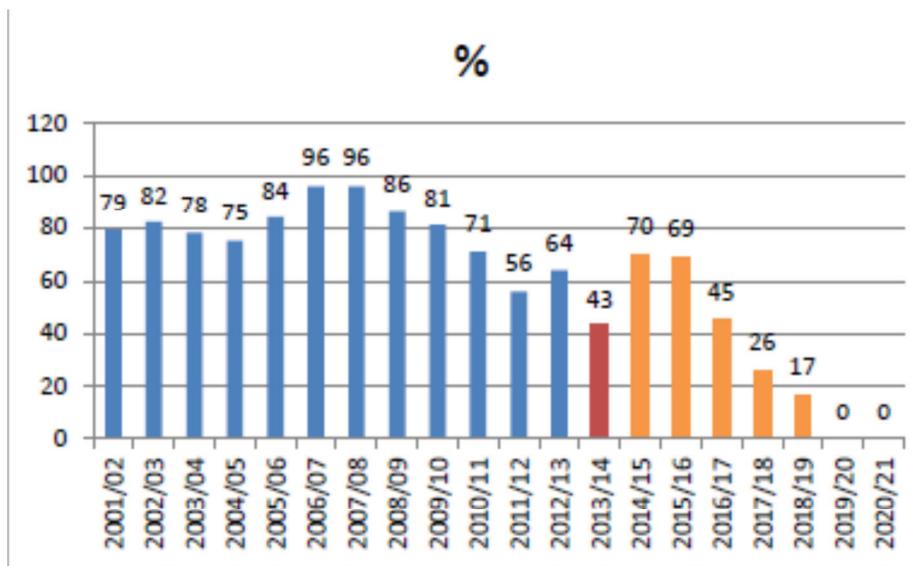
Permissions Granted since 2008-2014						
No. of units	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
1	58%	48%	59%	57%	52%	44%
2	14%	19%	15%	10%	19%	18%
3	6%	5%	3%	6%	6%	10%
4	6%	6%	4%	2%	6%	4%
5-9	12%	14%	10%	10%	7%	12%
10-14	5%	3%	4%	3%	0%	3%
Under 15	100%	95%	97%	91%	93%	94%
15-24	0	1%	1%	1%	1%	6%
25-49	0	1%	1%	1%	2%	6%
50-99	0	0%	0%	4%	1%	1%
100-199	0	1%	0%	1%	2%	1%
200+	0	0%	0%	0%	0%	6%
Total	100%	100%	100%	100%	100%	100%

Source: East Hertfordshire District Council

### Brownfield delivery

3.2.3 The delivery on brownfield land is forecast to fall in the future due to the majority of the brownfield allocated sites in the Local Plan having been developed as shown in Figure 3-1 below.

Figure 3-1 East Hertfordshire past housing completions on brownfield land



Source: East Herts Council and Hertfordshire County Council Monitoring (CDP reports), 2014

3.2.4 Two strategic brownfield sites are identified as important to the delivery of the plan – these include the Bishop's Stortford Goods Yard (200 units) and Mead Lane area (300 units).

### **3.3 Future development proposed in the East Herts Draft District Plan**

3.3.1 During May 2014, the Council consulted on the East Herts Draft Preferred Options District Plan 2014. This sets out the vision and strategy for development across East Hertfordshire District Council for the period 2011 to 2031.

3.3.2 The housing trajectory included in the Draft Preferred Options District Plan 2014, shows the remaining element of the 15,000 dwellings spread over three five year timeframes. Note the actual quantum of housing growth to be provided is currently being reviewed in parallel with this study and will be finalised shortly. For this study, we have used the figures outlined in the Draft Preferred Options District Plan 2014.

3.3.3 Due to the limited capacity to accommodate the planned growth within the existing settlements, the bulk of the future housing supply is to be met through sites on the edge of settlements and within Broad Locations for Growth. The four largest schemes included in the Draft Preferred Options District Plan 2014 are:

- Gilston Area (5,000 – 10,000 units, 3,000 units of which to be delivered within the Plan period)
- North and East of Ware (200 – 3,000 units)
- East of Welwyn Garden City (1,700 units)
- Bishop's Stortford South (750 – 1000 units)

3.3.4 These four sites are considered in a separate report and not duplicated here. The large brownfield sites at Bishop's Stortford Goods Yard (400 units) and Mead Lane area (300 units) are considered as case studies in this report.

3.3.5 A range of smaller sites consisting of 50 to 300 dwellings have also been identified to help meet the immediate short term housing supply needs and these will be complemented with an allowance of windfall and smaller urban infill sites.

3.3.6 It is expected that delivery on smaller sites of less than 10 dwellings will continue due to the windfall allowances included in the trajectory.

### **3.4 Employment land**

3.4.1 The Draft Preferred Options District Plan 2014 identifies that an additional 11 – 13 hectares (ha) of employment land will be delivered at the following locations:

- 3 ha to the north of Buntingford Business Park.
- 4 - 5 ha within the development at North of Bishop's Stortford.
- 4 – 5 ha within the development at South of Bishop's Stortford.

3.4.2 In addition, a number of existing locations have been formally designated as Employment Areas. The Council also envisages new employment land will be created through mixed-use developments at sites such as Bishop's Stortford Good's Yard to accommodate small scale business units.

### **3.5 Retail land**

3.5.1 The Draft Preferred Options District Plan 2014 identifies the need to encourage the delivery of the following retail floorspace during the plan period:

- Convenience retail – an additional 7,100 sq.m of new floorspace
- Comparison retail – an additional 5,700 sq.m of new floorspace.

3.5.2 Note these floorspace figures do not include any existing commitments, and therefore the figures are for entirely new provision. This floorspace is likely to be channelled in the main town centres of the District.

#### **Uses less likely to come forward**

3.5.3 Some uses are currently considered unlikely to come forward over the plan period. These do not currently merit special treatment but will be kept under review. They are as follows:

- Hostels
- Scrap yards
- Petrol filling stations
- Selling and/or displaying motor vehicles
- Nightclubs
- Launderettes
- Taxi businesses
- Amusement centres
- Casinos

3.5.4 The land uses which are central to the delivery of the East Hertfordshire District Plan are expected to fall within a limited number of development types. The most important development types are:

- Residential – predominantly edge of settlement greenfield sites and a few strategic brownfield sites
- Industrial and warehousing
- Comparison and convenience retail (based on possible speculative development).

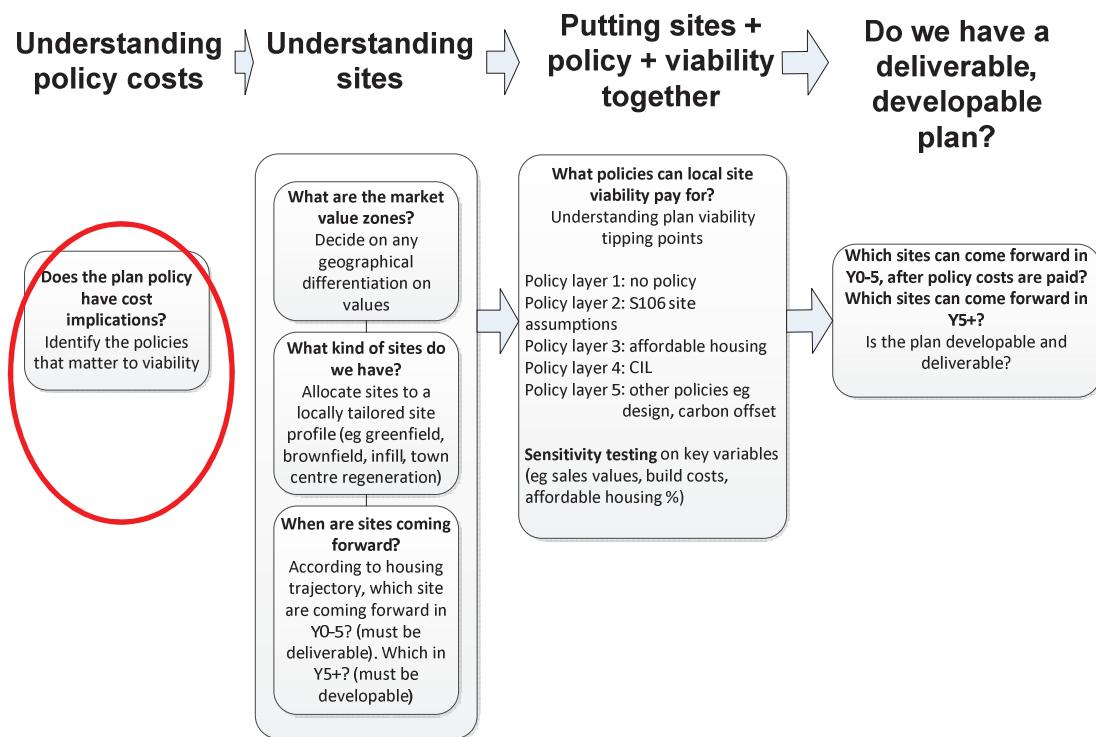
3.5.5 This report thus focuses on these types of development, aiming to ensure that they remain broadly viable after taking account of policy and CIL charge.

## 4 LOCAL PLAN POLICIES

### 4.1 Introduction

4.1.1 This section assesses the impact of local plan policies on viability as shown in Figure 4-1. The policies were identified by East Hertfordshire District Council officers who are most familiar with the emerging plan.

Figure 4-1 Process flow – understanding the policy cost



Source: PBA

4.1.2 The following sets out some guiding principles in terms of whole plan policy assessment and viability.

### Viability testing is an iterative process

4.1.3 The Harman Report clearly identifies that viability assessment is an iterative process. The following extracts from the report help to demonstrate this point:

4.1.4 *'The assessment process should be iterative. Draft policies can be tested based on the assumptions agreed with local partners, and in turn those assumptions may need to be revised if the assessment suggests too much development is unviable.'*

4.1.5 *'This dynamic process is in contrast to the consideration of viability during development management, when policy is already set. This approach does make viability assessment more challenging, particularly when considering the potential viability of plan policies over the whole plan period and across the different sub-markets of the plan area. However, a demonstration of viability across time and local geography will be of much more value to local decision making and will help develop a local shared understanding of deliverability. None of the above is intended to suggest that the outcome of a viability assessment should dictate individual policy decisions. Rather, the role of an assessment is to inform the decisions made.'*

*by local elected members to enable them to make decisions that will provide for the delivery of the development upon which the plan is reliant. What is important is that consideration of overall viability is part of the evidence base on which those decisions rest and which is subjected to test, challenge and debate at examination. Carrying out an assessment is a means of reducing the risk of plan policies based on aspirations that are unviable and therefore incapable of being applied in practice. (Harman Report page 11)*

4.1.6 *Therefore, if an initial viability assessment determines that, for example, the plan's housing requirements are not deliverable, factors such as plan policies or the geographical distribution of housing land will need to be reconsidered and balanced until the plan is judged deliverable within the principles of sustainable development. (Harman Report page 40)*

### **Flexibility and review mechanisms should be incorporated**

4.1.7 The Harman report acknowledges that viability will change over the plan period which will frequently cover durations of fifteen years or more. The report recommends that policies should be subject to review to enable planning authorities to take account of changes in market conditions. Otherwise significant changes in market conditions (viability assumptions) could lead to challenges of the plan policies at the point of making planning applications.

### **Further planning documents should not introduce additional cost**

4.1.8 The NPPF clearly states that further planning documents should not be used add to financial burden:

4.1.9 '*Any additional development plan documents should only be used where clearly justified. Supplementary planning documents should only be used where they can help applicants make successful applications or aid infrastructure delivery, and should not be used to add unnecessarily to the financial burdens of development.*' NNPF para 153

4.1.10 The Harman report also advises that because of the key role of the viability assessment in identifying the cumulative impact of policies, once a plan is in place, additional costs to development should not be introduced that will alter the viability and potentially render the plan-wide testing redundant. For this reason, having established the viability of the Local Plan (and associated Community Infrastructure Levy), planning authorities should critically examine the financial implications from the subsequent adoption of any Supplementary Planning Documents (SPDs) or Development Plan Documents (DPDs). Any subsequent policies or SPDs should not be progressed without a robust and proportionate review of the plan's viability.

4.1.11 PBA has undertaken a presentation to East Herts District Council Members on plan viability - outlining the importance of trade-offs in policy that might be required to support the delivery of infrastructure (see October 2015 reports on EHDC website).

## **4.2 Plan viability policy assessment matrix**

4.2.1 We have reviewed the planning policies contained in the East Herts Draft District Plan Preferred Options Consultation document (February 2014 to May 2014). The findings are set out in Appendix B. As part of this process, where appropriate, we have worked with the District Council officers to suggest changes to the draft policies in order to:

- Avoid duplication in policy cost burden with other existing national standards e.g. through Building Regulations or the emerging Housing Standards Review, so that focus can be given to locally important policy requirements.

- Merge or cross reference the policy cost element relating to infrastructure requirements into a single overarching infrastructure policy so that it is clear and transparent for developers to articulate the requirement and cost implications for infrastructure.
- Incorporate flexibility and review mechanisms to allow for a review of the policy if market conditions change or if site specific viability is challenging.

4.2.2 After discussion with the client team, we have recommended the removal of some policy requirements that create a cost burden or are already incorporated with Building Regulation or other national requirements included a cost estimate in the viability assessment for those policies that still remain or suggested merging with other policies.

4.2.3 Appendix B summarises the assessment undertaken to inform the plan viability assessment. Some of the policy costs are included within existing appraisal assumptions. However, other additional costs are identified as 'separate policy layers' which are taken forward in the viability cost assumptions.

### **4.3 Policy costs arising from whole plan policy assessment**

4.3.1 Based on the policy matrix assessment set out in Appendix B, the main policies identified as having an impact on viability are:

- **Affordable housing policy HOU3** – the viability assessment undertaken as part of this study will inform the affordable housing policy. We provide a brief summary of past delivery later in this section.
- **Infrastructure requirements DEL1** – there are a number of policies which have an implication on infrastructure requirement, including thematic policies relating to health, open space, transport and site specific policies relating to various sites identified in the Plan. We set out a simplified and more flexible approach to managing infrastructure delivery later in this section.
- **Efficient use of water resources WAT3** – as East Herts is in a water stress area, a policy layer to include the provision of features to promote the efficient use of water have been incorporated as an additional policy layer tested as part of the viability assessment.
- **Gypsies and Travellers and Travelling Show People HOU7** – the policy requirement is developing, for this study a cost estimate per pitch has been factored into each of the strategic sites delivery study appraisals (separate study).

### **4.4 Affordable housing need, policy and past delivery**

#### **Needs assessment and draft policy**

4.4.1 The Strategic Housing Market Assessment (SHMA) informing the Draft Preferred Options District Plan 2014 identified an affordable housing requirement of 49% of all housing provided. Policy HOU3 in the Draft Preferred Options District Plan 2014 has evolved from previous work undertaken on affordable housing need and viability. This draft policy sets out the following requirements:

- Up to 30% on sites of 5 to 14 gross additional dwellings, or between 0.17 and 0.49 ha.
- Up to 40% on sites of 15 or more gross dwellings or 0.5 ha or more in size.
- For 5 to 199 dwellings, a mix of 75% social / affordable rent and 25% intermediate tenure.

- 200 or more dwellings to provide a mix of 60% social / affordable rented and 40% intermediate tenure.

4.4.2 The policy allows flexibility from these percentages to reflect site specific infrastructure priorities and viability evidence being provided. It is also assumed that the there is a threshold of 5 units, so units of four or less are not required to provide any affordable housing.

4.4.3 During the preparation of this study the national affordable housing threshold has been successfully challenged in July 2015 at the High Court by Reading Borough Council and West Berkshire District Council. Since this High Court decision, the NPPG notes that the threshold will be removed. So for the purpose of this study, EHDC have confirmed that the appraisals should test scenarios at the policy level without the previous national affordable housing threshold.

### **Past delivery and future direction**

4.4.4 In terms of actual delivery, based on research undertaken by EHDC the majority of schemes were not eligible to provide any affordable contribution due to the fact they were below the local threshold of 14 units.

4.4.5 Of the schemes that were eligible to make contributions towards affordable housing, eleven made the full 40% affordable housing contribution. A further six schemes contributed between 35% and 39% affordable housing.

4.4.6 Going forward, this Plan Viability study will review the policy requirement and make recommendations for the percentage of affordable housing based on viability which reflects the changes to thresholds, and takes account of infrastructure requirements.

## **4.5 Infrastructure need, policy and past delivery**

### **Infrastructure needs assessment**

4.5.1 EHDC has prepared an Infrastructure Topic Paper which identifies various issues in relation to infrastructure requirements. The work will inform the preparation of a district wide Infrastructure Delivery Plan. Our approach to the wider planned growth infrastructure assessment has been informed by interviews with the following service providers (see Appendix A for stakeholders consulted and Appendix E for infrastructure critical path chart):

- **Education** - The response was that most schools in East Herts are at, or near, capacity, and existing consented sites will absorb any available capacity. The service providers are exploring options for expanding capacity at present, and new growth, including the first five year delivery will need additional capacity. The initial assessment indicates this will be created through expansion of existing schools and standalone new schools as part of the strategic sites.
- **Health** - The response was that most GP surgeries in East Herts are at, or near, capacity, particularly in Bishop's Stortford and Hertford. The service providers are exploring options for expanding capacity, and new growth, including the five year delivery will need additional capacity.
- **Foul water** - Capacity from unrealised growth (due to the downturn in housing development and efficiency measures) means that there is foul water capacity to cater for growth over the wider catchment area up to 2026 (depending on the rate of delivery). After that time it is likely that additional provision will need to be made. Additional plant capacity could be provided without any extension of the Rye Meads treatment works site and without any encroachment into the adjacent SSSI. However, it is important to note that the overall impact and treatment capacity will be affected by the cumulative effects of

development from all the adjacent local authority areas also served by Rye Mead. Thus the current view expressed by Thames Water is a snap shot in time.

- **Transport assessment** – PBA sought to understand the site specific and cumulative impact on town centres and strategic transport networks arising from the proposed growth based on documented evidence and consultation with a wide range of stakeholders. The findings are incorporated in the accompanying Delivery Study report.

4.5.2 The Draft Preferred Options District Plan 2014 does include an indication of the type of likely infrastructure requirements to support the planned growth for some of the larger sites, and account has been taken of these requirements in informing the deliverability considerations of the plan. None of the wider plan sites, apart from the strategic sites, are expected to provide any major site specific infrastructure such as a school or doctor's surgery or community facility. In most cases, there will be a need to expand existing provision or create new strategic shared provision which could be funded by CIL in the future.

4.5.3 No major issues have been identified to prevent the delivery of the non strategic growth. The concern from service providers is the cumulative impact of growth on transport, health, education etc. and the need to ensure that appropriate additional infrastructure capacity continues to be provided in a timely manner. Ongoing engagement with infrastructure delivery service providers should form part of the infrastructure delivery mechanism to inform a 'live infrastructure delivery plan'.

4.5.4 A separate infrastructure delivery plan to be prepared by EHDC will detail the type and range of infrastructure to support the delivery of planned growth for the Local Plan and the evidence base for the CIL funding gap and Regs 123 list to avoid duplication with S106 contributions.

### **Infrastructure policy**

4.5.5 There are a number of local plan policies in the assessment matrix that relate to the delivery of infrastructure. This can make it very difficult for a developer to assess the 'total ask' for a scheme. Similarly, in informing the plan viability assessment, it is important to have clarity as to the likely cost of infrastructure. Appendix D includes a summary table which identifies the majority of policies currently in the draft Local Plan, including those that relate to infrastructure requirements.

4.5.6 We would suggest that these individual policies on infrastructure should be simplified and approach to their delivery and funding mechanism should be linked to a single overarching infrastructure requirements and delivery policy. This would be linked to an Infrastructure and Delivery Plan. The aim of this is to provide a better understanding of the cumulative impact of infrastructure costs on viability and delivery and provide clarity over the scale of contributions likely to be required from developers, and avoid duplication of contributions by clarifying which mechanism will be adopted to pay for infrastructure (S106 / S278 or CIL).

4.5.7 For this study, in consultation with EHDC, we have assumed that the various policies relating to infrastructure will be grouped together and addressed through the live infrastructure delivery plan. Various sources of funding will be used to support the delivery of infrastructure, including developer contributions, either in the form of a community infrastructure levy charge (CIL) or a planning obligation.

4.5.8 There is a Planning Obligations SPD dated October 2008 which sets out thresholds and guidance for different infrastructure contributions for EDCU and Hertfordshire County Council infrastructure provision, in addition there is a toolkit prepared by Hertfordshire County Council. These precede the legislation on planning obligations through the Planning Act 2008 and subsequent CIL Regulations, and will require updating to be compliant with the changes in the way developer contributions can now be sought, pooled and spent.

4.5.9 PBA has prepared a member briefing note in November 2014 (See EHDC website for a copy of this) considering the policy trade-offs and recent planning legislation affecting infrastructure delivery and provided guidance to EHDC officers on the effect of legislation changes to such issues as pooling infrastructure, and differentiating between site specific and strategic infrastructure.

4.5.10 A key point to note is that there has been a threshold of 10 units for all other contributions including health and county council infrastructure. Schemes under ten dwellings have generally not been required to make a S106 contribution (as the most common contributions relate to education, transport and health infrastructure). They have also not been required to make a contribution towards affordable housing. Thus any future developer contributions could be difficult to accept.

#### **Developer contributions secured and future direction**

4.5.11 East Herts District Council has produced a summary table of past developer contributions of twenty four schemes of varying sizes since 2009. The main findings from this assessment are as follows:

- Most of the developer contributions have been for education and to a lesser extent for transport contributions. Some schemes have made contributions for open space, community facilities, waste and recycling, library, youth facilities. However, the majority of contributions have been for education. The total contributions achieved range from £300 per unit to £8,000 per unit. The total average S106 contributions of the schemes reviewed is £5,300 per unit.
- Schemes of 100 to 200 dwellings have provided variations of affordable housing ranging from 20% to 40% and infrastructure contributions ranging from £2,000 to £8,000 as S106.

4.5.12 Going forward, EHDC will only be able charge a planning contribution (S106) in the tightly controlled circumstances set out in recent legislation. With the exception of affordable housing requirements, the CIL Regulation 122(2) tests require that developer contribution charge must meet three statutory tests of being:

- Necessary to make the development acceptable in planning terms.
- Directly related to the development.
- Fairly and reasonably related in scale to the development proposed.

4.5.13 If a planning obligation does not meet all of these tests it cannot legally be taken into account in granting planning permission, and any off site or strategic infrastructure cost requirements can only be collected if EHDC has a Community Infrastructure Levy in place (apart from the pooling of five contributions). This study will inform the level of CIL charge for the preliminary draft consultation stage and will guide the infrastructure delivery assessment being undertaken by EHDC

## **4.6 Other policies that impact on viability and deliverability**

### **Mineral policy and impact on delivery timeframes and layout**

4.6.1 The NPPF encourages the prior extraction of minerals, where practicable for non-mineral development to take place. Hertfordshire County Council (HCC) has an adopted Minerals Local Plan policy and Minerals Consultation Areas (MCA) Supplementary Planning Document<sup>35</sup>. The Minerals Local Plan includes a Mineral Sterilisation Policy. The effect of the

<sup>35</sup> <http://www.hertsdirect.org/services/envplan/plan/hccdevplan/mlp/>

policy is particularly important to the planned growth in East Herts as much of this is within the identified MCA for sand and gravel.

An initial review by HCC suggests that some of the sites that form part of this Plan Viability study may have mineral deposits<sup>36</sup> and would benefit from a mineral assessment scoping report to assess the economic viability for extraction prior to development. In most cases we are likely to be dealing with fairly small sites (apart from the strategic sites) and it would be helpful if the Local Authorities could review the sites in the plan and provide a threshold size to inform the minimum scale at which point a site might be considered as not economically viable and so would be required to undertake further mineral assessment.

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<sup>36</sup> These sites include Sawbridgeworth, land north, west and south of Hertford,

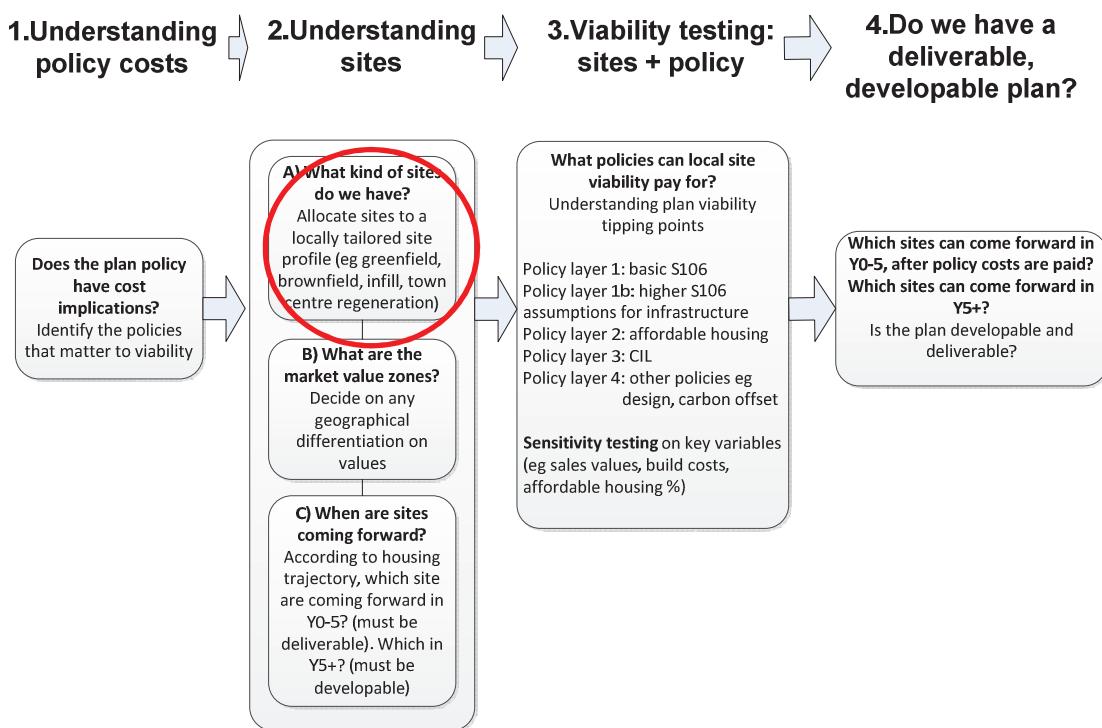
## 5 THE SITE TYPOLOGIES

### 5.1 Introduction

5.1.1 This section, as shown in Figure 5-1 seeks to allocate the development sites to an appropriate development typology. This allows the study to deal efficiently with the very high level of detail by adopting typologies that are representative of the type of sites that make up the bulk of the Plan supply. This approach is proposed by the Harman Report, which suggests 'a more proportionate and practical approach in which local authorities create and test a range of appropriate site typologies reflecting the mix of sites upon which the plan relies'.<sup>37</sup>

5.1.2 The typologies are supported with a selection of case studies (see Delivery Study report) reflecting CIL guidance (2014) which suggests that 'a charging authority should directly sample an appropriate range of types of sites across its area, in order to supplement existing data. This will require support from local developers. The exercise should focus on strategic sites on which the relevant Plan relies, and those sites where the impact of the levy on economic viability is likely to be most significant (such as brownfield sites).

Figure 5-1 Process flow – understanding the plan typologies



### 5.2 East Hertfordshire site typologies

5.2.1 The sites were allocated to typologies that best reflect the type of sites likely to come forward in East Hertfordshire based on the Strategic Land Availability Assessment (SLAA) sites but also on the review of past delivery of sites. The site typologies created for the East Hertfordshire viability study are summarised in Table 5.1.

Table 5.1 East Hertfordshire residential site typologies and case studies

<sup>37</sup> Local Housing Delivery Group Chaired by Sir John Harman (2012) *Viability Testing Local Plans* (9)

Typology and case studies	No units	Density (dph)
Housing 4 units	4	30
Housing 10 units	10	30
Housing 20 units	20	30
Housing 50 units	50	30
Housing 150 units	150	30
Flats 4 units	4	75
Flats 15 units	15	75
Flats 60 units	60	75
Mead Lane, Hertford brownfield	300	100
Bishop's Stortford Goods Yard brownfield	450	115

Source PBA

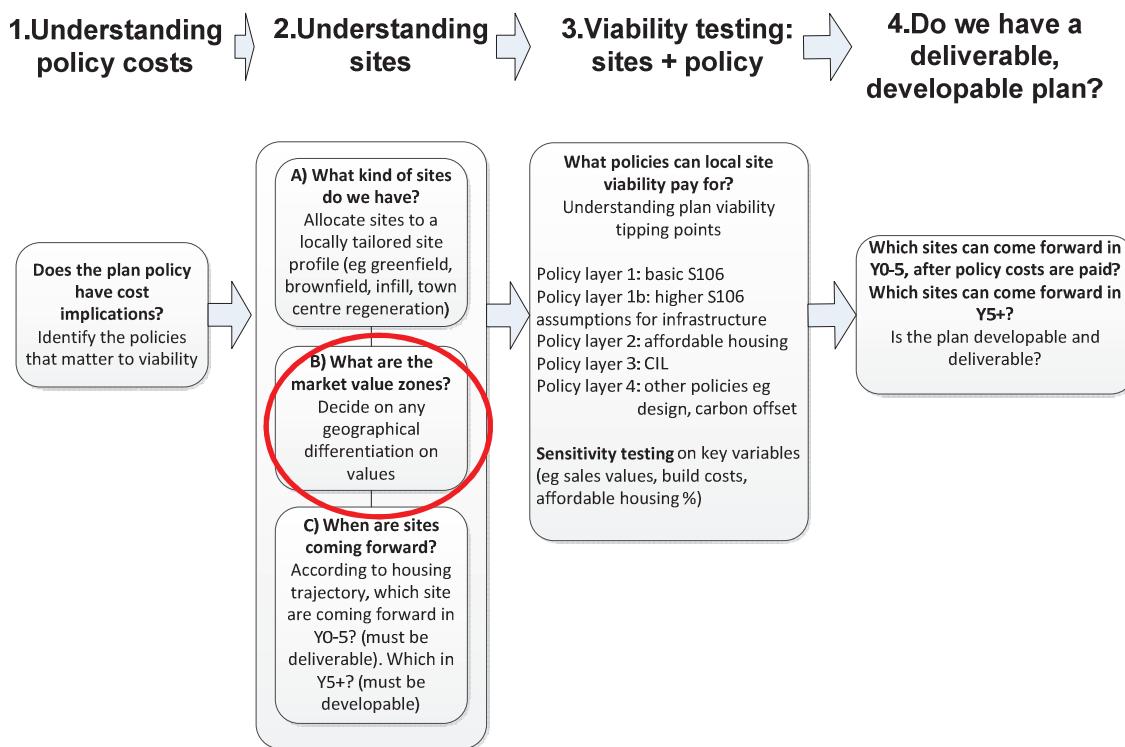
5.2.2 In addition, a selection of strategic sites (see separate report) and two brownfield case studies for Bishop's Stortford Goods Yard and Mead Lane were tested, with input from agent and developer consultations and developer workshops. It is assumed that bigger schemes are likely to be sold in smaller parcels represented in the site typologies.

## 6 THE MARKET VALUE ZONES

### 6.1 Introduction

6.1.1 A major determinant of the viability of a site is its location. Site locations affect viability through the interaction of supply and demand for land in a particular location. This feeds through into house prices and land values and thus site viability, assuming that other things are equal. This section, as shown in Figure 6-1 looks at the make-up of the market value zones for residential development based on sales value.

Figure 6-1 Process flow – understanding the market value zones



Source: PBA

### 6.2 Setting viability zones for residential development

6.2.1 We arrive at the value zones based on interviews with local agents, and an analysis of recent new build property values on the market based on web research. Unfortunately there were just over 40 new properties on the market providing a very small sample size. We have also reviewed some 10,000 historic transactional data from 2010 to 2014 of both new and old property transactions based on data provided by the Land Registry. Finally in arriving at the market value zones, we take account of where the bulk of growth is likely to create a simplified zonal area.

#### Market commentary from local agents on value zones

6.2.2 The feedback from local agents operating in the area has highlighted the following comments in relation to value zones:

- There is a very high demand for property in the district as not much new development has been forthcoming, so anything tends to sell quickly.

- The highest value areas are those to the south of the district closest to London. Rural areas and towns to the north of the district, further away from fast train links to London lose value quickly.
- Values are highest in town centres with fast rail links to London. To the very north of the district, values for new properties can be up to 20% lower.
- In terms of highest to lowest value, the areas are - Welwyn village and Garden City; Hertford; Ware; Bishop's Stortford; Buntingford & rural north.
- There is a particular shortage of two bedroom houses in the area.
- Generally locations closest to train stations, within walking distance of town or village centres and well performing schools command the highest values.

### Research of sales values based on transactional data

6.2.3 Sales values are a reasonable, though imperfect proxy for value zones. An average house value range may be broadly correct, however, it is possible to have some individual house price variations. Even between areas with different average prices, the prices of similar houses in different areas may considerably overlap.

6.2.4

**sets out finding of average sales prices from our research of past transactional data for new build properties and**

6.2.5 Table 6.2 sets out the average sales values for new and old build properties based on a review of some 10,000 properties.

Table 6.1 Average values for new build properties transacted during 2010 – 2014

Row Labels	Flat		House		
	Average of HousePrice	Count of HousePrice	Average of HousePrice	Count of HousePrice	
BISHOP'S STORTFORD	£215,265	118	£446,567	30	
BUNTINGFORD	£210,000	2	£350,289	126	
HERTFORD	£282,691	148	£437,609	163	
SAWBRIDGEWORTH	£186,938	8	£418,679	61	
WARE	£190,745	77	£425,412	93	
<b>Grand Total</b>	<b>£237,514</b>	<b>353</b>	<b>£416,307</b>	<b>498</b>	

Source: PBA based on Land Registry data of some 850 new build dwellings transacted

Table 6.2 Average values for new and old properties transacted during 2010 - 2014

Row Labels	Flat		House		
	Average of HousePrice	Count of HousePrice	Average of HousePrice	Count of HousePrice	
BISHOP'S STORTFORD	£172,890	547	£325,679	2140	
BUNTINGFORD	£154,333	24	£361,442	600	
HARLOW	£501,667	3	£450,921	19	
HERTFORD	£211,972	748	£365,625	2078	
MUCH HADHAM			£560,355	80	
SAWBRIDGEWORTH	£161,666	114	£360,024	585	
STEVENAGE	£170,964	14	£457,285	193	
WARE	£172,163	723	£355,134	1849	
<b>Grand Total</b>	<b>£185,749</b>	<b>2173</b>	<b>£355,580</b>	<b>7544</b>	

Source: PBA based on Land Registry data of just under 10,000 new and old dwellings transacted

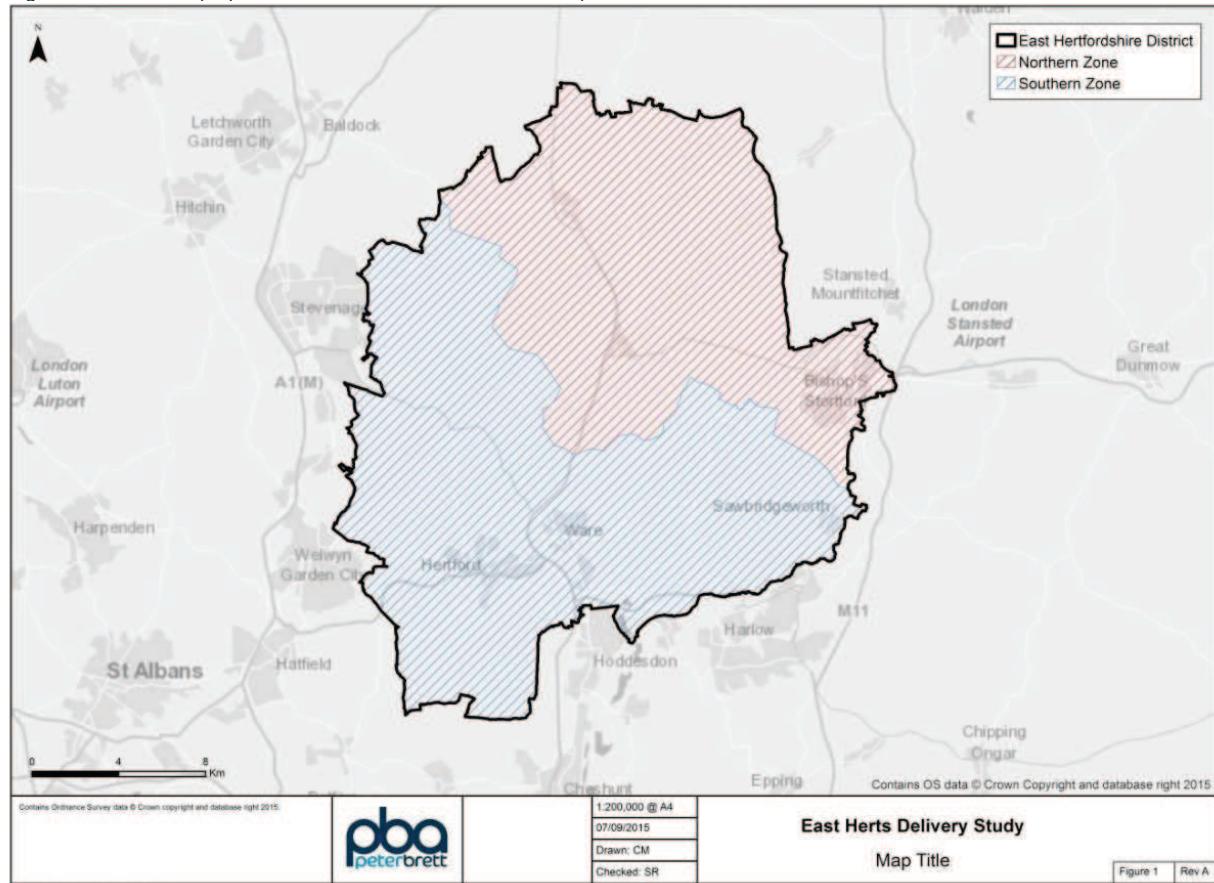
- 6.2.6 Note all the properties included in these two tables relate to properties within East Hertfordshire, though they may have postcodes that relate to adjoining local authority areas.
- 6.2.7 The research findings are generally consistent with the feedback from the agent interviews, that properties in Welwyn Garden City and surrounding settlements with East Herts command some of the highest values. Areas in the south of the district, including Hertford, Ware and villages close to Harlow with access to the train stations to London also have some of the strongest values.
- 6.2.8 The findings for Buntingford and Bishop's Stortford suggest that new properties in Buntingford have a lower value than older properties, whilst the opposite is true in the case of Bishop's Stortford, where the small sample of new properties have a considerably higher value than the general average values for the area for old and new properties.

### **6.3 Arriving at a simplified value zones map**

- 6.3.1 An important determinant of viability of a site is its location and accompanying value zone, particularly for residential use. This feeds through into house prices and land values and thus site viability. So the starting point is to articulate the market value zones affecting the bulk of the development. The value zones are based on 'appropriate available evidence' available from a range of sources.
- 6.3.2 Sales values are a reasonable, though imperfect proxy for value zones. An average house value range may be broadly correct; however it is possible to have some individual house price variations. Even between areas with different average prices, the prices of similar houses in different areas may considerably overlap. Therefore, to keep the process simple, account is taken of the likely future patterns of growth, and where appropriate broader value zones are merged.
- 6.3.3 It is important to highlight that these are approximations of values aimed at creating a simplified approach at this plan level assessment - however we acknowledge there are considerable variations which will be picked up at planning application stage. The research did identify some exclusive developments for very large, expensive properties in the central rural villages in the northern zone, however given the scale of development proposed in these locations, it is suggested this area is best grouped with the northern zone in order to avoid a complex CIL charging schedule. Our assessment of new build properties in Ware and Hertford also suggests very similar values exist for new properties and so these areas have been merged to create one value zone area.
- 6.3.4 We have also reviewed the sales prices for new build properties on the market during October 2014, to provide an indication of the per square metre sales values for the zones. Appendix C provides a summary of recent sales values for new properties being transacted. Although this is based on a small sample it is useful evidence when considered alongside the wealth of other sales value data gathered for this study, the feedback from agents and the developer workshop, previous viability research undertaken by Lambert Smith Hampton (LSH) for East Herts and an assessment of where the bulk of the planned growth is likely to take place in the future.
- 6.3.5 The assessment in this section, including the consultations with the client team favours allocating the East Hertfordshire residential market into two simplified value zones which reflects the bulk of the planned development sites.
- 6.3.6 Figure 6.2 shows the value zone areas and values adopted for this study. The following value zones have been adopted:
  - Northern zone consisting of Buntingford, Central rural villages and Bishop's Stortford @ £3,500 per sq. m

- Southern zone consisting of Ware, Hertford and western rural villages @ £3,700 per sq.m

Figure 6.2 East Herts proposed value zones for residential development



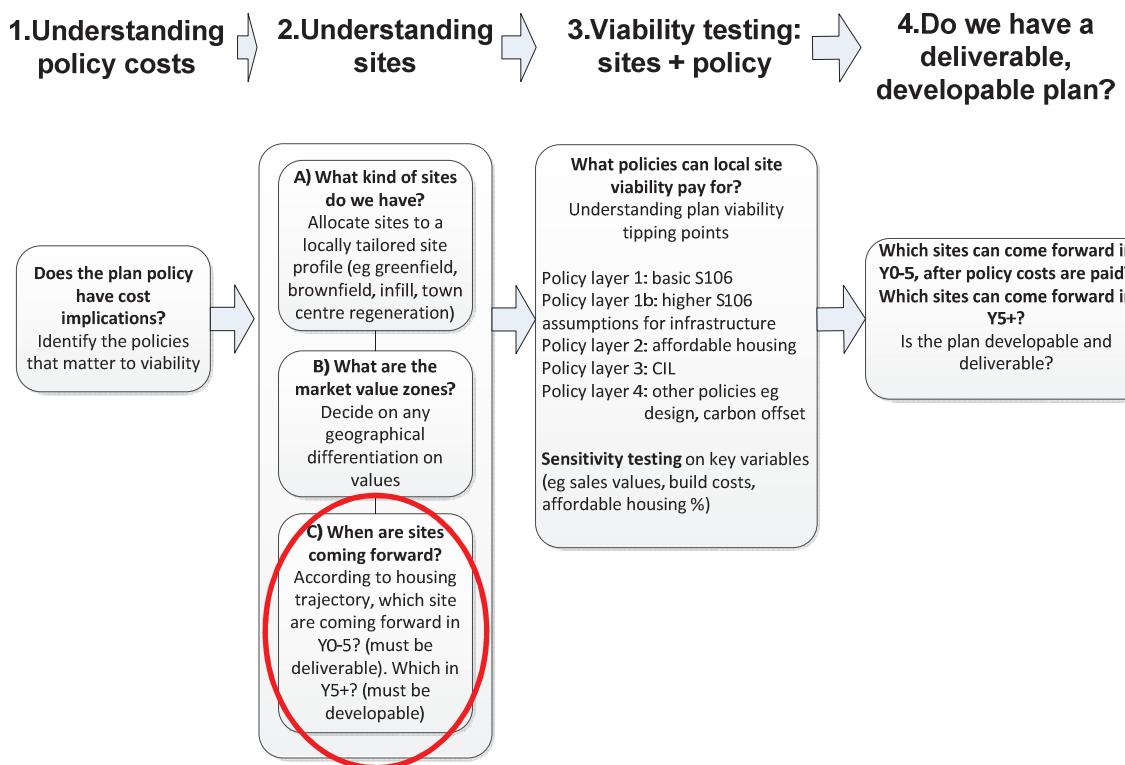
Source: PBA

## 7 THE PLANNED RESIDENTIAL TRAJECTORY

### 7.1 Introduction

7.1.1 The objective in this section, as shown in Figure 7-1 is to understand and allocate development sites to an appropriate timescale. This has been achieved through analysis of the emerging housing trajectory to understand the broad time frames that different developments are expected, and explore whether sites are 'deliverable' in Years 0-5 of the plan, or 'developable' in Years 6 onwards.

Figure 7-1 Process flow – understanding when the planned growth will take place



Source: PBA

### 7.2 Timescales when sites are expected to come forward

7.2.1 The Draft Plan sets out the vision and strategy for development across East Hertfordshire for the period to 2031. Table 7.1 Draft Preferred Options District Plan 2014 housing trajectory overleaf is a copy of the draft Local Plan trajectory, setting out the estimated delivery of the various sites in five yearly timescales.

7.2.2 As can be seen from this, the first five year housing supply consists of some 4,400 dwellings based primarily on sites with planning permission - the largest of these is the North of Bishop's Stortford development consisting of 1,300 dwellings during the first five year phase of 2016 – 2021.

7.2.3 The unconsented sites during the first five years comprise of smaller edge of settlement greenfield sites ranging from around 50 units to 500 units. The main unconsented brownfield site within the first five year allocation is the Hertford Mead Lane site, which involves the

regeneration of an underused employment site to a mixed use development<sup>38</sup>. Other brownfield sites such as land south of Buntingford on land formerly known as the Sainsbury's Distribution Depot site have been granted planning consent and 300 dwellings are assumed to form part of the five year housing supply.

- 7.2.4 Given the importance of understanding the delivery of the larger strategic sites, a separate report has been prepared for the four larger strategic sites – including an assessment of the South of Bishop's Stortford site which is included in the five year housing trajectory. This site is currently unconsented though we are informed that the promoters are preparing to submit a planning application imminently.
- 7.2.5 The housing trajectory making up the five year supply has been carefully considered to ensure that the appraisal assumptions reflect the sites coming forward. The past delivery trend analysis presented earlier has also helped to shape the assumption inputs.

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<sup>38</sup> See HERT 2 Mead Lane Area policy in Draft Preferred Options District Plan 2014.

Table 7.1 Draft Preferred Options District Plan 2014 housing trajectory

1	A	B	C	D	E	F	G	H
			2011-2016	2016-2021	2021-2026	2026-2031	2011-2031	After 2031
2	Other	Windfall allowance	0	450	400	350	1200	
3	Other	Completions	1,082	0	0	0	1082	
4	Other	Commitments	1,572	0	0	0	1572	
5	Other	Group 1 Villages	0	250	125	125	500	
6	SLAA	Bishop's Stortford Urban Area	0	75	172	0	247	
7	Allocation	Bishop's Stortford Goods Yard	0	0	200	0	200	
8	Allocation	Hadham Road Secondary School Reserve Site, Bishop's Stortford (increase to 250 in 2016-2021 if secondary school not required)	0	0	0	0	0	
9	Allocation	North of Bishop's Stortford (reduce to 2,350 if secondary school required)	0	1300	800	500	2600	
10	Allocation	South of Bishop's Stortford (reduce to 750 if secondary school required)	0	500	500	0	1000	
11	Allocation	East of Bishop's Stortford	0	150	0	0	150	
12	SLAA	Buntingford Urban Area	0	13	0	0	13	
13	Allocation	Buntingford South (former Depot)	0	300	0	0	300	
14	Allocation	Buntingford North	0	0	180	0	180	
15	SLAA	Hertford Urban Area	0	365	36	50	451	
16	Allocation	North of Hertford	0	0	150	0	150	
17	Allocation	South of Hertford	0	50	0	0	50	
18	Allocation	West of Hertford	0	550	0	0	550	
19	SLAA	Sawbridgeworth Urban Area	0	0	5	0	5	
20	Allocation	West of Sawbridgeworth	0	400	0	0	400	
21	SLAA	Ware Urban Area	0	20	12	0	32	
22	Broad Location	Gilston Area	0	0	1,250	1,750	3000	7000
23	Broad Location	North and East of Ware	0	0	800	1,000	1800	1200
24	Broad Location	East of Welwyn Garden City	0	0	0	450	450	1250
25	<b>TOTAL SUPPLY - including contingency of c.6%</b>		<b>2654</b>	<b>4423</b>	<b>4630</b>	<b>4225</b>	<b>16932</b>	
26	<b>Projected Need (750 dwellings per year)</b>		<b>3750</b>	<b>3750</b>	<b>3750</b>	<b>3750</b>	<b>15000</b>	
27	<b>Shortfall spread over 2016-2031</b>			<b>365.3</b>	<b>365.3</b>	<b>365.3</b>	<b>1096</b>	
28	<b>Need plus shortfall</b>			<b>4115</b>	<b>4115</b>	<b>4115</b>		
29	5% buffer moved forward from 2021-2031 to 2016-2021			<b>206</b>	<b>-103</b>	<b>-103</b>		
30	<b>Total Requirement</b>		<b>2654</b>	<b>4321</b>	<b>4012</b>	<b>4012</b>	<b>15000</b>	
31								
32	Shortfall	2011-2016 shortfall (3,750-2,654)	1096					
33		Shortfall per year spread over remaining 15 years (2016-2031)	73.1					
34		Shortfall over 5 years (73.1 * 5 years)	365.3					
35								
36	Contingency (mainly post 2021)	Supply	1593.2					
37		Requirement	15000					
38		Contingency	932					
39		% contingency	6%					
40								
41	Note on Bishop's Stortford housing numbers							
42	A secondary school could be provided at one of three locations: a) Hadham Road, b) North of Bishop's Stortford, c) South of Bishop's Stortford							
43	Numbers at any of these sites would therefore reduce to accommodate a new secondary school.							
44	To avoid double counting, for the purpose of the district-wide strategy the full amount at b) and c) is shown but 250 homes at the allocated Hadham Road site are not shown.							

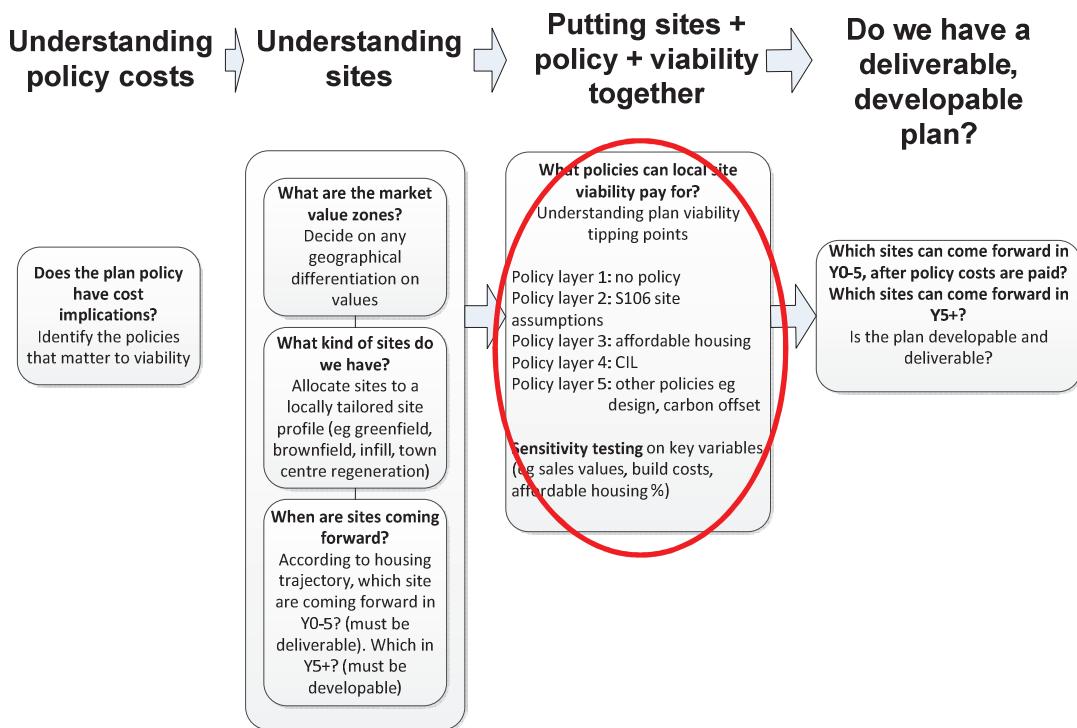
Source: EHDC – East Herts Draft Preferred Options District Plan Consultation 2014

## 8 RESIDENTIAL VIABILITY TESTING

### 8.1 Introduction

8.1.1 Previous stages have provided an understanding of how location and policy costs might affect viability. In effect, policy costs have been identified, the future development sites have been allocated to the site profile typologies, and market sales values have been estimated, and the planned delivery periods understood. As shown in Figure 8-1, this next stage is about undertaking the viability testing to assess the ability of developments to pay for policy cost.

Figure 8-1 Process flow – putting together the policies, sites and viability



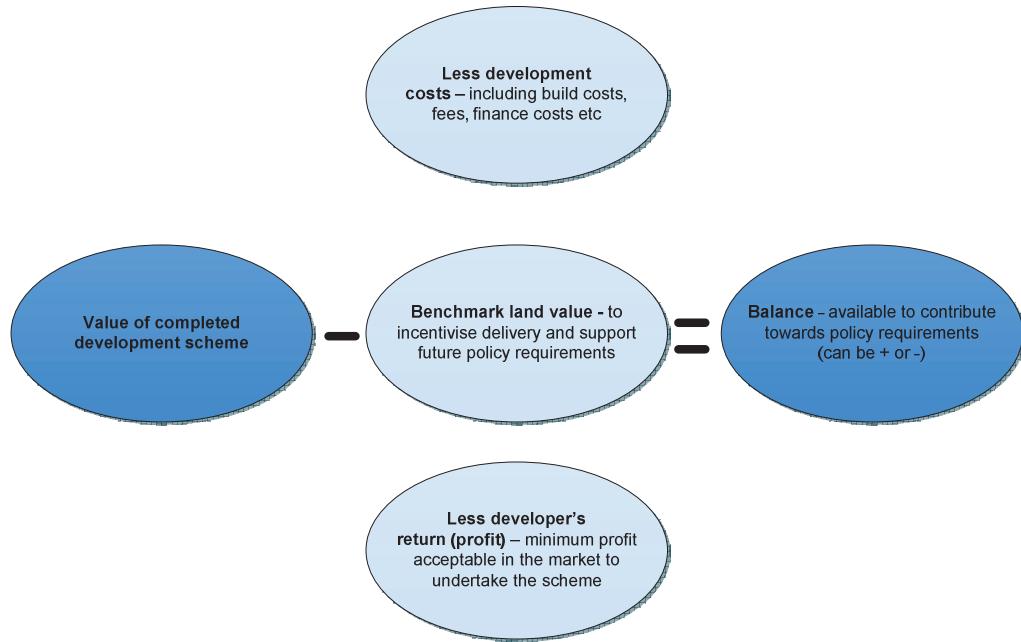
Source: PBA

### 8.2 Approach used for the development viability appraisals

8.2.1 The PBA development viability model uses the residual approach to development viability. The approach takes the difference between the development value and costs and compares the 'residual land value' with a threshold land value to determine the balance that could be available to support policy costs such as affordable housing and infrastructure. The method is illustrated in the Figure 8-2 overleaf.

8.2.2 As noted in section 3, the policy costs relevant for generic typology assessment for this plan viability assessment for East Hertfordshire were affordable housing, local water efficiency measures and infrastructure. All other policy cost considerations (e.g. design, low carbon, site delivery layout) have been incorporated in the development cost assumptions for the appraisals.

Figure 8-2 Approach to residual land value assessment for plan viability



- 8.2.3 The purpose of the assessment is to identify the balance available to pay for policy costs at which the bulk of the development proposed in the development plan is financially viable.
- 8.2.4 Work in the previous stages provides an understanding of the types of sites in the area, and how location might affect their viability. When added to a set of locally based assumptions on new-build sales values, threshold land values and developer profits, a set of area-wide and case study development viability appraisals are produced.

### 8.3 Viability assumptions

- 8.3.1 Given the range of sites within the East Hertfordshire area, it is not possible to get a perfect fit between a site, the site profile and cost/revenue categories. A best fit in the spirit of the Harman Report guide has been attempted. For this, the viability testing requires a series of assumptions about the size coverage and floorspace mix to generate an overall sales turnover and value of land, which are discussed here.

#### Net developable area and density

- 8.3.2 The net (developable) area of the site informs the likely land value of a residential site. Typically, residential land values are normally reported on a per net hectare basis, since it is only this area which delivers a saleable return. The housing densities adopted are summarised in Table 8.1

Table 8.1 site densities for typologies and case studies

Site	Dwellings per net developable ha
All residential typologies	30 dph
Flats	75 dph
Mead Lane case study	100 dph assumed net site area of 3 ha
Goods Yard case study	110 dph assumed net site area of 4.5 ha

## Floorspace

8.3.3 The residential floorspace for new builds reflects a combination of average sizes based on floorspace details in marketing brochures for recent new builds in East Hertfordshire and discussions with stakeholders. The average floorspace assumptions used are presented in Table 8.2.

Table 8.2 Sales areas

	GIA	NIA
Houses – market	95 sq.m	n/a
Houses – affordable	75 sq.m	n/a
Flatted schemes	76 sq.m	65 sq.m

8.3.4 Two floor areas are displayed for flatted schemes: the Gross Internal Area (GIA), including circulation space, is used to calculate build costs and Net Internal Area (NIA) is applied to calculate the sales revenue. Also, based on feedback from local providers of affordable units sizes are assumed to mirror the open market unit standards for apartments, whilst house sizes are smaller.

## Sales values

8.3.5 Current residential revenues and other viability variables are obtained from a range of sources, including:

- Websites research such as the Right Move and the Land Registry data to look at new property sales values and second hand values.
- Consultation with agents operating in the area.
- Comparison with values in previous CIL study by LSH.

8.3.6 The evidence for the sales assumptions and value zones has been discussed in the value zone sections of this report. It is important to note that there are relatively few examples of new build properties on the market in East Herts. The values used for this study are set out in Table 8.3.

Table 8.3 Sales values

Zone	Market housing	Flats
Northern zone	£3,500 psm (£332,500 aver property price)	£3,462 psm (£225,000 aver property price)
Southern zone	£3,700 psm (£351,500 aver property price)	£3,846 psm (£250,000 aver property price)

8.3.7 The testing assumes the following transfer values for affordable housing:

- Affordable rent 55% of market value
- Intermediate 65% of market value

### Forecast changes in sales values

8.3.8 Looking forward **Error! Reference source not found.** provides the latest projections of house prices prepared by Savills in their Residential Property Focus (Q1, 2015). This suggests that house prices for the outer commute area such as East Hertfordshire are expected to grow by around 24.5% over the next five years, which is considerably higher than the national UK forecast of 19.3%.

Table 8.4 Prime Markets - five year forecast of sales values

Market Area	2015	2016	2017	2018	2019	5-year
Central London	-1.05%	8.0%	6.5%	5.0%	5.0%	25.5%
Other London	0.0%	6.0%	5.0%	4.0%	4.0%	20.4%
Suburbs	1.0%	7.0%	6.0%	5.0%	4.5%	25.7%
Inner Commute	1.0%	7.0%	5.5%	5.0%	4.5%	25.1%
Outer Commute	1.0%	6.0%	5.5%	5.0%	5.0%	24.5%
Wider South of England	1.0%	4.5%	5.0%	5.0%	5.0%	22.2%
Midlands/North	1.0%	4.0%	4.0%	5.0%	5.0%	20.4%
Scotland	0.0%	4.0%	4.5%	4.0%	4.0%	17.5%

\*Assuming no mansion tax but allowing for revision of the council tax system. NB These forecasts apply to average prices in the second hand market. New Build values may not move at the same rate.

Source: Savills Residential Property Forecast Issue 1 - 2015

### Threshold land values

8.3.9 There are two land values that are important to informing viability, the 'residual' land value and the 'threshold' land value. If the residual land value exceeds the threshold land value, the development is viable and can support a CIL charge. The distinction between the two is explained as follows:

- The residual land value is the value generated by a scheme, assuming that affordable housing and other policy costs are paid, and the developer makes a target profit after deducting development costs;
- The threshold land value is the price that a landowner will require to supply the land. For an unserviced site, as in the case of the strategic sites, without planning permission, a landowner will receive considerably less for the site, in order to allow the master developer / promoter to first service the site and fund the initial promotion costs to secure the planning consent to a fully serviced state. It is important to appreciate that assumptions on threshold land values can only be broad approximations, subject to wide variations. This is taken account of in drawing conclusions and recommendations on setting the affordable housing policy and CIL charge.

8.3.10 The approach used to arrive at the threshold land value is based on a review of recent viability evidence of sites currently on the market, viability appraisal submissions, published data on land values and discussions with various stakeholders. The approach considers current market value and existing use / alternative use values. Account has also been taken of current and future policy requirements. This approach is in line with the Harman report and recent CIL examination reports which accept that authorities should work on the basis of future policy and its effects on land values as well as ensuring a reasonable return to a willing landowner and developer.

8.3.11 In collecting evidence on residential land values, greenfield sites are assumed to be fully serviced or 'oven-ready' residential sites. In reality, the land value will be lower for those sites that are likely to require greater opening up infrastructure. We take account of this uncertainty in drawing conclusions and recommendations from our analysis. We have also distinguished between sites that deliver flats and housing sites, with a higher threshold land value cost assumption to reflect the higher density for flatted schemes resulting in market expectation on the value of a site.

8.3.12 Table 8.5 sets out the threshold residential land value assumptions used for the generic site appraisals.

Table 8.5 Threshold land values

Zone	Land value per net developable ha		Site servicing costs
	Housing sites	Apartment sites	Fully serviced site
Southern	£2,250,000	2,500,000	Fully serviced site
Northern	£2,000,000	£2,250,000	Fully serviced site
Case studies Land values per net developable ha		Site servicing cost	
Bishop's Stortford Good's Yard		£1,482,000	£150,000 per net ha
Mead Lane, Hertford		£1,605,500	£150,000 per net ha

8.3.13 Brownfield site values have been based on existing employment land values plus a premium. This methodology is consistent with the Harman Report which recommends threshold land values be based on existing use plus a landowner premium. The Mead Lane site is based on commercial land values plus 30% premium whilst the Goods Yard is based on existing use plus 20% - the higher premium represents the higher value residential area the Mead Lane site falls within.

## Build costs

PBA's viability assessment is based on build cost data published by the Building Cost Information Service (BCIS) as shown in

8.3.14 Table 8.6. The BCIS is part of the Royal Institution of Chartered Surveyors and is generally adopted by surveying practices for plan level viability appraisals. The building prices used in the BCIS data are averages taken from a wide range of different contracts and tenders in the BCIS data bank, which is based on the analysis of about one thousand new projects each year.<sup>39</sup>

8.3.15 Our approach has been to use the BCIS data as it represents the most robust source for this type of plan wide study. We acknowledged that the method of preparing the BCIS cost data does not necessarily reflect the build costs for the volume house builders (who are likely to benefit from greater economies of scale) and their costs are generally acknowledged as being lower than the regional and local developers. However, our market research has also shown that currently in East Hertfordshire there is a mix of national developers, regional and local developers. Smaller and medium sized developers of houses are usually unable to attain the same economies, so their construction costs may be higher; however, anecdotally the higher cost of small builds is also likely to reflect higher standards and specifications to match local demand for standalone units which consequently command higher values than those assumed in this study.

<sup>39</sup> BCIS (February 2015) Page 3, Quarterly Review of Building Prices Issue 136

Table 8.6 Median build costs for East Hertfordshire

Dwelling type	£ psm
Flats – generally	£1,225
Houses – general estate housing	£1,036

Source: BCIS December 2014

8.3.16 Note the BCIS build costs adopted are not an 'all in build cost' and are exclusive of external works, contingencies, fees, VAT and finance charges, and other revenue costs which are added to the build cost assumptions.

### External cost allowance

8.3.17 This input incorporates all additional costs associated with the site curtilage of the built area. These include circulation space in flatted areas and garden space with housing units; incidental landscaping costs including trees and hedges, soft and hard landscaping; estate roads and connections to the strategic infrastructure such as sewers and utilities.

8.3.18 The external works variable has been set at a rate of 10% of build cost.

### Other development costs

#### Professional fees

8.3.19 This input incorporates all professional fees associated with the build, including fees for designs, planning, surveying, project managing, etc, at 10% of build costs plus externals.

#### Contingency allowance

8.3.20 It is normal to build in contingency based on the risk associated with each site and has been calculated based on industry standards. They are applied at 5% of build costs plus externals.

### S106 infrastructure, site enabling and policy costs

8.3.21 A decision is yet to be made on which funding mechanism (CIL or S106) EHDC and HCC would like to pursue in the future. For this study, we have assumed a nominal cost of £500 per unit as a S106 contribution towards the cost of site specific requirements. The infrastructure requirements anticipated for the majority of the urban sites are likely to be met through off site delivery of infrastructure such as schools expansions, improved access to and open space enhancements, or transport improvements (Appendix E provides a summary of the feedback from service providers concerning infrastructure capacity). This could be met either through a CIL or the pooling of S106 contributions and will be dependent on meeting the legislative test for S106 relating to each specific schemes. In the past the requirement for such schemes has varied considerably depending on size of scheme and existing capacity of infrastructure.

8.3.22 The PBA viability model tests the residual available to support a CIL contribution towards the cost of strategic infrastructure such as the expansion of existing secondary schools, doctor's surgeries, upgrade of existing open space, libraries and so.. If a CIL charging schedule is adopted then a CIL Regs 123 list will have to be prepared to avoid any potential double funding with S106 contributions.

8.3.23 It should be noted, that EHDC will continue to develop the infrastructure delivery schedule assessment for 'other' infrastructure requirements such as libraries, open space, sport, social services, emergency services etc. This will in turn inform the overall infrastructure funding gap for the purposes of the CIL assessment.

#### **Affordable housing policy costs**

8.3.24 One of the most significant items of S106 sought from residential development sites is affordable housing. This has been tested at different percentages to enable the Council to understand the implications of affordable housing policy (HOU3) on the balance available to support wider infrastructure costs via CIL.

#### **Water efficiency policy costs**

8.3.25 The Government has stated that in water stressed areas, it would be possible to request additional water efficiency measures – given that East Herts is in such a water stressed area, the draft local plan includes a policy to allow for a higher water efficiency standard. The Housing Standards Review includes cost estimates based on Government assessment of water efficiency measures and these have been applied to this appraisal based on an additional cost of £68 for a house and £43 for a flat for an efficiency standard of 110 litres per day / per person.

#### **Opening cost allowance**

8.3.26 There will be varying levels of site specific opening costs, such as utilities, drainage, and S278 highway requirements to secure the delivery of the generic sites. For the appraisals, we have assumed fully serviced site land values the sites assessed in this report, so any site specific costs will come off the value paid for the land.

#### **Brownfield site remediation costs**

8.3.27 The appraisals for the brownfield sites include an allowance of £150,000 per net ha for abnormal and remediation costs. This cost will vary depending on site conditions, and once detailed ground investigation is undertaken there will be a better understanding of these costs to inform site specific assessments.

#### **Land purchase costs**

8.3.28 The land value needs to reflect additional purchase cost assumptions, shown in Table 8.7. These are based on surveying costs and legal costs to a developer in the acquisition of land and the development process itself, which have been established from discussions with developers and agents, and are also reflected in the Harman Report (2012) as industry standard rates.

Table 8.7 Land purchase costs

Land purchase costs	Rate	Unit
Surveyor's fees	1%	Land value
Legal fees	0.75%	Land value
Stamp Duty Land Tax	HMRC rate	Land value
Development finance for land purchase (pa)	7%	Land value

8.3.29 A monthly cashflow based on a finance cost of 7% has been used throughout the site appraisals. Note given the strength of the current market, some developers maybe able to negotiate rates below 7%, and make cost savings.

#### **Sales fees**

8.3.30 The Gross Development Value (GDV) on open market units need to reflect additional sales cost assumptions relating to the disposing of the completed residential units. This will include legal, agents and marketing fees at the rate of 3% of the open market unit GDV. Some agents have suggested costs are higher than this allowance, though cost savings elsewhere and the CIL buffer will reflect any adjustments.

#### **Developer's profit**

8.3.31 The developer's profit is the expected and reasonable level of return that a private developer would expect to achieve from a specific development scheme. The open market residential dwellings elements are assumed to achieve a profit of 20%, which is applied to their GDV. This also allows for internal overheads. It is possible in a strong market such as East Herts, that some developers may be able to go below this percentage.

8.3.32 For the affordable housing element, because they will have some, albeit lower, risks to the developer, a 6% profit margin is assumed on a nil grant basis.

### **8.4 Residential viability appraisal findings**

8.4.1 This section sets out the findings for the residential development viability assessment. Each generic typology has been subjected to a detailed appraisal, complete with cashflow analysis. A range of different scenarios were appraised. The percentage of affordable housing cost and water efficiency policy costs are treated as a cost input in the appraisal. Examples of the typology appraisals are included in Appendix C.

8.4.2 The financial headroom is the difference between the residual land value of the appraised scenario and the threshold land value. This shows the maximum balance available to accommodate developer contributions. Note that the CIL overage is not a direct calculation of deducting the threshold value from the residual land value. As affordable housing is not liable to CIL charge.

#### **Residential appraisal summary findings**

8.4.3 The appraisal summary table 8.8 overleaf shows the effect on viability of introducing the HOU 3 policy level affordable housing contribution of 40% on schemes of above 15 dwellings, 30% on schemes of 5 to 14 dwellings and 0 % on 4 dwellings or less. This shows that apart from the flatted schemes, all other typologies are viable at the policy level with varying levels of financial headroom to support a CIL charge for strategic infrastructure.

8.4.4 Further testing of 35% affordable housing on the generic scenarios, and 20% and 10% for the flatted schemes was also tested to inform the affordable housing and CIL charge options. The summary tables for these further iterations are presented in Appendix C.

Table 8.8 Affordable housing @ HOU 3 policy levels, S106 @ £500 per dwelling for generic scenarios and £2000 per dwelling for two brownfield case studies

Site typology	Zone	Dwellings	Affordable housing	Net site area	Total floorspace	chargeable floorspace	Residual land value	Threshold land value	Headroom	
		No.	%	Ha	Sqm	Sqm	Per Ha	Per Ha	Per Ha able Sqm	
<b>Policy HOU3 affordable assumptions</b>										
Housing 4 units	Southern zone	4	0%	0.13	380	380	£3,764,163	£2,250,000	£1,514,163	£531
Housing 10 units	Southern zone	10	30%	0.33	890	665	£2,934,541	£2,250,000	£684,541	£343
Housing 20 units	Southern zone	20	40%	0.67	1,740	1,140	£2,626,049	£2,250,000	£376,049	£220
Housing 50 units	Southern zone	50	40%	1.67	4,350	2,850	£2,589,180	£2,250,000	£339,180	£198
Housing 150 units	Southern zone	150	40%	5.00	13,050	8,550	£2,535,181	£2,250,000	£285,181	£167
Flats 4 units	Southern zone	4	0%	0.05	306	306	£4,596,449	£2,500,000	£2,096,449	£366
Flats 15 units	Southern zone	15	40%	0.20	1,147	688	£2,469,703	£2,500,000	-£30,297	-£9
Flats 60 units	Southern zone	60	40%	0.80	4,588	2,753	£2,354,835	£2,500,000	-£145,165	-£42
Housing 4 units	Northern zone	4	0%	0.13	380	380	£3,411,717	£2,000,000	£1,411,717	£495
Housing 10 units	Northern zone	10	30%	0.33	890	665	£2,606,069	£2,000,000	£606,069	£304
Housing 20 units	Northern zone	20	40%	0.67	1,740	1,140	£2,321,240	£2,000,000	£321,240	£188
Housing 50 units	Northern zone	50	40%	1.67	4,350	2,850	£2,289,910	£2,000,000	£289,910	£170
Housing 150 units	Northern zone	150	40%	5.00	13,050	8,550	£2,243,954	£2,000,000	£243,954	£143
Flats 4 units	Northern zone	4	0%	0.05	306	306	£3,061,927	£2,250,000	£811,927	£142
Flats 15 units	Northern zone	15	40%	0.20	1,154	688	£1,240,120	£2,250,000	-£1,009,880	-£293
Flats 60 units	Northern zone	60	40%	0.80	4,616	2,753	£1,137,117	£2,250,000	-£1,112,883	-£323
Mead Lane	Southern zone	300	40%	3.00	23,082	13,765	£3,133,742	£1,605,500	£1,528,242	£333
Goods Yard	Northern zone	450	40%	4.50	34,624	20,647	£1,553,536	£1,482,000	£71,536	£16

Source: PBA

### **The cost of borrowing impacts on larger schemes**

8.4.5 Table 8.8 shows that as the number of units increases from 20 dwellings to 150 dwellings, the financial headroom reduces. This is due largely to the impact of the cost of borrowing from holding the land on day one. The appraisal assumes for the generic scenarios land is drawn down on day one. Scenarios 50 and 150 dwellings require more land to build on than the other scenarios and as a result the lump sum paid for the land is greater. Interest is incurred on day one to borrow for the land, this results in more interest charges, (or higher costs) which in turn reduces overall viability. It is assumed that any higher costs for these schemes will be negotiated on the price paid for the land. There may also be a need for some negotiation, depending on site specific issues on larger schemes of 150 units in the northern zone

### **Flatted schemes are not viable at policy level affordable housing**

8.4.6 Most of the flatted scheme findings in Table 9.8 are not viable at 40% affordable housing. This is because flats are generally more expensive to build than houses, and the increase in cost is not captured through a proportionate increase in sales values. The difference in sales values between the norther zone and southern zone also impacts on the flatted schemes. For this reason, further appraisals were carried out for flatted schemes and summary tables are included at Appendix C.

### **Mead Lane and Bishop's Stortford Good's Yard case studies treated differently**

8.4.7 We have been informed that planning applications are expected imminently for the Mead lane and Bishop's Stortford Good's Yard sites, and so are unlikely to be affected by a CIL. However, there are likely to be higher site specific costs related to transportation works in particular. The exact amounts are unknown; however it has been agreed with EHDC to test a cost of £2000 per dwelling for these two sites. The appraisal summaries for these two sites are included at Appendix C and show the higher S106 allowed for these case studies.

8.4.8 It has also been assumed that there will be some site remediation costs associated with these sites. By their nature these costs are 'abnormal' and as yet unknown. For now an allowance of £150,000 per net ha has been allowed. However, both sites are likely to have significant cost associated with land reclamation due to the previous uses that took place.

8.4.9 Due to the nature of these two sites, although they are viable at policy level affordable housing, it is likely that once detailed masterplans and evidence is prepared, the viability assumptions should be refined.

## **8.5 Residential CIL charge and affordable housing policy recommendations**

8.5.1 The CIL Regulations allow the charging authority to introduce charging variations by geographical zone, by use, or by scale or a combination of these. All differences in rates need to be justified by reference to the economic viability of development. Setting up a CIL which levies different amounts on development in different places increases the complexity of evidence required. However, it may be worthwhile if the additional complexity generates important additional revenues for contributing to the delivery of infrastructure and therefore growth.

8.5.2 Identifying different charging zones for CIL has inherent difficulties. For example, house prices are an imperfect indicator; and there is no certainty that we are comparing like products; even within a given type of dwelling, such as terraced houses, there will be variations in, say, quality or size which will impact on price. Also the assumed housing type may produce anomalies when applied to individual houses – especially around zonal boundaries. Even between areas with very different average prices, the prices of similar houses in different areas may considerably overlap.

8.5.3 Having reviewed the type and location of the bulk of development proposed in East Hertfordshire, and taking account of the comments made at the developer surgery relating to the variation in individual schemes, particularly smaller developments, our recommendation is for a simple CIL charging schedule, maintaining a larger buffer to reflect the scope for higher on-site enabling infrastructure costs or build cost for the range of schemes that may come forward.

8.5.4 Based on the appraisal findings presented in Table 8.8 and other iterations included in Appendix C, we consider the following CIL and affordable housing policy refinements can be sustained in the area without putting at risk the bulk of development required to support the future housing growth in the Local Plan:

- Developments of less than 5 dwellings, which are not required to contribute to any affordable housing, can contribute a CIL charge of up to £200 per sq.m. This affordable housing threshold is currently included in policy HOU3.
- Typologies of between 5 and 14 dwellings can contribute up to 35% affordable housing and a CIL charge of up to £150 per sq.m. This is an increase from the policy HOU 3 which stipulates an affordable housing requirement of 30% affordable housing for schemes in this range.
- Typologies of 15 dwellings and above, can contribute 40% affordable housing and a CIL charge of up to £100 per sq.m. This is consistent with policy HOU 3.
- Flatted schemes in the Southern Zone can contribute 20% affordable housing and a CIL charge of up to £50 per sq.m. This is a refinement to policy HOU3 which does not differentiate between houses and flats.
- Flatted schemes in the Northern Zone can contribute either a 10% affordable housing contribution or a £40 per sq.m CIL charge, but cannot sustain both. This is a refinement to policy HOU3 which does not differentiate between houses and flats
- The brownfield case studies are expected to be submitted as a planning application before a CIL charging schedule is in place and so will be managed through the S106 developer contribution mechanism.

8.5.5 Note the strategic sites CIL charge and affordable housing policy options are set out in the Strategic Sites Delivery Study (September 2015).

8.5.6 The residual land values created in the viability model and the corresponding threshold land values that they are assessed against to determine viability, do not make an allowance for site enabling or site abnormal costs i.e. the values are fully serviced greenfield sites pre planning consent. It is assumed that the site enabling / site abnormal costs are deducted from the figures shown.

8.5.7 A considerable buffer has been included between the maximum financial headroom and the proposed CIL charge to allow for any site specific variations in costs and values.

8.5.8 An important message from the various viability appraisals is that once the percentage of affordable housing is increased, the balance available to support strategic infrastructure costs reduces. This is to be expected, and some policy trade-offs will be required between the level of affordable housing and infrastructure. This will be determined once there is a better indication on the scale of strategic infrastructure needed to support the delivery of the planned growth.

## 9 NON RESIDENTIAL VIABILITY TESTING

### 9.1 Introduction

9.1.1 There are no notable Local Plan policies which will impact on non-residential development viability in East Hertfordshire. Nonetheless, it is important to consider the viability of non-residential development, not least because if there is some headroom in values then this could usefully contribute to meeting local infrastructure requirements through CIL. The assumptions and typologies were consulted on at the developer workshop held in October 2014 (see Appendix A).

### 9.2 Non residential viability assumptions

9.2.1 The test for non-residential development is based on hypothetical schemes that are most likely to come forward in East Hertfordshire over the Plan period. These are described in Table 9.1.

Table 9.1 Non-residential use typologies

Use	GIA sq.m	NIA sq.m
Business Park	500	425
Warehousing	1000	1000
Town centre comparison retail	278	236
Out of town comparison retail	1850	1650
Retail convenience	1500	1350

9.2.2 Table 9.2 sets out the assumed net to gross site coverage percentages, (also expressed as total net developable area per ha) to allow for roads, landscaping, open space, pedestrian movement and SuDs and the net developable area.

Table 9.2 Site coverage ratios

Use	Net developable area (ha)	Site area coverage
Business Park	0.13	40%
Warehousing	0.25	40%
Town centre comparison retail	0.09	30%
Out of town comparison retail	0.05	40%
Retail convenience	0.43	35%

### Establishing gross development value (GDV)

9.2.3 Establishing gross development value (GDV) for non-residential uses a different approach than that used for residential. This is because the sales value is most likely to reflect the value in the rented market which accounts for most of the non-residential property supply in East Hertfordshire.

### Values

9.2.4 Table 9.3 outlines the rental values for the non-residential uses, expressed in square metres (sq.m) and square feet (sq.ft) of net rentable floorspace, and likely yields. A market incentive of six to nine months free rent is assumed in the assessment.

Table 9.3 Rent and yields assumptions

Use	Rent per sq.m	Yield	Rent free (months)
Business Park	£205	7.0%	9
Warehousing	£75	5.25%	6
Town centre comparison retail	£210	6.5%	6
Out of town comparison retail	£210	7.0%	6
Retail convenience	£230	5.00%	6

9.2.5 Although investment in supermarkets has fallen among the big five supermarkets, some operators are still looking for new stores to gain market share, and the covenants of this use can be very strong which is reflected in the keen yields of less than 5% in many cases. For this study we have accounted for the current uncertainties in the supermarket and adjusted the yield rate to a conservative value of 5%.

### Costs

9.2.6 Build cost inputs have been established from the RICS Build Cost Information Service (BCIS) median prices at the time of this study (current build cost values) accessed on 13<sup>th</sup> January 2015 and adjusted for East Hertfordshire prices. These are shown in Table 9.4.

Table 9.4 Build cost assumptions

Use	BCIS Median build cost (p sq.m)
Business Park	£1,446
Warehousing	£566
Town centre comparison retail	£888
Out of town comparison retail	£888
Retail convenience	£1,309

Source: BCIS Jan 2015

### External works

9.2.7 Plot externals relate to costs for internal access roads, car parking, drainage, utilities within the site and hard and soft landscaping associated with the site curtilage of the built area. We have allowed a rate of 15% of build costs for these items. This excludes abnormal site development costs and exceptional offsite infrastructure costs.

## Other development costs

### Professional fees

9.2.8 Professional fees relate to the costs incurred to bring the development forward and cover items such as; surveys, architects, quantity surveyor etc. Professional fees are based upon accepted industry standards and are calculated as a percentage of build costs and externals at 8% of build costs plus external cost allowance.

### Contingency

9.2.9 It is normal to build in contingency based on the risk associated with each site and has been calculated based on industry standards. They are applied at 5% of build cost plus externals.

### Acquisition fees and Land Tax

9.2.10 This input represents the fees associated with the land purchase and are based upon the following industry standards: Surveyor – 1%; Legal – 0.75% of residual land value.

9.2.11 A Stamp Duty Land Tax is payable by a developer when acquiring development land. This factor has been recognised and applied to the residual valuation as percentage cost against the residual land value at the standard variable rates set out by HMRC (0 – 4% of land value).

### Finance costs

9.2.1 A monthly cashflow based on a finance cost of 7% has been used throughout the site appraisals. This is used to account for the cost of borrowing and the risk associated with the economic climate and near term outlook and associated implications for the market specific to the proposed development.

### Sales fees

9.2.2 This cost representing marketing fees at £25,000, letting agent fees at 10% and letting legal fees at 5%:

### Policy costs

9.2.3 The review of the local plan policies in section 3 has informed the assessment of policy costs arising from the Draft Preferred Options District Plan 2014. Policy TRA 3 relating to vehicle parking provision includes a requirement for non – residential car parks to provide for charging points for low and zero carbon vehicles. Although there can be a cost attached to these, we are aware of a number of companies<sup>40</sup> that are providing these free of charge and so a cost has not been included.

9.2.4 Most development will still be expected to make S106/S278 etc. contributions to mitigate direct impacts of the development. These will be specific to individual developments, and often centre on highways improvements but could also relate to design and access. No other Local Plan policies are considered to apply. However, no S106/S278 cost have been factored into the appraisal costs and therefore any financial headroom in the viability assessment is treated as being suitable for charging CIL and/or any S106/S278 subject to there being no other demands that the Council may seek to apply.

<sup>40</sup> British gas, Telstra and Ecotricity install car charge points for free.

### Threshold land value assumptions

9.2.5 Our estimates of threshold land values are based on market comparable derived through consultation with stakeholders and analysis of published data on CoStar. At this current point in the economic cycle there is much uncertainty surrounding land values due to the small number of transactions occurring. Where necessary we have considered transactions in the wider market and adjusted for the East Herts area. The threshold value assumptions are shown in Table 9.5.

Table 9.5 Assumed threshold land values in East Hertfordshire

Use	Threshold land value per net developable hectare
Business Park	£1,235,000
Warehousing	£1,235,000
Town centre comparison retail	£3,000,000
Out of town comparison retail	£4,000,000
Retail convenience	£4,000,000

### 9.3 Non-residential viability appraisal findings

9.3.1 The rest of this section sets out the assessment of non-residential development viability based on the assumptions set out in above. Table 9.6 below summarises the appraisal results, and represent the net value per sq.m, the net costs per sq.m (including an allowance for land cost) and the balance between the two.

Table 9.6 Non-residential viability appraisal results

East Herts Plan Viability 2014/15	GIA	NIA	Net site area ha	Residual value		Threshold land value		CIL overage	
				Per Ha	Per £psm	Per Ha	Per £psm	Per Ha	Per £psm
Business Park Office	500	425	0.13	-£592,228	-£148	£1,235,000	£309	-£1,827,228	-£457
B8 Warehousing	1,000	1,000	0.25	£1,163,496	£291	£1,235,000	£309	-£71,504	-£18
In town comparison retail - High Street	278	236	0.09	£2,242,122	£747	£3,000,000	£1,000	-£757,878	-£253
Out of town comparison retail	1,850	1,647	0.46	£3,036,297	£759	£4,000,000	£1,000	-£963,703	-£241
Retail convenience	1,500	1,350	0.43	£4,583,493	£1,310	£4,000,000	£1,143	£583,493	£167

Source: PBA

9.3.2 It is important to note that the analysis considers speculative development that might be built for subsequent sale or rent to a commercial tenant. These results do not identify that employment space will not come forward, because in reality there will be development to accommodate specific users based on the profitability of the occupier's core business activities rather than the market values of the development. Importantly this viability assessment relates to speculative build for rent.

9.3.3 The analysis suggests that for most of the non-residential uses it is not appropriate to charge a CIL, apart from convenience retail, where there is positive viability and after allowing for a suitable buffer, scope for a CIL charge of up to £80 per sq.m

#### Other non-residential development

9.3.4 In addition to the development considered above there are other non-residential community type uses that might be delivered. It would not be helpful to set a CIL for the type of facilities that may be treated as infrastructure in turn and paid for by CIL (amongst other sources).

9.3.5 The approach to this issue is that the commercial values for community uses are £0 but there are build costs of over £1,000 per sq.m plus the range of other development costs; with a net negative residual value. Therefore we recommend a £0 CIL for these uses.

#### **9.4 Non-residential development CIL charge recommendations**

9.4.1 The findings from this section illustrate the levels of value in the tested schemes when all costs have been subtracted from the values. As can be seen, positive values exist for convenience retail development but nothing more.

9.4.2 The findings suggest that if EHDC were minded to set a CIL charge on convenience retail developments there is scope for a CIL charge of up to £80 per sq.m, thus leaving sufficient buffer for any site specific costs.

9.4.3 It is recommended that a zero CIL charge should apply to all the other forms of non-residential development. All other tested uses show negative values, although, it is important to note that this does not mean that these uses will never come forward in East Hertfordshire. Specific business operation plans and bespoke schemes with identified end users, and land owners willing to sell at lower prices, will enable development to come forward in the future.

## 10 CONCLUSIONS AND RECOMMENDATIONS

### 10.1 Introduction

10.1.1 The final stage of this viability assessment is to draw conclusions on whether the East Hertfordshire District Plan is deliverable and developable and make recommendations for the affordable housing, infrastructure and CIL charge options. Note we do not refer to the strategic sites here, as these are documented in a separate accompanying report.

### 10.2 General study conclusions

#### Generic site viability assessment (non strategic sites)

10.2.1 Of the unconsented sites that form part of the housing supply, the majority are on edge of urban centres, generally in greenfield locations, apart from Mead Lane in Hertford and Bishop's Stortford Good's Yard, which are on complicated brownfield sites. The type and location of sites has informed our viability assessment. For the greenfield sites, we have assumed fully serviced site land values based on net developable area, and any site opening costs will be reflected within the value paid for the site.

10.2.2 The housing market is strong in East Herts, fuelled particularly by the London and Cambridge commuter market, and those searching for housing near to good schools and in attractive villages. The supply of housing has been constrained by the limited availability of new developments. The situation going forward is likely to remain strong, but account should be taken of the wide range of strategic housing sites due to come onto the market and their effect on values is as yet unknown. Future forecasts of sales values by Savills predict an anticipated annual increase in values of over 5% per annum over the next four years.

10.2.3 Based on the research and interviews, two value zones are considered to best reflect the bulk of the planned growth. Generally, values for sites most accessible to London command the highest values. The Southern Zone generally represents the higher value areas of the District from the borders with Welwyn Garden City, Hertford, Ware, and the southern rural areas; whilst the Northern Zone comprising of Buntingford, Bishop's Stortford and the central rural areas are slightly lower values (though there are exceptions, especially due to the shortfall in current supply of new developments).

10.2.4 The viability assessment has been tested at current costs and current values. There has not been a need to test the impact of longer term variations in assumptions, as the plan has been demonstrated to be viable based on current values and with the inclusion of a sensible mix of policies. However the viability should be kept under regular review to help refine the affordable housing and developer contributions policies.

10.2.5 With regard to the non-residential element of the planned development, the delivery of schemes taking place is less affected by the impact of 'policy burdens' for which this study is assessing, and more sensitive to wider economic market conditions of demand and supply for such development. The viability assessment considered a range of speculative development scenarios, without the imposition of any planning obligations. Schemes most likely to take place are those that have an identified client requiring specific development requirements rather than speculative delivery.

10.2.6 The assessment identified the policies most likely to impact on the residential viability of the District Plan were those concerned with affordable housing, infrastructure requirements and local water efficiency measures. Other policy costs identified are already factored into the viability appraisal 'inputs'. No additional policies were identified to impact on non-commercial development beyond site specific requirements.

10.2.7 Section 9 shows all the residential development scenarios relevant to the planned trajectory are viable when there is no additional policy cost included. Once the draft Plan affordable housing policy requirements are factored into the assessment, some of the flattened schemes become unviable, and the overage remaining to support CIL relevant infrastructure in general is reduced. Affordable housing has been tested at the HOU 3 policy level which includes a local threshold. A local water efficiency measure cost allowance has been incorporated in all schemes to reflect local plan policy.

10.2.8 The scale of the sites that form part of this study are not likely to require any major site specific infrastructure requirements. A nominal allowance of £500 per dwelling has been factored into the appraisal assessment for any site specific S106 requirements that might arise. Other known policy costs, in particular affordable housing policy cost have been factored into the appraisals as a cost input, to identify the maximum financial headroom to support a possible CIL charge to support the cost of strategic infrastructure.

10.2.9 An important message from the various viability appraisals is that once the percentage of affordable housing is increased, the balance available to support strategic infrastructure costs reduces. This is to be expected, and some policy trade-offs will be required between the level of affordable housing and infrastructure. This should be undertaken once there is a better indication on the scale of strategic infrastructure needed to support the delivery of the planned growth. We suggest a review of the viability and policy trade-off is undertaken after the infrastructure delivery plan and transport vision have been prepared.

10.2.10 At this stage there should be further consideration on the most appropriate developer funding mechanism to adopt. The final decision on the developer funding mechanism of CIL or S106 has not yet been decided by EHDC.

**Infrastructure costs are unknown and further assessments will be needed to inform the Plan's developability**

10.2.11 The general conclusion in terms of our infrastructure consultations is that some expansion and improvement will be needed to existing schools and doctor's surgeries as most facilities are at or near capacity. This is not likely to prevent development taking place, but will require some off-site expansion of existing facilities or the provision of new facilities to support the planned growth. The type of infrastructure needed is most likely to form part of the CIL Regs 123 list. There are unlikely to be any site specific requirements (such as primary schools or health facilities) to be funded via a S106 contribution.

10.2.12 EHDC in preparing an infrastructure delivery plan, which will help to inform the infrastructure funding gap and refine the thinking on the infrastructure delivery mechanism. An important element of the infrastructure delivery plan will be the transport assessment. A letter from Hertfordshire County Council (HCC) to East Hertfordshire District Council on 27<sup>th</sup> July 2015 recent, state that they consider that following the first five year delivery of the planned trajectory, the anticipated severe traffic congestion on the A414 arising from the scale of planned development cannot be accommodated by the existing A414 corridor in Hertford. As such HCC have now commissioned work on a new Countywide Transportation Model (COMET) which will provide a platform for testing strategic mitigations to growth across the County. This will inform a 'Transport Vision' and identify packages of transport interventions to enable growth across the county to 2050.

10.2.13 Hence although this study has assessed the viability of the plan in relation to the known plan policy costs, in particular the affordable housing policy, the plan infrastructure assessment, cost and funding to support the long term developability is as yet unknown. So the actual scale of the funding gap is not yet known, and will only be made clear once the Transport Vision and action plan have been prepared and the infrastructure delivery plan has been prepared by EHDC.

10.2.14 Therefore it is not possible to bring together the viability and infrastructure assessment to inform the deliverability of the Plan. Once the overall infrastructure delivery plan has been prepared, then the viability assessment will need to reconsider the deliverability of the plan, and it may require further policy trade-offs between the scale of affordable housing and delivery of essential enabling infrastructure to support planned growth. The final decisions on this will be for EHDC to make and so will have to be reviewed when the infrastructure funding gap and infrastructure priorities are known.

### **10.3 Study recommendations**

#### **Recommendation 1: The 'developability' of the post five year planned supply will need to be reviewed**

10.3.1 Based on the information known at this stage in the plan making process, we confirm that the housing sites represented by the development typologies (non strategic sites) included in the housing trajectory are viable subject to the current scale of affordable housing policy. Some of these schemes could form part of the five year 'deliverable' supply as they do not require complicated site specific infrastructure and the letter from HCC has confirmed that these sites are acceptable subject to local requirements. However, liaison will be needed with the service providers, particularly those concerned with education and health provision, to ensure infrastructure capacity can be provided in a timely manner.

10.3.2 Any sites that form part of the longer term supply will need to be reviewed once the infrastructure delivery plan, including the Transport Vision, has been completed and there is a better understanding of the infrastructure requirements. This may necessitate the need for some policy trade-offs between affordable housing and infrastructure. This assessment of infrastructure and viability will need to be undertaken prior to preparing the Submission Version of the District Plan.

#### **Recommendation 2: Mead Lane and Good's Yard brownfield sites will require proactive delivery strategies**

10.3.3 With respect to the Bishop's Stortford Good's Yard site, PBA have supported EHDC at a developer surgery with Network Rail and have produced a number of reports to inform the site delivery and transport assessment which were presented to EHDC Members in December 2014. Further discussions are now progressing in developing a masterplan and a planning application is expected in 2015. The Mead Lane area is a complicated site due to its historic uses and is owned by the National Grid, but again we are informed by EHDC that a planning application is expected soon on this site.

10.3.4 Both these sites require considerable site specific ground investigations to inform the developable area and any abnormalities that need to be addressed. For this study, we have included a generic allowance for these costs and assumed that both schemes will be based on apartment style developments. In both cases, the site owners are in discussion with EHDC to bring the site forward for delivery within the next five years. Development viability, policy requirements and infrastructure requirements for these sites will be refined. Given the individual site context and background, PBA considers that a cautious approach is needed to the likely timeframes when delivery might take place and it is more likely to form part of the post five year supply.

#### **Recommendation 3: Policy on percentage and threshold for affordable housing**

10.3.5 The viability appraisal findings demonstrate that policy trade-off decisions are required between the need to deliver infrastructure to support the delivery of growth and meeting the affordable housing need if the overall delivery of the District Plan is to remain viable.

10.3.6 These decisions will be informed in part by the infrastructure assessment undertaken by EHDC and political priorities. The infrastructure assessment undertaken by EHDC will inform

the CIL funding gap evidence, and this in turn will then inform the policy trade-off decisions relating to funding infrastructure and affordable housing. We have tested the Draft Preferred Options District Plan HOU3 affordable housing policy and found, subject to minor refinements, it is viable and provides scope for varying levels of CIL charge to support the delivery of infrastructure.

#### **Recommendation 4: CIL charge recommendations to support strategic infrastructure**

10.3.7 The CIL charge options have been considered as part of the wider plan viability assessment and reflect the current legislation which allows for variation by area, use and scale. We have been mindful of the cost and value variations that exist at a site specific level and have sought to retain a substantial CIL buffer. The options of a more complicated CIL charging schedule based on variations linked to the value zones was considered, however, this was out-weighed by the advantage of a simple CIL charging schedule which reflects the types of site likely to form the first five year supply.

### **10.4 Proposed Preliminary Draft Charging Schedule**

10.4.1 Table 10.1 below summarises the proposed Preliminary Draft CIL Charging Schedule.

Table 10.1 Proposed Preliminary Draft CIL Charging Schedule

Use	Affordable housing policy / refinements	CIL charge per sq. m
Residential (less than 5 dwellings)	0%	Up to £200 per sq.m
Residential (5 – 14 dwellings)	Amend to 35%	Up to £150 per sq.m
Residential (15 dwellings or more)	40%	Up to £100 per sq.m
Southern Zone flats	20%	Up to £50 per sq.m
Northern Zone flats	Either 10%	Or up to £40 per sq.m
Convenience retail	n/a	Up to £80 per sq.m
All other developments	n/a	£0 per sq.m

10.4.2 If a CIL charging schedule is adopted, then EHDC will need to produce a Regulation 123 infrastructure list as part of the preliminary draft consultation stage of the CIL setting out the relevant infrastructure to be funded by CIL and where s106 developer contributions will be scaled back and how double dipping will be avoided with s106 and s278 highway contributions.

#### **Recommendation 5: A flexible approach should be incorporated to affordable housing and infrastructure delivery policy**

10.4.3 The above CIL charge options are based on the current affordable housing policy. However, once the final infrastructure delivery plan has been prepared, further refinements may be needed to inform overall developability considerations and could require some adjustments. The affordable housing and infrastructure delivery policies (and CIL charging schedule) should be scripted as flexible policies which will be adjusted at regular intervals to reflect changes in viability and to manage the delivery of planned growth. Review periods could be on a 3 – 5

year basis, so as to give some certainty to developers, but also allow flexibility to adapt policy to reflect changes in market fluctuations and delivery. EHDC will need to seek legal advise on whether the Local Plan mechanism will permit draft a policy that can be regularly reviewed and updated to reflect changes in market fluctuations in viability assumptions.

**Recommendation 6: Infrastructure policy should reflect the cumulative impact of infrastructure requirements and to become more delivery orientated**

- 10.4.4 Our assessment has identified a large number of individual policies in the Draft Preferred Options District Plan which are all related to infrastructure delivery – there is a need to bring these various policies together under one overarching infrastructure policy and delivery mechanism linked to a ‘live’ infrastructure delivery plan and schedule.
- 10.4.5 The infrastructure delivery process needs to adopt a proactive approach to managing the timely delivery of infrastructure. This will start with a clear assessment of infrastructure requirements, cost and funding, and developer funding mechanisms and be supported by a strong policy which reflects the latest legislation in relation to developer contributions.
- 10.4.6 This will allow EHDC and its partners to have a clear handle on what infrastructure is needed to enable the timely delivery of growth. This will also provide a better understanding of the cumulative impact of infrastructure costs, and will provide clarity to developers over the scale of contributions likely to be required for their schemes, and will avoid duplication of contributions by clarifying which mechanism will be adopted to part pay for the infrastructure (S106 / S278 or CIL).

**Recommendation 7: The SPD on developer contributions needs to be updated to reflect the latest legislation**

In compliance with the CIL guidance, EHDC should update the current SPD on developer contributions to reflect the changes in legislation and the issues covered by this report and our Member briefing reports, especially the need to avoid having a range of separate policies that could have a cumulative impact on the viability of development. This should be linked to work on recommendation 6 above to ensure consistency and avoid introducing new additional policies that might impact on viability.

## Appendix A Stakeholder Consultations

### A.1 Developer workshop held on 9<sup>th</sup> October 2014

A.1.1 The notes of all meetings listed below and a list of attendees have been posted to East Herts Council's website at [www.eastherts.gov.uk/deliverystudy](http://www.eastherts.gov.uk/deliverystudy)

**Agent telephone interviews were held with the following during autumn 2014:**

- Fordyce Furnival (Bishop's Stortford)
- Jonathan Hunt (Ware)
- William H Brown (Ware and north)
- Country Properties (Welwyn Village & wider district area)
- Fine & Country
- Keith Ian

A.1.2 Responses from these have informed our viability assessments.

**Telephone interviews were held with the following infrastructure service provider:**

- Richard Reeves of Thames Water (sewage infrastructure) held on 23rd September 2014
- Andrea Gilmour of HCC (education infrastructure) held on 26th September 2014
- Laura Griggs, Lin Dalton and James Gleed (health infrastructure) held on 13th October 2014
- Joan Hancock Hertfordshire LEP held on 9th December 2014

**Dates of site promoter surgery, transport meetings and Parish Council meetings:**

- Gilston Area - Places for People/City and Provincial Properties (3 November 2014)
- East of Welwyn Garden City - Lafarge Tarmac Ltd (8 October 2014)
- South of Bishop's Stortford - Countryside Properties (8 October 2014)
- North and East of Ware – Leach Homes and Ptarmigan (8th October 2014)
- Viability Developer Workshop (9 October 2014)
- Transport meeting on M11 Junction 8 assessment/modelling (27 August, 13 November 2014)
- Initial transport workshop with adjoining Local Planning Authorities, Highways Agency, and Hertfordshire County Council (9 September 2014)
- Transport meeting with Hertfordshire County Council (10 October, 24 November 2014)
- East Herts Association of Parish and Town Councils (6 November 2014)
- Bishop's Stortford Neighbourhood Plan Group (13 November 2014)

## Appendix B Plan Viability Policy Assessment

## B.1 East Herts draft district plan policy assessment

Table B1 Easts Herts Draft Preferred Options District Plan policy assessment

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
DPS1: Housing, Employment and Retail Growth (pg 25)	No		N/A	N/A
DPS2: The Development Strategy 2011-2031 (pg 28)	No		N/A	N/A
DPS3: Housing Supply 2011-2031 (pg 30)	No		N/A	
DPS4: Broad Locations for Development (pg 32)	Yes	No duplication	Plan preparation, site promotion - pre-application, and site delivery.	Input from site promoters to inform site specific viability assessments/
DPS5: Infrastructure Requirements (pg 34)	Yes	Some duplication with DEL 1 on page 264.	Depending on type of infrastructure requirement – mainly site opening and site delivery.	Recommend merging of two policies into an infrastructure delivery and developer contribution policy linked to a separate Infrastructure Delivery Schedule, CIL and revised S106 SPD. For this study an estimate of S106 has been included in the viability assessment.
DPS6: Long Term Planning (pg 35)	No		N/A	
DPS7: Presumption in Favour of Sustainable Development (pg 36)	No		N/A	
DPS8: Neighbourhood Planning (pg 37)	No		N/A	
GBR1: Green Belt (pg 41)	No		N/A	
GBR2: Rural Area Beyond the Green Belt (pg 42)	No		N/A	
GBR3: Major Developed Sites (pg 44)	No		N/A	
BISH1: Development in Bishop's Stortford	No		N/A	

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
(pg 50)				
BISH2: The Mill Site (pg 51)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL, S106 and site specific costs will be reflected in value paid for the site.	Site specific – not tested for this study.  Policy relates to requirements should the site come forward for re-development in the longer term. Suggest infrastructure requirements are considered in a separate 'live' Infrastructure Delivery Schedule allowing regular updates which take account of wider infrastructure developments.
BISH3: The Goods Yard (pg 53)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL, S106 and site specific costs will be reflected in value paid for the site.	Site specific – developer surgery hosted with site promoters, and PBA reports submitted to Council on approach to policy requirements. If there are delays the promoters maybe required to provide a site specific viability assessment to show the site can be delivered.  Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
BISH4: The Causeway/Old River Lane (pg 55)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL, S106 and site specific costs will be reflected in value paid for the site.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
BISH5: Reserve Secondary School Site, Hadham Road (pg 57)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL, S106 and site specific costs will be reflected in value paid for the site.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
BISH6: East of Manor Links (pg 59)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL, S106 and site specific costs will be reflected in value paid for the site.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
BISH7: South of Bishop's Stortford (pg 62)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  Some of the viability assumption inputs agreed with promoter for a site specific assessment to inform the PV assessment	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
BISH8: North of Bishop's Stortford (pg 65)	Yes	N/A	N/A.	Consented site – no further action.
BISH9: Essential Off-Site Infrastructure (pg 67)	Yes	Some duplication with DEL 1 on page 264.	Generic strategic infrastructure	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
BISH10: Employment in Bishop's Stortford (pg 68)	No	N/A	N/A	N/A
BISH11: Retail in Bishop's Stortford (pg 70)	No	N/A	N/A	N/A
BUNT1: Development in Buntingford (pg 76)	No	N/A	N/A	N/A
BUNT2: South of Buntingford (pg 78)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
			appraisals.	include approaches to developer contributions – CIL, S106 and other.
BUNT3: North of Buntingford (pg 79)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV appraisals.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
BUNT4: Employment in Buntingford (pg 81)	No	N/A	N/A	N/A
HERT1: Development in Hertford (pg 87)	No	N/A	N/A	N/A
HERT2: Mead Lane Area (pg 88)	Yes	No	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV appraisals.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
HERT3: West of Hertford (pg 91)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV appraisals.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
HERT4: North of Hertford (pg 93)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs.  The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV appraisals.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
HERT5: South of	Yes	Some duplication	Design, site opening and	Suggest infrastructure

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
Hertford (pg 95)		with DEL 1 on page 264.	site delivery costs. The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV appraisals.	requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
HERT6: Employment in Hertford (pg 96)	No	N/A	N/A	N/A
SAWB1: Development in Sawbridgeworth (pg 102)	No	N/A	N/A	N/A
SAWB2: Land North of West Road (West of Sawbridgeworth) (Pg 103)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs. The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV appraisals.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
SAWB3: Land to the south of West Road (West of Sawbridgeworth) (pg 105)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs. The study assumes cost will be paid through a combination of CIL and site specific S106 costs and these will be included in the PV appraisals.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
SAWB4: Sports Pitch Provision (pg 107)	Possibly	No	Need to clarify whether the intention is to provide a serviced sports pitch or simply a site allocation.	Further clarity would be helpful as to who is expected to provide the sports pitch – it could be linked to the IDS.  The notes do not include any justification for this requirement at this location.
WARE1: Development in Ware (pg 112)	No	N/A	N/A	N/A.
WARE2: Former Co-op Depot, Star Street (pg. 114)	Yes	No	This study will inform scale of affordable housing policy.	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates –

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
				this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
WARE3: Land North and East of Ware (pg 115)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs. Some of the viability assumption inputs agreed with promoter for a site specific assessment to inform the PV assessment	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
WARE4: Employment in Ware (pg 117)	No	N/A	N/A	N/A
VILL1: Group 1 Villages (pg 123)	No	N/A	N/A	N/A
VILL2: Group 2 Villages (pg 124)	No	N/A	N/A	N/A
VILL3: Group 3 Villages (pg 126)	No	N/A	N/A	N/A
VILL4: Neighbourhood Plans (pg 127)	No	N/A	N/A	N/A
VILL5: Village Employment Areas (pg 128)	No	N/A	N/A	N/A
VILL6: New Employment Development (pg 128)	No	N/A	N/A	N/A
EWEL1: Land East of Welwyn Garden City (pg 135)	Yes	Some duplication with DEL 1 on page 264.	Design, site opening and site delivery costs. Some of the viability assumption inputs agreed with promoter for a site specific assessment to inform the PV assessment	Suggest infrastructure requirements for this policy are considered in a separate 'live' Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
GA1: Land in the Gilston Area (pg 143)	Yes	Merge infrastructure elements with	Design, site opening and site delivery costs. Some of the viability	Suggest infrastructure requirements for this policy are considered in a separate 'live'

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
		DPS5	assumption inputs agreed with promoter for a site specific assessment to inform the PV assessment	Infrastructure Delivery Schedule (IDS), allowing regular updates – this would then be linked to a stronger Infrastructure and Delivery Policy which would include approaches to developer contributions – CIL, S106 and other.
HOU1: Type and Mix of Housing (pg 150)	Yes	Yes – with Building Regs Requirements and affordable policy HOU 3.	Affordable housing to be tested through appraisal options. Lifetime Homes assumed same as Building Regs – BCIS build costs For Gypsy & Travellers include cost for pitch provision.	Align policy for Lifetime Homes to Building Regulations and new description following Housing Standards Review of level 1, 2, 3 of the Accessibility Standards. Affordable housing policy may need to have some review periods incorporated to reflect fluctuations in viability criteria and also some text about site specific negotiations based on viability.
HOU2: Housing Density (pg 152)	Possibly	No	Densities and sales values factored into appraisal assumption – average of 30 dph	No change.
HOU3: Affordable Housing (pg 155)	Yes	Some - with HOU 1 and most site specific policies.	Planning policy cost factored into the PV appraisals. New national policy threshold tested.	Threshold will need to be revised to 10 dwellings in line with recent national policy amendment on Section 106 for affordable housing and tariffs – Nov 2014.
HOU4: Rural Exception Affordable Housing Sites (pg 157)	No	N/A	N/A	N/A
HOU5: Dwellings for Rural Workers (pg 158)	No	N/A	N/A	N/A
HOU6: Housing for Older and Vulnerable People (pg 159)	No	N/A	N/A	N/A
HOU7: Gypsies and Travellers and Travelling Show people (pg 161)	Yes	Yes with HOU1	Policy being developed a per pitch cost factored into strategic site appraisals where applicable.	Suggest streamlining two policies into one.
HOU8: Replacement Buildings in the Green Belt and Rural Area Beyond the Green Belt (pg 162)	No	N/A	N/A	N/A
HOU9: Extensions to Dwellings (pg 163)	No	N/A	N/A	N/A

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
HOU10: Extensions and Alterations to Dwellings and their Curtilage (pg 164)	No	N/A	N/A	N/A
HOU11: Residential Outbuildings (pg 164)	No	N/A	N/A	N/A
HOU12: Change of Use of Land to Residential Garden and Enclosure of Amenity Land (pg 165)	No	N/A	N/A	N/A
HOU13: Residential Annexes (pg 166)	No	N/A	N/A	N/A
ED1: Employment (pg 170)	No	N/A	N/A	N/A
ED2: Rural Economy (pg 171)	No	N/A	N/A	N/A
ED3: Communications Infrastructure (pg 172)	No	N/A	N/A	N/A
ED4: Flexible Working Practices (pg 173)	No	N/A	N/A	N/A
ED5: Tourism (pg 174)	No	N/A	N/A	N/A
ED6: Lifelong Learning (pg 175)	No	N/A	N/A	N/A
RTC1: Retail Development (pg 179)	No	N/A	N/A	N/A
RTC2: Primary Shopping Area (pg 180)	No	N/A	N/A	N/A
RTC3: Primary Shopping Frontages (pg 181)	No	N/A	N/A	N/A
RTC4: Secondary Shopping Frontages (pg 182)	No	N/A	N/A	N/A
RTC5: District Centres, Neighbourhood	No	N/A	N/A	N/A

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
Centres, Local Parades and Individual Shops (pg 183)				
DES1: Local Character and Amenity (pg 192)	No	N/A	N/A	N/A
DES2: Crime and Security (pg 194)	No	N/A	N/A	N/A
DES3: Advertisements and Signs (pg 194)	No	N/A	N/A	N/A
TRA1: Sustainable Transport (pg 198)	Possibly	No	PV assessment will determine scope of CIL to contribute to support such strategic infrastructure items.	Consider inclusion of projects in the IDS / Regs 123 list
TRA2: Highway Safety and Trip Generation (pg 199)	No	N/A	N/A	N/A
TRA3: Vehicle Parking Provision (pg 200)	Yes	No	A number of providers are now installing car charging points free of charge to the developer and so no additional cost has been assumed.	None
CFLR1: Loss of open Space, Sport and Recreation (pg 207)	No	N/A	N/A	N/A
CFLR2: Open Space Standards (pg 205)	Yes	Scope to merge with a new merged infrastructure and delivery policy	The requirements of Policy CFLR2 should be considered as part of site infrastructure costs and will form part of the S106 or CIL considerations.	Consider inclusion in the IDS/ Regs 123 list
CFLR3: Local Green Space (pg 205)	No	N/A	N/A	N/A
CFLR4: Water Based Recreation (pg 206)	No	N/A	N/A	N/A
CFLR5: The Lee Valley Regional Park (pg 208)	No	N/A	N/A	N/A
CFLR6: Equine Development (pg 209)	No	N/A	N/A	N/A

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
CFLR7: Community Facilities (pg 211)	No	N/A	N/A	N/A
CFLR8: Health and Wellbeing (pg 212)	Yes	This element of the policy should be crossed linked to the new IDP policy and the IDS should clarify the current capacity and need for new GP surgeries.	The requirements of Policy CFLR8 should be considered as part of site infrastructure costs and will form part of the S106 or CIL considerations.	Consider inclusion in the IDS / CIL Regs 123 list.
CFLR9: Education (pg 213)	Yes	This element of the policy should be crossed linked to the new IDP policy and the IDS should clarify the current capacity and need for new / extended schools.	The requirements of Policy CFLR9 should be considered as part of site infrastructure costs and will form part of the S106 or CIL considerations.	Consider inclusion in the IDS / CIL Regs 123 list
NE1: International, National and Locally Designated Nature Conservation Sites (pg 218).	Yes	No	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land.	No change to planning policy
NE2: Species and Habitats (pg 220)	Yes	No	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land.	No change to planning policy
NE3: Green Infrastructure (pg 222)	Yes	Policy should be crossed linked to the new IDP policy and the IDS should clarify areas for green infrastructure enhancement.	The requirements of infrastructure costs should be considered as part of on or off site developer contributions either in the form of the S106 for site specific costs or CIL considerations.	Consider inclusion in the IDS / CIL Regs 123 list
LAN1: Landscape Character (pg 226)	Yes	No	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land.	No change to planning policy
LAN2: Landscaping	Yes	No	The policy requirements	No change to planning policy

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
(pg 227)			will form part of the professional fees allowance for the viability appraisals.	
HA1: Heritage Assets (pg 230)	No	N/A	N/A	N/A
HA2: Non-Designated Heritage Assets (pg 231)	No	N/A	N/A	N/A
HA3: Archaeology (pg 232)	Yes	No	The policy requirements are part of the professional fees allowance for the viability appraisals.	No change to planning policy
HA4: Conservation Areas (pg 233)	Possibly	No	The requirements of materials costs reflecting the Conservation Area are generally balanced with higher values.	No change to planning policy
HA5: Shopfronts in Conservation Areas (pg 234)	No	N/A	N/A	N/A
HA6: Advertisements in Conservation Areas (pg 234)	No	N/A	N/A	N/A
HA7: Listed Buildings (pg 235)	No	N/A	N/A	N/A
HA8: Historic Parks and Gardens (pg 237)	No	N/A	N/A	N/A
HA9: Enabling Development (pg 238)	No	N/A	N/A	N/A
CC1: Climate Change Adaptation (pg 241)	No	No	N/A.	N/A
CC2: Climate Change Mitigation (pg 242)	Yes	No	BCIS build costs will reflect latest requirements stemming from Building Regulations – Council agree to amend policy so that it is aligned with national standards.	Recommend this policy is aligned to Building Regulation requirements in line with consultation from the Housing Standards Review.
CC3: Renewable and Low Carbon Energy	Yes	No	If policy for higher than Building Regulation requirement, then an	Recommend this policy is aligned to Building Regulation requirements in line with

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
(pg 244)			additional cost of £2,500 would be appropriate for perhaps including PV panels, however, Council will align policy in line with national standards and so costs are reflected in BCIS build costs.	consultation from the Housing Standards Review.
WAT1: Flood Risk Management (pg 249)	Possibly	No	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land.	No change to policy
WAT2: Water Quality and the Water Environment (pg 251)	Possibly	No	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land	
WAT3: Efficient Use of Water Resources (pg 252)	Yes	No	Housing Standards Review cost estimate based on Government assessment for water efficiency measure is priced at £68 for a house and £43 for a flat for an efficiency standard of 110 litres per day/ per person.	Recommend policy is aligned to the Housing Standards Review which sets out clear process for introducing policy, and has the allowable target of 110 l/per day in water stressed areas rather than the policy criteria of 105 l/pd.
WAT4: Sustainable Drainage (pg 254)	Yes	No	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land.	No change to policy
WAT5: Wastewater Infrastructure (pg 255)	Yes	No	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land.	No change to policy
EQ1: Contaminated Land and Land Instability (pg 258)	Yes		The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land	No change to policy

Plan policy area	Cost	Duplication	Approach to costs	Recommendation
EQ2: Noise Pollution (pg 259)	No	N/A	N/A	N/A
EQ3: Light Pollution (pg 260)	No	N/A	N/A	N/A
EQ4: Air Quality (pg 261)	Possibly	NO	The requirements of site mitigation cost to enable development to take place will be factored into the developers enabling costs and reflected in the value paid for the land	No change to policy
DEL1: Infrastructure and Service Delivery (pg 264)	Yes	Yes with the infrastructure requirement policy DPS5.	Some of the IDS costs will be met through either CIL or S106 depending on the nature of infrastructure and pooling restrictions.	The objective of the IDS should be as a proactive tool which is highly transparent and easy to understand. The IDS should provide clarity to developers of what infrastructure contributions are required and should be set out in one place, (to avoid going to a range of service providers and a list of policies) what infrastructure requirements will be for a development to be considered acceptable in planning terms, thus enabling the developer to take all relevant costs into account when appraising the value of a site and amount to pay the landowner. This document will be a 'live' document that sets out requirements, and avoids any duplication in charging between CIL, S106 and S278 contributions. Further guidance on delivery mechanism is provided in the Delivery Study section on infrastructure.
DEL2: Community Infrastructure Levy (CIL) and Planning Obligations (pg 266)	Yes	Links with the infrastructure requirement policy DPS5 and DEL 1	CIL charging schedule will be drafted based on the outcome of the residual value of the PV appraisals.  S106 cost inputs, based on past contributions and likely future requirements will be incorporated as a cost input into the viability assessment.	Clarity will be required to avoid double charging between CIL or S106 and S278 contributions by preparing a CIL Regs 123 list. Review and installments guidance maybe incorporated.  The developer contributions SPD will need to be revised to reflect latest legislation and aligned with the CIL Regs 123 list.

Source: PBA and EHDC

## Appendix C Residential viability assumptions

### C.1 Residential sales values

Table C1 Average values for new build properties transacted during 2010 – 2014

Row Labels	Flat		House	
	Average of HousePrice	Count of HousePrice	Average of HousePrice	Count of HousePrice
BISHOP'S STORTFORD	£215,265	118	£446,567	30
BUNTINGFORD	£210,000	2	£350,289	126
HERTFORD	£282,691	148	£437,609	163
SAWBRIDGEWORTH	£186,938	8	£418,679	61
WARE	£190,745	77	£425,412	93
<b>Grand Total</b>	<b>£237,514</b>	<b>353</b>	<b>£416,307</b>	<b>498</b>

Source: PBA based on Land Registry data of some 500 dwellings new dwellings transacted

Table C2 Average values for new and old properties transacted during 2010 – 2014

Row Labels	Flat		House	
	Average of HousePrice	Count of HousePrice	Average of HousePrice	Count of HousePrice
BISHOP'S STORTFORD	£172,890	547	£325,679	2140
BUNTINGFORD	£154,333	24	£361,442	600
HARLOW	£501,667	3	£450,921	19
HERTFORD	£211,972	748	£365,625	2078
MUCH HADHAM			£560,355	80
SAWBRIDGEWORTH	£161,666	114	£360,024	585
STEVENAGE	£170,964	14	£457,285	193
WARE	£172,163	723	£355,134	1849
<b>Grand Total</b>	<b>£185,749</b>	<b>2173</b>	<b>£355,580</b>	<b>7544</b>

Source: PBA research based on Land Registry data of some 10,000 new and old dwellings transacted

Table C3 Estimated average residential sales values by post code in Hertfordshire

Low Value Areas			Medium Value Areas			High Value Areas		
Post Code	£/sqft	£/sqm	Post Code	£/sqft	£/sqm	Post Code	£/sqft	£/sqm
HP2	£259	£2,788	EN10	£328	£3,531	WD23	£416	£4,478
EN8	£285	£3,068	CM21	£330	£3,552	HP4	£431	£4,639
AL10	£286	£3,079	SG12	£335	£3,606	WD3	£433	£4,661
AL7	£296	£3,186	WD19	£341	£3,671	WD17	£434	£4,672
WD25	£299	£3,218	SG14	£349	£3,757	WD4	£437	£4,704
EN11	£300	£3,229	AL4	£353	£3,800	AL6	£455	£4,898
HP3	£300	£3,229	WD6	£354	£3,810	AL3	£461	£4,962
WD24	£306	£3,294	SG3	£356	£3,832	AL9	£462	£4,973
HP1	£309	£3,326	SG9	£356	£3,832	AL1	£478	£5,145
CM23	£318	£3,423	SG13	£364	£3,918	SG10	£492	£5,296
WD18	£323	£3,477	CM22	£374	£4,026	AL5	£515	£5,543
EN7	£324	£3,488	WD5	£377	£4,058	WD7	£543	£5,845
		SG11	£378	£4,069				
		HP23	£378	£4,069				
		AL8	£380	£4,090				
		AL2	£392	£4,219				
		EN6	£402	£4,327				

Source: Lambert Smith Hampton – Hertfordshire CIL study 2013 (Table 13 page 60)

Table C4 Comparison of PBA and LSH average sales values relevant to EHDC (2013 and 2015)

Location	SH Sales values (sq.m) 2013	PBA Sales Value Zone (sq.m) 2015
Ware	£3,606 - £4,069 post codes SG12 and SG11	£3,700 Southern Zone
Hertford	£3,757 - £3,918 post codes SG 13 and SG14	
Buntingford	£3,832 – post code SG9	£3,500 Northern Zone
Much Hadham	£5,296 – post code SG10	£3,700 Southern Zone
Knebworth	£3,832 – post code SG2	£3,700 Southern Zone

Source: Lambert Smith Hampton and PBA

## C.2 Further appraisal iterations

C.2.1 Table C5 shows the effect on viability of introducing an affordable housing contribution of 35% on all the generic residential scenarios and a site specific S106 contribution of £500.

Table C5 Residential appraisal summaries with affordable housing at 35% for generic residential typologies

Site typology	Zone	Dwellings	Affordable housing	Net site area	Total floorspace	chargeable floorspace	Residual land value	Threshold land value	Headroom
		No.	%	Ha	Sqm	Sqm	Per Ha	Per Ha	Per Ha able Sqm
<b>35% affordable assumptions</b>									
Housing 4 units	Southern zone	4	35%	0.13	352	247	£2,823,297	£2,250,000	£573,297
Housing 10 units	Southern zone	10	35%	0.33	880	618	£2,796,194	£2,250,000	£546,194
Housing 20 units	Southern zone	20	35%	0.67	1,760	1,235	£2,762,715	£2,250,000	£512,715
<b>Housing 50 units</b>	<b>Southern zone</b>	<b>50</b>	<b>35%</b>	<b>1.67</b>	<b>4,400</b>	<b>3,088</b>	<b>£2,724,108</b>	<b>£2,250,000</b>	<b>£474,108</b>
<b>Housing 150 units</b>	<b>Southern zone</b>	<b>150</b>	<b>35%</b>	<b>5.00</b>	<b>13,200</b>	<b>9,263</b>	<b>£2,667,509</b>	<b>£2,250,000</b>	<b>£417,509</b>
Housing 4 units	Northern zone	4	35%	0.13	352	247	£2,501,134	£2,000,000	£501,134
Housing 10 units	Northern zone	10	35%	0.33	880	618	£2,477,100	£2,000,000	£477,100
Housing 20 units	Northern zone	20	35%	0.67	1,760	1,235	£2,448,657	£2,000,000	£448,657
Housing 50 units	Northern zone	50	35%	1.67	4,400	3,088	£2,415,723	£2,000,000	£415,723
Housing 150 units	Northern zone	150	35%	5.00	13,200	9,263	£2,367,345	£2,000,000	£367,345

Source: PBA

C.2.2 The tables below include further appraisal summaries testing flatted schemes at a lower rate of affordable housing policy to consider if there is financial headroom to support strategic infrastructure costs.

C.2.3 Table C6 shows the effect of reducing the affordable housing target to 20% for the flatted and brownfield schemes and still maintaining the S106 at £500 for flats and £2000 for the two brownfield case studies. This begins to highlight the differential in sales values between the northern and southern zones. The southern zones can afford to support 20% affordable housing and contribute upto £50 sq.m in CIL charge. Whilst at 20% affordable housing most of the northern zones are either marginal or unviable.

C.2.4 Summary Tables C7 and C8 show further testing of the flatted schemes in the northern zone. This shows that flatted schemes in the northern zone maybe able to support an affordable housing contribution of upto 10% or a £40 per sq.m CIL charge but not both.

Table C6 Affordable housing at 20% for flats and brownfield sites

Site typology	Zone	Dwellings	Affordable housing	Net site area	Total floorspace	chargeable floorspace	Residual land value	Threshold land value	Headroom
		No.	%	Ha	Sqm	Sqm	Per Ha	Per Ha	Per Ha able Sqm
<b>20% affordable assumptions</b>									
Flats 4 units	Southern zone	4	20%	0.05	307	245	£3,701,577	£2,500,000	£1,201,577
Flats 15 units	Southern zone	15	20%	0.20	1,147	918	£3,286,031	£2,500,000	£786,031
Flats 60 units	Southern zone	60	20%	0.80	4,588	3,671	£3,182,134	£2,500,000	£682,134
Flats 4 units	Northern zone	4	20%	0.05	307	245	£2,293,764	£2,250,000	£43,754
Flats 15 units	Northern zone	15	20%	0.20	1,151	918	£1,965,422	£2,250,000	-£284,578
Flats 60 units	Northern zone	60	20%	0.80	4,602	3,671	£1,868,224	£2,250,000	-£381,776
Mead Lane	Southern zone	300	20%	3.00	23,012	18,353	£4,141,043	£1,605,500	£2,535,543
Goods Yard	Northern zone	450	20%	4.50	34,518	27,529	£2,327,498	£1,482,000	£845,498

Table C7 Affordable housing at 10% for northern flatted schemes

Site typology	Zone	Dwellings	Affordable housing	Net site area	Total floorspace	chargeable floorspace	Residual land value	Threshold land value	Headroom
		No.	%	Ha	Sqm	Sqm	Per Ha	Per Ha	Per Ha able Sqm
<b>10% affordable assumptions</b>									
Flats 4 units	Northern zone	4	10%	0.05	306	275	£2,692,887	£2,250,000	£442,887
Flats 15 units	Northern zone	15	10%	0.20	1,149	1,032	£2,339,912	£2,250,000	£89,912
Flats 60 units	Northern zone	60	10%	0.80	4,595	4,129	£2,233,777	£2,250,000	-£16,223
Goods Yard	Northern zone	450	10%	4.50	34,465	30,971	£2,713,868	£1,482,000	£1,231,868

Table C8 Affordable housing at 0% for northern flatted schemes

Site typology	Zone	Dwellings	Affordable housing	Net site area	Total floorspace	chargeable floorspace	Residual land value	Threshold land value	Headroom
		No.	%	Ha	Sqm	Sqm	Per Ha	Per Ha	Per Ha able Sqm
<b>0% affordable assumptions</b>									
Flats 4 units	Northern zone	4	0%	0.05	306	306	£3,061,927	£2,250,000	£811,927
Flats 15 units	Northern zone	15	0%	0.20	1,147	1,147	£2,688,734	£2,250,000	£438,734
Flats 60 units	Northern zone	60	0%	0.80	4,588	4,588	£2,599,331	£2,250,000	£349,331
Goods Yard	Northern zone	450	0%	4.50	34,412	34,412	£3,099,983	£1,482,000	£1,617,983

Source: PBA

Tables C9-C12 Example of residential appraisals

Housing 150 unit Greenfield		150 Units		Northern zone		pba peterbrett		
ITEM		Residual Value		Technical Checks:				
Net Site Area	5.00	£2,243,954 per net ha		Sqm/ha 13,050				
		Dwgs/ha 30		Units/ha 49				
Nr of units	Private 90.00 Affordable 60.00	Affordable rent 45.00	Intermediate 15.00	GDV=Total costs -				
1.0	Development Value							
1.1	Private units		No. of units 90.00	Size sq.m 95	Total sq.m 8,550	£psm £3,500	Total Value £29,925,000	
			90.00		8,550			
1.2	Affordable rent		No. of units 45.00	Size sq.m 75	Total sq.m 3,375	£psm £1,700	Total Value £6,000,220	
			45.00		3,375			
1.3	Intermediate		No. of units 15.00	Size sq.m 75	Total sq.m 1,125	£psm £2,275	Total Value £2,559,375	
			15.00		1,125			
	Gross Development value				£38,390,625			
2.0	Development Cost							
2.1	Site Acquisition							
2.1.1	Site value (residual land value)				£11,219,770			
			Plus Purchaser Costs		5.75%			
					11,864,907			
2.2	Build Costs							
2.2.1	Private units		No. of units 90.00	Size sq.m 95	Total sq.m 8,550	Cost per sq.m £1,036	Total Costs £8,857,800	
			90.00		8,550			
2.2.2	Affordable units		No. of units 45.00	Size sq.m 75	Total sq.m 3,375	Cost per sq.m £1,036	Total Costs £3,496,500.00	
	Affordable rent		45.00		3,375			
	Intermediate		15.00	75	1,125	£1,036	£1,165,500.00	
			60.00		4500			
	150.00		13050.00		£13,519,800			
2.3	Extra over construction costs							
2.3.1	Externals 10% on build cost				£1,351,980.00			
2.3.2	Site abnormalities (remediation/demolition) £0				£0			
					£1,351,980			
2.4	Professional Fees							
2.4.1	10% on build costs				£1,351,980			
					£1,351,980			
2.5	Contingency							
2.5.1	5% on build costs (incl: externals)				£743,589			
					£743,589			
2.6	Developer contributions							
2.6.1	Water efficiency £88 per unit				£10,200			
2.6.2	Section 106 standard typologies £500 per unit				£75,000			
2.6.3	CIL £0 psm on market units				£0			
2.6.4	CSH Level 4 £0 per unit				£0			
					£85,200			
2.7	Sale cost							
2.7.1	Private units only 3.00% on OM GDV				£897,750			
					£897,750			
	TOTAL DEVELOPMENT COSTS (including land)				£29,815,206			
3.0	Developer's Profit							
3.1	Private units 20% on OM GDV				£5,885,000			
3.2	Affordable units 6% on Affordable GDV				£587,731			
					£6,543,731			
	TOTAL PROJECT COSTS (EXCLUDING INTEREST)				£36,358,908			
	TOTAL INCOME - TOTAL COSTS (EXCLUDING INTEREST)				£2,031,687			
4.0	Finance Costs		APR 7.00%	PCM 0.565%	£2,031,687			
4.1	Finance							
	TOTAL PROJECT COSTS (INCLUDING INTEREST)				£38,390,625			
<p>This appraisal has been prepared by Peter Brett Associates for the Council. The appraisal has been prepared in line with the RICS valuation guidance. The purpose of the appraisal is to inform the Council about the impact of planning policy has on viability at a strategic level. This appraisal is not a formal Red Book (RICS Valuation – Professional Standards January 2014) valuation and should not be relied upon as such.</p>								

Housing 20 units		Greenfield		20 Units		Southern zone																																																											
<b>ITEM</b>																																																																	
<b>Residual Value</b> <table> <tr> <td>Net Site Area</td> <td>0.67</td> <td></td> <td>£2,626,049</td> <td>per net ha</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Net Site Area	0.67		£2,626,049	per net ha																																																			
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<b>Technical Checks:</b> <table> <tr> <td>Sqm/ha</td> <td>1,740</td> </tr> <tr> <td>Dwgs/ha</td> <td>30</td> </tr> <tr> <td>Units/ha</td> <td>14</td> </tr> <tr> <td>GDV=Total costs</td> <td>-</td> </tr> </table>										Sqm/ha	1,740	Dwgs/ha	30	Units/ha	14	GDV=Total costs	-																																																
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		12.00	95	1,140	£3,700	£4,218,000																																																											
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		6.00	75	450	£1,850	£832,500																																																											
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<table> <tr> <td>1.3</td> <td>Intermediate</td> <td>No. of units</td> <td>Size sq.m</td> <td>Total sq.m</td> <td>£psm</td> <td>Total Value</td> </tr> <tr> <td></td> <td></td> <td>2.00</td> <td>75</td> <td>150</td> <td>£2,405</td> <td>£360,750</td> </tr> <tr> <td></td> <td></td> <td>2.00</td> <td></td> <td>150</td> <td></td> <td></td> </tr> </table>										1.3	Intermediate	No. of units	Size sq.m	Total sq.m	£psm	Total Value			2.00	75	150	£2,405	£360,750			2.00		150																																					
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		2.00	75	150	£2,405	£360,750																																																											
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<b>2.2 Build Costs</b>																																																																	
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2.2.1	Private units	No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs																																																											
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<table> <tr> <td>2.2.2</td> <td>Affordable units</td> <td>No. of units</td> <td>Size sq.m</td> <td>Total sq.m</td> <td>Cost per sq.m</td> <td>Total Costs</td> </tr> <tr> <td></td> <td>Affordable rent</td> <td>6.00</td> <td>75</td> <td>450</td> <td>£1,036</td> <td>£466,200</td> </tr> <tr> <td></td> <td>Intermediate</td> <td>2.00</td> <td>75</td> <td>150</td> <td>£1,036</td> <td>£155,400</td> </tr> <tr> <td></td> <td></td> <td>8.00</td> <td></td> <td>600</td> <td></td> <td></td> </tr> </table>										2.2.2	Affordable units	No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs		Affordable rent	6.00	75	450	£1,036	£466,200		Intermediate	2.00	75	150	£1,036	£155,400			8.00		600																														
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Goods Yard		Brownfield		450 Units		Bishop's Stortford Gyard											
<b>ITEM</b>																	
Net Site Area	4.50				Residual Value £1,553,536 per net ha			Technical Checks:									
					60% 40%			Sqm/ha 34,624									
Nr of units	Private 270.00	Affordable 180.00		Affordable rent 108.00	Intermediate 72.00			Dwgs/ha 100									
								Units/ha 55									
								GDV=Total costs -									
<b>1.0 Development Value</b>																	
1.1	Private units		No. of units 270	Size sq.m 65	Total sq.m 17,550		£psm £3,385	Total Value £59,400,000									
			270		17,550												
1.2	Affordable rent		No. of units 108	Size sq.m 66	Total sq.m 7,128		£psm £1,692	Total Value £12,062,769									
			108		7,128												
1.3	Intermediate		No. of units 72	Size sq.m 66	Total sq.m 4,752		£psm £2,200	Total Value £10,454,400									
			72		4,752												
	Gross Development value		450		29,430			£81,917,169									
<b>2.0 Development Cost</b>																	
2.1	Site Acquisition																
2.1.1	Site value (residual land value)							£6,990,912									
								Plus Purchaser Costs 5.75%									
									£7,392,890								
2.2	Build Costs																
2.2.1	Private units		No. of units 270	Size sq.m 76	Total sq.m 20,647		Cost per sq.m £1,225	Total Costs £25,292,647									
			270		20,647												
2.2.2	Affordable units		No. of units 108	Size sq.m 78	Total sq.m 8,386		Cost per sq.m £1,225	Total Costs £10,272,705.88									
	Affordable rent		108		8,386		£1,225										
	Intermediate		72	70	5,591		£1,225	£10,272,705.88									
			180		13,976			£10,404,470.59									
	450				34,624			£42,413,824									
2.3	Extra over construction costs																
2.3.1	Externals			10% on build cost				£4,241,382.35									
2.3.2	Site abnormals (remediation/demolition)			£150,000 per net developable ha				£675,000									
									£4,916,382								
2.4	Professional Fees																
2.4.1				10% on build costs				£4,241,382.35									
									£4,241,382								
2.5	Contingency																
2.5.1				5% on build costs (incl: externals)				£2,332,760									
									£2,332,760								
2.6	Developer contributions																
2.6.1	Water efficiency			£43 per unit				£19,350									
2.6.2	Section 106 standard typologies			£2,000 per unit				£900,000									
2.6.3	CIL			£0 psm on market units				£0									
2.6.4	CSH Level 4			£0 per unit				£0									
									£010,360								
2.7	Sale cost																
2.7.1	Private units only			3.00% on OM GDV				£1,782,000									
									£1,782,000								
	TOTAL DEVELOPMENT COSTS (including land)							£63,998,588									
3.0	Developer's Profit																
3.1	Private units			20% on OM GDV				£11,880,000									
3.2	Affordable units			6% on Affordable GDV				£1,486,133									
									£13,366,133								
	TOTAL PROJECT COSTS [EXCLUDING INTEREST]							£77,364,721									
	TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]							£4,552,448									
4.0	Finance Costs				APR 7.00% on net costs		PCM 0.565%	£4,552,448									
4.1	Finance																
	TOTAL PROJECT COSTS [INCLUDING INTEREST]							£81,917,169									
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Mead Lane		Brownfield		300 Units		Mead Lane							
<b>ITEM</b>													
Net Site Area	3.00			Residual Value £3,133,742 per net ha		Technical Checks:							
				60% 40%		Sqm/ha 23,082							
				Affordable rent Intermediate		Dwgs/ha 100							
Nr of units	180.00	120.00		72.00 48.00		Units/ha 277							
						GDV=Total costs -							
<b>1.0 Development Value</b>													
1.1 Private units		No. of units 180	Size sq.m 65	Total sq.m 11,700	£psm £3,846	Total Value £45,000,000							
		180		11,700									
1.2 Affordable rent		No. of units 72	Size sq.m 66	Total sq.m 4,752	£psm £1,923	Total Value £9,138,462							
		72		4,752									
1.3 Intermediate		No. of units 48	Size sq.m 66	Total sq.m 3,168	£psm £2,500	Total Value £7,920,000							
		48		3,168									
Gross Development value			300	19,620		£62,058,462							
<b>2.0 Development Cost</b>													
2.1 Site Acquisition													
2.1.1 Site value (residual land value)						£9,401,227							
						Purchaser Costs 5.75%							
							£9,941,798						
<b>2.2 Build Costs</b>													
2.2.1 Private units		No. of units 180	Size sq.m 76	Total sq.m 13,765	Cost per sq.m £1,225	Total Costs £16,861,765							
		180		13,765									
2.2.2 Affordable units		No. of units Affordable rent Intermediate	Size sq.m 72 40	Total sq.m 5,591 3,727	Cost per sq.m £1,225 £1,225	Total Costs £6,848,470.59 £4,500,047.00							
		72 40	78 70	9,318									
		120											
300			23,082			£28,275,882							
<b>2.3 Extra over construction costs</b>													
2.3.1 Externals			10% on build cost			£2,827,588.24							
2.3.2 Site abnormals (remediation/demolition)			£150,000 per net developable ha			£450,000							
							£3,277,588						
<b>2.4 Professional Fees</b>													
2.4.1			10% on build costs			£2,827,588							
							£2,827,588						
<b>2.5 Contingency</b>													
2.5.1			5% on build costs (incl: externals)			£1,555,174							
							£1,555,174						
<b>2.6 Developer contributions</b>													
2.6.1 Water efficiency			£43 per unit			£12,900							
2.6.2 Section 106 standard typologies			£2,000 per unit			£600,000							
2.6.3 CIL			£0 psm on market units			£0							
2.6.4 CSH Level 4			£0 per unit			£0							
							£612,000						
<b>2.7 Sale cost</b>													
2.7.1 Private units only			3.00% on OM GDV			£1,350,000							
							£1,350,000						
<b>TOTAL DEVELOPMENT COSTS (including land)</b>													
<b>3.0 Developer's Profit</b>													
3.1 Private units			20% on OM GDV			£9,000,000							
3.2 Affordable units			6% on Affordable GDV			£1,125,858							
							£10,125,858						
<b>TOTAL PROJECT COSTS [EXCLUDING INTEREST]</b>													
<b>TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]</b>													
4.0 Finance Costs			APR 7.00%	on net costs	PCM 0.565%	£4,091,673							
4.1 Finance													
<b>TOTAL PROJECT COSTS [INCLUDING INTEREST]</b>													
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## Appendix D Non-residential viability appraisals

Tables D1Example of non-residential appraisals

Business Park Office						
ITEM						
Net Site Area	0.13	residual value £592,228 per ha				
1.0 Development Value						
1.1 Business Park Office	No. of units 1	NIA sq.m 425	Rent £205	Yield 7.0%	Value per Unit £1,244,643	Total Value £1,244,643
				No. of months 9	Rent free period £1,183,060.40	
					Less Purchaser Costs £71,567	
					Adjusted cap value £1,111,493	
	1	425			£1,111,493	
2.0 Development Cost						
2.1 Site Acquisition						
2.1.1 Site Value					-£72,755	
					Plus Purchaser Costs 1.75%	
					-£74,028.46	
2.2 Build Costs						
2.2.1 Business Park Office	No. of units 1	GIA sq.m 500	Cost £ psm £1,446		Total Costs £723,000	
					£723,000	
2.3 External						
2.3.1 External works as a percentage of build costs		15.0%			£108,450	
					£108,450	
2.4 Professional Fees						
2.4.1 as percentage of build costs & external		8%			£66,516	
					£66,516	
2.5 Contingency						
2.5.1 Based upon percentage of construction costs		5%			£44,898	
					£44,898	
2.6 Sale costs						
2.6.1 Marketing costs		£25,000			£25,000	
2.6.2 Letting agent fee		10% of rent			£8,713	
2.6.3 Letting legal fees		5% of rent			£4,356	
					£38,069	
TOTAL DEVELOPMENT COSTS						
3.0 Developers' Profit						
3.1 Based upon percentage of total development costs		Rate 20%			£181,380.92	
					£181,381	
TOTAL PROJECT COSTS [EXCLUDING INTEREST]						
					£1,088,286	
TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]						
4.00 Finance Costs	APR 7.00%		PCM 0.565%		-£23,208	
TOTAL PROJECT COSTS [INCLUDING INTEREST]						
					£1,111,493	

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Retail convenience						
ITEM						
Net Site Area	0.43	residual value £4,583,493	per ha			
1.0 Development Value						
1.1	Retail convenience	No. of units 1	NIA sq.m 1350	Rent £230	Yield 5.0%	Value per Unit £6,210,000
				No. of months	Rent free period 6	Adjusted for rent free £6,060,339.45
						Less Purchaser Costs £357,075
						Adjusted cap value £5,703,264
		1	1,350			£5,703,264
2.0 Development Cost						
2.1	Site Acquisition					
2.1.1	Site Value					£1,857,545
					Plus Purchaser Costs	5.75%
						£1,964,354.34
2.2 Build Costs						
2.2.1	Retail convenience	No. of units 1	GIA sq.m 1,500	Cost £ psm £1,309		Total Costs £1,963,500
						£1,963,500
2.3 Externals						
2.3.1	External works as a percentage of build costs		15.0%			£294,525
						£294,525
2.4 Professional Fees						
2.4.1	as percentage of build costs & externals		8%			£180,642
						£180,642
2.5 Contingency						
2.5.1	Based upon percentage of construction costs		5%			£121,933
						£121,933
2.6 Sale costs						
2.6.1	Marketing costs		£25,000			£25,000
2.6.2	Letting agent fee		10% of rent			£31,050
2.6.3	Letting legal fees		5% of rent			£15,525
						£71,575
TOTAL DEVELOPMENT COSTS						
3.0 Developers' Profit						
3.1	Based upon percentage of total development costs		Rate 20%			£919,306
						£919,306
TOTAL PROJECT COSTS [EXCLUDING INTEREST]						
TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]						
4.00	Finance Costs	APR 7.00%		PCM 0.565%		-£187,429
TOTAL PROJECT COSTS [INCLUDING INTEREST]						
						£5,703,264
<p>This appraisal has been prepared by Peter Brett Associates on behalf of East Hertfordshire District Council. The appraisal has been prepared in line with the RICS valuation guidance. The purpose of the appraisal is to inform East Hertfordshire District Council as to the impact of planning policy has on viability at a strategic district level. This appraisal is not a formal 'Red Book' (RICS Valuation – Professional Standards January 2014) valuation and should not be relied upon as such.</p>						

## Appendix E Critical path analysis of infrastructure

The following table sets out the critical path analysis for health and waste water infrastructure based on the stakeholder interviews undertaken by PBA.

Infrastructure	place	Short Term (2016-2021)	Medium Term (2021-2026)	Long Term (2026-2031)
Health	Rest of Bishop's Stortford	The majority of existing practices in the area are constrained, although two do have capacity, however, both these surgery premises are not ideally suited for modern general medical services. A key constraint is acquiring a suitable site - various options available.		
Health	Rest of Bishop's Stortford			
Waste Water	Rest of Bishop's Stortford	Capacity in the treatment works up to medium term due to increased capacity already designed. Development specific network upgrades will be required.		
Waste Water	Rest of Bishop's Stortford			
Health	Buntingford	Currently, both practices within the town have capacity to accept new patients. The proposed development sites amounting to around 500 dwellings would potentially increase the population by circa 1,200 patients, which could be accommodated across both the existing town centre and surrounding areas.		
Health	Buntingford			
Waste Water	Buntingford	There is capacity at the Sewage Treatment Works, however, network pipe capacity stretched if all consented / appeal sites progress - localised treatment works planned to meet network pressure.		
Waste Water	Buntingford			
Health	Hertford	The existing GP premises capacity within the town is already constrained, particularly in the case of two surgery premises. Therefore, any additional residential development in the area will only add pressure on existing facilities, which would not, as a result, be able to accommodate the projected increase in population without major investment in GP premises provision within the town.		
Health	Hertford			
Waste Water	Hertford	Local network upgrades will be required as the Hertford sites are separated from each other in drainage terms. Thames Water would require each developer to present a drainage strategy for their site for Thames Water to consider with the LPA. There is capacity up to medium term at Rye Meads STW through the planning process. This is because it is		
Waste Water	Hertford			
Health	Sawbridgeworth	The town is served by one GP practice only which is currently very constrained, therefore any additional development in the area will only add to the present situation. Although overall the development figures proposed on the outskirts of the Town are modest, the close proximity of the proposed development at Harlow North, could add additional pressure on the practice current capacity.		
Health	Sawbridgeworth			
Waste Water	Sawbridgeworth	The location of development sites on the west side of town is already experiencing sewage leak and this location will increase the risk of further sewer flooding. Therefore sewerage network upgrades will be required, possibly in the form of underground balancing tanks. There is capacity at the Rye Meads STW.		
Waste Water	Sawbridgeworth			
Health	Ware	The existing GP premises capacity within the Ware is already constrained. Depending on scale of growth additional on site capacity will be required.		
Health	Ware			
Waste Water	Ware	Large scale development would require the provision of a new sewer to the north and east of the town to connect with the trunk sewer. The existing sewer lies underneath the High Street and this new sewer to the north and east would therefore avoid disruption here. There is capacity up to medium term at Rye Meads STW.		
Waste Water	Ware			

Source: PBA with service provider inputs 2014

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