

Chapter 2: Strategic Overview

2.1 Introduction

- 2.1.1 Step 2 of the policy process is to identify the key strategic issues likely to affect the choice of location of future development. This requires investigation of a wide range of different social, economic and environmental issues.
- 2.1.2 Identification of strategic issues is based on the following:
- national planning policy, which identifies the scope of planning issues and sets out strategic priorities for plan-making;
 - Government statistics^j, reports and other publications;
 - technical studies on various social, economic and environmental topics including infrastructure and demographic projections;
 - consultation feedback from the Issues and Options stage;
 - meetings with the providers of infrastructure and services;
 - planning judgement (issues important to strategy development).
- 2.1.3 The scope of the strategic overviews is defined by a number of matters, as explained in Section 1.4 of this document. Strategic Overviews set the overall focus for work at subsequent steps of the strategy selection process. It may be that some of the information contained in the strategic overviews will need to be amended as more information is obtained as work progresses.
- 2.1.4 Some planning issues can be considered under a number of different headings. For example, climate change is usually considered in terms of reducing greenhouse gases (mitigation) and in terms of creating environments which can be resilient to the unavoidable effects of climate change (adaptation). However, within these categories there are issues relating to transport (reducing emissions), economy (low carbon business), environment (flood risk), housing (insulation), infrastructure (district heating), water (supplies), and natural resources (renewable and low carbon energy). There are also cross-cutting concerns. For example, biomass boilers may result in lower CO₂ emissions but a rise in particulates, which is an environmental health issue.

^j Many prepared by the Office for National Statistics (ONS). These include www.neighbourhood.statistics.gov.uk. Mid-Year Population Estimates published by ONS. The 2011 Census results are expected to be published during 2012-3. In the meantime the 2001 Census data, although over 10 years old, provides a good indication of trends sufficient for many strategic planning purposes.

2.1.5 The approach taken here is to avoid duplication and repetition by dealing with issues where relevant as part of each separate strategic overview. *Step 5: Scenario Testing* and *Step 6: Preferred Strategy* will consider more specifically how such cross-cutting issues might influence the emerging development strategy.

2.2 Housing

Scope of this Overview

2.2.1 This overview sets out how housing issues will be dealt with in respect of the development strategy. The key housing issues are considered to be:

- Demographics and the Housing Target
- Affordability and the Housing Market
- Housing Density, Type and Size
- Ageing Population and Specialist Needs
- Brownfield Land, Urban Capacity and Mix of Uses
- Gypsies and Travellers and Travelling Showpeople
- Housing Design and Functionality

2.2.2 Other housing related issues, including many raised through the Core Strategy Issues and Options Consultation in 2010 are also discussed. Because the preparation of the plan is a 'stepped' approach, this overview also sets out how the housing issues will be dealt with under later steps.

Demographics and Housing Target

2.2.3 Over the next twenty years the population of East Herts is expected to grow by 18,900 people¹. This growth will be caused by both 'natural change' (the difference between births over deaths) as well as people coming into East Herts from outside the district (migration).

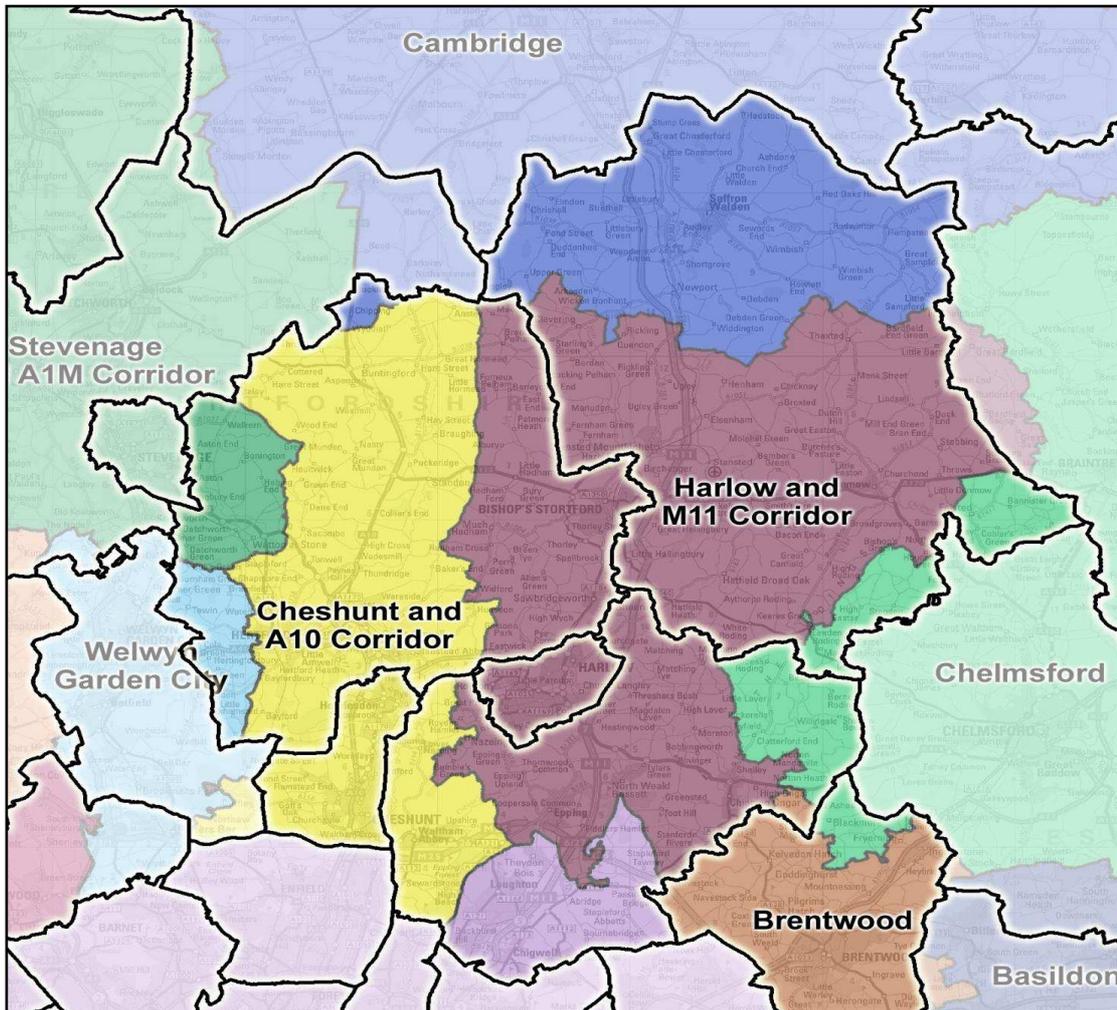
2.2.4 In terms of migration, East Herts 'imports' population from London and the neighbouring districts of Broxbourne, Epping Forest and Harlow and 'exports' population to Uttlesford². These flows reflect the fact that East Herts is not an 'island' nor is it a single housing market area and that when purchasing a home, people tend to ignore local government administrative boundaries preferring to relocate along travel-to-work corridors. The housing market areas are shown in Figure 2.1 below.

2.2.5 It is possible to seek to meet the 'internal' housing needs of the existing East Herts population, often referred to as 'local needs'. That is, just build enough houses to meet the housing requirements of the current population. However, such an approach is not considered appropriate since whilst you achieve this

numerically, it is not considered that it would adequately meet the *actual* housing needs of the resident's of East Herts.

- 2.2.6 This is because the UK has a free housing market and anyone can buy a house (or houses) anywhere. Given that East Herts is a desirable location in which to live, individuals and families from outside the district may have a higher purchasing power and successfully out-price local people. A lower housing target which overly limits supply will therefore exacerbate this problem causing un-affordability to increase and local people being forced to move outside the district away from their families.

Figure 2.1: Housing Market Areas³



- 2.2.7 Whilst the population of East Herts is expected to grow by 13.6% to 2031 (an increase of 18,900 people⁴), the number of households is expected to grow by 13,068, representing a 22.6% increase over the same period⁵.

- 2.2.8 The difference between the level of population growth and the level of household growth is due to the age profile of the population (different population profiles generate differing housing requirements). The trends for a

reduction in household size and an increase of smaller households are set to continue, with household size expected to reduce from a ratio of currently 2.4 to 2.2 persons per household by 2031. This reduction is driven to a large degree by an ageing population, with over two-thirds of the population growth by 2031 expected to be aged over 65 years⁶, as well as continued growth in younger people choosing to co-habit later.

- 2.2.9 As the local planning authority, it is East Herts Council's responsibility to plan for and meet the future housing and development needs of the district. Previously, the number of houses that had to be 'planned-for' (known as the district housing requirement or target) was set by the strategic planning authority: originally Hertfordshire County Council (HCC) through the Structure Plan and then, between 2004 and 2012, the East of England Regional Assembly (EERA) through the Regional Spatial Strategy (RSS) or Regional Plan. In 2011, regional assemblies were abolished and their strategic planning functions ceased. Regional Plans will be formerly abolished in 2012.
- 2.2.10 In the absence of the East of England Regional Plan, the requirement to deliver the district housing requirement has not disappeared. Instead, East Herts Council is now solely responsible for setting its own district housing requirement. In doing so, East Herts Council must ensure that its plans are consistent with national planning policy⁷. The Draft National Planning Policy Framework (NPPF) states that *objectively assessed development needs should be met*⁸ and *'to boost the supply of housing, local planning authorities should use an evidence-base to ensure that their Local Plan meets the full requirements for market and affordable housing in the housing market area'*⁹.
- 2.2.11 The Population and Household Topic Paper reported to the LDF Executive Panel 29th March 2012 sets out the background and considers the implications of various housing targets. It acknowledges that in line with the accepted principles of sustainable development, a housing target cannot simply be imposed: its geographic implications must be tested to ensure that the level of housing growth is appropriate and balances the social and economic needs of the district with its environmental capacity. The development strategy will set the district housing target for East Herts to 2031, including identifying the numbers and broad locations where these homes will be built.
- 2.2.12 It should be noted that East Herts Council is required to maintain a continuous supply of housing. As such, houses with planning permission are counted as part of the supply and are deducted from the total when built. These are listed in the Council's Housing Trajectory and include both allocated and non-allocated housing sites¹⁰. This figure of 5,978 homes, and any additional homes that are granted planning permission between now and

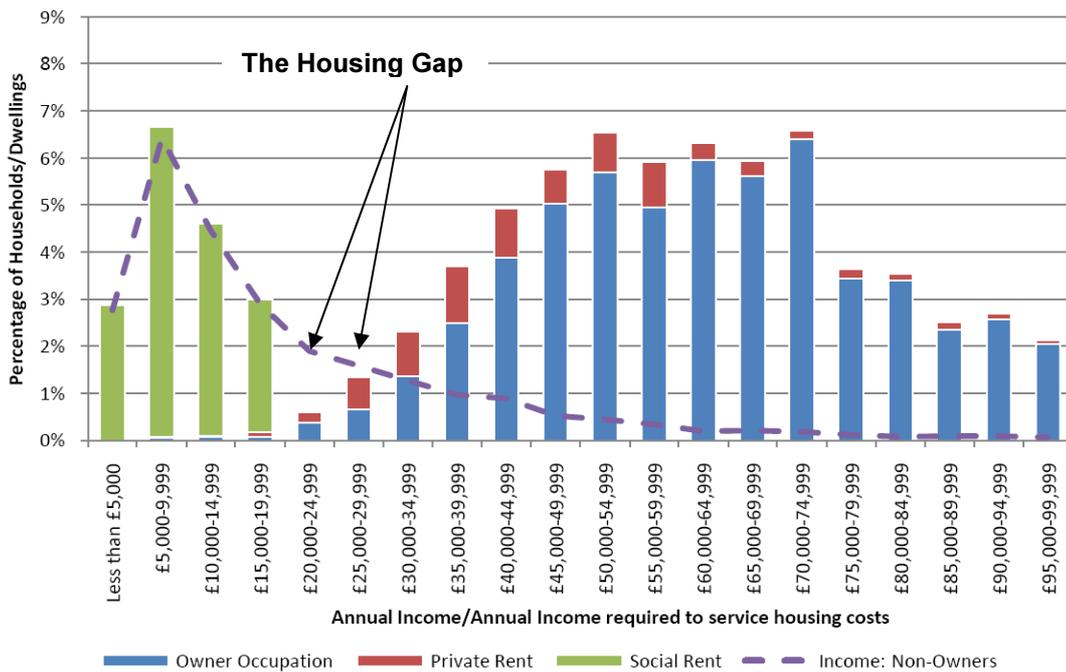
adoption of the District Plan, will be deducted from the housing target leaving a 'to-find' figure, which is the number of homes that has to be planned for in the development strategy.

Affordability and the Housing Market

- 2.2.13 East Herts Council, like any local planning authority, does not have the powers to restrict the ownership or occupation of homes sold on the open market. It does, however, have a responsibility to provide advice and assistance to secure accommodation for those who are homeless¹¹. Although an extreme outcome, ultimately, homelessness is caused by an imbalance in the housing market and individuals not being able to meet their own housing needs. Alternative outcomes include overcrowding and/or sub-standard housing.
- 2.2.14 The location of East Herts on the periphery of London in the Southeast of England means that the affordability of housing (i.e. the relationship of income to house prices) is a key issue. Between 2000 and 2008, the average property price in East Herts increased by 117%, compared with 85% in Uttlesford and 133% in Epping Forest¹².
- 2.2.15 Figure 2.2 (below) identifies a 'gap' in the housing market. If the housing market was balanced, the amount of housing stock (columns) would exceed the proportion of local households who can afford housing in that income band (dotted line) in every income bracket. As can be seen, for those households earning between £20,000 and £29,999 per annum, the columns do not exceed the dotted line so there is a shortage of homes available to these households to either rent or buy. Individual earners would need to earn at least £55,000 per annum whilst joint earners would need an income of at least £65,000 per annum just to afford properties in the cheapest quarter of the market.
- 2.2.16 To help prevent homelessness, East Herts operates a housing register. As at December 2011 there are 2,754 live housing applications on the East Herts Housing Register, consisting of 5,404 people. This is a 91.5% increase since 2001. Of the 2,754 applications, 1,628 (59%) are considered to be in housing need^k.

^k This increase may also reflect the impact of the introduction of Choice Based Lettings and the fact that anyone can join the register.

Figure 2.2: The Affordability of Housing¹³



2.2.17 To help balance the housing market, East Herts Council seeks to provide subsidised housing, known as affordable housing (formerly Council housing)^l to those households considered to be in housing need. Affordable housing is allocated using a points system based on level of need. When allocating homes, weighting is given to individuals with a local connection to East Herts as well as other housing need issues.

2.2.18 Affordable housing is delivered through the planning system usually as a percentage of market housing. East Herts Council currently seeks up to 40% on eligible sites^m.

2.2.19 It should be noted that land values vary across the district, and as such, the imposition of affordable housing requirements and tenure mix would have a different impact on the viability of residential schemes in different areas. The lowest value area is CM23 Bishop’s Stortford whilst the highest value area is SG13/14 Hertford¹⁴. This broadly reflects the split of the district between the A10 corridor and the M11 Corridor housing market areas, as shown in Figure 2.1.

^l Affordable housing is defined in the Draft NPPF as ‘social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. “Low cost market” housing may not be considered, for planning purposes, as affordable housing (Draft National Planning Policy Framework, page 53, (CLG, July 2011)).

^m Currently, the Council seeks 40% of homes on sites providing 15 or more dwellings or 0.5 or more hectares in the Six Main Settlements and 3 or more dwellings or 0.09 or more hectares in Category 1 and 2 Villages to be provided as affordable^m. Of these, 25% are required to be provided as Shared Ownership and 75% as Affordable Rented properties.

2.2.20 The percentage requirement, site size thresholds and tenure split are all important planning issues. However, these are not considered to be strategic in nature. Instead, the development strategy will deal with the locations where affordable housing provision will be sought. Detailed affordable housing policy will be included within allocations and policies.

Housing Density, Type and Size

2.2.21 Housing density is a measure of the amount of land used for development (usually expressed as dwellings per hectare (DPH)). Higher densities allow land to be used more efficiently (i.e. less land is required for development) and are considered to be more sustainable. However, since higher density development is usually associated with flatted apartments and taller buildings, the impact of increasing densities on character must be considered. The Draft NPPF allows local planning authorities *to set out their own approach to housing density to reflect local circumstances*¹⁵. The development strategy will set out indicative density ranges considered appropriate for East Herts.

2.2.22 Density is often determined by the size of the homes themselves. In recent years there has been a proliferation of one and two bedroom flatted apartments, reflecting both demographic trends and the desire to re-use brownfield land.

2.2.23 Looking forward, based on the likely population profile and size mix of the existing housing stock, nearly two-thirds of new homes should be 2-3 bedrooms and almost a quarter 1-bed homes¹⁶. Whilst it may be difficult for a local planning authority to control, the impact of owners of existing properties continuing to convert their smaller homes to larger homes, also needs to be considered. The development strategy will set out indicative dwelling size requirements considered appropriate for East Herts.

2.2.24 *The planning system can play an important role in facilitating social interaction and creating inclusive communities*¹⁷. This can be achieved by ensuring that developments create mixed communities by providing for a range of housing types, sizes and tenures. The requirement for the provision of an appropriate mix of housing types, sizes and tenures will be set out in the development strategy, although specific allocations and any policy criteria will be identified in allocations and policies.

Ageing Population and Specialist Needs

2.2.25 A key issue for East Herts is its ageing population. Hertfordshire County Council (HCC) is the commissioning authority for older persons housing and care needs. Their preference is for a move away from residential and nursing care to the provision of 'flexi-care'¹⁸. Flexicare schemes enable a greater mix

of older people to live independently, with their own tenancy but with communal areas and the reassurance of having 24 hour care provided should they need it, or as and when they need care, as they get older and their care needs change.

- 2.2.26 Flexicare schemes can be both publicly and privately provided. HCC are seeking the even spread of socially rented flexi-care units across the district, with the preference being for town locations. In terms of private provision, flexi-care schemes could be developed anywhere across the District, as market analysis has found a shortfall of services providing an alternative to residential care for those people self-funding their care. Every flexicare scheme should meet the HCC criteria both in terms of design and location requirements.
- 2.2.27 The requirement for the provision of flexicare schemes will be set out in the development strategy, although specific allocations and any policy criteria will be identified in allocations and policies.
- 2.2.28 HCC is also the commissioning authority for specialist housing services such as for those with mental health, learning disability and physical disabilities. The current level of provision varies across the district and there is a shortfall in some areas, which has resulted in a high proportion of placements being made outside of the District. Outpatient numbers are amongst the highest, and the future population growth in East Herts indicates that there will be a need for additional services to meet the growing needs of the population. Target areas are the larger settlements of Bishop's Stortford, Hertford and Ware because of the transport links and lower risk of isolation. It is not considered that such provision would be specifically identified in the LDF (District Plan). Instead, it is considered that provision would be made through the provision of affordable housing or through a specific allocation in allocations and policies.

Brownfield Land, Urban Capacity and Mix of Uses

- 2.2.29 Whilst the exact locations of new homes are still to be determined, how and where they could be accommodated are important issues. One of the Core Planning Principles set out in the Draft NPPF is the requirement to *focus significant development in locations which are or can be made sustainable*¹⁹. In general terms, such locations are considered to be existing urban areas such as towns and large villages.
- 2.2.30 Monitoring shows that in the year to 31st March 2011, 71% of all new and converted dwellings in East Herts were built on previously developed (brownfield) land. However, brownfield land is a finite and dwindling resource.

For example in 2017/18 it is anticipated that only 23% of new homes in the district will be on previously developed land, compared to 96% in 2007/08²⁰.

- 2.2.31 Whilst every effort should be made to make the best use of urban land, the effects of doing so must also be considered including the effect of the loss of garden land and land for other commercial and non-residential uses, which can have economic consequences. As of summer 2011, East Herts has 575 empty homes. In terms of trends, the number of empty homes has remained relatively stable over the past ten years around the 650 mark, and the current figure is the lowest it has been since 2002. Bringing empty homes back into use is a painstaking process which entails lengthy negotiations for each new home brought into use. On average, between 10 and 20 homes are brought back into use every year. Therefore, it seems very unlikely that empty homes will provide a significant contribution to meeting East Herts' overall housing need.
- 2.2.32 The Council is also undertaking a Strategic Land Availability Assessment (SLAA) which will provide further information as to the capacity of the existing urban areas to accommodate further development. The development strategy will establish the settlement hierarchy and the broad locations for development in East Herts to 2031. The Council's approach to the re-use of existing buildings will be set out in allocations and policies. Ensuring that the Council delivers its housing target will also help ensure that development on unwanted sites can be controlled.
- 2.2.33 It is also important to ensure that new developments provide for a mix of land uses including community facilities, open space and employment uses. In accordance with the Government's objective to create *strong, vibrant and healthy communities*²¹ large residential estates should be avoided. The development strategy will set out the broad mix of uses the Council will expect on new development sites.

Gypsies and Travellers and Travelling Showpeople

- 2.2.34 As with the settled population, local planning authorities have a responsibility to plan for the accommodation needs of Gypsies and Travellers and Travelling Showpeople²². As with general housing, the requirements for East Herts district were set by the East of England Plan²³.
- 2.2.35 In respect of Gypsies and Travellers, of the 46 permanent pitches required for the period 2006 to 2021, ten have already been provided in East Herts. A need for transit provision for 20 transit pitches for the whole of Hertfordshire for the period to 2011 was also identified; however, no district specific figures were provided and no transit provision has been made to date in the district. In respect of Travelling Showpeople, for the period 2006 to 2021 the

requirement is for 14 plots in East Herts; none of which have yet been provided²⁴. For both Gypsies and Travellers and Travelling Showpeople, no target for the period 2021 to 2031 has been provided.

- 2.2.36 In 2011 the Government consulted on a draft 'Planning for Traveller Sites' Planning Policy Statement (PPS) to replace both national and regional planning guidance in respect of Gypsies and Travellers and Travelling Showpeople²⁵. This document indicated that the Government would support the local determination of need, as a basis for future pitch and plot provision. A final version of this PPS has yet to emerge; however, the later consultation on the draft NPPF included potential for the revised guidance to be subsumed within this larger document.
- 2.2.37 If local need alone were to be taken into account then an indicative target totalling nine pitches to be provided for the period from 2006 to 2021 would be more applicable for East Herts (all of which have already been provided). Under a locally arising needs scenario, Travelling Showpeople's targets would be likely to remain as 14ⁿ.
- 2.2.38 Until final national planning policy is published, it is not possible to determine the exact numbers of pitches and plots that will need to be accommodated within East Herts over the plan period to 2031. What is certain is the fact that the LDF (District Plan) must make provision to meet the accommodation needs of these specific groups as part of its overall housing requirement and that a needs assessment to establish what that provision should be for the period 2021 to 2031 will need to be undertaken in due course. One benefit of appropriate planned provision is that it helps support the Council in taking action where illegal encampments occur.
- 2.2.39 As such, it is considered that the policy approach to the provision of permanent and transit pitches for Gypsies and Travellers and plots for Travelling Showpeople will be set out in allocations and policies. This will take account of evidence such as local need²⁶, site suitability for purpose, sustainability criteria and the potential for large-scale development opportunities to aid delivery. It should also be noted that the starting place for the identification of sites for pitches and plots is likely to continue to be in areas beyond the Green Belt.

ⁿ It should be noted that the needs of Travelling Showpeople differ to those of Gypsies and Travellers as, in addition to residential accommodation, secure, permanent bases are required due to the need for storage of equipment and maintenance of rides. Furthermore, circus people may also require an enclosed rehearsal spaces and also areas to exercise animals.

Housing Design and Functionality

- 2.2.40 The design of new homes is an important issue. Design can refer to architectural appearance; the relationship to other buildings and the street scene; and functionality.
- 2.2.41 Whilst planning can seek to influence the general appearance of new buildings, it should *avoid unnecessary prescription or detail and should concentrate on guiding the overall scale, density, massing, height, layout and access of new development*²⁷. This is known as urban design and can help ensure inclusive, accessible communities²⁸.
- 2.2.42 Functionality refers to the non-aesthetic elements of design such as Lifetime Homes Standards, which are design principles that seek to enable general housing to meet the existing and changing needs of diverse households over time, *including families with push chairs as well as some wheelchair users. The additional functionality and accessibility it provides is also helpful to everyone in ordinary daily life, for example when carrying large and bulky items*²⁹. Allocations and policies will include detailed urban design and public realm policies, including policies relating to residential amenity and standards. The issue of zero carbon homes is discussed in further detail in the Natural Resources Strategic Overview.

Housing Next Steps

- 2.2.43 As can be seen above, it is considered that most issues in respect of housing can be dealt with in allocations and policies, as opposed to the development strategy. This section sets out how housing issues will be dealt with through the steps approach to the preparation of the development strategy.
- 2.2.44 *Step 3: Topic Assessments* - will consider how the availability of land relates to the areas of search.
- 2.2.45 *Step 4: Areas of Search Assessments* - will consider any relevant information for the areas of search in relation to all the topic assessments carried out under Step 3, along with relevant technical studies. For example, an area of search may perform well in terms of land availability, but may score poorly in terms of environmental concerns.
- 2.2.46 *Step 5: Scenario Testing* - will examine the cumulative issues of a number of different strategy scenarios, in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 3 and 4. This step will be key in determining an appropriate housing target for East Herts district.

- 2.2.47 *Step 6: Preferred Strategy* - will set out the draft strategy and development principles to planning for housing including the housing target, settlement hierarchy, and broad mix of uses (including housing for older people) required on strategic sites. It will also set out where affordable housing will be applied, and indicative requirements for density and sizes of new dwellings.

Housing References:

- ¹ 2008-based Sub-National Population Projections (SNPP) published from the Office for National Statistics (ONS) in 2010
- ² Information from Strategic Housing Market Assessment (SHMA) (ORS, 2010)
<http://www.eastherts.gov.uk/index.jsp?articleid=15675>
- ³ Figure 15, p47, Strategic Housing Market Assessment (SHMA), (ORS 2010)
<http://www.eastherts.gov.uk/index.jsp?articleid=15675>
- ⁴ 2008-based Sub-National Population Projections (SNPP) published from the Office for National Statistics (ONS) in 2010
- ⁵ 2008-based Sub-National Population Projections (SNPP) published from the Office for National Statistics (ONS) in 2010
- ⁶ Interrogation of 2008-based Sub-National Population Projections (SNPP) published from the Office for National Statistics (ONS) in 2010
- ⁷ Planning & Compulsory Purchase Act 2004 (as amended), Chapter 5, Section 20, Part 5(b)
- ⁸ Draft National Planning Policy Framework, paragraph 20 (CLG, July 2011)
- ⁹ Draft National Planning Policy Framework, paragraph 109 (CLG, July 2011)
- ¹⁰ Appendix C, Annual Monitoring Report (AMR) 2010-2011 www.eastherts.gov.uk/amr
- ¹¹ 1996 Housing Act (as amended)
- ¹² Paragraph 7.2, p101, Strategic Housing Market Assessment (SHMA), (ORS 2010)
<http://www.eastherts.gov.uk/index.jsp?articleid=15675>
- ¹³ Figure 124, p126, Strategic Housing Market Assessment (SHMA), (ORS 2010),
<http://www.eastherts.gov.uk/index.jsp?articleid=15675>. NB: graph shows the housing market for the whole LCB (East)/M11 Sub-region, not just East Herts
- ¹⁴ SHMA Viability Assessment, Level, 2010
<http://www.eastherts.gov.uk/index.jsp?articleid=15687>
- ¹⁵ Draft National Planning Policy Framework, paragraph 109 (CLG, July 2011)
- ¹⁶ p143, Strategic Housing Market Assessment (SHMA) (ORS, 2010)
<http://www.eastherts.gov.uk/index.jsp?articleid=15675>
- ¹⁷ Draft National Planning Policy Framework, paragraph 125 (CLG, July 2011)
- ¹⁸ Flexicare Housing Hertfordshire: Accommodation Services for Older People, (Hertfordshire County Council, Adult Care Services, 2009)
- ¹⁹ Draft National Planning Policy Framework, paragraph 19 (CLG, July 2011)
- ²⁰ Figure 6, Page 25 East Herts Annual Monitoring Report 2010/11 (December 2011)
www.eastherts.gov.uk/amr
- ²¹ Draft National Planning Policy Framework, paragraph 124, and also see paragraphs 125 - 132 (CLG, July 2011)
- ²² The Housing Act 2004 (Section 225) requires local authorities to consider Gypsy and Traveller sites as part of their Accommodation Assessments and to prepare strategies to meet those needs.
- ²³ Accommodation for Gypsies and Travellers and Travelling Showpeople in the East of England, A Revision to the Regional Spatial Strategy for the East of England, Government Office for the East of England, July 2009 (Policies H3 and H4).
- ²⁴ A figure of 20 plots was identified for the joint East Herts and Broxbourne area. The East Herts element of this relates to nine plots for the period 2006-2011 with a further five plots to 2021, giving a total of fourteen plots.

²⁵ Circular 01/2006, 'Planning for Gypsy and Traveller Caravan Sites'; Circular 04/2007, 'Planning for Travelling Showpeople'; and Accommodation for Gypsies and Travellers and Travelling Showpeople in the East of England, A Revision to the Regional Spatial Strategy for the East of England, Government Office for the East of England, July 2009.

²⁶ E.g. Accommodation Needs of Gypsies and Travellers in Northern and Eastern Hertfordshire, Stage Two: Identification of Potential Areas to Accommodate Gypsy and Traveller Pitches in the Study Area (Scott Wilson, October 2007)

²⁷ Draft National Planning Policy Framework, paragraph 117 (CLG, July 2011)

²⁸ See paragraphs 114-123 on Design and 124-127 on Sustainable Communities in the Draft National Planning Policy Framework, (CLG, July 2011)

²⁹ <http://www.lifetimehomes.org.uk/pages/revised-design-criteria.html>

2.3 Economy

Scope of overview

2.3.1 This overview sets out how economy issues will be dealt with in respect of the development strategy. The key economy issues are considered to be:

- Economic History and geography
- Businesses and Employment Land
- Rural Economy
- Retail and Services
- Tourism

2.3.2 Other economy related issues, including many raised through the Core Strategy Issues and Options Consultation in 2010 are also discussed. Because the preparation of the District Plan is a 'stepped' approach, this overview also sets out how the economy issues will be dealt with under later steps.

Economic History and Geography

2.3.3 In order to understand the economic environment of East Herts as a district it is important to understand the economic environment of Hertfordshire as a whole and the relationship of the county within the national and international economic context.

2.3.4 The commercial property market of Hertfordshire has a strong, high quality manufacturing base, with many national and international high technology occupiers carrying out specialist manufacturing and research and development functions. The success of these has been built from access to a high quality pool of labour, accessibility to London, and to national and international markets, the high quality environment, location of higher education establishments and the historic location of pioneering industries such as aviation and pharmaceuticals. In recent decades this has enabled the growth of logistics and distribution industries.

2.3.5 Despite these positive attributes, many of the key employment locations within the county suffer from a market perception of infrastructure problems, primarily associated with transport infrastructure, but also the physical environment, higher education (skills levels), and the general quality of commercial building stock. There is intense competition not only from London but from other locations which have a similar travel distance and connection to the city. Within Hertfordshire itself some locations fare better than others because of their locations, quality, constraints and economic histories. This is acknowledged in the Hertfordshire Strategic Employment Sites Study³⁰.

Within East Herts this is manifested in the location of the more successful employment sites being located in the main towns of Bishop's Stortford, Hertford and Ware and to a lesser extent Buntingford; i.e. near the M11, A414 and A10 corridors.

- 2.3.6 As with housing, employment is a fluid and mobile activity and is less constrained by distance now than it once was. Travel to work data³¹ for the main settlements in the district indicate that 14-18% of the East Herts working population commutes to and from London; hence there are greater pressures for housing in the towns with train services. People will travel considerable distances to seek employment, particularly in specialist fields. Whilst it may be desirable to live near to a place of work this is not in many cases an option, particularly when two adults in a family may work in different locations. People often choose to live in travel to work corridors to enable access employment some distance away, rather than working locally.
- 2.3.7 It is no longer the case of leaving school and securing a 'job for life'. Employers relocate forcing individuals to commute long distances, or close down forcing redundancy; skills and individual circumstances change over time and therefore careers also change. It is important therefore to acknowledge that planning for the economic prosperity of a district will be limited to those economic factors that a district planning authority can influence.

Businesses and Employment Land

- 2.3.8 East Herts is a prosperous district with higher than average earnings and low unemployment with a claimant count rate of 1.9%. East Herts contributes significantly to the economy of the county accounting for around 11% of Hertfordshire's Gross Value Added³² (GVA)^o. Employment and unemployment levels in the district have performed better than the county average even during the peak of the recent recession. However, in the last decade East Herts has seen a decrease in office and factory/manufacturing floorspace and an increase in warehouses. This trend is anticipated to continue³³, with forecasts predicting a decline in B2 and slight increases in B1 and B8 uses³⁴.
- 2.3.9 The district has a sound economic base built on small and medium-sized firms including engineering, high-tech computer companies, brewing, printing, food processing and distribution, and Stansted Airport related service industries. The presence of GSK in Ware contributes significantly to the success of the district in the Life Sciences business sector. GSK has

^o GVA is a measure of the value of goods and services produced in an area, industry or sector of an economy.

sites within Stevenage and Harlow and the employer attracts a significant number of supporting businesses creating a cluster of Life Sciences.

- 2.3.10 The District Council cannot fund the construction of new employment locations, but it can encourage and enable such development through a positive planning policy approach, combined with land allocations/designations in appropriate locations. In order to deal with the above issues, the employment potential of the areas of search will need to be assessed. The application of a general policy against the loss of existing and creation of new employment land is considered to be a key component of the development strategy. This will take into account issues of location, viability and the quality of employment land. Detailed criteria-based policy for assessing the impact of the loss of employment land and the development of new employment sites will be included in Allocations and Policies.

The Rural Economy

- 2.3.11 East Herts has the most significant rural economic profile in the county. There are 433 holdings in East Herts in total occupying 34,647 hectares.³⁵ Many of these businesses have diversified and have a second income stream. Some diversification schemes, such as those that create visitor attractions result in the intensification of the rural area but can also act as a means of connecting visitors to the countryside, supporting rural jobs and crafts. In terms of employment land in the rural area, this tends to be smaller and of comparatively poorer quality than town counterparts. It nonetheless provides valuable locations for small and start up businesses. While the rural economy is a major part of the districts' economic profile, it is important to retain and support it but at the same time not seek to preserve it to the point of stagnation. Diversification schemes should be considered on an individual basis to ensure that they do not conflict with the principles of the rest of the strategy.
- 2.3.12 One method of protecting the rural economy is by acknowledging the role of environmental stewardship schemes and areas of higher quality agricultural land and seeking to ensure their protection from development where possible. Agricultural land, particularly that which is subject to environmental stewardship is important in terms of building resilience to climate change and fluctuations in food production. Local food production not only decreases the cost of transporting food to consumers but has the added benefit of reducing CO2 emissions, supporting local rural jobs and crafts and can provide an educational tool of connecting the consumer to the product. The areas of search should be assessed in relation to their agricultural land classification and whether environmental stewardship schemes exist.

- 2.3.13 With the development of new information technology such as broadband internet and Wi-fi connectivity, the technological barriers to working in more remote locations are gradually being overcome³⁶. Working from home, farm or in business hubs^p is becoming more possible, reducing the need to travel to or rent office space in urban locations.
- 2.3.14 Given the importance of the rural economy on the economic success of the district, the application of a general policy seeking to protect and enable rural economic activity is considered to be a key component of the development strategy. This will take into account issues of location, viability and the impact of diversification on the local environment. Detailed criteria-based policy for assessing the impact of the loss of rural employment land and the development of new diversification schemes will be included in Allocations and Policies.

Jobs and skills

- 2.3.15 The East Herts Economic Development Strategy cited ambitions to increase the number of high level jobs in the district. In order to create high value jobs there would need to be a major new purpose-built employment site, created in the district with these industries in mind in order to secure their investment. It is also important that investment is made in higher education, in order to provide the skilled workforce such employers need. Traditionally specialist employers locate near specialist education facilities, sharing experience and research skills. It is unlikely that a new university would be built in the district during the plan period. Given the location of the district in relation to London, Cambridge and our larger neighbouring towns, particularly those with universities, it may be necessary to accept that the role of East Herts will be as a dormitory district where those with higher-skills commute out of the district for employment.
- 2.3.16 This level of out-commuting leads to a range of other issues. The spending power of higher earners can disproportionately raise the cost of properties both in towns and the rural area, leading to an affordability issue for those on average salaries. An ambition that concentrates on high-value jobs risks alienating those unable to attain those positions. Without affordable housing employers may not be able to secure sufficient local labour, but without sufficient labour with the appropriate skills an employer will not locate or invest in an area. The development strategy should therefore seek to support a range of employment uses and range of housing affordability.

^p A premises set up for flexible office uses with associated facilities, available to rent or use on an ad-hoc basis by a range of users.

- 2.3.17 With a decline in agriculture and manufacturing jobs, there is a need to ensure those with manual skills are valued, with more opportunities for adult learning being made. When considering schemes for employment and education, the strategy should seek to enable and support new businesses and entrepreneurial activity, through incubation and new business support schemes. The assessment into employment potential of the areas of search should consider the opportunity to make links with existing or new education facilities such as schools and colleges.
- 2.3.18 As has been indicated in the Housing Strategic Overview, the population of the district is getting older. The population of East Herts is expected to increase by an additional 18,500 persons with two-thirds of this growth being in the 65 and over age range. This has implications in terms of both the number of economically active residents and the abilities of the remaining workforce to continue in full active employment. Where the number of younger working age ranges has shrunk, this leads to an imbalance between employees and dependents, with fewer workers supporting both younger and older age groups. Changes in retirement age, life expectancy and the cost of living into retirement may have implications on the workforce. Older employees tend to be in the more expensive senior roles, while younger workers starting out on their careers are at lower pay scales. One of the problems of increasing the retirement age is that in the short to medium-term there is less churn, or turnover of positions, which can restrict the ability of younger workers to gain employment.
- 2.3.19 The types of jobs created will be determined by the type of employment land developed and is therefore linked to the development strategy, particularly in relation to the opportunities created by links to higher education, incubation and entrepreneurial activities. Housing affordability is also a key part of the development strategy.

Retail and Services

- 2.3.20 The district's five main towns are performing reasonably well despite the recent economic downturn, with only a slight increase in the number of vacant units. The biggest issue facing the district's towns is that of competition from neighbouring centres. Stevenage has just granted permission for a major redevelopment of its town centre; Welwyn Garden City Centre benefits from a wide retail offer including department stores; Harlow Town Centre, combined with its out of centre retail and leisure complexes offer a substantial retail experience combined with greater car parking. Broxbourne Council has an ambition to considerably expand the Brookfield Shopping Centre off the A10, south of Hertford and Ware. It would be impractical and unrealistic to try to compete with these centres, as this would involve the loss of the very character that makes our market towns special.

Of all our towns Bishop's Stortford has changed the most over time and has recently seen plans approved for a large scale extension to the town centre. Should these plans be implemented, the retail offer within the town may be able to reduce the loss of expenditure out of the district and also provide valuable job opportunities.

- 2.3.21 The evolution of the district's historic town centres is both a positive and a negative; it has led to their unique character and charm, but it has also led to congestion and inflexibility, as their historic form tries to accommodate modern travel and shopping habits. The rise of supermarkets often in out-of-centre locations has also contributed to the demise of the town centre in general enabling shoppers to complete all their retail needs in one location. It is therefore common that independent retailers suffer more when economic downturns occur, resulting in high vacancy levels within town centres and re-igniting the question as to the future of the high street.
- 2.3.22 The draft NPPF sets out its approach to retail policies,³⁷ and these should be strengthened by local policies that support the viability and vitality of town centres, including the establishment of town centre boundaries and a range of policies to guide the appropriate types of developments that should occur within or outside these boundaries.

Tourism

- 2.3.23 Visitors to the district play a vital role in the East Herts economy. The overall value of tourism to East Herts in 2002 was an estimated £138.8 million. Of this, approximately £43.7 million was generated by staying visitors and approximately £95 million was generated by day visitors. In terms of staying visitors, there were approximately 334,000 trips. In terms of day visitors, there were approximately 3.5 million tourist trips. Expenditure from tourism activities supported an estimated 2,376 full time job equivalents, not including part time and seasonal positions.
- 2.3.24 Whilst tourism plays an important part in the economy of the district, it is really a by-product of the high quality environment of its countryside and historic market towns, along with its locational advantages and proximity to Stansted Airport, rather than something that can effectively be planned for. It is therefore important that the overall planning strategy for the district seeks to retain the qualities that attract visitors and to ensure that tourist-related developments are supported, where they do not conflict with other principles of the strategy.

Economy Next Steps

- 2.3.25 *Step 2: Topic Assessments* – will assess the areas of search in relation to their use as potential employment land and where links to existing or new education establishments could be forged. These assessments should be read in conjunction with separate assessments into access to passenger transport networks, vehicular access and highways infrastructure.
- 2.3.26 Topic assessments should also consider the areas of search in relation to high value agricultural land zones and land subject to environmental stewardship schemes.
- 2.3.27 *Step 3: Areas of Search Assessments* – will consider any relevant information for the areas of search, in relation to all the topic assessments carried out under Step 2, along with relevant technical studies. For example, an area of search may perform well in terms of employment potential, taking account of transport and access constraints, but may score poorly in terms of environmental concerns.
- 2.3.28 *Step 4: Scenario Testing* – will examine the cumulative issues of a number of different strategy scenarios, in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 2 and 3.
- 2.3.29 *Step 5: Preferred Strategy* – will set out the draft strategy and policy approach to managing the economy of the district in terms of new and existing employment land and retail areas, rural diversification, education, and tourism. This may include broad locations for new employment land, town centre boundaries and primary and secondary shopping areas.
- 2.3.30 District Plan: Part 2 - Allocations and Policies will set out in further detail, policies regarding the design and use of employment land, rural diversification schemes and retail developments.

Economy References:

³⁰ Paragraph 2.8 and Figure 2-2: Employment Trends 2003-2008 in Hertfordshire Strategic Employment Sites Study 2011.

³¹ Hertfordshire County Council provides summaries of for selected settlements, based on the 2001 Census, (which will be updated as 2011 Census figures become available) at: www.hertsdirect.org/yourcouncil/hcc/env/factsfigs/population/census2001/cenresults/odmatrices/commprof/

³² NOMIS, December 2011

³³ Hertfordshire Strategic Employment Sites Study, 2011 Appendix A, paragraph 2.11, Figure 2.1

³⁴ East Herts Employment Land and Policy Review, 2008, paragraph 5.4

³⁵ East Herts Economic Development Strategy, 2006-2011

³⁶ Broadband Delivery UK Initiative 2011:

www.culture.gov.uk/what_we_do/telecommunications_and_online/7781.aspx

and Hertfordshire and Buckinghamshire Joint Project for Broadband Delivery:

www.hertsdirect.org/your-community/broadband/

³⁷ Draft NPPF, 2011, paragraphs 76 to 80

2.4 Education

Scope of this Overview

2.4.1 This overview sets out how education issues will be dealt with in respect of the development strategy. The main issues relate to the provision of school places for:

- Primary School Provision
- Middle and Upper School Provision
- Secondary School Provision

2.4.2 In East Herts, Hertfordshire County Council (HCC) is responsible for school placements. Comments received in response to the Core Strategy Issues and Options consultation highlighted the need to ensure that the development strategy takes account of the ability of HCC to plan for suitable education provision, both in terms of existing school capacity and potential to expand schools.

2.4.3 Because the preparation of the LDF (District Plan) is a 'stepped approach', this overview also sets out how education will be dealt with under later steps.

School Place Planning

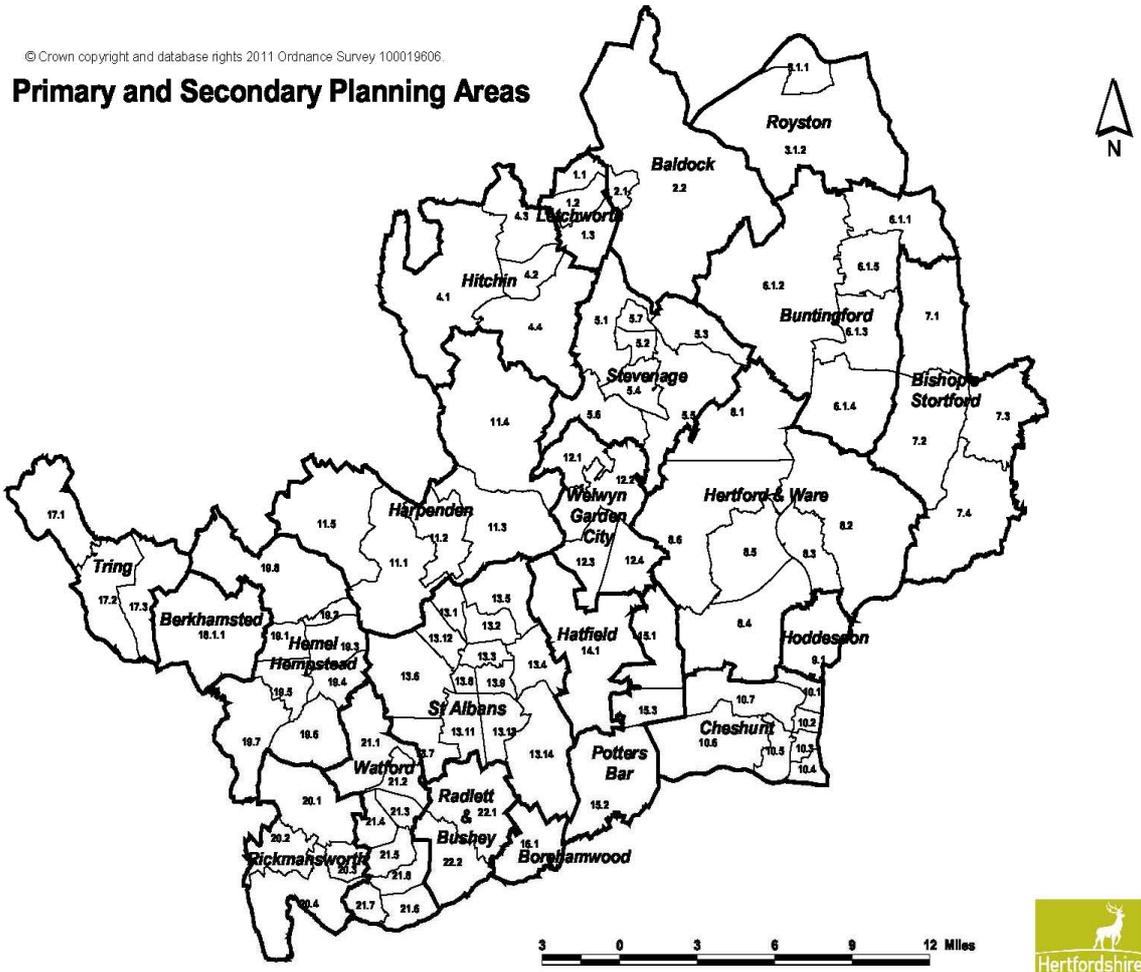
2.4.4 School place planning is based on ensuring that current and future supply is in line with forecast demand³⁸. It assumes an average 'pupil yield' from new developments: i.e. the likely number of school children requiring school places in a particular area. HCC predicts that in East Herts, an allowance of 42 primary pupils and 38 secondary pupils per 100 dwellings (phd) needs to be made. In Bishop's Stortford there is evidence, based on recent developments in the town, to suggest that yields of 20 to 38 phd at primary and 18 to 34 phd at secondary could be expected.

2.4.5 School provision is often described in terms of 'Forms of Entry' (FE). One Form of Entry (1.0FE) equals 30 places per year group. In East Herts, based on the above pupil yields, 1.0FE will be required for every 500 to 850 dwellings when calculating the school requirements from new developments.

2.4.6 HCC is a commissioner of school places, not a provider. School places are commissioned from a wide range of providers in the state funded sector which include community, foundation, trust, voluntary controlled and voluntary aided schools, academies and potentially free schools. HCC engages with the full family of schools across an area to ensure sufficient school places are available to meet demand.

- 2.4.7 HCC is the admission authority for all voluntary controlled and community schools. All other schools (e.g. faith schools, foundation, voluntary aided schools and academies) are their own admitting authority and as such, determine their own admissions rules. HCC coordinates admissions to all maintained schools and academies in Hertfordshire. Many schools have more applications than there are places available. When schools are oversubscribed a set of admission criteria (rules) are used by the school's admitting authority to decide which children should be offered places. Different schools have different admission rules.
- 2.4.8 School planning areas are used to inform decisions around school place planning and are the basis of HCC pupil forecasts. Figure 2.3 (below) shows the primary and secondary education planning areas for Hertfordshire (the thick lines delineate the secondary areas). In East Herts there are three secondary planning areas (Bishop's Stortford & Sawbridgeworth, Hertford & Ware, and Buntingford), and 17 primary planning areas (Bishop's Stortford, Buntingford, Hertford, Sawbridgeworth, Ware, The Pelhams, The Hadhams, Watton District North, Ware Villages, Hertford South Villages, Watton District South, Stevenage South East Villages, Puckeridge, Anstey, Hormead, Braughing and Walkern).
- 2.4.9 The majority of the district is covered by a two tier education system (primary and secondary). However, there is a three tier education system (first, middle and upper schools) operating in the Buntingford area, which includes Puckeridge. Anstey, Hormead, Braughing and Walkern also operate within the three tier system and each has their own planning area.
- 2.4.10 HCC works to ensure wherever possible that school places are provided where they are required to meet local demand, and do so in consideration of both parental preference and analysis of where pre-school aged children live in an area.
- 2.4.11 One of the most challenging roles for a local authority is to ensure that there is always sufficient and suitable education provision for all of its children and young people. HCC has a statutory duty to ensure a school place is offered to every child who applies for one. It is therefore essential that the development strategy for East Herts properly considers the impact of growth upon the statutory duty of the County Council to provide school places.

Figure 2.3: Primary and Secondary Planning Areas



Primary School Provision

- 2.4.12 Primary schools typically have 7 year groups from reception through to Year 6; therefore a 1.0FE school has $30 \times 7 = 210$ pupils. Many primary schools also have a nursery class, typically with 30 places.
- 2.4.13 HCC policy is to provide 2.0FE primary schools where possible for operational reasons, with 420 pupils (plus nursery). There are also variations in provision, such as in rural areas where schools are often smaller than 2.0FE.
- 2.4.14 To assist in informing the decision on which development strategy would be the most appropriate, HCC has provided information indicating both areas where there is existing capacity, and therefore additional development may not be an issue for school place planning, and those areas where there is no capacity, and whether or not it would be possible to address these issues.

- 2.4.15 In summary, generally the primary schools to the north of the district could accommodate more children, if new housing development was to take place in this location. Primary schools to the south of the district have limited existing capacity to accommodate additional need arising from new development. In Hertford a shortage of 2.0FE is forecast in the short term.
- 2.4.16 If required the development strategy will identify where any new primary schools would need to be. Primary schools should ideally meet the following criteria:
- 2.5 hectares site size
 - Sustainably located
 - Flat site
 - Accessible to pedestrians (less than 2 miles along safe routes) and vehicles
 - Free from site constraints

Middle and Upper School Provision

- 2.4.17 Middle schools have 5 year groups, from Year 5 through to Year 9. An Upper school has 4 year groups, from Year 10 to Year 13. There are two middle schools in the district – Edwinstree C of E in Buntingford and Ralph Sadleir in Puckeridge. Freman College in Buntingford is an Upper School and has 7.0FE.
- 2.4.18 Current forecasts are showing a 0.5FE deficit in the middle schools in Buntingford and Puckeridge. There is also currently a shortfall of 2.0FE in Freman College. If significant levels of development are to occur in the Buntingford area early discussions will be needed with HCC to ensure education provision.

Secondary School Provision

- 2.4.19 Secondary schools have 5 year groups, from Year 7 through to Year 11. A typical Hertfordshire secondary school has between 5.0FE and 8.0FE; therefore a 5.0FE school will have $30 \times 5 \times 5 = 750$ compulsory age pupils. Many schools also have sixth forms, with lower and upper year groups. HCC policy is to provide secondary schools of between 6.0FE and 10FE where possible, for operational reasons.
- 2.4.20 The strategy for expanding secondary provision in the Bishop's Stortford and Sawbridgeworth planning area includes the proposed relocation of the two single sex schools, Bishop's Stortford High School and Herts & Essex High School, to the Whittington Way site in the south of the town. This is currently subject to a planning appeal. The Secretary of State's Decision is not

expected until 24 April 2012. Expansion is required to meet forecast demand for places in the area. New development will add to the demand already identified.

2.4.21 In the Hertford and Ware planning area there is a forecast deficit of 2.0FE (from 2017/18). Any development that adds to this would require further discussion to develop a strategy to deal with this and further housing.

2.4.22 If required the development strategy will identify where any new secondary schools would need to be. Secondary schools should ideally meet the following criteria:

- 13-15 Hectares site size (c.4 ha will typically be built development and include hard play and parking areas)
- Sustainably located
- Flat site
- Accessible to pedestrians, vehicles and public transport
- Free from site constraints

Education Next Steps

2.4.23 The above standards set out HCC's preferred model of provision. The Government has recently introduced new policy which allows the setting up of free schools. They are not governed by the same standards as community schools, and may be lower in terms of spatial provision. HCC must, however, continue to seek provision of schools to Department for Education (DfE) standards. Information on the costs of providing new schools and funding mechanisms will be provided in the Infrastructure Delivery Plan.

2.4.24 Education will be dealt with through the next steps in the preparation of the development strategy as follows.

2.4.25 *Step 3: Topic Assessments* – will assess whether or not existing schools are forecast to have sufficient spare places to accommodate the additional pupils generated by development in an area of search; and whether or not existing schools can be expanded to provide any additional capacity.

2.4.26 *Step 4: Areas of Search Assessments* – will consider any other relevant information for the areas of search in relation to all the topic assessments carried out under Step 3 along with relevant technical studies. For example, an area of search may perform well in terms of land availability, but may have insurmountable issues regarding education provision.

- 2.4.27 *Step 5: Scenario Testing* – will examine the cumulative issues of a number of different strategy scenarios in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 3 and 4. This step will be key in determining whether or not a new school site/s will be required during the plan period.
- 2.4.28 *Step 6: Preferred Strategy* – will set out the draft strategy and policy approach to education provision.

Education References:

³⁸ HCC's current strategy for provision of education is set out in the document 'Meeting the Rising Demand for School Places' - <http://www.hertsdirect.org/services/edlearn/aboutstatesch/risingdemand>. This document is updated on a regular basis.

2.5 Transport

Scope of this Overview

2.5.1 This overview sets out how transport issues will be dealt with in respect of the development strategy. The key transport issues are considered to be:

- Route Hierarchy and Connectivity
- Sustainable Transport
- Park and Ride
- Rural Accessibility
- Aviation

2.5.2 Other transport related issues, including many raised through the Core Strategy Issues and Options Consultation in 2010, are also discussed. Because the preparation of the plan is a 'stepped' approach, this overview also sets out how transport issues will be dealt with under later steps.

Background

2.5.3 Transport is an important issue for development plan-making in East Herts, due to the need for people to achieve access for work, shopping, education, health and leisure purposes. It is therefore crucial that the appropriate infrastructure is in place in the district to ensure that those journeys will be able to be made. Due to the dispersed nature of the district's settlements and complex journey patterns, car borne traffic is likely to continue to be the most used transport mode. The aim of any development strategy for the district should be to ensure that choices made on the location of future development, will enable sustainable transport modes to make a more significant contribution to travel patterns in the future.

The National Context

2.5.4 Any local planning policy for transport must be compliant with national government policy. Currently, revised Planning Policy Guidance Note 13³⁹ provides advice in this respect. However, the draft *National Planning Policy Framework* (NPPF)⁴⁰ is shortly expected to supersede this advice. The draft NPPF states, within its section on Core Planning Principles (paragraph 19), that "planning policies and decisions should actively manage patterns of growth to make the fullest use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable".

2.5.5 The draft NPPF acknowledges the variance between urban and rural communities and that differing solutions will be required in these locations in

respect of opportunities to maximise sustainable transport solutions and balancing the transport system in favour of those modes.

2.5.6 The draft NPPF's specific objectives for transport policy are to:

facilitate economic growth by taking a positive approach to planning for development;
and support reductions in greenhouse gas emissions and congestion,
and promote accessibility through planning for the location and mix of development.

2.5.7 While the final version of the NPPF may be subject to revision in terms of transport, it is considered likely that the overall approach to national policy will continue.

2.5.8 The National Infrastructure Plan⁴¹ and Investment in Highways Transport Schemes⁴² provide summaries of the current state of nationally strategic transport projects and details the areas of expenditure that the Government intends to support. However, these are largely related to major infrastructure schemes that will have little or no direct impact on East Herts.

Local context

2.5.9 At the local level, Hertfordshire County Council (HCC) is the Highway Authority for the area and has the prime responsibility for transport provision in the district. Therefore, it should be recognised that there are limitations to the extent of direct involvement in transport provision that the district council has, although it does have an influence through the planning system in respect of development proposals.

2.5.10 The Local Transport Plan (LTP) 2011-2031⁴³, published by HCC in April 2011 and supported by a suite of daughter documents, is the main delivery vehicle for transport in the county. Urban Transport Plans (UTPs) are developed in partnership with district and borough councils for the larger towns in the county and set out a framework to focus transport improvements within a specific geographical area to cover a 15 to 20 year period. For East Herts, the Hertford and Ware UTP⁴⁴ is already in place, with the Bishop's Stortford and Sawbridgeworth UTP currently being under development. Schemes within these Plans are important considerations in new developments.

Modal Hierarchy Principles

2.5.11 Hertfordshire County Council has introduced a Route User Hierarchy for its Urban Transport Plans. This gives priority consideration for users in the following order:

- pedestrians;
- cyclists;
- mobility impaired;
- public transport;
- car; and
- HGV.

2.5.12 New development proposals should be based on this hierarchy. However, in terms of serving such developments, it is recognised that it is necessary to plan for the availability of suitable road infrastructure – not only for the use of private motorised transport but also for passenger transport provision and to enable connections to wider route networks and to support the local economy.

Route Hierarchy and Connectivity

Motorways and national routes

2.5.13 The road network in the district is limited in terms of nationally strategic routes. Although the A1(M) runs to the west of the district and the M11 to the east, within East Herts the A10 is a comparatively less important north-south de-trunked road serving only other A-roads such as the A120, A507 and A602. Although the M25 runs to the south of the district, there are few east-west routes within East Herts, the principal one being the A414 in the south of the district, which links the A1(M) to the M11. While these nationally important motorways are beyond the district boundaries, they do have an effect on travel patterns within the district, and likewise any large-scale development within the district may also have a knock-on impact on capacity levels for these strategic roads.

2.5.14 The Highways Agency is responsible for motorways and trunk roads. Although it has no coverage for roads in East Herts, it is concerned with levels of development in the district in terms of long-term impact. This is especially true of the A1(M), where there are existing capacity issues and no provision for upgrades in the current Comprehensive Spending Review (2010-2014)⁴⁵. There is also doubt that the following Review will contain provision either. As the Highways Agency does not expect to cater for unconstrained traffic generated by new development proposals, it therefore considers that in respect of LDF Core Strategies, development should be promoted at sustainable locations and that demand management measures be incorporated in development proposals; most notably measures to manage car use.

Road Hierarchy Principles

2.5.15 In Hertfordshire, there is a specific hierarchy for roads, based on intended function; the aim of which is to ensure that traffic is concentrated onto those

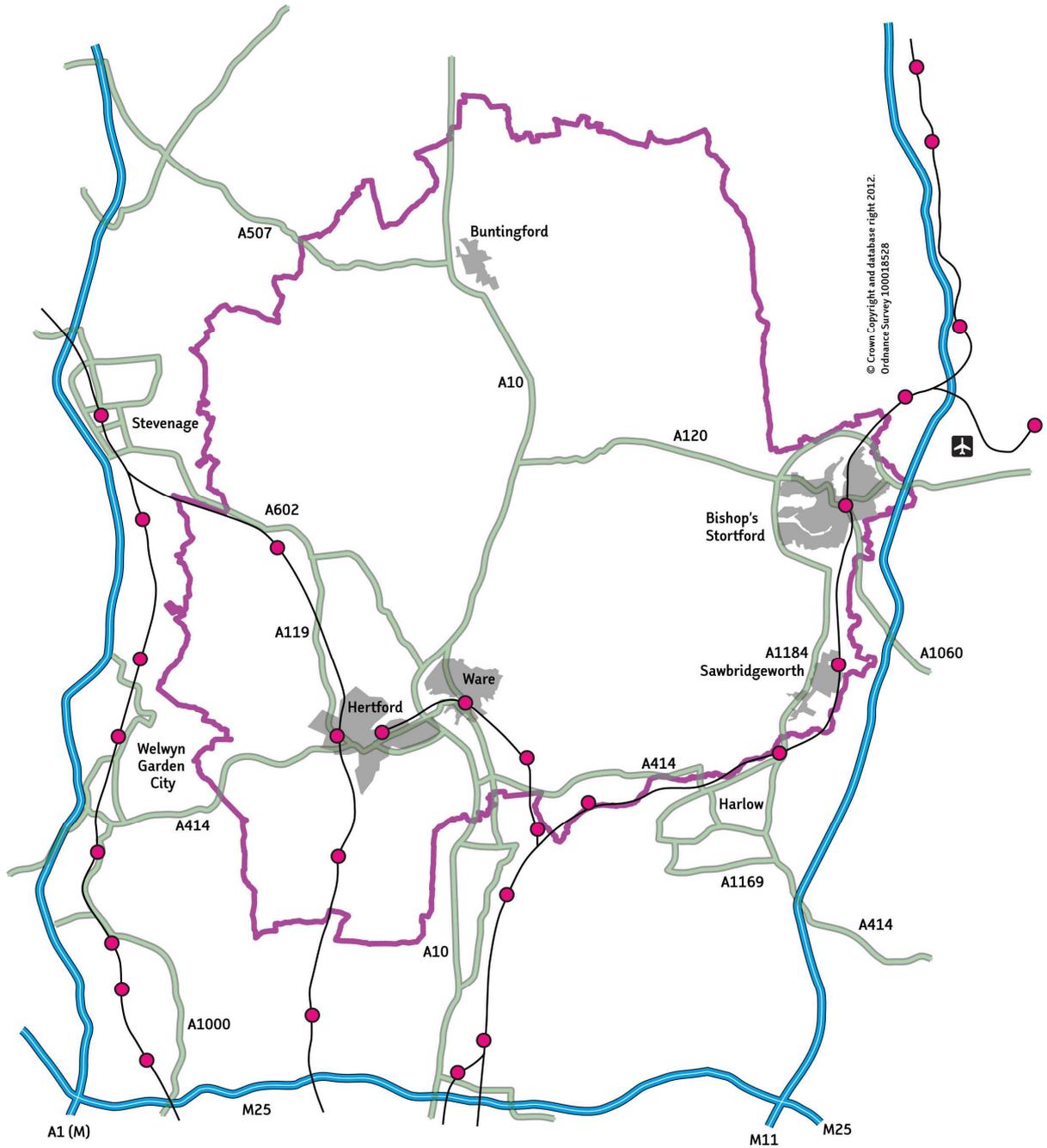
roads that are most suitable for journey purpose. The road hierarchy consists of:

- Primary Roads;
- Main Distributor Roads;
- Secondary Distributor Roads;
- Local Distributor Roads; and
- Access Roads (Major, Minor and Shared Surface).

2.5.16 The Primary Route Network in East Herts comprises the A10, A120, A414 and A602. In considering the location of any new development, direct access from any of these roads would not normally be supported as this would be contrary to HCC policy⁴⁶ on new connections to primary routes. This is because they could lead to a detrimental impact on traffic that is using those routes to access wider destinations. It should also be noted that there is a further concern that, depending on the mix of uses, development on such routes could attract amounts of externally generated trips for other uses (e.g. employment or retail).

2.5.17 Future connections to the local network, in conjunction with proposed development, will be dependent on many factors. The ability of the road network to accommodate the additional number of trips generated will be a major issue for consideration. In some cases additional infrastructure provision may be necessitated (for both physical improvements to the road network and to enable passenger transport enhancements). In such cases, it is likely that these improvements will need to be financed through development, in order to enable their provision as, in the current economic climate with stretched resources, it is unlikely that public finance would be available to fund significant new infrastructure proposals. It should also be noted that Hertfordshire County Council is in the process of developing an Inter Urban Route Strategy, as a daughter document to the LTP. This covers key corridors linking the urban centres within the County and across the borders to neighbouring authorities. It will inform the development strategy and may help address existing deficiencies e.g. east-west travel.

Figure 2.4: Rail connections, Primary Road Routes, 'A' roads and links to strategic road network



Sustainable Transport⁴⁷

2.5.18 East Herts is an area with high car ownership^{48q} and this is partly due to the dispersed settlement pattern of the district and the level of passenger transport services in some areas failing to provide suitable journey alternatives. People's movement patterns are not necessarily linked to where they live as suitable opportunities for employment, education, shopping and other services may not be readily available in their locality; therefore it is recognised that it may not always be possible for journeys to be made other than by private motor vehicle. There are also significant dormitory commuting patterns in the district^r. It is recognised that this trend of high car ownership is likely to continue and it would be unreasonable to restrict it. The aim of any transport strategy should be to encourage the use of sustainable transport modes, to be used for journeys in preference to private motor vehicles, where possible to address service deficits and help minimise greenhouse gas emissions and congestion. Therefore, the development strategy should aim to provide locally self-sustaining communities, but also offer the ability for as many people as possible to access services (which may also be beyond the district boundaries) by sustainable transport modes.

2.5.19 To achieve these aims it is crucial that existing passenger transport services are maintained and that these be supplemented by additional provision to ensure as wide coverage as possible in the district.

Bus Services

2.5.20 The majority of bus services in Hertfordshire are run on a commercial basis by bus companies. Hertfordshire County Council subsidises approximately 30% of overall services to help fill gaps in the commercial network. Due to restricting budgets, it is likely that most new service provision will either have to be commercially self-financing or be totally funded via development led contributions. Therefore, the ability of developments to economically support frequent and reliable services, either through enhanced existing services or new specific provision where necessary, will be crucial in helping to ensure sustainable communities in the district are delivered and will be a matter of Strategy. Matters concerning details of provision will be covered in Allocations and Policies.

^q According to the 2001 Census, approximately 87% of households have access to a car or van compared to the national average of 73%; while around 47% of households in the district have access to two or more cars or vans, which is considerably above the national average of 36%.

^r According to the 2001 Census, over 50% of the working population is employed outside the district. Around 17% of the working population commute to either inner or outer London.

Trains

- 2.5.21 Various rail services operate through the district utilising two lines into London, which serve Kings Cross/Moorgate and Liverpool Street stations. Route Utilisation Strategies (RUSs) are developed by Network Rail with the purpose of seeking to balance capacity, passenger and freight demand, operational performance and cost, while addressing the requirements of funders and stakeholders. RUSs can identify where deficiencies in the network exist and suggest measures to help redress shortfalls in infrastructure and service provision. Network Rail takes account of the recommendations of RUSs when carrying out its activities. In particular, they are used to help inform the allocation of capacity on the network. East Herts is affected by measures contained in several RUSs⁴⁹ and various schemes have been identified within them that could impact on service delivery in the district. However, notwithstanding the cost of provision, due to the many competing demands for limited capacity, it is not possible for Network Rail to provide for all identified schemes. Therefore, while some schemes have projected delivery timescales within certain control periods and some are categorised as uncommitted, others are not shown as being supported at this stage. It should also be noted that a number of schemes that offer benefit to some lines and services, may have a detrimental effect on other areas. The East Coast Main Line 2016 Capacity Review has likewise identified that the demand for paths exceeds the capacity available, and that without any tradeoffs in journey times or service specifications, there will be limited opportunities to increase the number of train services, after the completion of committed infrastructure interventions.
- 2.5.22 Issues highlighted in the RUSs of particular note for East Herts include: station/platform capacity issues (both at points of origin and destination); frequency of service; identified peak crowding; and forecast growth on inner suburban services, notably the Hertford Loop. In particular, the July 2011 London and South East RUS forecasts a significant increase in the numbers of commuters using National Rail services into the capital during the weekday morning peaks.
- 2.5.23 Within the RUSs several improvements for services in East Herts have been identified. Some of these have already been implemented, including (in December 2011) more capacity to Bishop's Stortford and Hertford East stations as trains became freed up by the arrival of the new trains elsewhere on the West Anglia network coupled with timetable improvements.
- 2.5.24 Many other potential improvements have been identified, including platform lengthening; increasing the number of carriages on trains; some faster journey times; and additional peak time services. Of particular significance is the potential for additional services on the Hertford Loop line into

Moorgate, to allow a frequency increase to 10 trains per peak hour, following completion of the Thameslink programme (as this scheme involves rerouting many services elsewhere that currently stop at Welwyn Garden City).

- 2.5.25 Regarding further rail infrastructure provision in the future, it is improbable that any significant infrastructure proposals (e.g. new lines or stations) will be provided in the district, within the Plan period beyond the more limited measures included in the RUSs, as there is unlikely to be enough critical population mass to support such schemes and be economically viable. This is also likely to be the case for potential schemes involving ultra light rail, trams and guided busways. These schemes usually serve much larger conurbations than the settlements in East Herts, rely on heavy usage to make them financially viable, and are extremely expensive to provide^s.
- 2.5.26 All of the above issues in relation to the potential for future passenger transport infrastructure provision will inform the development strategy.

Other Passenger Transport Initiatives

- 2.5.27 In addition to “traditional” passenger transport mechanisms (buses and trains), there are various additional schemes that supplement this provision and help extend the options available to users. These non-statutory initiatives are supported by various funding mechanisms and are often restricted in the clientele that they serve. They include, but are not restricted to: taxis; Dial a Ride^t; WRVS Good Neighbour Scheme^u; Hertfordshire Action on Disability^v; Buntingford Action for Social Help^w; and the Barbara Bus Fund^x.

Park and Ride

- 2.5.28 Many Park and Ride (P&R) facilities have become established in recent years and there are now over 100 bus based P&R sites throughout the UK. P&R at rail, light rail and underground stations also form part of the country’s sustainable transport offer. A 2007 report⁵⁰ looking into P&R nationally showed that a number of towns with populations of between 45,000 and

^s The Cambridge Guided Busway (25km of dedicated busway within 40km total route length) is believed to have cost £180.7m by its opening in August 2011.

^t Door to door transport service for the elderly or people of any age, including children, who have difficulty travelling due to permanent disability or illness.

^u Community Car Scheme providing door-to-door travel to hospitals, doctors or clinics.

^v Transport Service providing fully accessible transport 24 hours a day 365 days a year and accessible vehicle hire.

^w Voluntary transport scheme for health related journeys for people from Buntingford and the surrounding villages who lack their own means of travel and who are unable to use public transport.

^x Small fleet of adapted vehicles for those dependent on a wheelchair and cannot transfer to use cars, taxis or public transport.

85,000 have P&R; larger towns and cities of 90,000 population plus often have more than one P&R site; and consideration is being given for P&R to be introduced in some smaller towns with populations of less than 45,000.

- 2.5.29 To date, no P&R facilities have been provided in East Herts, although the Hertford and Ware Urban Transport Plan examines in simplistic terms the potential for a shared facility to be provided to serve both towns, should the population base in the area increase and economic viability be established in the future. The likelihood of the provision of such schemes anywhere in the district in the future would be largely reliant on critical user mass to secure long-term financial viability. Therefore, the finally selected development strategy could prove crucial in this respect.

Rural Accessibility

- 2.5.30 A large proportion of East Herts lies outside of urban settlements within a rural context. The differing sizes and dispersed nature of the settlements within district results in big variations in the provision of passenger transport services for the rural population. Some rural residents have very limited transport choices and therefore suffer “transport deprivation”. This is especially true of those people with no access to private motorised transport and can particularly include those on low income, young people, older people and those with disabilities. It is important that the development strategy for the district should not exacerbate this situation and should, where possible, seek to improve modal choice.
- 2.5.31 Hertfordshire County Council is in the process of developing a Rural Transport Strategy, which is expected to set out measures aimed at addressing the shortfall in transport provision in locations outside the urban areas. As a daughter document to the LTP, any future transport strategy within the LDF (District Plan) should comply with the final contents of this document.

Aviation

- 2.5.32 While there are no airports within East Herts, the district is affected by the very close proximity of Stansted (in Essex), and to a lesser extent by Luton (in Bedfordshire).
- 2.5.33 Stansted, in particular, has potential impacts for the district; both positive, in terms of immediacy to air travel and employment opportunities, and negative, in terms of traffic generation, noise, and air quality issues. As the fourth busiest airport in the UK (third busiest in London), it attracted 18.3 million passengers in 2011 and has permission to grow to 35 million per annum. In seeking to mitigate its impact on the area, Stansted Airport has produced both a Noise Strategy Access Plan⁵¹ and a Surface Access Strategy⁵².

Approximately 49% of passengers currently use public transport to travel to and from the airport⁵³. The Government has previously declared against additional runway provision at Stansted.

2.5.34 Luton Airport is developing proposals to increase the capacity of the airport to handle 18 million passengers per annum, up from the current 11.5 million. It aims to achieve this within the airport's current boundary and using its existing runway. Should such proposals proceed, issues and concerns relate to the provision of adequate and timely surface access infrastructure, increased over-flying of East Herts and night flights.

2.5.35 It should be noted that a comprehensive review of the UK's aviation needs is due to be undertaken in 2012. Depending on the recommendations of this review, there could potentially be implications for the district that would need to be taken into account in the development strategy. Likewise, NATS' consideration of appropriate future flightpaths for both airports may be an issue to be taken into account.

Non strategic issues

2.5.36 While the Strategy is concerned with issues of strategic importance and all the matters discussed above are considered to fall into that category, there are other transport related matters that, although important in their own right, do not meet this criterion. Examples of such non-strategic issues include:

- Travel Plans
- Car parking standards, restrictions and charges, car sharing
- Electric and other sustainable fuelled vehicles
- Cycling provision
- Pedestrian provision
- Aviation mitigation
- Waterways and towpath routes
- Traffic calming
- Passenger transport new specific initiatives (e.g. community buses) and minor infrastructure improvements
- Other transport issues relating to development management considerations.

2.5.37 It is intended that these matters will be considered within the Allocations and Policies sections of the Plan.

Transport Next Steps

- 2.5.38 *Step 3: Topic Assessments* – in terms of transport, these will assess areas of search in relation to: the potential need for highways infrastructure; vehicular access requirements; and, the likely availability of those areas to access passenger transport provision.
- 2.5.39 *Step 4: Areas of Search Assessments* – these will consider any relevant information for the areas of search in relation to all the topic assessments carried out under Step 3 along with relevant technical studies, responses to the Issues and Options consultation, and other pertinent matters. For example, in relation to transport matters, an area of search may perform well in terms of highways infrastructure and vehicular access issues, but may score poorly in terms of access to bus and rail services.
- 2.5.40 *Step 5: Scenario Testing* – will examine the cumulative effects and issues for a number of different strategy scenarios in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 3 and 4. Liaison with the Highways Agency, Highway Authority, Bus and Train operating companies and certain transport modelling and will be carried out at this stage.
- 2.5.41 *Step 6: Preferred Strategy* – will set out the draft strategy and policy approaches in relation to strategic transport provision in the district.

Transport References:

³⁹ Planning Policy Guidance 13: Transport, Department for Communities and Local Government, first published March 2001, updated January 2011
<http://www.communities.gov.uk/publications/planningandbuilding/ppg13> (viewed 24 February 2012)

⁴⁰ Draft National Planning Policy Framework, Department for Communities and Local Government, July 2011
<http://www.communities.gov.uk/publications/planningandbuilding/draftframework> (viewed 24 February 2012)

⁴¹ National Infrastructure Plan, HM Treasury, November 2011 http://www.hm-treasury.gov.uk/national_infrastructure_plan2011.htm (viewed 24 February 2012)

⁴² Investment in Highways Transport Schemes, Department for Transport, October 2010
<http://assets.dft.gov.uk/publications/investment-in-highways-transport-schemes/highways-transport-schemes.pdf> (viewed 24 February 2012)

⁴³ Local Transport Plan 2011 - 2031, Hertfordshire County Council, April 2011
<http://www.hertsdirect.org/services/transtreets/transplan/ltp/LTP3/ltp3docs/> (viewed 24 February 2012)

⁴⁴ Hertford and Ware Urban Transport Plan, Hertfordshire County Council, November 2010
<http://www.hertsdirect.org/services/transtreets/transplan/tcatp/handwutp.pdf> (viewed 24 February 2012)

⁴⁵ http://cdn.hm-treasury.gov.uk/sr2010_completereport.pdf (viewed 24 February 2012)

⁴⁶ Local Transport Plan 2011 - 2031, Volume 2: Policy Document, Hertfordshire County Council, April 2011 (3.20 Road Hierarchy and Network Development) <http://www.hertsdirect.org/docs/pdf//ltp3vol2policydoc.pdf> (viewed 24 February 2012) and Roads in Hertfordshire: A Design Guide, 3rd Edition, Hertfordshire County Council, January 2011 <http://www.hertsdirect.org/services/transtreets/transplan/infdev/roadsinherts/> (viewed 24 February 2012)

⁴⁷ Delivering Sustainable Transport for Housing Growth: Case studies from Local Communities, Department for Transport, December 2010. Available via National Building Specification website: <http://www.thenbs.com/PublicationIndex/DocumentSummary.aspx?PubID=172&DocID=296116>

⁴⁸ 2001 Census, Key Statistics, Office for National Statistics, <http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=276992&c=east+hertfordshire&d=13&e=15&g=454150&i=1001x1003x1004&m=0&r=1&s=1330100783085&enc=1&dsFamilyId=51> (viewed 24 February 2012)

⁴⁹ East Coast Main Line RUS, Network Rail, February 2008;
East Coast Main Line RUS, 2016 Capacity Review, an addendum to the East Coast Main Line RUS, Network Rail, December 2010;
East Coast Main Line RUS, Update, Network Rail, 2011
Greater Anglia RUS, Network Rail, December 2007
Greater Anglia RUS, Update, Network Rail, 2010
London and South East RUS, Network Rail, July 2011
All available at: <http://www.networkrail.co.uk/aspx/4449.aspx> (viewed 24 February 2012)

⁵⁰ Park & Ride Great Britain, 2007, TAS Publications, 2007
<http://www.taspublications.co.uk/content/park-a-ride> (viewed 28 February 2012)

⁵¹ Building on a sound foundation, Stansted Noise Strategy and Action Plan (2010 – 2015), Stansted Airport, June 2011
http://www.stanstedairport.com/static/Stansted/Downloads/PDF/STN_Noise_Action_Plan.pdf (viewed 28 February 2012)

⁵² Leading the way forward Airport Surface Access Strategy - Review 2010, Stansted Airport, December 2010
http://www.stanstedairport.com/static/Stansted/Downloads/PDF/STAL_ASAS_Summary_Web.pdf (viewed 29 February 2012)

⁵³ CAA data <http://www.stanstedairport.com/about-us/stansted-facts-and-figures> (viewed 29 February 2012)

2.6 Water

Scope of this Overview

2.6.1 This overview sets out how water-related issues will be dealt with in respect of the development strategy. The key water-related issues are considered to be:

- Flood Risk
- Water Demand, Water Supply, and Water Quality
- Water Supply Infrastructure
- Waste Water Infrastructure

Flood Risk

2.6.2 East Herts Council has a Strategic Flood Risk Assessment (SFRA)⁵⁴ which was produced with the close involvement of flood experts at the Environment Agency. The SFRA explains and where possible, maps the following flood risks in East Herts:

- **Fluvial (river) flooding:** caused by rivers bursting their banks. Based on river modelling and historical records, four main flood Zones are identified. (Zone 1: Low Probability; Zone 2: Medium Probability; Zone 3a High Probability; Zone 3b: The Functional Floodplain). National policy prescribes which types of development are appropriate within each zone. Climate change is expected to exacerbate flood risk and national guidance requires a 20% allowance for climate change impacts over and above the Flood Zones. The 2012 update to the SFRA includes new modelled flood outlines.
- **Sewer flooding:** due to blocked drains. Records collected by East Herts Council's Drainage Team and recorded in the Flood Incident Database;
- **Surface water flooding:** follows intense rainfall where water cannot soak into the ground or enter drainage systems. Records collected by East Herts Council's Drainage Team and recorded in the Flood Incident Database;
- **Groundwater flooding:** during wet winters ground water may rise to affect low-lying areas. Records collected by East Herts Council's Drainage Team and recorded in the Flood Incident Database.;
- **Artificial sources of flooding:** where flood defence infrastructure fails, for example dam or bank failure, or blocked storm grilles. A map

showing Areas Benefiting from Defences and storm grilles is included in the SFRA;

- **Residual Risk:** remaining risks relating for example to, uncertainties associated with flood risk modelling, overtopping of defence infrastructure resulting from extreme weather events, etc;
- **Critical Infrastructure:** for emerging planning purposes the SFRA reviews the risk of extreme flood events, including major roads which could be affected, and risk to sewerage infrastructure, schools and nursing homes.

2.6.3 The SFRA includes a number of recommendations for the strategic level of planning work. These respond to the Thames Catchment Flood Management Plan⁵⁵, which provides a long-term strategic overview of flood risk management including the Environment Agency's investment plans. These are addressed in the 'next steps' section below. The remainder of the recommendations will be addressed through a combination of work by applicants at specific sites, through the development management process, and through the development of appropriate district policies. The Green Infrastructure Strategy will set the context for further work to river corridors, and new policies on Sustainable Urban Drainage Systems (SUDS) will seek to mitigate flood risk at development sites and downstream. East Herts Council will continue to work with the Environment Agency in respect of the SFRA recommendations, within the context of the Thames Catchment Flood Management Plan.

Water Demand, Water Supply, and Water Quality

2.6.4 It is essential to consider whether the amount of water currently available will be sufficient to provide for the planned growth, and to understand the environmental impact of water abstraction to cater for general consumption.

2.6.5 Veolia Water is the water supply company serving East Herts. East Herts lies within the company's Northern Water Resource Zone (WRZ), which includes Hertfordshire, Bedfordshire and Essex. Each zone is considered as a water grid within which water can be moved around to meet changing demand. Within the grid there are daily changes in the volume of water abstracted from each source and the direction of water flows. Therefore it is not possible to identify which source supplies any particular settlement, since this depends on need and the way the system is being operated at any given time.

2.6.6 As a guideline, around 60% of water consumed is abstracted through boreholes descending to the large chalk aquifer underlying the area. Around

40% comes from surface water, including rivers and reservoirs. The amount of water that can be taken from any individual source is controlled by the Environment Agency, which grants water abstraction licenses.

2.6.7 Development impact calculations and catchment capacity figures are contained within the *Rye Meads Water Cycle Strategy* (2008), which assumed the levels of growth given in the East of England Plan. In summary, total demand was calculated using best case, worst case and base case scenarios as follows:

- The **worst case** assumes that current daily per capita water consumption levels (150 litres) are carried forward to 2031. In this case, even allowing for the enhanced Building Regulations introduced in 2009 (to 125 litres) total demand will rise substantially from 2007 levels;
- The **base case** requires the implementation of a daily per capita consumption of 105 litres at new development, enacted through local planning policy (the government has no plans to require this through Building Regulations). In this case demand will increase slightly.
- The **best case** assumes the rollout of water metering to the existing population. Under this scenario, the total consumption of the catchment will actually reduce, despite significant growth within the area.

2.6.8 Veolia Water's current *Water Resources Management Plan (March 2010)*⁵⁶, has been agreed by the Environment Agency and OFWAT (the water regulator). The demand projections used in the plan are based on 90% rollout of water meters by 2030, leading to a reduction in daily per capita consumption of 132 litres by that date. Without metering, demand by the same date is forecast at 148 litres. Based on the assumptions about rollout of metering, the plan suggests that there is likely to be sufficient water to meet demand through to 2035 without developing new water resources, subject to the Environment Agency's licensing requirements for water abstraction. In reaching this conclusion Veolia acknowledges uncertainty around several variables, but has allowed a margin of error and remains flexible in its approach.

2.6.9 However, the Environment Agency has advised East Herts Council that the worst case scenario would be likely to have significant negative environmental impacts. Many of the district's Sites of Special Scientific Interest (SSSIs) and the Lee Valley Special Protection Area are water dependent and there is a risk that further development could result in negative impacts. Unless appropriate mitigation measures are taken,

strategic development would reduce the likelihood of meeting the ecological standards set out in the European Water Framework Directive⁵⁷.

- 2.6.10 The *Rye Meads Water Cycle Strategy* recommended that water efficiency targets would help to reduce the impact of development on water resources and water supply infrastructure, as well as the environment. The concept of offsetting water demand from new development by increased water efficiency and reduced demand in existing buildings is referred to as water neutrality. This allows water to remain in the environment for ecological and leisure purposes and negates the need for new resources such as reservoirs. The strategy suggested that “*water neutrality should always be the aim of Local Authorities, the water companies and developers*”⁵⁸
- 2.6.11 The Environment Agency has recommended that the Council introduce a water efficiency policy on the grounds that this will alleviate pressure on the chalk aquifer and therefore will have a beneficial impact on river flow levels and water quality.
- 2.6.12 Whether this requires a strategic policy or a non-strategic policy will be considered as part of Steps 5 and 6. It is likely that such a policy would need to be subject to viability assessment as part of the planning requirements, alongside other items such as Community Infrastructure Levy and Affordable Housing.

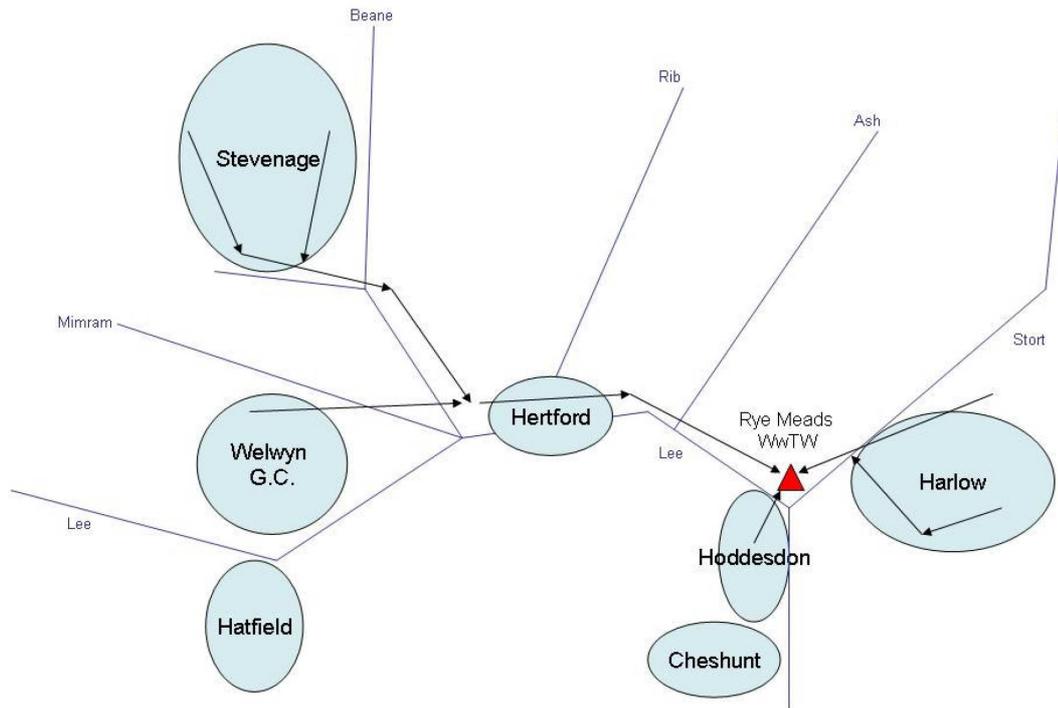
Water Supply Infrastructure

- 2.6.13 Veolia Water’s network of infrastructure and pipes has been designed to be suitable for existing developments with a limited amount of spare capacity to accept incremental growth.
- 2.6.14 Where large scale development is required, the network may need infrastructure improvements to be made to ensure that the new developments have an appropriate supply network, and that existing customers do not experience deterioration in service.
- 2.6.15 Veolia Water plans for new infrastructure as new development sites are planned and applications made. The company then works with developers to ensure that new infrastructure needed is appropriate for the developments proposed and that developers help to fund the new infrastructure needed. It is impossible for Veolia Water to give accurate information on the type and cost of infrastructure needed until detailed plans for new developments have been completed.

Waste Water Infrastructure

- 2.6.16 The main strategic sewerage and sewage treatment issues in the district relate to the capacity of the Rye Meads treatment works, located in the far south of the district and to the capacity available in some of the main trunk sewers. The catchment area served by Rye Meads is shown in Figure 2.5 below:

Figure 2.5: Rye Meads sewerage network schematic



Source: *Rye Meads Water Cycle Strategy* (2008)

- 2.6.17 Rye Meads treatment works was built in the 1950s to serve the New Towns of Harlow and Stevenage. Existing settlements in the catchment area were connected to the sewer network, resulting in the closure of local sewage treatment works in the catchment area. In total Rye Meads serves the equivalent of over 400,000 people, which includes trade effluent, for example from Stanstead airport (runway de-icer) and industry within Harlow. Predicting flows from these latter sources can be especially difficult, as businesses may open or close without warning.
- 2.6.18 The sewerage network is gravity-based, which means that waste water falls to the lowest point in the network without the need for pumping, which is prohibitively expensive over large areas and has negative environmental impacts in terms of increased fossil fuel use and associated carbon emissions.

- 2.6.19 A consequence of the gravity-based system is that Rye Meads is sited in the middle of a wide floodplain. The floodplain is attractive to a wide variety of birds, and in recent years the areas adjacent to the treatment works have been designated as a Site of Special Scientific Interest (SSSI) and a Ramsar site.
- 2.6.20 These environmental designations mean that there are significant constraints to expansion of the capacity of the treatment works to cater for the level of development within the catchment under the East of England Plan (70,000 dwellings to 2021). Recognising these constraints, in 2008 the *Rye Meads Water Cycle Strategy*⁵⁹ was produced to investigate potential solutions in order to provide for future growth and development. The study suggested a number of possible options involving various infrastructure-based solutions, and suggested various issues for further investigation by Thames Water (the water company responsible for the sewerage network infrastructure).
- 2.6.21 Thames Water has continued to monitor capacity at Rye Meads treatment works. Since the study was commissioned, forecast volumes of treated effluent discharged to the river have been lower than were forecast at the time of the Rye Meads study⁶⁰. This is because of reduced consumption and also lower rates of housebuilding than were envisaged at the time. Difficulties with the West of Stevenage proposals are an example of this. Therefore concerns about capacity have somewhat receded over the next twenty year period. Whilst Thames Water continues to monitor the situation closely, it does not believe that there are sufficient grounds for refusing particular developments during the plan period due to capacity constraints at Rye Meads.
- 2.6.22 A second strategic issue is the capacity of the trunk sewer serving Stevenage, which runs along the Beane Valley from Bragbury End past Watton-at-Stone before entering the Lea Valley in Hertford. This sewer is of insufficient diameter to accommodate strategic growth around Stevenage, and therefore network upgrades in the form of a new trunk sewer are likely to be necessary. This may either run to the west of the railway line or along the line of the existing sewer. Given the uncertainty surrounding proposals west of Stevenage in North Herts, it is at present unclear how this might be funded.
- 2.6.23 Thirdly, in order to provide for strategic growth at Harlow, upgrades to the trunk sewer along the Stort Valley will be required. Thames Water suggests that strategic growth within Harlow District will on its own be sufficient to make this upgrade financially viable. Therefore there is more confidence about the viability of upgrades to this sewer than there is around upgrades to the Beane sewer.

- 2.6.24 East Herts Council has discussed with Thames Water the concept of localised sewage treatment such as low technology reed beds. These are not feasible for strategic developments, because they require a large area of land even for quite small scale developments, and require high levels of maintenance. A new local high technology treatment works is likely to be energy and carbon intensive to meet the required effluent standards.
- 2.6.25 The ability to upgrade or construct new treatment works depends on the ability to secure revised or new discharge consents from the Environment Agency and the likelihood that Thames Water can construct new treatment assets to meet the high standards of effluent quality that will undoubtedly be required.
- 2.6.26 Thames Water and the Environment Agency advocate the use of Sustainable Urban Drainage Systems (SUDs). These come in a variety of forms, the more sustainable types of which include grass swales and filter strips⁶¹. These have a variety of beneficial effects in terms of reduced flood risk, and they also free up capacity within sewers, which can be particularly important during and after periods of heavy or prolonged rainfall.

Water Next Steps

- 2.6.27 *Step 3: Topic Assessments* – a sequential test for flood risk will be undertaken using available flood risk mapping. Assessment of waste water impacts will be undertaken.
- 2.6.28 *Step 4: Areas of Search Assessments* – n/a
- 2.6.29 *Step 5: Scenario Testing* – work with the water companies to assess the cumulative impacts of various development scenarios. Work with the Environment Agency to assess the impacts on water quality and flood risk.
- 2.6.30 *Step 6: Preferred Strategy* – will consider water infrastructure issues necessary as part of the Infrastructure Delivery Plan. Deciding which policy areas are strategic and which can be addressed later in the preparation of the Local Development Framework (District Plan). Agree flood mitigation measures at particular locations.

Water References:

⁵⁴ See www.eastherts.gov.uk/sfra. The SFRA will be updated during 2012 to include new modelled flood outlines, surface water flood maps, groundwater flooding records, as well as updates on the national policy position.

⁵⁵ See <http://www.environment-agency.gov.uk/research/planning/33592.aspx>

⁵⁶ This is the Veolia Water Central area. See www.veoliawater.co.uk/media/wrmp/three-valleys-water.htm. The Overview (pages i to iv) provides a succinct summary. Pages

⁵⁷ See www.environment-agency.gov.uk/wfd. East Herts is located within the Thames River Basin District.

⁵⁸ Rye Meads Water Cycle Strategy, page 63

⁵⁹ See www.eastherts.gov.uk/watercycle

⁶⁰ Flow reports are available from Thames Water and from the Environment Agency

⁶¹ Further information on SUDS is contained within the East Herts SFRA
www.eastherts.gov.uk/sfra

2.7 Telecoms, Gas and Electricity

Scope of this Overview

2.7.1 This section introduces important infrastructure which will be needed for any new development. These are:

- Telecoms
- Gas
- Electricity

2.7.2 There are several National Policy Statements (NPS) on energy⁶². There is no nationally significant energy infrastructure in East Herts District. Provision of these utilities is largely a matter for the utility companies and developers. However, the Local Development Framework (District Plan) can provide an opportunity for early discussions around feasibility. Low and Zero Carbon energy is addressed in the 'Natural Resources' strategic overview.

Telecoms

2.7.3 As BT has a universal service obligation telecoms is never a barrier to scheme delivery. However some sites will not be commercially attractive to telecoms companies therefore limiting the choice of supplier. The National Broadband Strategy: "Britain's Superfast Broadband Future"⁶³ sets out the Government's vision for broadband in the UK, which is to ensure the UK has the best superfast broadband network in Europe by 2015. As part of this initiative a joint Local Broadband Plan for Hertfordshire and Buckinghamshire has secured £3m of Government funding to support the delivery of super-fast broadband. Those communities and associated premises which are in rural areas, where the market has indicated it will fail to deliver, are the priority for implementation of these monies.

2.7.4 Telecoms include provision for mobile-phone masts as well as cables. The physical pieces of infrastructure such as masts and telephone exchanges require planning permission, except in cases of permitted development. National policy provides guidance on this. The possibility of a telecommunications policy will be investigated further during the preparation of the Development Management Policies DPD (District Plan Part 2: Allocations and Policies).

Gas

2.7.5 The gas industry can be split into the infrastructure for production, transmission, distribution and metering and the supply of the gas.

- 2.7.6 Production infrastructure is a competitive market and includes the production and importing infrastructure of the major oil companies (e.g. BP/Shell). Gas transmission occurs through the National Transmission System (NTS) operated by the regulated monopoly of National Grid Gas. Three off-takes from the National Grid system supply the whole of the Hertfordshire area.
- 2.7.7 Local Gas Distribution Networks (GDNs) supply the gas from the transmission network to the consumer. GDNs prepare long term development statements (10 year periods – reviewed annually). Reinforcement Plans are produced annually. GDN investment plans cover 5 year periods and are based on consumer demand growth trends, known locations of capacity limitation and slow rollout into rural areas.
- 2.7.8 The cost of network infrastructure both on-site and off-site will be borne by developers. The gas company may wish to install strategic pipelines at an early stage of the developments and will recharge a proportion of the costs to each developer. National Grid will not install infrastructure on a speculative basis to serve potential developers and will need to enter into agreement with developers before any work is commenced. Ofgem (the gas and electricity regulator) will not accept the practice of speculative main laying as this would be seen as anti-competitive and against the interests of the consumer⁶⁴.

Electricity

- 2.7.9 Generation sources include fossil-fuelled power stations, nuclear power stations, waste incineration and on-and offshore wind power. Electricity is then transmitted through a national network of electricity lines operated by National Grid, before connecting to local networks owned by distribution network operators (DNOs). EDF Energy Ltd is the DNO covering all of East Herts District. DNOs prepare Long Term Development Statements for 5 year periods, reviewed annually based on consumer growth trends for whole DNO area, and known locations of capacity limits.
- 2.7.10 Whilst there is some spare capacity in several East Herts towns, housing growth will require a substantial investment in infrastructure before a connection is permitted. This may be in the form of additional sub-stations and new heavier duty cables. The electricity companies will seek all costs associated with these works, including design, from the developer.

Telecoms, Gas and Electricity Next Steps

- 2.7.11 *Step 3: Topic Assessments – n/a*
- 2.7.12 *Step 4: Areas of Search Assessments –comment may be made on opportunities for low-carbon energy.*

2.7.13 *Step 5: Scenario Testing* - TBD

2.7.14 *Step 6: Preferred Strategy* – will include an Infrastructure Delivery Plan (IDP), which will contain further information on Telecoms, Gas and Electricity.

Telecoms, Gas and Electricity References:

⁶² See www.nationalpolicystatements.org.uk

⁶³ See www.culture.gov.uk/publications/7829.aspx

⁶⁴ Hertfordshire Infrastructure and Investment Strategy (2009)

2.8 Natural and Historic Environment

Scope of this Overview

2.8.1 This overview sets out how natural and historic environmental issues will be dealt with in respect of the development strategy. The key issues are considered to be:

- Landscape and the Countryside
- Tranquillity
- Wildlife, Biodiversity and Green Infrastructure
- Historic Assets

2.8.2 Other natural and historic environmental related issues, including many raised through the Core Strategy Issues and Options Consultation in 2010 are also discussed. Because the preparation of the plan is a 'stepped' approach, this overview also sets out how natural and historic environmental issues will be dealt with under later steps.

Landscape and the Countryside

2.8.3 The defining landscape characteristic of the district is its river valleys and the historic pattern of settlement at river fording points; including five tributaries of the River Lea⁶⁵. Lying between the valleys are the areas of higher ground or plateaus: more exposed agricultural landscapes largely free from significant settlement.

2.8.4 The issue of topography is usually considered in terms of the landscape, and certainly, any assessment of landscape character includes an assessment of topography, since this is often its defining feature. As such, there is no specific guidance in relation to topography other than a 'rule of thumb' that (on the whole) development on sloping sites or in visually prominent locations should be avoided.

2.8.5 The landscape is formed by many factors, including the underlying soils, climate, habitats and human influence, both past and present. The classification and designation of areas of the countryside for their 'landscape value' has long been part of the planning system. This dates back to the creation of National Parks and Areas of Outstanding Natural Beauty (AONB) from the 1940s and in subsequent decades by the introduction of local landscape designations at a county/district scale.

2.8.6 The Draft NPPF states that *'the planning system should aim to conserve and enhance the natural and local environment by:*

- *Protecting valued landscapes*

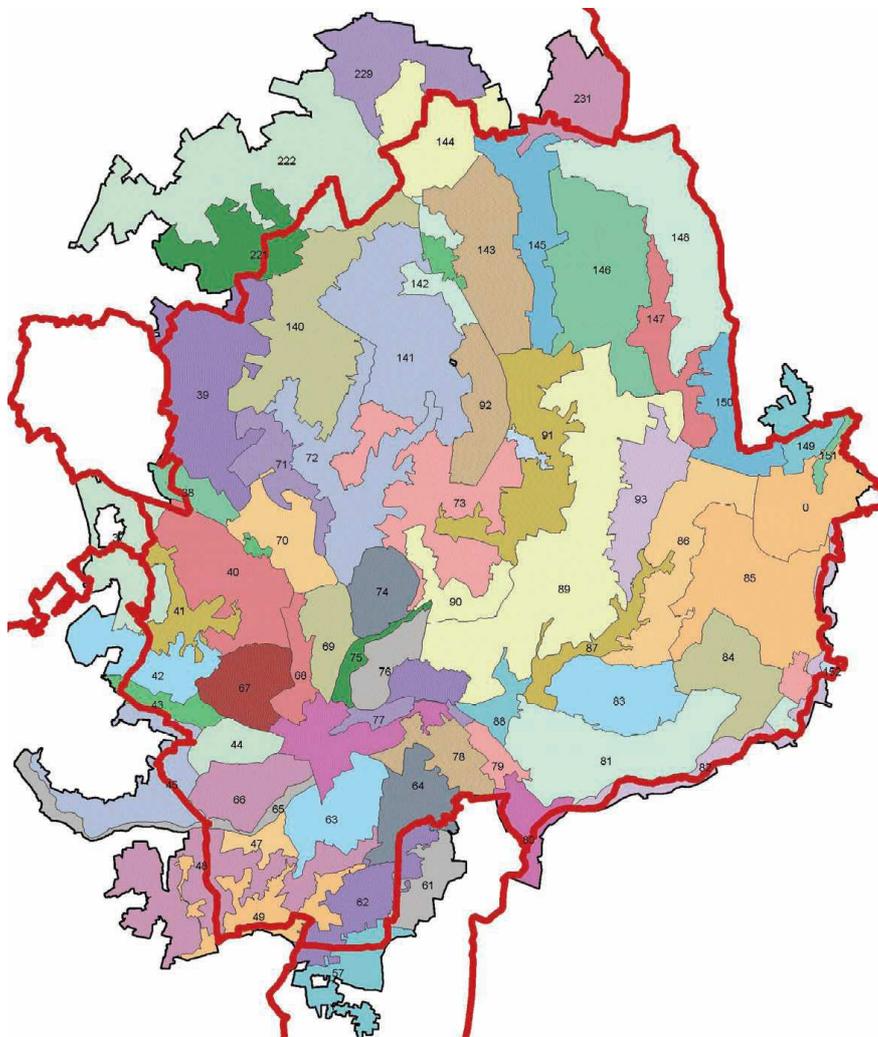
- *Minimising impacts on biodiversity and providing net gains in biodiversity, where possible*⁶⁶

- 2.8.7 Whilst there are no nationally important landscape designations in East Herts, when viewed at the sub-regional level East Herts forms an important 'green bubble' or 'green lung' between the M11 corridor to the east and the A1(M) corridor to west.
- 2.8.8 Given the value attached to the various landscapes in East Herts, the East Herts Local Plan 2007 applies a general approach of restraint to development in the rural area. Priority is given to conserving and enhancing the character, appearance, and quality of the countryside. Although not landscape policies themselves, Policies GBC1, GBC2, and GBC3 set out appropriate development in the Green Belt and Rural Area Beyond the Green Belt. Coupled with Policy GBC14 Landscape Character, such an approach helps ensure that the landscapes of East Herts maintain their unique character.
- 2.8.9 Landscape characterisation is an approach advocated by Natural England, which values the countryside as a whole, rather than just those areas with specific designation. In short: all landscapes matter. Landscape characterisation seeks to understand what makes each individual landscape unique. It is defined as *'a distinct, recognisable and consistent pattern of elements, be it natural (soil, landform) and/or human (for example settlement and development) in the landscape that makes one landscape different from another, rather than better or worse'*⁶⁷.
- 2.8.10 England has been divided into areas with similar landscape character, which are called National Landscape Character Areas. East Herts is covered by the following three National Landscape Character Areas:
- 86 South Suffolk and North Essex Claylands
 - 87 East Anglian Chalk
 - 111 Northern Thames Basin
- 2.8.11 In Hertfordshire, the process of characterising the landscape was undertaken by Hertfordshire County Council in 2000, and completed for East Herts district in 2004. In 2007, the Council adopted its Landscape Character Assessment technical study as a Supplementary Planning Document (SPD) to Policy GBC14 of the East Herts Local Plan 2007. This document identifies 63 individual landscape character areas (see Figure 2.6 below). For each landscape character area, the SPD presents a summary, assessment, evaluation and guidelines for managing change.

2.8.12 East Herts covers approximately 1/3 of Hertfordshire. Outside of the main settlements is rolling countryside, predominately used for arable agriculture. The Draft NPPF requires local planning authorities to *'take into account the economic and other benefits of the best and most versatile agricultural land'* and seek to focus development on poorer quality agricultural land⁶⁸.

2.8.13 The application of a general policy of restraint to development in the countryside is considered to be a key component of the development strategy. This will take into account issues of landscape character and the quality of agricultural land. Detailed criteria-based policy for assessing the impact of development on landscape character will be included in Allocations and Policies.

Figure 2.6: East Herts Landscape Character Areas⁶⁹



Tranquillity

- 2.8.14 Feedback from the Issues and Options consultation suggested that the tranquillity of the countryside in East Herts is highly prized for its recreational and amenity value. The draft NPPF states that “*Planning should aim to identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason*” (Paragraph 173). However, the NPPF provides no guidance as to how ‘relative’ is to be defined, so a methodology appropriate to local circumstances must be devised.
- 2.8.15 Reflecting national policy, the development strategy will steer development away from tranquil areas to ensure their continued protection. East Herts Council’s approach recognises that strategic planning should incorporate understanding of the wider setting of urban areas as a strategic-level design consideration. The amenity value of the countryside in terms of providing access to high-quality open spaces for leisure and recreation is an example of this. ‘Tranquillity Areas’ in this sense may be understood as part of a district-wide strategic approach.
- 2.8.16 NPPF emphasis on the need to protect ‘relatively’ undisturbed areas suggests that planning should not pursue a blanket approach to identifying large areas of urban fringe as ‘tranquil’. In order to differentiate between ‘more’ and ‘less’ tranquil areas, a common-sense approach based on proximity to noise sources such as roads, railways, and aircraft flight-paths is used (see Chapter 3). This information will then be used to inform a strategy-level approach to identification of the most important tranquil areas (Chapter 5). Noise is a separate but related planning issue and this is dealt with in the ‘Environmental Quality’ strategic overview (Section 1.12 below).

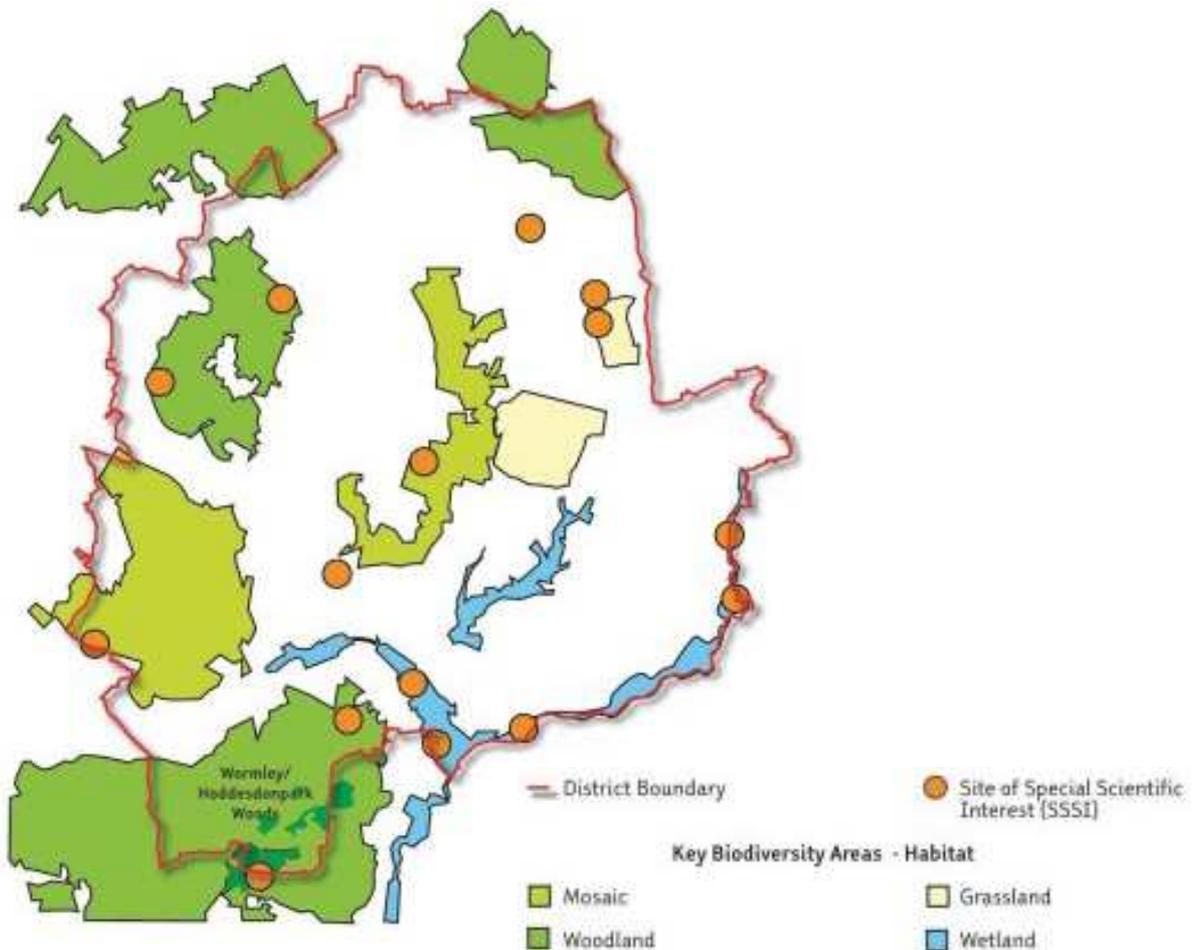
Wildlife, Biodiversity and Green Infrastructure

- 2.8.17 Biodiversity encompasses the whole of the natural world and all living things. Importantly, *‘biodiversity is all around us: not just in wild places and nature reserves but also in our cities, the places we live and work, our farmland and our countryside. We are an integral part of this biodiversity and exert a major influence over it’*⁷⁰. The term Green Infrastructure refers to *‘a strategically planned and delivered network of high quality green spaces and other environmental features and includes parks, open spaces, playing fields, woodlands, allotments and private gardens’*⁷¹.
- 2.8.18 The draft NPPF states that local planning authorities should plan *‘positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure’*⁷². Key biodiversity areas in East Herts are shown below in Figure 2.7.

2.8.19 The district contains a number of important habitats including impressive wetlands along the Mimram, Stort and Lea Valleys, many of which are a legacy of mineral extraction sites. Ancient woodland areas of national importance are found south of Hertford, including part of the Broxbourne Woods National Nature Reserve. Hornbeam trees are distinctive to this area of the country, making these woodlands really special in a national context. Heathland is one of the county's rarest habitats. Patmore Heath and Hertford Heath Nature Reserves are both nationally significant Sites of Special Scientific Interest.

2.8.20 Key Biodiversity Areas (KBAs) are areas that support the greatest diversity of species and the greatest extent and highest quality of semi-natural habitat.⁷³ There will usually be a significant wildlife resource, often as a cluster of sites, and therefore the potential to manage the adjacent land in a way that enlarges and links these sites. It should be noted that some KBAs might have inherently low biological diversity; but which support unusual communities of species that do not occur elsewhere.

Figure 2.7: Key Biodiversity Areas



- 2.8.21 Given the large size of KBAs, they perhaps offer the greatest potential to contribute to the mitigation of the climate change on wildlife by providing habitats that are more resilient to change. Indeed, as Natural England acknowledge, *'climate change poses the most serious long-term threat to England's natural environment because of the damage it will cause to our wildlife and habitats, the landscapes we enjoy and the ecosystem services they provide, including clean water, food and recreation'*.⁷⁴ The issue of climate change is considered in more detail in the Natural Resources Strategic Overview, although it is important to remember it affects both the natural and built environments and the relationships between them.
- 2.8.22 In terms of designations, East Herts includes sites of European, national and local importance:
- 1 RAMSAR site which is part of a Special Protection Area (SPA) for birds classified under the European Commission's Birds Directive, 1979
 - 1 Special Area of Conservation (SAC)
 - The only National Nature Reserve (NNR) in Hertfordshire (Broxbourne Woods)
 - 16 Sites of Special Scientific Interest (SSSI)
 - 582 Wildlife Sites of county importance covering 3,505ha
 - 13 Herts and Middlesex Wildlife Trust Nature Reserves (HMWT)
 - 1 local nature reserve
 - Numerous local wildlife sites
- 2.8.23 The main strategic issues in the district relating to wildlife sites revolve around the fragmentation and cumulative harm to habitats, flora and fauna from inappropriate development in proximity to protected sites, particularly where development pressure is greatest such as in the south of the district around Hertford and Ware. Consideration must also be given to the impact on important sites outside the district such as Hatfield Forest and Epping Forest, both areas of Ancient Woodland.
- 2.8.24 Urban areas cause disruption to natural wildlife corridors, prohibiting migration and movement of species, making them less adaptable to change, including that brought about by climatic change. The A10, dividing the district roughly in half is a key part of the district's transport network and thus development along this corridor would make sense. Yet the proximity of this major transport artery to the district's sites of European, national and local wildlife importance could be of vital consideration, as any further development which significantly increases vehicle movements along the A10 could also cause harm to these sites.

2.8.25 The development strategy will seek to protect wildlife and habitats by guiding development away from such locations and ensuring any negative effects are mitigated. To assist with this, the potential impacts of the development strategy will be assessed through the Sustainability Appraisal and Habitats Regulations Assessment; both formal requirements of the plan-making process. Detailed policies seeking to protect sites of wildlife importance will be included in Allocations and Policies.

Heritage Assets

2.8.26 The Government's objectives for planning for the historic environment include '*conserving heritage assets in a manner appropriate to their significance*'.⁷⁵ Designated heritage assets in East Herts include⁷⁶:

- Over 30 Scheduled Monuments
- Over 4,000 Listed Buildings, of which just over 1% are Grade 1
- 15 Registered Parks and Gardens
- 42 Conservation Areas
- 450 Areas of Archaeological Significance
- At least 59 Locally Listed Historic Parks and Gardens
- Numerous Tree Preservation Orders

2.8.27 Many historic assets are designated under other heritage-related consent regimes rather than through the planning system itself. Nonetheless, planning has a role to ensure that new development does not adversely affect such assets. This is particularly important where development is off-site, but has the potential to still affect the historic asset such as, for example, its setting.

2.8.28 This is particularly true for development within a Conservation Area. East Herts has 42 Conservation Areas, including the town centres of all of the five towns and most Category 1 and 2 Villages. They are, therefore, the historic asset under most pressure, since the majority of development is focused within the existing urban areas. Conservation Areas are not static, although it is crucial that they do not suffer from incremental change that detrimentally affects their character.

2.8.29 '*When considering the impact of a proposed development on a designated heritage asset, considerable importance and weight should be given to its conservation. The more important the asset, the greater the weight should be*'.⁷⁷ Similarly to wildlife assets, the development strategy will seek to protect the heritage of the district, by guiding development away from such historic assets and ensuring any negative effects are mitigated. Detailed policies

seeking to protect sites of historic importance will be included in Allocations and Policies.

Natural and Historic Environment Next Steps

- 2.8.30 One of the biggest challenges facing planning is striking the correct balance between conserving the historic environment with conserving the natural environment. This is especially true in more recent years with the presumption in favour of previously developed land. On the one hand, whilst such an approach minimises development in the surrounding countryside, it increases the pressure and potential impact on the historic character of the towns.
- 2.8.31 The conservation and protection of natural and historic environmental assets is considered to require both strategic and detailed policy approaches. Whilst criteria-based policies setting out how the assets will be protected in detail will be included within Allocations and Policies, the development strategy will also seek to conserve such assets by guiding development away from such locations and ensuring any negative effects are mitigated.
- 2.8.32 Natural and historic environmental issues will be dealt with through the next steps in the preparation of the development strategy as follows:
- 2.8.33 *Step 3: Topic Assessments* - will assess the impact and importance of wildlife sites, historic assets, landscape character and tranquillity in relation to the areas of search. Assessments will also cover other topics including agricultural land, environmental stewardship, Green Belt, strategic gaps and boundary limits to growth.
- 2.8.34 *Step 4: Areas of Search Assessments* - will consider any relevant information for the areas of search in relation to all the topic assessments carried out under Step 3, along with relevant technical studies. For example, an area of search may perform well in terms of historic issues, but may score poorly in terms of wildlife concerns.
- 2.8.35 *Step 5: Scenario Testing* - will examine the cumulative issues of a number of different strategy scenarios, in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 3 and 4. This step will be key in determining the cumulative and off-site impacts on both natural and historical environmental assets.
- 2.8.36 *Step 6: Preferred Strategy* - will set out the draft strategy and identify the broad locations for growth, helping to conserve natural and historical environmental assets. It will include a Green Infrastructure strategy

identifying a strategic network of high quality green spaces and other environmental features.

Natural and Historic Environment References:

⁶⁵ Also spelt Lee, and historically, Ley. Convention is that when referring to the river and its valley, the spelling Lea is used but when referring to the Navigation and Regional Park, the spelling Lee is used, because this spelling is used in the respective Acts of Parliament.

⁶⁶ Draft National Planning Policy Framework, paragraph 164 (CLG, July 2011)

⁶⁷ Natural England

<http://www.naturalengland.org.uk/ourwork/landscape/englands/character/default.aspx> (7th Dec 2011)

⁶⁸ Draft National Planning Policy Framework, paragraph 167 (CLG, July 2011)

⁶⁹ East Herts Landscape Character assessment SPD 2007, page 26

<http://www.eastherts.gov.uk/index.jsp?articleid=24642>

⁷⁰ <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/default.aspx>

⁷¹

<http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/greeninfrastructure/default.aspx>

⁷² Draft National Planning Policy Framework, paragraph 167 (CLG, July 2011)

⁷³ A 50-year vision for the wildlife and natural habitats of Hertfordshire: A Local Biodiversity Action Plan (1998 revised 2006).

⁷⁴ <http://www.naturalengland.org.uk/ourwork/climateandenergy/default.aspx>

⁷⁵ Draft National Planning Policy Framework, paragraph 177 (CLG, July 2011)

⁷⁶ Data from East herts Council Core Strategy Issues and Options Consultation 2010 (paragraphs 2.7.4 and 2.7.5) and Appendix C of the Historic Parks and Gardens Supplementary Planning Document

⁷⁷ Draft National Planning Policy Framework, paragraph 183 (CLG, July 2011)

2.9 Green Belt

Scope of overview

2.9.1 This overview sets out how Green Belt issues will be dealt with in respect of the development strategy. The key Green Belt issues are considered to be:

- The Five Purposes of Green Belt
- The Need for a Green Belt Review

2.9.2 Other Green Belt related issues, including many raised through the Core Strategy Issues and Options Consultation in 2010 are also discussed. Because the preparation of the District Plan is a 'stepped' approach, this overview also sets out how the Green Belt issues will be dealt with under later steps.

The Five Purposes of Green Belt

2.9.3 Approximately the southern third of the district lies within the London Metropolitan Green Belt (17,530 hectares). The remainder of the district is covered by the 2007 Local Plan Second Review policy area Rural Area Beyond the Green Belt. Four of the district's main towns are surrounded by Green Belt; Bishop's Stortford, Hertford, Sawbridgeworth and Ware.

2.9.4 The Government attaches great importance to Green Belts. Retaining the principles set out in Planning Policy Guidance Note 2: Green Belts, the draft NPPF sets out the policy requirements for Green Belts (paragraphs 133 to 147). Green Belts serve five purposes:

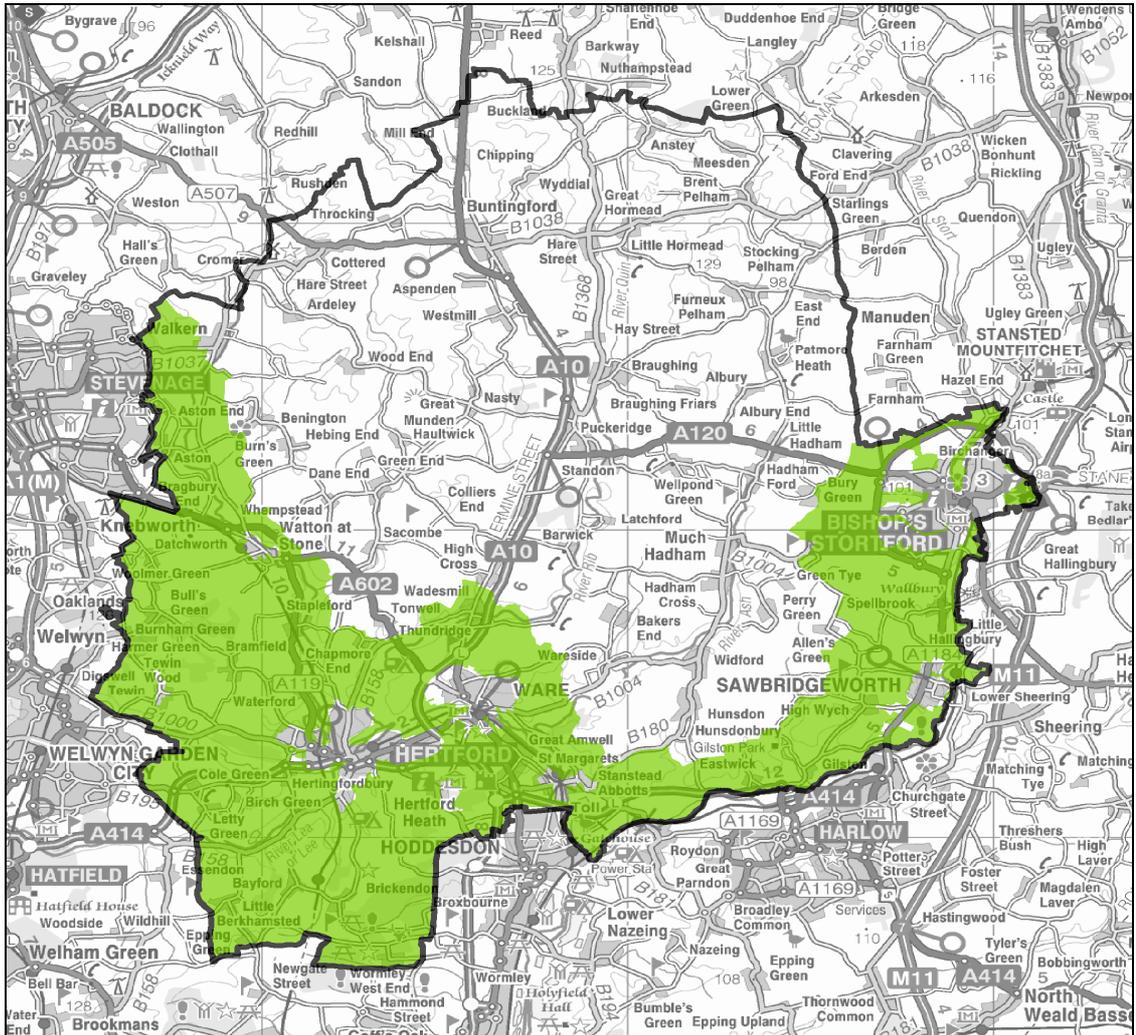
- To check the unrestricted sprawl of large built-up areas
- To prevent neighbouring towns merging into one another
- To assist in safeguarding the countryside from encroachment
- To preserve the setting and special character of historic towns; and
- To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

The Need for a Green Belt Review

2.9.5 In the absence of a regional or county-wide plan, the duty to plan for Green Belts falls to the local planning authority, which should set the framework for Green Belt and settlement policy and determine the appropriateness of existing Green Belt boundaries during the review of a local plan. The Green Belt policy should consider the ability of Green Belt boundaries to remain effective for the time period proposed for the district plan and beyond i.e its permanence. Once established, Green Belt boundaries should only be altered in exceptional circumstances.

- 2.9.6 The draft NPPF states that *“when drawing up or reviewing Green Belt boundaries local planning authorities should take account of the need to promote sustainable patterns of development. They should consider the consequences for sustainable development of channelling development towards urban areas inside the Green Belt boundary, towards towns and villages inset within the Green Belt or towards locations beyond the outer Green Belt boundary”* (paragraph 139).
- 2.9.7 In response to the Issues and Options consultation, many comments were received to the effect that Green Belt should not be touched. However, as the consultation document explained: *“whilst we acknowledge that two-thirds of the district is not covered by Green Belt, we do not think that it would be either realistic or sustainable to propose a development strategy option which seeks to locate development exclusively outside the Green Belt”* (Issues and Options consultation document, 2010, Section 3.6)
- 2.9.8 We know that there is a finite amount of brownfield or previously developed land within the urban areas of our towns. Future recycling of urban land is likely to take the form of intensification of existing buildings or estates, the act of which could create increased demand for existing services and facilities, but due to the constrained nature of such sites these developments tend not to be able to provide new facilities on site. Since four of the district’s five towns and many of the villages are surrounded by Green Belt, it is doubtful whether it is possible to meet the requirement to ‘promote sustainable patterns of development’ without reviewing the Green Belt and extending existing settlements. It would also be very difficult and expensive to provide adequate supporting infrastructure if all development were to take place beyond the Green Belt, given that the settlements outside the Green Belt areas are by and large quite small. This is shown in Figure 2.8 below.
- 2.9.9 It is important to recognise that the Green Belt is simply a strategic planning tool used to ensure that the five purposes of the Green Belt are met. Given the need for development in the district it is difficult to balance both protecting the Green Belt and enabling sustainable development. The most proactive approach is to assess Green Belt principles, and see where the most important areas of Green Belt lie, and then review Green Belt boundaries in accordance with this assessment. If there is no option but to develop in the Green Belt where is the best location?

Figure 2.8: Designated Green Belt in East Herts District (Local Plan Second Review 2007)



Green Belt Next Steps

- 2.9.10 *Step 3: Topic Assessments* – will consider firstly whether an area of search is within the Green Belt or in the Rural Area Beyond the Green Belt, secondly whether the area of search plays a role in protecting the strategic gap between settlements, and thirdly whether there are any clear boundary limits to growth within the area of search.

- 2.9.11 *Step 4: Areas of Search Assessments* – will consider any relevant information for the areas of search, in relation to all the topic assessments carried out under Step 2, along with relevant technical studies. For example, an area of search may perform well in terms of employment potential taking account of transport and access constraints, but may score poorly in terms of environmental concerns.

Draft Supporting Document

- 2.9.12 *Step 5: Scenario Testing* – will examine the cumulative issues of a number of different strategy scenarios in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 3 and 4. In order to inform this stage a Green Belt review will be needed.
- 2.9.13 *Step 6: Preferred Strategy* – will set out the draft strategy and policy approach to managing the Green Belt in terms of where strategic Green Belt releases will be necessary and set the framework for Green Belt and settlement policies.

2.10 Community and Leisure

Scope of this Overview

2.10.1 This overview sets out how people and community issues will be dealt with in respect of the development strategy. The key issues are considered to be:

- Community Facilities
- Healthcare Facilities
- Leisure and Open Space
- Lee Valley Regional Park
- Crime Prevention and Emergency Services
- Equalities

2.10.2 Other people and community related issues, including many raised through the Core Strategy Issues and Options Consultation in 2010 are also discussed. Because the preparation of the plan is a 'stepped' approach, this overview also sets out how people and community issues will be dealt with under later steps.

Community Facilities

2.10.3 The term 'community facilities' is very broad and applies to a range of types of facilities that may be used by the wider community or a particular section of the community, whether this is a particular age group (e.g. teenagers or older people), interest or faith group. Such facilities can also be provided for a specific use or be multi-functional. In smaller communities, such facilities often form the hub of community life.

2.10.4 *'To deliver the facilities and services the community needs, planning policies and decisions should:*

- *Plan positively for the provision and integration of community facilities (such as local shops, meeting places, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments*
- *Safeguard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs*
- *Ensure that established shops, facilities and services are able to develop and modernise in a way that is sustainable, and retained for the benefit of the community⁷⁸*

2.10.5 In East Herts, the following are considered to be community facilities, irrespective of whether they are located in a village or town centre:

- Arts Centres / Museums / Theatres
- Community Centres / Village Halls
- Healthcare Facilities (see below)
- Libraries
- Leisure Centres
- Local / Village Shop (i.e. selling milk, bread and newspapers)
- Post Office
- Place of Worship
- Public House

- 2.10.6 Whilst not considered community facilities *per se*, schools can provide a valuable resource for extra curricular activities through community use agreements and open access arrangements. This includes, for example the use of school playing fields for public recreation at weekends (see below).
- 2.10.7 Hertfordshire County Council provides a wide range of community services, including libraries and children and youth services. There are currently libraries in Bishop's Stortford, Hertford, Ware, Buntingford, and Sawbridgeworth which also act as hubs for a range of community services. Four mobile library services operate a number of routes across the district.
- 2.10.8 Children's centres are local service hubs where children under five years old and their families can receive integrated services and information, to a relatively small geographic area. Developments of 2,500 dwellings will require a new children's centre. Centres could be provided alongside or as part of a new primary school. Youth Connexions provides information, advice, guidance and support to 13-19 year olds on subjects such as education, work, training and volunteering, drugs, finance, health, sexual health and housing. There are two Youth Connexions Centres in East Herts, in Bishop's Stortford and Hertford. HCC's preferred model of provision would be to locate services in the larger towns and have access through community facilities in smaller communities through access to shared use of local facilities.
- 2.10.9 Provision of community facilities is usually through the use of planning obligations and Section 106 Agreements. To support or make facilities financially viable, a certain minimum level of population, reached at a particular threshold, is required. These vary from facility to facility. Illustrative thresholds are set out in Figure 2.9 (below). Please note: these figures would need to be amended to reflect local circumstances, particularly in rural locations where the thresholds may be lower.

Figure 2.9: Illustrative Thresholds⁷⁹

Community Facility	Illustrative Catchment Populations	Approximate Dwelling Threshold
Health Centre (4 GPs)	10,000	4,350
Local Shop	1,500	650
Public House	6,000	2,610
Post Office	5,000	2,170
Community Centre	4,000	1,740
Local Centre	6,000	2,610
Leisure Centre	24,000	10,440

2.10.10 The requirement for the provision of community facilities will be set out in the development strategy, although specific allocations and any policy criteria will be identified in allocations and policies.

2.10.11 Indeed, the approach to the provision of community facilities will depend on the scale of development. Smaller developments, (which cannot in themselves provide a full range of social infrastructure), should complement and use spare capacity within existing facilities in close proximity in the existing settlement. Where there is no spare capacity in existing facilities nearby, the cumulative impact of more than one smaller development could collectively provide for additional facilities. Larger developments will be more likely to provide a fuller range of community facilities, perhaps at identified local centres.

Healthcare Facilities

2.10.12 Healthcare facilities are also considered to fall within the term 'community facilities'. There are five main types of healthcare facility (excluding specialist and private hospitals and home care):

- *District General Hospitals* provide acute care services including accident and emergency and maternity functions. Although outside of the district, Lister Hospital in Stevenage and Princess Alexandra Hospital in Harlow serve East Herts.
- *Local General Hospitals* offer a wide range of primary care services that patients use most often including outpatient, therapies, diagnostics and urgent care. NHS Hertfordshire is proposing to redevelop the QEII Hospital site in Welwyn Garden City in 2014 as a Local General Hospital (with acute care services being transferred to Lister)
- *Urgent Care Centres* treat most injuries or illnesses that are urgent but not life threatening. For example sprains and strains, broken bones, minor

burns and scalds, minor head and eye injuries, bites and stings. Hertford County Hospital is an Urgent Care Centre

- *Community Hospitals* provide outpatient services, for example including a Minor Injuries Unit. There are community hospitals in Bishop's Stortford (the Herts and Essex Hospital) and in Cheshunt.
- *GP surgeries* are located in the five towns in East Herts as well as the larger villages of Hertford Heath, Much Hadham, Puckeridge, Stanstead Abbots and Watton-at-Stone. There are a total of 70 practices in East Herts.

2.10.13 In order to provide a better and more efficient level of care, some health services are being decentralised closer to where people live, such as community hospitals, GP practices or in their own homes⁸⁰. Thus, in terms of plan-making, the focus for new health infrastructure will be on providing a limited number of small-scale local health facilities such as health centres for GP practices. It is not considered that specific allocations of new facilities will be made although any requirement for the provision of healthcare will be set out in the development strategy.

Leisure and Open Space

2.10.14 Nationally and locally there is a drive to increase participation in physical and social activity and to encourage improvements in health and wellbeing: an approach perhaps endorsed by the presence of the Olympic and Paralympic Games in London, including the Lee Valley White Water Centre in Broxbourne.

2.10.15 Open spaces provide a valuable contribution to community life not only in terms of leisure and recreation, but in many cases because of their cultural significance and contribution to the character and setting of an area.

2.10.16 In East Herts, these include:

- Allotments
- Children's Playground
- Parks and Gardens
- Playing Fields
- Outdoor sports facilities
- Natural and semi-natural green spaces
- Amenity green spaces
- Cemeteries and churchyards
- Green corridors and public rights of way

2.10.17 *Planning policies should identify specific needs and quantitative or qualitative deficits or surpluses of open space, sport and recreation facilities in the local*

area. The information gained from this assessment of needs and opportunities should be used to set locally derived standards⁸¹. Quantity provision set out the indicative amount of open space per 1,000 population. Through the use of planning obligations and Section 106 Agreements planning can help ensure adequate provision of open spaces across East Herts. Currently the district has a deficit in open spaces for sport and recreation.

2.10.18 The requirement for the provision of open space will be set out in the development strategy, although specific allocations and any policy criteria will be identified in allocations and policies.

2.10.19 East Herts has an extensive network of public rights of way and Hertfordshire County Council is responsible for maintaining the definitive map. Proposals for development should not adversely affect a right of way and this policy approach will be set out in allocations and policies.

2.10.20 The rivers Lea and Stort are a good example of green infrastructure: corridors that penetrate into the urban areas for the benefit of both wildlife and people. As important water-based habitats they are also a focus for recreation and leisure, whether walking, cycling, boating or fishing. The policy approach for their continued protection and enhancement will be set out in allocations and policies.

2.10.21 Indoor leisure and recreation facilities are provided at:

- Grange Paddocks, Bishop's Stortford
- Hartham, Hertford
- Wodson Park, Ware
- Fanshaws Pool and Gym, Ware
- Leventhorpe Pool, Sawbridgeworth
- Ward Freman Pool, Buntingford

2.10.22 It is not considered that new sites for indoor recreation facilities will be allocated. However, additional provision at existing sites may be delivered through S106 and/or community infrastructure levy payments.

Lee Valley Regional Park

2.10.23 Established by Act of Parliament in 1966, the Lee Valley Regional Park covers 10,000 acres and stretches 26 miles and was created to meet the recreation, leisure and nature conservation needs of London, Hertfordshire and Essex. Although not a local authority, the Lee Valley Regional Park Authority is a statutory body responsible for managing and developing the park and must prepare a Plan setting out future use and development.

- 2.10.24 445 hectares of the Regional Park to the south of Ware running through Stanstead Abbots and St Margarets fall within East Herts and East Herts Council will continue to support the proposals of the Park Plan subject to their general conformity with the LDF (District Plan). The development strategy will identify the boundaries of the Regional Park.

Crime Prevention and Emergency Services

- 2.10.25 In terms of police services, there are 13 'Safer Neighbourhood Teams' across the district, based at Hertford, Buntingford and Bishop's Stortford police stations. The number of staff needed to police an area is not based on population but on criminality, which is influenced by the type of housing, population density, housing quality and whether there is a stable population. It is, therefore, difficult to assess future demand for police services as a result of housing growth.
- 2.10.26 However, Hertfordshire Constabulary has advised that larger developments would require the provision of a new facilities, including the potential for custody facilities. The capital investment required for a new custody facility would be in the region of £20m. It is critical that new or enhanced police facilities are provided early on as local police need to be able to build relationships with expanded or new communities from the outset, and to react to the need for police services, demand for which will typically commence as soon as growth starts.
- 2.10.27 Through the application of good design principles planning can help ensure that new development reduces opportunities for criminal and anti-social behaviour. Devised by the Association of Chief Police Officers (ACPO), Secured by Design focuses on crime prevention through design. The principles have been proven to achieve a reduction of crime risk by up to 60%, by combining minimum standards of physical security and well-tested principles of natural surveillance and defensible space⁸². The principles of Secured by Design apply to the design of specific schemes. As such, it is considered appropriate to include it in allocations and policies rather than the development strategy.
- 2.10.28 The East of England Ambulance Service NHS Trust provides emergency and unscheduled care and patient transport services in East Herts. The ambulance service is demand driven, as opposed to purely population driven. EEAAS is already experiencing a 6% a year increase in calls, which has doubled since 1992/93; partly driven by changing public attitudes to using the 999 service, an ageing population profile and increased resources being allocated to emergency capability. These challenges are resulting in consideration of major changes to the delivery of the ambulance service,

which could result in a more flexible 'hub and spoke' approach, with operational staff not assigned to a single centre and only going there as required (e.g. for training). This could reduce the number of command centres and, therefore, its property portfolio.

- 2.10.29 In terms of fire and rescue services, there are currently fire stations in East Herts (Bishop's Stortford, Buntingford, Hertford, Much Hadham, Sawbridgeworth, and Ware). Fire and rescue services are driven by attendance standards: 1st fire engine within 10 minutes; 2nd within 13 minutes, and 3rd within 16 minutes. There is generally less coverage in the north and east of the County. In particular, the northern areas surrounding the A10 corridor have been identified as a particularly difficult area in which to meet attendance standards. Few new developments would be large enough to warrant a new fire station or even an extension to an existing one e.g. a development of 10,000 would only generate potential need for a retained (part time) station⁸³.
- 2.10.30 As such, it is not considered that specific allocations of new emergency services facilities will be made.

Equalities

- 2.10.31 As part of the preparation of the District Plan, the Sustainability Appraisal will include both Equalities and a Health Impact Assessment. These will help to ensure that the effects of the development strategy and allocations and policies on all groups of society including the most vulnerable, are given due consideration.

Community and Leisure Next Steps

- 2.10.32 Whilst criteria-based policies setting out how community facilities (including open space and recreation) will be protected in detail will be included within allocations and policies, the development strategy will also set out the requirements to provide the appropriate level of facilities to support new development and ensure sustainable communities. This section sets out how community and leisure issues will be dealt with through the next steps in the preparation of the development strategy.
- 2.10.33 *Step 3: Topic Assessments* - will assess the availability of a range of community facilities in relation to the Areas of Search.
- 2.10.34 *Step 4: Areas of Search Assessments* - will consider any relevant information for the areas of search in relation to all the topic assessments carried out under Step 3 along with relevant technical studies. For example, an area of search may perform well in terms of availability of community facilities, but may score poorly in terms of environmental concerns.

- 2.10.35 *Step 5: Scenario Testing* - will examine the cumulative issues of a number of different strategy scenarios in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 3 and 4. This step will be key in determining the broad quantum of development and the required level of supporting community and leisure infrastructure.
- 2.10.36 *Step 6: Preferred Strategy* - will set out the draft strategy and identify the broad locations for growth, helping to conserve natural and environmental assets. It will include a Green Infrastructure strategy identifying a strategic network of high quality green spaces as well as an Infrastructure Delivery Plan setting out how certain types of community infrastructure will be delivered.

Community and Leisure References:

⁷⁸ Draft National Planning Policy Framework, paragraph 126 (CLG, July 2011)

⁷⁹ Adapted from 'Shaping neighbourhoods' by Hugh Barton, Marcus Grant and Richard Guise, p98 (Spon Press, 2003) and included in the East Herts Core Strategy issues and Options Consultation 2010. Approximate dwelling threshold based on 2.3 persons per household and rounded to nearest 10.

⁸⁰ The Hertfordshire Health Strategy (NHS Hertfordshire, October 2011)

⁸¹ Draft National Planning Policy Framework, paragraph 128 (CLG, July 2011)

⁸² <http://www.securedbydesign.com/>

⁸³ *Hertfordshire Infrastructure and Investment Strategy* (2010)

2.11 Natural Resources

Scope of this Overview

2.11.1 This overview sets out how natural resource issues will be dealt with in respect of the development strategy. Planning aims to encourage the prudent use of natural resources (draft NPPF Paragraph 10). The key issues are considered to be:

- Waste
- Minerals
- Food Supply
- Low Carbon Energy

2.11.2 Waste is included in this section because although not 'natural', if managed sustainably there is potential to make it a resource.

Waste

2.11.3 Hertfordshire County Council has two separate responsibilities for waste: waste disposal and waste planning. Household waste is collected by East Herts Council, which is then disposed of by the County Council. There are four County Household Waste Recycling Centres (HWRCs) in East Herts, at Bishop's Stortford, Buntingford, Cole Green, and Ware. All are operating at the limit of their capacity.

2.11.4 The Hertfordshire Waste Partnership (a partnership between the County Council and the 10 District Councils) has developed a Joint Municipal Waste Management Strategy⁸⁴. The strategy aims to identify solutions to Hertfordshire's lack of facilities for treating and disposing of waste.

2.11.5 The County Council is responsible for decisions on waste planning applications. It has also prepared the Waste Core Strategy⁸⁵. The new plan, which will cover a period to 2026, will set out the County Council's vision and objectives for the future treatment of waste and the policies and proposals necessary to achieve this vision, including identifying potential sites for future waste facilities and safeguarding existing facilities.

Minerals

2.11.6 Hertfordshire County Council is the Minerals Planning Authority for the whole County including East Herts. The Minerals Local Plan (2007) includes policies and site allocations⁸⁶.

- 2.11.7 The Minerals Local Plan provides a safeguarded 'landbank' of aggregates used in constructing and maintaining roads, buildings and other infrastructure. Sand and gravel deposits are found in most parts of the county although they are concentrated in that part south of a line between Bishop's Stortford in the east and Hemel Hempstead in the west (often referred to as the sand and gravel belt).
- 2.11.8 Stakeholders include the minerals industry, other commercial enterprises, landowners, conservation or other interest groups and the general public including local residents. Since each stakeholder group may have its own particular concerns and priorities, some of which may be contradictory, it is likely that a degree of compromise will be required. It is the role of the Minerals Local Plan to ensure that a satisfactory balance is struck between these potentially competing interests in terms of sustainable planning for minerals in Hertfordshire.

Food Supply

- 2.11.9 Agricultural land is the main source of food. Most agriculture is based on intensive, large scale production, although there are a number of small scale and organic farmers who serve the local area. Agricultural diversification is an important issue for planning policy, although its overall influence on formulation of a development strategy is limited. The development strategy concept of small-scale communal agriculture to feed the majority of the population is not considered realistic. However, agricultural land classifications based on land quality is a planning concern and will be assessed.
- 2.11.10 Allotments are also a smaller-scale source of food, although in planning terms they are considered as open space. East Herts Council manages three allotments in Hertford. Each of the Town Councils (Bishop's Stortford, Buntingford, Sawbridgeworth and Ware) manages its own allotments. Protection of existing allotments is a wider concern of planning policy in the LDF (District Plan). Provision of new allotments may be possible within new development, although this is only likely to be financially viable on larger scale developments, and where appropriate land agreements and long-term management arrangements are feasible.
- 2.11.11 There is a complicated relationship between food supply and other needs such as biodiversity and leisure uses. Environmental Stewardship is a national scheme to encourage conservation interests in farming. The strategy selection process will balance these considerations with development needs in planning terms, at a level appropriate to the emerging development strategy.

Low-Carbon Energy

- 2.11.12 The social, economic and environmental benefits of pursuing renewable and low carbon energy opportunities are recognised in national planning policy and are well documented.
- 2.11.13 Energy opportunities mapping suggests locations where such opportunities may be explored through planning⁸⁷. It may be that energy opportunities have some influence on the selection of a development strategy, although there is not likely to be a direct correlation. For example, availability of wind or biomass is not likely to be a consideration in the selection of locations for strategic-scale development. For this reason energy opportunities mapping has not been used as a basis for a topic assessment in Step 3.
- 2.11.14 Following the development strategy work there are likely to be challenges for planning policy in terms of striking an appropriate balance around certain energy opportunities, for example, around wind turbines and biomass boilers. Such issues will be addressed separately by policy work after the strategy is in place.
- 2.11.15 Climate change mitigation requires more than identifying energy opportunities. It is also about infrastructure delivery, for example district heating systems. These are complex and long-term projects which require a policy framework but also require extensive investigation into feasibility and deliverability⁸⁸. The ‘zero carbon homes’ debate at national level⁸⁹ is beyond the scope of the development strategy. Much of the reduction in emissions from individual buildings is addressed through phased tightening of Building Regulations.

Natural Resources Next Steps

- 2.11.16 Many natural resources issues are beyond the scope of the LDF (District Plan), or otherwise may be addressed by non-strategic policies. Issues addressed at the next steps are expected to be as follows:
- 2.11.17 *Step 3: Topic Assessments* – Agricultural Land Classification, Minerals and Waste Designations, Environmental Stewardship.
- 2.11.18 *Step 4: Areas of Search Assessments* – will consider these issues in more detail if necessary.
- 2.11.19 *Step 5: Scenario Testing* – likely to engage the County Minerals and Waste Authority and East Herts Council Environmental Health Service.
- 2.11.20 *Step 6: Preferred Strategy* – may include low carbon requirements for strategic allocations.

Natural Resources References:

⁸⁴ The Joint Municipal Waste Strategy is available at: www.wasteaware.org.uk

⁸⁵ See www.hertsdirect.gov.uk/waste. The Core Strategy and Development Management Policies DPD has recently completed Examination in Public. The Inspector's report is expected at the end of March 2012.

⁸⁶ See www.hertsdirect.org/services/envplan/plan/hccdevplan/mlp

⁸⁷ See www.sustainabilityeast.org.uk for the East of England Low and Zero Carbon Strategy. The Hertfordshire Renewable and Low Carbon Strategy (2010) is on the Council's website at: www.eastherts.gov.uk/technicalstudies

⁸⁸ See for example 'Community Energy: Urban Planning for a Low Carbon Future' (2010) at www.tcpa.org.uk

⁸⁹ For example see www.zerocarbonhub.org

2.12 Environmental Quality

Scope of this overview

2.12.1 This overview sets out how environmental quality issues will be dealt with in respect of the development strategy. The key environmental quality issues are considered to be:

- Air Quality
- Noise Pollution
- Light Pollution
- Groundwater Pollution
- Contaminated Land

2.12.2 Other environmental quality related issues, including many raised through the Core Strategy Issues and Options Consultation in 2010 are also discussed. Because the preparation of the District Plan is a 'stepped' approach, this overview also sets out how the environmental quality issues will be dealt with under later steps.

Air Quality

2.12.3 The nature of the district, with its dispersed towns, villages and hamlets with poor inter-connectivity by public transport, relative affluence and mobility, high car-ownership and close proximity to London and larger towns and cities, all contribute to higher levels of greenhouse gas emissions per person than neighbouring districts. The historic nature and organic growth of the district's principle towns of Bishop's Stortford, Hertford and Ware have in themselves led to inefficient road and transport networks and where these issues coincide with limited connections to major roads, congestion is inevitable. Such congestion can result in high levels of localised pollutants which can cause problems for those with respiratory conditions.

2.12.4 Bishop's Stortford in particular suffers from this issue; the combination of the historic road network combined with its proximity to Stansted Airport means that the town centre frequently suffers from congestion and the resultant poor air quality. As such an Air Quality Management Area (AQMA) has been established in the town centre (Hockerill Lights) to monitor levels of pollutants. There is also an AQMA in Hertford (Mill Road/A414 roundabout), with a potential new one being established in London Road, Sawbridgeworth. These monitoring sites are supported by action plans to improve air quality in these locations⁹⁰.

2.12.5 The potential impact on these AQMAs from development is largely dependant upon the location and scale of development and any

improvements to infrastructure that occur as a result. In theory, any development along the M11 corridor has the potential to impact on the AQMA in Bishop's Stortford as there are limited opportunities to improve the road infrastructure. It is therefore appropriate to determine this during the area of search assessments and scenario testing (Steps 4 and 5).

- 2.12.6 All developments have a level of impact on air quality through emissions, built form and activity. The impact of different building forms on local air quality have been well-documented, sometimes creating micro-climates of increased temperature and trapping pollutants within air pockets. The mechanised heating and cooling of buildings can increase emissions and local air temperatures. However, new construction techniques can aid the natural ventilation and heating of properties and these can be encouraged through planning policies. Pressures on highways department budgets and the relative cost of the maintenance of street trees often result in the removal of trees in the urban area, thus reducing the cleansing and shading benefits they bring. In historic centres there are fewer trees as the built form tends to consist of narrow roads and pavements and combined with vehicle movements can lead to localised high pollutant levels.
- 2.12.7 The application of a general policy concerning air quality, in relation to wider environmental concerns is considered to be a key component of the development strategy. Detailed criteria-based policy for the management of development proposals which have the potential to affect AQMAs will be included in Allocations and Policies.

Noise Pollution

- 2.12.8 The scope of the strategy work is defined by noise issues which may impact on the choice of location for strategic development. It does not address the issue of noise created by strategic development: although construction activity (including traffic) is noisy, national policy provides for this to be addressed through planning conditions.
- 2.12.9 A distinction should be drawn between the environmental health approach to noise and the strategic planning approach. The environmental health approach uses measurable recordings and data to provide stand-alone evidence which may be tested in a court of law. Planning can take account of the environmental health data where these are available, and where there is clear evidence that noise is likely to cause a significant risk to human health.
- 2.12.10 For strategic planning purposes such data is either lacking or controversial. There are no suitable data for noise arising from traffic. Flightpath noise contour maps attempt to identify the impact of aircraft noise in precise locations and whether it does or does not exceed an acceptable threshold.

However, such techniques are subject to highly technical argument and interpretation, which is further complicated by changes to flight patterns, weather conditions on the dates when readings are taken, and many other factors. Because such maps are usually produced by interested parties in support of particular proposals they are often contentious.

- 2.12.11 East Herts Council's approach is based on common sense criteria to assess noise impacts. One aspect of this is to use the proximity of a given area to different types of road as a proxy for likely noise impact. Air noise contours are used in a similar way, but indicatively rather than in a technical sense. This approach avoids the pitfalls of 'false precision' without resorting entirely to subjective judgement. The approach enables a strategic perspective to provide a degree of consistency and transparency in assessing the possible impacts of a wide range of issues 'in the round'.
- 2.12.12 An approach to identifying areas of tranquillity in accordance with the draft NPPF is included in Section 2.8: Natural and Historic Environment above.

Light Pollution

- 2.12.13 Artificial light is a part of everyday life. We use it for security reasons, pedestrian and traffic safety, recreation and for enhancing historic buildings. But poor or inconsiderate lighting schemes can result in light pollution, nuisance and is also a waste of energy. Light can affect humans and wildlife in detrimental ways. Glare and light trespass can be dangerous and disturbing and streetlights can cause a sky-glow at night preventing the observation of the night sky by astronomers and wildlife. Birds and animals use the moon for navigation and nocturnal animals like bats, badgers and otters are confused by bright lights. Artificial lighting can also dissuade animals from visiting favoured breeding or feeding grounds. In the rural area, where dark skies are one of the qualities of the rural landscape, artificial lighting can be particularly harmful. Detailed criteria-based policy on minimising the impact of artificial lighting will be included in Allocations and Policies.

Groundwater pollution

- 2.12.14 A key concern for the district, as elsewhere in the south-east of England is the protection of groundwater, the abstraction of which provides a third of our drinking water in England and Wales. Groundwater also maintains the flow in many of our rivers. The Environment Agency plays a crucial role in looking after these sources to ensure that our water is completely safe to drink⁹¹.
- 2.12.15 In order to ensure pollution to sources of groundwater does not occur, the Environment Agency has established a range of Source Protection Zones (SPZ) for groundwater sources such as wells, boreholes and springs used for

public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area; the closer the activity, the greater the risk. The Environment Agency Groundwater Map series show three main zones (inner, outer and total catchment) and a fourth zone of special interest, which is occasionally applied, to a groundwater source. These zones are used in conjunction with a Groundwater Protection Policy to set up pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluters nearby.⁹² In determining where development should or should not be located, it is important to consider the location of these Zones in order to ensure any development does not harm vulnerable groundwater sources.

- 2.12.16 The application of a general policy concerning groundwater protection, in relation to wider environmental concerns is considered to be a key component of the allocations and policies following the development strategy. This will take into account issues of the contamination of groundwater sources. Detailed criteria-based policy for the management of development proposals in areas of known groundwater importance will be included in Allocations and Policies.

Contaminated land

- 2.12.17 Contaminated land is any land which is in such a condition, by reason of substances in, on or under the land, that causes or has the significant possibility to cause harm, or where the pollution of controlled water is being or is likely to be caused.⁹³ For a risk to exist there needs to be a source and a target and a pathway between them.
- 2.12.18 Examples of sources of contamination include: petrol filling stations, chemical works, ordnance factories, metal works and other such industrial and land use activities. Being a rural district with a large agricultural base, historic farming practices including the use of pesticides and fertilisers have had impacts on water and soil quality. Riverside industrial uses have also contributed to the contamination of waterways. Being in proximity to London there are also a number of landfill sites originally constructed to manage the waste of the northern London boroughs. The East Herts Contaminated Land Strategy 2007 identified 400 sites of potential contamination during its review.
- 2.12.19 Contamination can move through groundwater, gas migration, wind blown deposition, uptake from soils into plants and then to humans, leaching into watercourses and then to aquatic life. Particularly vulnerable to the effects of contamination are Sites of Special Scientific Interest, high quality rivers, groundwater, human beings, and flora and fauna.

2.12.20 Whilst it is theoretically possible to map these potential sources, pathways and targets, a topic assessment along these lines will prove impractical and inconclusive at this stage due to the technical nature of the necessary testing and evaluation required. A more useful assessment would occur on a more detailed area of search level with the potential cumulative impact of development being assessed as part of scenario testing (Steps 4 and 5).

2.12.21 The application of a general policy concerning contaminated land, in relation to wider environmental concerns is considered to be a key component of the development strategy. This will take into account the prevention of new contamination and mitigation of existing potential sources of contaminated land. Detailed criteria-based policy for the management of development proposals in relation to contaminated land will be included in Allocations and Policies.

Environmental Quality Next Steps

2.12.22 *Step 3: Topic Assessments* – will assess the areas of search in relation to noise pollution in the form of a tranquillity assessment. Given the more technical and site specific nature of the remaining environmental quality issues these are more appropriately assessed in Step 4 and 5 below.

2.12.23 *Step 4: Areas of Search Assessments* – will consider any relevant information for the areas of search in relation to all the topic assessments carried out under Step 3 along with relevant technical studies.

2.12.24 *Step 5: Scenario Testing* – will examine the cumulative issues of a number of different strategy scenarios in order to determine the potential impacts of all the relevant topic and areas of search assessments carried out in Steps 3 and 4.

2.12.25 *Step 6: Preferred Strategy* – will set out the draft development strategy and policy approach to managing the impact of development on environmental quality.

Environmental Quality References:

⁹⁰ The Environment Act 1995 places a duty on local authorities to review and assess air quality in their districts.

⁹¹ Environment Agency Policy and Practice for the Protection of Groundwater (1998) provides a comprehensive framework

⁹² Environment Agency Website <http://www.environment-agency.gov.uk/business/topics/water> (accessed 22.02.12)

⁹³ East Herts Contaminated Land Strategy 2007

2.13 Conclusion and Next Steps

- 2.13.1 Step 2 (this chapter) has established a basis for the identification of strategic planning issues. However, as explained in Section 1.7, the stepped approach is about gradual testing and refinement of evidence to reach progressively greater levels of confidence. It is therefore not possible to take the information contained in this Chapter as setting out a 'definitive' list of strategic issues. This will only become possible at the end of Step 6 as the emerging strategy becomes clear. Chapter 2 must therefore be read in context as 'work in progress'.
- 2.13.2 The next step is based on very different techniques to those employed in this chapter. The Step 3 Topic Assessments relate to the Step 2 Strategic Overviews as shown in **Essential Reference Paper C**.