

Sustainability Appraisal of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area



Sustainability Appraisal Report

September 2016



Quality information

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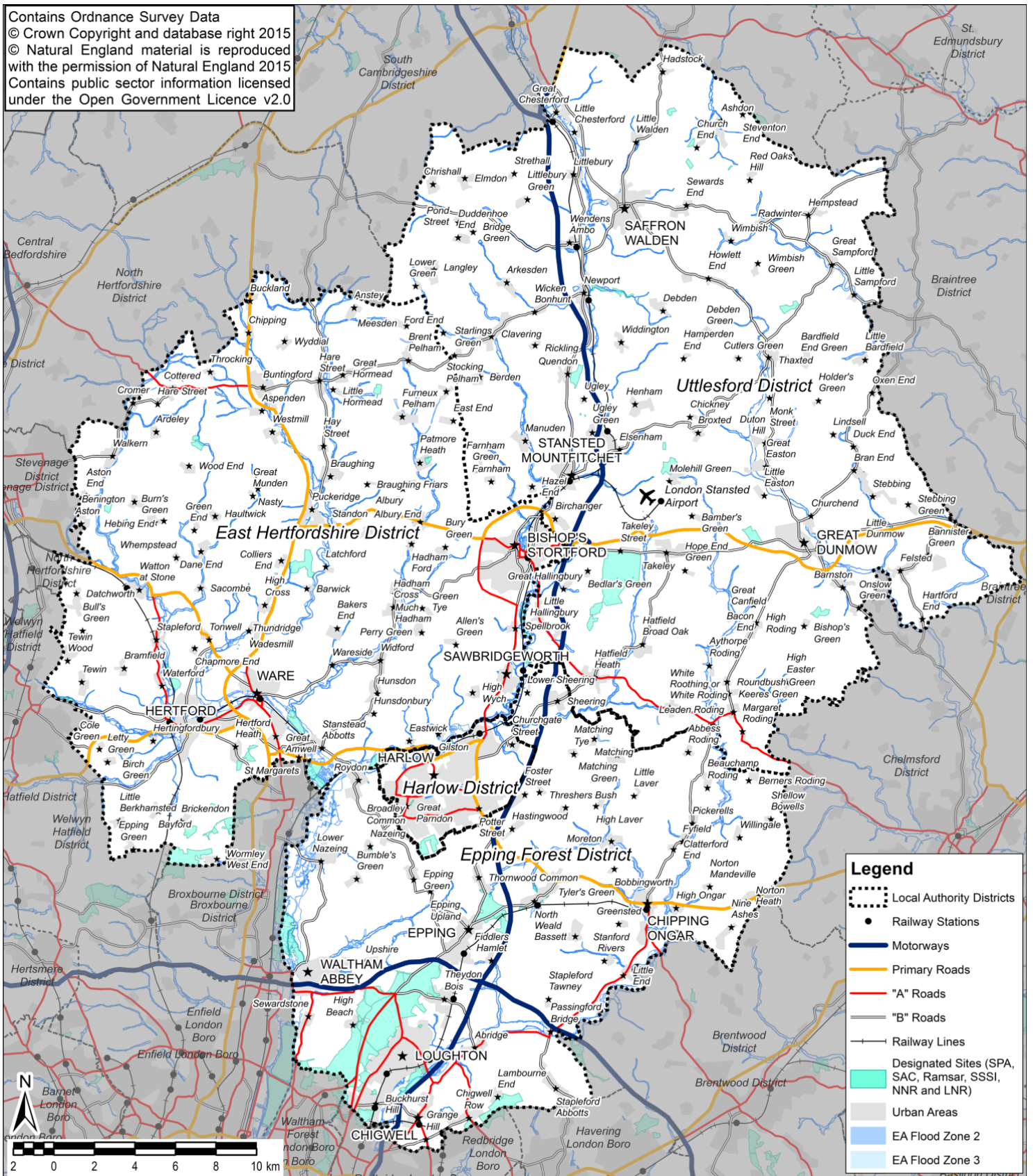


Figure 1.1: West Essex and East Hertfordshire Housing Market Area

1 Introduction

1.1 Background: The West Essex and East Hertfordshire Housing Market Area Strategic Spatial Options Study

AECOM has been commissioned to undertake a Sustainability Appraisal process to support the consideration of housing growth and distribution options for the West Essex and East Hertfordshire Housing Market Area.

Strategic Housing Market Assessment

East Hertfordshire District Council, Epping Forest District Council, Harlow District Council and Uttlesford District Council have a substantial history of co-ordinated working on planning issues, including on assessing housing need and planning for future growth.

Growth in the area is also being promoted by the London Stansted Cambridge Corridor (LSCC) Growth Commission which aims to raise the global economic potential of the LSCC, setting out a vision for transformational change. The Commission's report, published in July 2016, argues that the LSCC has the hallmarks of a national asset: a fast-growing population, vibrant economy, and presence in globally traded economic activities.¹ The report emphasises that failure to invest in measures to boost housebuilding will lead to further rises in house prices and worsening affordability which, in turn, has major implications for employers and their ability to recruit and retain talent.

With respect to housing need, three joint Strategic Housing Market Assessments (SHMAs) have been undertaken for the West Essex and East Hertfordshire Housing Market Area (HMA) since 2010. These have sought to establish what is referred to as Objectively Assessed Housing Need (OAHN) for the HMA. The most recent SHMA was undertaken in 2015.² This identified the OAHN for the HMA to be 46,100 dwellings over the 22-year period between 2011 and 2033, equivalent to an average of 2,095 dwellings per year. This includes an Objectively Assessed Need for Affordable Housing of 13,600 dwellings over the same period, equivalent to an average of 618 per year.

For the four authority areas, the SHMA concluded that the OAHN over the 22-year period for each of the four areas was as follows:

- 16,400 dwellings in East Hertfordshire
- 11,300 dwellings in Epping Forest
- 5,900 dwellings in Harlow
- 12,500 dwellings in Uttlesford

In addition, the SHMA highlighted that the Department for Communities and Local Government's (DCLG) 2012-based household projections indicated an increase in households from 175,189 to 224,827 across the HMA over the 22-year period 2011-33. The SHMA stated that *"PPG [Planning Practice Guidance] identifies that the starting point for estimating housing need is the CLG 2012-based household projections. For the 22-year period 2011-33, these projections suggest an increase of 49,638 households across the West Essex and East Hertfordshire HMA: an average growth of 2,256 households each year, comprised of 779 in East Hertfordshire, 653 in Epping Forest, 326 in Harlow and 498 in Uttlesford."*

¹ London Stansted Cambridge Corridor Growth Commission (2016). Findings and Recommendations of the London Stansted Cambridge Corridor Growth Commission www.lsccgrowthcommission.org.uk/wp-content/uploads/2016/07/LSCC-Growth-Commission-Final-Report-full.pdf.

² Opinion Research Services (September 2015) West Essex and East Hertfordshire Strategic Housing Market Assessment: Report of Findings <http://www.uttlesford.gov.uk/CHttpHandler.ashx?id=5344&p=0>.

In August 2016, Opinion Research Services (ORS) updated the overall housing need³ to take into account more recent information including the DCLG 2014-based household projections and suggested a revised OAHN for the HMA of 54,608 disaggregated as follows:

- 19,427 dwellings in East Hertfordshire
- 13,278 dwellings in Epping Forest
- 7,824 dwellings in Harlow
- 14,080 dwellings in Uttlesford

Joint Economic Report

Alongside the SHMA, the four authorities commissioned a study to consider the Objectively Assessed Economic Need of the Functional Economic Market Area (FEMA)⁴, which considers a wider area than that of the HMA.⁵ This was published in 2015 and gives an up-to-date assessment of jobs growth need in the FEMA for the period 2011-33.

The study identified a net jobs growth per year of 1,890 for the FEMA. For the four authority areas, this translated as the following ranges in jobs growth per year:

- 435 – 505 in East Hertfordshire
- 400 – 455 in Epping Forest
- 325 – 335 in Harlow
- 665 – 675 in Uttlesford

Strategic Spatial Options Study

In response to a need to fulfil Duty to Cooperate requirements, and to adhere to the spirit of the NPPF which requires that local authorities '*... demonstrate evidence of having effectively cooperated to plan for issues with cross-boundary impacts when their Local Plans are submitted for examination*'⁶ the West Essex and East Hertfordshire authorities have explored options for meeting OAHN across the HMA. This includes the consideration of a range of growth and locational options for delivering new housing.

To support this process, AECOM worked with the four authorities to:

- identify options for spatially distributing the housing need identified in the SHMA (2015), the DCLG 2012-based household projections and the August 2016 advice from ORS across the HMA, based on an analysis of the policy context and evidence base;
- provide an evidence-based Sustainability Appraisal setting out the anticipated significant positive and negative impacts of each option (including opportunities to deliver infrastructure, employment development, regeneration benefits, etc.) and potential mitigation measures (where relevant); and
- facilitate the development of a draft Memorandum of Understanding (MoU) between the four authorities which sets out a high level agreement as to how new housing should be distributed across the HMA.

These activities are collectively referred to as the Strategic Spatial Options Study. It is anticipated that the study will provide a critical piece of evidence for demonstrating that the key strategic issue of housing growth has been robustly addressed and that the Duty to Co-operate has been clearly complied with.

1.2 Sustainability Appraisal

As part of the Strategic Spatial Options Study, a Sustainability Appraisal (SA) has been undertaken to assist in determining the most appropriate housing growth and distribution option for the HMA.

³ Opinion Research Services (August 2016). Updating the Overall Housing Need Based on 2014 projections for West Essex & East Herts.

⁴ Hardisty Jones Associates (September 2015) Economic Evidence to Support the Development of the OAHN for West Essex and East Herts <http://www.uttlesford.gov.uk/CHttpHandler.ashx?id=5438&p=0>.

⁵ The FEMA covers the four authority areas, but also includes: Broxbourne, a fringe area comprising all of the immediately adjacent local authorities; and a link to central London.

⁶ Paragraph 181, National Planning Policy Framework https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

In addition, the options have also been subject to transport modelling by Essex County Council and Habitat Regulations Assessment screening by AECOM. The options themselves have also been informed by a Strategic Site Assessment study looking at the appropriateness of strategic sites in and around Harlow town and their capacity to contribute to housing need.

SA considers and communicates the likely significant effects of options in terms of key sustainability issues. The aim of SA is to inform and influence the decision-making with a view to avoiding or mitigating negative effects and maximising positive ones. Through this approach, the SA seeks to contribute to more sustainable development.

It should be noted that the SA was not undertaken in line with the requirements prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004 which transpose into national law European Union Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment' (the Strategic Environmental Assessment or SEA Directive). The SEA Directive applies to certain plans and programmes and requires an assessment of a 'draft plan' as well as 'reasonable alternatives'. In this case, the focus is solely on reasonable alternatives and there is no 'draft plan' being prepared. Instead, it is anticipated that the selected alternative will be reflected in the content of the local plans for East Herts, Epping Forest, Harlow and Uttlesford Districts. Furthermore, the SEA Directive applies to plans and programmes required under 'legislative, regulatory or administrative provisions' and does not apply to plans and programmes prepared on a voluntary basis, as is the case here with respect to the reasonable alternatives. For these reasons, a formal assessment in line with the SEA Directive has not been undertaken. It should be noted, however, that the four constituent local plans will be subject to an assessment in line with the SEA Directive's requirements.

1.3 Spatial distribution options considered

As part of the Strategic Spatial Options Study, a range of spatial options for distributing housing across the HMA were considered. Three levels of growth were considered:

- ~46,100 new homes in line with the 2015 SHMA
- ~49,638 new homes in line with the DCLG 2012-based household projections
- ~57,400 new homes in line with advice from ORS suggesting a revised OAHN of 54,608 new homes taking into account the DCLG 2014-based household projections

In particular, the spatial options explored different levels of growth in and around Harlow, a key urban centre within the HMA:

- ~10,500 (lower growth)
- ~14,150 (medium growth)
- ~17,650 (higher growth)
- ~20,985 (maximum growth)

Table 1.1 below presents the six spatial options considered and **Table 1.2** sets out the rationale for each of the alternatives considered.

Table 1.1: Spatial distribution options for the West Essex and East Hertfordshire Housing Market Area 2011 to 2033 (key figures that differentiate between the options in red)

Spatial area	Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
	Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ⁷ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ⁸)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~20985 at Harlow)
East Hertfordshire District						
'Givens' (up to July 2016)	Completions	1951	1951	1951	1951	1951
	Permissions	1839	1839	1839	1839	1839
	Windfall assumption	1120	1120	1120	1120	1120
	Sub-total	4910	4910	4910	4910	4910
Potential allocations / broad locations ('choices')	Bishop's Stortford	4321	4321	4321	3421	4321
	Buntingford	496	496	496	496	496
	East of Stevenage	600	600	600	600	600
	East of Welwyn	1350	1350	1350	1350	1350
	Harlow fringe (Sites A & E) ⁹	2750	1250	1250	4350	4350
	Harlow fringe (Site B)	0	0	0	0	160
	Harlow fringe (Site C)	0	0	0	0	50
	Harlow fringe (Site G)	0	0	0	0	900
Hertford	950	950	950	300	950	

⁷ The possibility of one of the two new settlements being located in Epping Forest District was discussed. However, Epping Forest District argued that 1,616 may be potentially allocated at North Weald and this position would only be reviewed if/when aviation is found to be unviable in the longer term; no sites of sufficient size for a new settlement have been promoted as a new settlement in the remainder of the District and much of the east of the District is relatively rural with limited public transport connections

⁸ Figures reduced across settlements in East Herts (Bishop's Stortford, Hertford, Sawbridgeworth and Ware) and Epping Forest to minimise Green Belt incursion; Cross boundary developments at East of Stevenage and East of Welwyn unchanged

⁹ See Strategic Site Assessment for further information

Spatial area		Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
		Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ⁷ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ⁸)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
	Sawbridgeworth	375	375	375	0	375	375
	Ware	200	200	200	0	200	1000
	Larger villages / NP ¹⁰	500	500	500	500	500	500
	Other	337	337	337	337	337	337
	New settlement (option 1) ¹¹	N/A	N/A	0	N/A	N/A	N/A
	New settlement (option 2) ¹²	N/A	N/A	1500 ¹³	N/A	N/A	N/A
	New settlement (option 3) ¹⁴	N/A	N/A	0	N/A	N/A	N/A
	New settlement (option 4) ¹⁵	N/A	N/A	1500 ¹⁶	N/A	N/A	N/A
	New settlement (option 5) ¹⁷	N/A	N/A	0	N/A	N/A	N/A
	New settlement (option 6) ¹⁸	N/A	N/A	0	N/A	N/A	N/A
	Sub-total	11879	10379	13379	11354	13479	15389
East Hertfordshire District Total		16789 (OAHN = 16400)	15289 (OAHN = 16400)	18289 (OAHN = 16400)	16264 (OAHN = 16400)	18389 (OAHN = 16400)	20299 (OAHN = 19427)
Epping Forest							

¹⁰ Allocation to include facilitation of neighbourhood planning

¹¹ Location on the A10 corridor - north

¹² Location on the A120 corridor (Little Hadham)

¹³ Assume 1500 at each of two new settlements; option 2 (Little Hadham) and option 4 (Watton at Stone) are being tested under Option C for the purposes of the transport modelling

¹⁴ Location in the Hunsdon area

¹⁵ Location on the A602 corridor (Watton at Stone)

¹⁶ Assume 1500 at each of two new settlements; option 2 (Little Hadham) and option 4 (Watton at Stone) are being tested under Option C for the purposes of the transport modelling

¹⁷ Location on the A10 corridor - central

¹⁸ Location on the A507 corridor

Spatial area		Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
		Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ⁷ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ⁸)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
'Givens' (up to March 2016)	Completions	1007	1007	1007	1007	1007	1007
	Permissions	747	747	747	747	747	747
	Windfall assumption	1394	1394	1394	1394	1394	1394
	Sub-total	3148	3148	3148	3148	3148	3148
Epping Forest District part of the Harlow fringe	Latton Priory	1250	1350	350	2000	2000	2250
	West Sumners	1000	0	1000	1100	1100	1200
	West Katherines	750	0	0	800	800	1100
	East of Harlow	500	0	0	1500	1500	750
	West Pinnacles	0	0	0	0	0	1000
	Land at Riddings Lane	0	0	0	0	0	50
	Sub-total	3500	1350	1350	5400	5400	6350
Potential allocations / broad locations ('choices')	Chigwell	410	410	410	0	410	410
	Chipping Ongar	314	314	314	55	314	314
	Epping	513	513	513	413	513	513
	Loughton/Buckhurst Hill	892	892	892	1101	892	1101
	Theydon Bois	148	148	148	0	148	148
	Waltham Abbey	406	406	406	196	406	406
	North Weald ¹⁹	1616	1616	1616	0	1616	1616
	Larger villages / NP ²⁰	146	146	146	0	146	146

¹⁹ North Weald (including the Airfield) is subject to an existing masterplan (2014) prepared by Epping Forest District Council

Spatial area		Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
		Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ⁷ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ⁸)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
	Sub-total	7945	5795	5795	7165	9845	11004
Epping Forest District Total		11093 (OAHN = 11300)	8943 (OAHN = 11300)	8943 (OAHN = 11300)	10313 (OAHN = 11300)	12993 (OAHN = 11300)	14152 (OAHN = 13278)
Harlow District							
'Givens'(up to 1 April 2016)	Completions	1023	1023	1023	1023	1023	1023
	Permissions	3488	3488	3488	3488	3488	3488
	Windfall assumption	0	0	0	0	0	0
	Princess Alexandra Hospital	0	0	0	0	0	675
	Sub-total	4511	4511	4511	4511	4511	5186
'Choices'	Urban brownfield	1389	1389	1389	1389	1389	1389
	Greenfield (east of Harlow)	2000	2000	2000	2000	2000	2600
	Sub-total	3389	3389	3389	3389	3389	3989
Harlow District Total		7900 (OAHN = 5900)	7900 (OAHN = 5900)	7900 (OAHN = 5900)	7900 (OAHN = 5900)	7900 (OAHN = 5900)	9175 (OAHN = 7824)
Uttlesford District							
'Givens' (up to 1 April 2016)	Completions	1914	1914	1914	1914	1914	1914
	Permissions	5202	5202	5202	5202	5202	5202
	Windfall assumption	900	900	900	900	900	900
	Sub-total	8016	8016	8016	8016	8016	8016
Potential	Great Dunmow	500	500	500	500	500	750

²⁰ Allocation to include facilitation of neighbourhood planning

Spatial area		Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
		Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ⁷ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ⁸)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
allocations / broad locations ('choices')	Saffron Walden	500	500	500	500	500	750
	New settlement A120 (1) ²¹	2000	4000	2000	2000	2000	1400
	New settlement A120 (2) ²²	1000	2500	1000	1000	1000	1400
	Larger villages / NP ²³	500	500	500	250	500	200
	Other	0	0	0	0	0	100
	Sub-total	4500	8000	4500	4250	4500	4600
Uttlesford District Total		12516 (OAHN = 12500)	16016 (OAHN = 12500)	12516 (OAHN = 12500)	12266 (OAHN = 12500)	12516 (OAHN = 12500)	12616 (OAHN = 14080)
Total in and around Harlow		14150 (medium growth)	10500 (lower growth)	10500 (lower growth)	17650 (higher growth)	17650 (higher growth)	20985 (maximum growth)
Grand Total		48298 (OAHN = 46100)	48148 (OAHN = 46100)	47648 (OAHN = 46100)	46743 (OAHN = 46100)	51798 (CLG 2012-based household projections = 49638 ²⁴)	56242 (OAHN = 46100; however, latest ORS advice = 54608)

The rationale for considering these options, and not appraising alternatives deemed to be 'unreasonable' is presented in **Tables 1.2** and **1.3**, respectively.

²¹ Land at Easton Park

²² Land at Boxted Wood/Andrewsfield developed jointly with Braintree (NB access through Uttlesford which might facilitate quicker delivery on the Uttlesford side)

²³ Allocation to include facilitation of neighbourhood planning

²⁴ The SHMA states "PPG identifies that the starting point for estimating housing need is the CLG 2012-based household projections. For the 22-year period 2011-33, these projections suggest an increase of 49,638 households across the West Essex and East Hertfordshire HMA: an average growth of 2,256 households each year, comprised of 779 in East Hertfordshire, 653 in Epping Forest, 326 in Harlow and 498 in Uttlesford."

Table 1.2: Rationale for reasonable alternatives considered

Reasonable alternative	Rationale
Spatial options to deliver ~46,100 new homes across the SHMA area	
<p>Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)</p>	<p>This option is predicated on two principles: firstly, a mid-range level of growth in and around Harlow town and, secondly, the assumption that each local authority should accommodate its identified OAHN within its own district boundaries. A strong focus on development in and around Harlow is a sensible starting point for developing reasonable alternatives in that the town represents the most sustainable location within the HMA at which to concentrate development given its role as a sub-regional centre for employment; its Enterprise Zone status; the need to rejuvenate the town centre; the opportunity to capitalise on its transport connections; its important location on the London – Stansted – Cambridge corridor; and, above all, the wider economic growth aspirations for the town. Testing an alternative premised on each authority meeting its own housing needs was considered important in light of the NPPF's requirement that "local planning authorities should positively seek opportunities to meet the development needs of their area" (para. 14).</p>
<p>Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)</p>	<p>While a strong focus on development in and around Harlow town was considered an important starting point for developing reasonable alternatives (see rationale for Option A above), a degree of uncertainty surrounding the extent and likely provision of the additional infrastructure necessary to support growth suggested a need to test a lower overall housing figure for the area in and around Harlow. This, in turn, raised the question of where the growth that might otherwise have been located in and around Harlow should instead be focused (~3,500 new homes). In light of the conclusions of the Inspector examining the Uttlesford Local Plan (December 2014), it was considered reasonable to consider an option involving an accelerated level of development at two new settlements along the A120 (including one straddling the border with Braintree District): <i>"There appeared to me to be fairly widespread recognition that some form of 'new settlement(s)' may form an appropriate means for catering for the future long-term growth of the District and, if so, that this should be on a scale bold enough to achieve maximum possible sustainable critical mass and a long term solution, especially if there are judged to be limits as to how far relatively small towns with the characters of Saffron Walden and Great Dunmow can grow sustainably, attractively, and in an integrated way through successive phases of peripheral expansion"</i> (available at: www.uttlesford.gov.uk/CHttpHandler.ashx?id=4506&p=0).</p>
<p>Option C – Less development at Harlow and two new settlements in East Herts (NB ~10,500 at Harlow)</p>	<p>While a strong focus on development in and around Harlow town was considered an important starting point for developing reasonable alternatives (see rationale for Option A above), a degree of uncertainty surrounding the extent and likely provision of the additional infrastructure necessary to support growth suggested a need to test a lower overall housing figure for the area in and around Harlow. This, in turn, raised the question of where the growth that might otherwise have been located in and around Harlow should instead be focused (~3,500 new homes). In light of existing work undertaken by East Herts DC investigating six potential sites for a new settlement within their District, in discussion with East Herts, it was considered reasonable to investigate the implications of two of these delivering significant new housing in the plan period. In discussion with East Herts DC, two of the six locations were selected for testing (Little Hadham and Watton-at-Stone).</p>

Reasonable alternative	Rationale
<p>Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA)</p>	<p>In light of significant constraints to development across the HMA, in particular the extent of Green Belt in Epping Forest District and the southern part of East Herts District, it was considered reasonable to test an option that focused a higher level of development in and around Harlow with correspondingly lower levels of development in more constrained parts of the HMA (for example, at Bishop’s Stortford, Hertford, Sawbridgeworth and Ware in East Herts District and several settlements in Epping Forest District, notably Chigwell and Theydon Bois). Under this option, a significant development at North Weald in Epping Forest District was also removed. This option included the very maximum level of development considered conceivable in the plan period at Gilsten to the north of Harlow in East Herts District together with 5,400 new homes in the Epping Forest District part of the Harlow ‘fringe’.</p>
<p>Spatial option to deliver ~49,638 new homes</p>	
<p>Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)</p>	<p>The SHMA stated that “PPG [Planning Practice Guidance] identifies that the starting point for estimating housing need is the CLG 2012-based household projections. For the 22-year period 2011-33, these projections suggest an increase of 49,638 households across the West Essex and East Hertfordshire HMA: an average growth of 2,256 households each year, comprised of 779 in East Hertfordshire, 653 in Epping Forest, 326 in Harlow and 498 in Uttlesford.” In light of this, it was considered sensible to test an option of around 50,000 new homes. Reflecting Option D above, it was considered logical to explore an option that focused ~17,650 new homes in and around Harlow <u>and</u> which reinstated the development at the more constrained settlements removed under Option D as well as development at North Weald.</p>
<p>Spatial option to deliver ~57,400 new homes</p>	
<p>Option F – Maximum growth across the HMA (NB ~20,985 at Harlow)</p>	<p>Following an update of the HMA housing need by Opinion Research Services (ORS) (August 2016) in light of new information including the DCLG 2014-based household projections, it was considered prudent to test an option that provided for at least 54,608 new homes in the plan period. In order to reach this figure, it was necessary to include several new sites including two hitherto unconsidered sites to the north of Harlow in East Herts District and two previously unconsidered sites in the Epping Forest District part of the Harlow fringe. Altogether, Option F involved around 21,000 new homes in and around Harlow town.</p>

Table 1.3: Rationale for alternatives rejected as unreasonable

Unreasonable alternatives	Reason for rejection
<p>Option X – Focus growth in areas beyond the Green Belt</p>	<p>Given the extensive Green Belt in Epping Forest District and the southern part of East Herts District, it was considered sensible to ask the question as to whether the level of new development suggested in the SHMA could be conceivably accommodated outside of the existing Green Belt. However, such an approach was considered unreasonable due to:</p> <ul style="list-style-type: none"> • the rural nature of much of East Herts and Uttlesford districts (outside the Green Belt), which if development were allocated there, would likely lead to poor links between jobs and homes, limited or sporadic infrastructure to support new homes, poor access to services and facilities, limited public transport for new residents, and further trips generated from new residents utilising rural roads; • known significant constraints at Buntingford outside the Green Belt (e.g. the lack of capacity on the A10); • the Uttlesford 2014 Examination in Public Inspector’s conclusions regarding potential capacity at Saffron Walden and Great Dunmow; and • the fact that land at Great Chesterford in Uttlesford to the north of the HMA is linked to a different HMA.
<p>Option Y – To develop less than ~10,500 new homes in and around Harlow</p>	<p>This option was considered unreasonable as a strong focus on development in and around Harlow is a sensible starting point for developing reasonable alternatives. This reflects the fact that the town represents the most sustainable location within the HMA at which to concentrate development given its role as a sub-regional centre for employment as well as its Enterprise Zone status ; the need to rejuvenate the town centre; the opportunity to capitalise on its transport connections; its important location on the London – Stansted – Cambridge corridor; and, above all, the wider economic growth aspirations for the town.</p>

2 Approach to the SA

2.1 Developing an SA Framework for the assessment

When undertaking an SA, options and other components of plans (e.g. policies) are typically appraised using an 'SA Framework' of appraisal questions. The SA Framework provides a benchmark or yardstick against which sustainability effects can be identified and evaluated based on a structured and consistent approach.

To reflect this approach, an SA Framework of appraisal questions was developed as part of the Strategic Spatial Options Study.

2.2 SA Framework

Table 2.1 overleaf presents the SA Framework of appraisal questions for the Strategic Spatial Options Study.

The appraisal questions are presented under a series of key 'sustainability themes', as follows:

- Biodiversity
- Community and wellbeing
- Economy and employment
- Historic environment
- Housing
- Land
- Landscape
- Low carbon development
- Transport
- Water

The selected sustainability themes incorporate the 'SEA topics' suggested in Annex I(f) of the SEA Directive.²⁵ These were refined to reflect a broad understanding of the anticipated scope of effects.

It is intended that presenting the SA information under these themes will provide a clear and concise approach to presenting appraisal findings and help enable the reader to easily locate the information of greatest interest to them.

²⁵ The SEA Directive does not set out to prescribe particular issues that should and should not be a focus of assessment, beyond requiring a focus on 'the environment, **including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors**' [our emphasis]

Table 2.1: SA Framework

Sustainability theme	Appraisal questions: will the option...
Biodiversity	<ul style="list-style-type: none"> • Support continued improvements to the status of the Epping Forest SAC? • Support continued improvements to the status of the Lee Valley SPA? • Support continued improvements to the status of the SSSIs located in the sub-region? • Protect and enhance county and local wildlife sites? • Protect ancient woodland? • Protect and enhance priority habitats, and the habitat of priority species? • Achieve a net gain in biodiversity? • Protect and enhance the sub-region's geodiversity resource? • Limit the effects from air pollution on biodiversity? • Increase the resilience of biodiversity in the plan area to the effects of climate change, including through the enhancement of ecological connections and green infrastructure networks?
Community and wellbeing	<ul style="list-style-type: none"> • Improve the availability and accessibility of key local facilities for all age groups, including specialist services for disabled and older people? • Maintain or enhance the quality of life of existing local residents? • Promote the development of a range of high quality, accessible community facilities? • Encourage and promote social cohesion and encourage active involvement of local people in community activities? • Provide and enhance the provision of community access to green infrastructure? • Support enhancements to air quality, including in the five Air Quality Management Areas in the sub-region?
Economy and employment	<ul style="list-style-type: none"> • Provide for the needs of businesses (including enhancing the range of premises, services, infrastructure, and availability of a skilled workforce)? • Enhance the vitality of local centres? • Promote skills development and participation in further and higher education? • Support the visitor economy?
Historic environment	<ul style="list-style-type: none"> • Conserve and enhance buildings and structures of architectural or historic interest? • Support the integrity of the historic setting of key buildings of cultural heritage interest? • Support the integrity of conservation areas and their settings? • Conserve and enhance historic landscapes and townscapes? • Conserve the historic settlement patterns of towns and villages? • Conserve and enhance local diversity and distinctiveness?
Housing	<ul style="list-style-type: none"> • Provide quality and flexible homes that meet people's needs? • Provide housing in sustainable locations that allow easy access to a range of local services and facilities?
Land	<ul style="list-style-type: none"> • Promote the use of previously developed land? • Support the remediation of contaminated land? • Avoid the development of the best and most versatile agricultural land?
Landscape	<ul style="list-style-type: none"> • Conserve and enhance landscape character? • Conserve and enhance local distinctiveness? • Promote enhancements to green infrastructure networks? • Support the integrity of conservation areas and their settings?

Sustainability theme	Appraisal questions: will the option...
Low carbon development	<ul style="list-style-type: none"> • Limit the increase in the carbon footprint of the sub-region resulting from population growth? • Promote the use of sustainable modes of transport, including walking, cycling and public transport? • Reduce the need to travel?
Transport	<ul style="list-style-type: none"> • Reduce the need to travel through sustainable patterns of land use and development? • Encourage modal shift to more sustainable forms of travel? • Enable sustainable transport infrastructure improvements?
Water	<ul style="list-style-type: none"> • Support improvements to water quality? • Minimise water consumption? • Ensure that no development takes place in areas at higher risk of flooding, taking the likely effects of climate change into account? • Improve green infrastructure networks to support adaptation to the potential effects of climate change? • Sustainably manage water run-off, ensuring that the risk of flooding is not increased (either within the plan area or downstream) and where possible reduce flood risk?

2.3 Approach to the assessment

The options presented in Table 1.1 above have been appraised against the SA Framework.

In undertaking the appraisal, the proposed options were reviewed to determine the likelihood of positive or negative effects under each theme.

Where a causal link between the options and sustainability themes was established, impacts were identified on the basis of professional judgment with reference to the evidence base. The appraisal was undertaken with reference to the criteria in Schedule 1 of the SEA Regulations, that is:

- the probability, duration, frequency and reversibility of the effects;
- the cumulative nature of the effects;
- the transboundary nature of the effects;
- the risks to human health or the environment (for example, due to accidents);
- the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
- the value and vulnerability of the area likely to be affected due to-
 - special natural characteristics or cultural heritage;
 - exceeded environmental quality standards or limit values; or
 - intensive land-use; and
- the effects on areas or landscapes which have a recognised national, community or international protection status.

Every effort was made to predict effects accurately; however, this is inherently challenging given the strategic nature of the options considered. Because of the uncertainties involved, there was a need to exercise caution when identifying and evaluating significant effects and ensure that assumptions were explained in full. In many instances it was not possible to predict significant effects, but it was possible to comment on merits (or otherwise) in more general terms.

The assessment findings are presented in Chapter 3. These have been presented in a series of tables which present the findings of the assessment by sustainability theme.

3 Assessment findings

Table 3.1: Assessment findings, Biodiversity

Biodiversity	
<p>Will the options:</p> <ul style="list-style-type: none"> • Support continued improvements to the status of the Epping Forest SAC? • Support continued improvements to the status of the Lee Valley SPA? • Support continued improvements to the status of the SSSIs located in the sub-region? • Protect and enhance county and local wildlife sites? • Protect ancient woodland? • Protect and enhance priority habitats, and the habitat of priority species? • Achieve a net gain in biodiversity? • Protect and enhance the sub-region's geodiversity resource? • Limit the effects from air pollution on biodiversity? • Increase the resilience of biodiversity in the plan area to the effects of climate change, including through 	<p>The sustainability performance of the five options relating to the biodiversity theme is closely linked to the specific location of development and its proximity to sites designated for their nature conservation interest.</p> <p>In relation to Bishop's Stortford, Option D, through reducing housing provision in the town by 900 dwellings will help limit the potential for effects on sensitive nature conservation sites to the south of the town, including the Thorley Flood Pound SSSI, the Little Hallingbury Marsh SSSI and the Sawbridgeworth SSSI. SSSI Impact Risk Zones (IRZs) are a GIS tool/dataset which maps zones around each SSSI according to the particular sensitivities of the features for which it is notified. They specify the types of development that have the potential to have adverse impacts at a given location. Natural England is a statutory consultee on development proposals that might impact on SSSIs. In this context the southern part of Bishop's Stortford is within the IRZ for 'residential development of 100 units or more'. As such similar development taken forward may have potential effects on these SSSIs. For this reason, Option D has increased potential for avoiding effects on these SSSIs proposing locations with fewer biodiversity sensitivities.</p> <p>Option D also has reduced potential to lead to effects on Hatfield Forest National Nature Reserve / SSSI, which is located to the east of Bishop's Stortford.</p> <p>In terms of the Harlow fringe (Gilston), this area is relatively unconstrained by biodiversity considerations. As such Options D, E and F, which put forward 4,350 dwellings for this location, may help alleviate effects on designated sites elsewhere. Option B and C, which put forward 1,250 dwellings at this location and consequently less development elsewhere, are less likely to do this.</p> <p>The locations of Little Hadham and Watton-at-Stone are relatively unconstrained regarding nationally designated nature conservation sites. As such the delivery of 1,500 dwellings in each location under Option C will help limit potential effects at designated nature conservation sites.</p> <p>Option D will deliver fewer houses at Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey and North Weald, helping to limit effects on biodiversity at these locations. The option will however lead to a higher level of housing provision in the Harlow Fringe and (to a lesser extent) at Loughton/Buckhurst Hill.</p> <p>In relation to Uttlesford, Option C will significantly increase the number of dwellings to be delivered to two new settlements at the A120. One of these locations, Land at Easton Park, is located close to the High Wood, Dunmow SSSI, which is a wet Ash-Maple and Pedunculate Oak-Hornbeam wood (including ancient woodland) associated with a rich and varied flora. Both settlements are likely to impact on the Flich Way nature route in terms of its biodiversity and quiet enjoyment. The proposed</p>

Biodiversity

the enhancement of ecological connections and green infrastructure networks?

location for development is within the IRZ for 'residential development of 100 units or more'. The second proposed location for a new settlement at Land at Boxted Wood/Andrewsfield is not located within an IRZ- however Boxted Wood itself is ancient woodland.

In terms of the additional dwellings relating to the further 'choices', Options D, E and in particular F will deliver an increased level of housing at the Latton Priory, West Sumners, West Katherines and East of Harlow sites. West Sumners, Latton Priory and (part of) West Katherines are within the IRZ for the Harlow Woods SSSI for 'residential development of 100 units or more'. Alongside, Latton Priory is also in the IRZ for the Epping Forest SSSI. The East of Harlow sites are not within IRZs for the type of development proposed.

In terms of potential in-combination effects of potential allocations in locations in proximity to Epping Forest, all of the options all have potential to lead to effects on the Epping Forest SAC/SSSI through allocations at Theydon Bois, Loughton/Buckhurst Hill and Epping, in addition to growth at Harlow. Whilst the distribution between these settlements varies between Option A, B, C, E and F (which promote a higher level of development at Theydon Bois and Epping) and Option D and F (which promote a higher level of development at Loughton/Buckhurst Hill, the overall quantum of development in these settlements is similar. This is with the exception of the Maximum Growth option (Option F), which delivers significantly more housing across these settlements.

In relation to the Lee Valley SPA/Ramsar, whilst Option D proposes a lower level of development at Waltham Abbey, the settlement closest to this internationally designated site in the study area, comparative effects are likely to be limited by the relatively limited number of additional dwellings proposed through Options A, B, C, E and F (406 dwellings).

Potential effects on the Lee Valley SPA/Ramsar, Epping Forest SAC and Wormley-Hoddesdonpark Woods SAC have been examined in more detail through the HRA process undertaken with respect to the strategic spatial options²⁶. This considered: disturbance from recreational activities and urbanisation; atmospheric pollution; water abstraction; and water quality.

In terms of recreational pressures, whilst significant effects from the options considered were not anticipated on the three sites, it was recommended that all new development deliver greenspace in-line with the Natural England ANG standard to ensure it is self-sufficient. In relation to air quality, it was considered that the options considered would not lead to a likely significant effect upon the three sites either alone or in combination with other projects or plans. In relation to water abstraction, it was concluded that delivery of the options would not result in adverse effects on the Lee Valley SPA/Ramsar site through excessive water drawdown, either alone or in combination with other plans and projects. It was also evaluated that there would not be a water quality effect from the options on Lee Valley SPA/Ramsar site either alone or in combination with other projects and plans.

In relation to biodiversity action plan priority habitats, all options have the potential to lead to the loss of these if development is inappropriately located and poorly designed. Similarly all of the options have the potential to lead to adverse effects on priority species without the appropriate location, design and layout of development and the integration of appropriate green

²⁶ As presented in AECOM (September 2016) East Herts District Plan Habitats Regulations Assessment

Biodiversity

infrastructure provision.

The delivery of high quality green infrastructure provision is a key means of enhancing biodiversity habitats and improving ecological connections. In this context, it is possible that the larger scale developments proposed by Option D, E and F around Harlow and by Option C at the two new settlements at locations close to the A120 will facilitate opportunities for targeted biodiversity enhancements. This is linked to the delivery of Section 106 agreements likely to be levied on the larger development area at these locations promoted through these options. Whilst all new developments involving one or more dwellings are liable for the community infrastructure levy, concentrating the delivery of housing at fewer and larger sites may help secure additional contributions to site specific mitigation through Section 106 planning agreements. It should be noted however that such contributions are typically required to make a development proposal acceptable in planning terms that would not otherwise be acceptable.

Table 3.2: Assessment findings, Community and Wellbeing

Community and Wellbeing

Will the options:

- Improve the availability and accessibility of key local facilities for all age groups, including specialist services for disabled and older people?
- Maintain or enhance the quality of life of existing local residents?
- Promote the development of a range of high quality, accessible community facilities?
- Encourage and promote social cohesion and encourage active involvement of local people in community activities?

The options which plan for an increased level of housing provision to the largest settlements in the HMA (including Harlow and Bishop's Stortford) will promote accessibility through directing housing to the settlements with the broadest range of services and facilities. This will likely support social inclusion. In this context Option D and E, which deliver in the region of 17,650 dwellings at Harlow, and Option F, which delivers 20,985 dwellings, will deliver an increased level of housing to the largest settlement in the HMA, with the widest range of amenities. Option D will however deliver 900 fewer dwellings at Bishop's Stortford than the other options.

Directing increased levels of housing delivery to the larger settlements will support access to services and facilities for those living within or close to these settlements. However there is significant potential for enhancements to the vitality of smaller settlements in the HMA to be secured through increased population growth. This may support the availability and viability of services and facilities in smaller settlements, helping to improve access to services and facilities, promoting social connections and supporting physical activity. In this context, Options B, C and E, which promote an increased proportion of housing in the parts of the HMA outside of Harlow may support enhancements to such facilities in these locations. It should be noted, however, such an approach has the potential to lead to an increased dispersal of development without the requisite services being delivered. Such an approach also has the potential to increase the need to travel for employment purposes - for example Uttlesford District has two residents per job and there is a significant level of out commuting to London across the sub-region.

The delivery of higher levels of housing growth has the potential to lead to effects on health and wellbeing through increasing road safety issues and impacts on air and noise from increased traffic flows at certain locations. This may have impacts on the health and wellbeing of residents. Effects therefore depend on the detailed location of new development areas and the integration of elements such as sustainable transport and green infrastructure provision.

Community and Wellbeing

- Provide and enhance the provision of community access to green infrastructure?
- Support enhancements to air quality, including in the five Air Quality Management Areas in the sub-region?

Regarding the Air Quality Management Areas (AQMAs) declared within the HMA, Options A-E have been modelled as having similar effects on traffic increases within the areas declared as AQMAs. In relation to the Sawbridgeworth AQMA, modelling indicates that there will be significant increases in traffic flows on London Road, (on which the AQMA is centred) through Options A-E. Minor traffic increases have been modelled for Options A-E in Epping on the routes where traffic has resulted in the declaration of an AQMA on High Road (Bell Common). No significant increases are currently modelled affecting the AQMA in Bishop's Stortford or the AQMA in Saffron Walden.

The delivery of high quality green infrastructure provision will be a key contributor to health and wellbeing in the HMA. In this context it is possible that the larger scale developments proposed by Options D, E and F around Harlow and by Option C at the two new settlements at locations close to the A120 will facilitate opportunities for targeted biodiversity enhancements. This is linked to the delivery of Section 106 agreements likely to be levied on the larger development areas at the locations promoted through these options. Whilst all new developments involving one or more dwellings are liable for the community infrastructure levy, concentrating the delivery of housing at fewer and larger sites may help enable the securing of additional contributions to site specific mitigation through Section 106 planning agreements. It should be noted however that such contributions are typically required to make a development proposal acceptable in planning terms that would not otherwise be acceptable.

Table 3.3: Assessment findings, Economy and Employment

Economy and Employment

Will the options:

- Provide for the needs of businesses (including enhancing the range of premises, services, infrastructure, and availability of a skilled workforce)?
- Enhance the vitality of local centres?
- Promote skills development and participation in further and higher education?
- Support the visitor economy?

Overall, through delivering a larger number of dwellings in the sub-region, Options E and F have the potential to deliver increased levels of housing provision, with additional potential for support HMA economic vitality.

Options F, D and E, and to a lesser extent, Option A will do more to support the economic vitality of Harlow through allocating a larger proportion of development in the vicinity of the town. This will help rejuvenate the town centre and support Harlow's status as an Enterprise Zone. Options A, B, C, E and F through increasing the proportion of development to be located in a wider range of settlements, have the potential to do more to support the economic vitality of a broader range of settlements. These include Bishop's Stortford, Hertford, Sawbridgeworth, Ware, Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey Saffron Walden and Great Dunmow and the larger villages in Uttlesford. Having said this, economic vitality can also be adversely affected by increased traffic congestion associated with new development.

Table 3.4: Assessment findings, Historic Environment

Historic Environment	
<p>Will the options:</p> <ul style="list-style-type: none"> • Conserve and enhance buildings and structures of architectural or historic interest? • Support the integrity of the historic setting of key buildings of cultural heritage interest? • Support the integrity of conservation areas and their settings? • Conserve and enhance historic landscapes and townscapes? • Conserve the historic settlement patterns of towns and villages? • Conserve and enhance local diversity and distinctiveness? 	<p>Option D will help limit potential effects on the fabric and setting of the historic environment in Bishop's Stortford, Hertford, Sawbridgeworth, Ware, Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey, at North Weald, Saffron Walden and Great Dunmow and the larger villages in Uttlesford by limiting development in the vicinity of these locations.</p> <p>Options D, E and F will increase the potential for effects on the nationally designated features present in the Harlow fringe, including the scheduled monuments and listed buildings located to the south of the town.</p> <p>The historic environment of Saffron Walden has the most potential to be impacted on by the higher level of development in the town proposed through Option F. All of the options have the potential to have impacts on the listed gardens at Easton Park West of Great Dunmow.</p> <p>In relation to the historic environment, conservation areas are designated locally for their special architectural and historic interest, and comprise particular concentrations of features of historic environment interest. In this context conservation areas are present in many of the settlements potentially affected by the level of housing delivery proposed through the options. Whilst potential effects on conservation areas from new housing depends on the detailed location, design and layout of development, a number of broad conclusions can be made.</p> <p>In relation to the conservation areas in Great Dunmow and Saffron Walden, Option F has the largest potential to have impacts on their fabric and setting through proposing an increased level of housing delivery in these settlements. In relation to the three conservation areas in Loughton (York Hill, Staples Road, Baldwins Hill), Options D and F have most potential to affect their setting and fabric. For similar reasons Option F has increased potential to have impacts on the Ware Conservation Area, and Option C has increased potential to have impacts on the fabric and setting of the Watton at Stone Conservation Area. In relation to the conservation areas in Hertford, Sawbridgeworth, Chigwell, Chipping Ongar (x3 conservation areas: Great Stoney School, Ongar and Chipping Ongar), Epping (x3 conservation areas: Bell Common, Coopersale and Epping), Theydon Bois and Waltham Abbey, all of the options have the potential to have comparable effects due to similar levels of housing delivery. This is with the exception of Option D, which limits the housing delivery numbers proposed for these settlements.</p>

Table 3.5: Assessment findings, Housing

Housing	
<p>Will the options:</p> <ul style="list-style-type: none"> • Provide quality and flexible homes that meet people's needs? 	<p>Taken as a whole, at the HMA level, all six options exceed the OAHN for the Housing Market Area (46,100). In relation to meeting the four districts' individual housing needs:</p> <ul style="list-style-type: none"> • Option A will meet East Herts', Harlow's and Uttlesford's OAHN, but not Epping Forest's (however, the figure for Epping Forest is just shy of OAHN).

Housing

- Provide housing in sustainable locations that allow easy access to a range of local services and facilities?
- Option B will meet Harlow’s and Uttlesford’s OAHN, but not East Herts’ or Epping Forest’s.
- Option C will meet the delivery of East Herts’, Harlow’s and Uttlesford’s OAHN, but not Epping Forest’s.
- Option D will meet only Harlow’s OAHN, and not East Herts’ (just shy), Epping Forest’s or Uttlesford’s (just shy).
- Options E and F will meet all four districts’ OAHN.

More specifically, through limiting housing delivery in Bishop’s Stortford, Hertford, Sawbridgeworth, Ware, Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey Saffron Walden and Great Dunmow and the larger villages in Uttlesford, Option D may do less to meet localised housing needs at these locations.

Overall, through delivering a larger number of dwellings in the sub-region, Options D, E and F have most potential to deliver a broader range of housing types and tenures. In this context, higher levels of overall growth have the potential to deliver an increased range of housing (including affordable housing), with accompanying infrastructure provision, and will do more to support services and facilities.

Table 3.6: Assessment findings, Land

Land

<p>Will the options:</p> <ul style="list-style-type: none"> • Promote the use of previously developed land? • Support the remediation of contaminated land? • Avoid the development of the best and most versatile agricultural land? 	<p>All of the options, due to the lack of available brownfield land in the HMA, will lead to the significant loss of greenfield land. In this context each Local Planning Authority in the sub-region have completed a Strategic Housing Land Availability Assessment, and all reasonable and available opportunities for use of brownfield land have been explored.</p> <p>Due to the lack of brownfield land available in Harlow, Options D, E and F and to a lesser extent, Option A, have increased potential to lead to the loss of the Best and Most Versatile Agricultural Land present in the vicinity of Harlow, including Grade 2 and Grade 3a land present in this area. It should be noted however that recent (post 1988) classification of agricultural land has not been undertaken in the area.</p> <p>Through limiting housing delivery in Bishop’s Stortford, Hertford, Sawbridgeworth, Ware, Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey Saffron Walden and Great Dunmow and the larger villages in Uttlesford, Option D is likely to limit the loss of the Best and Most Versatile Agricultural Land in the vicinities of these locations.</p> <p>The lack of available brownfield land in Harlow will also limit opportunities for the remediation of contaminated land.</p>
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Table 3.7: Assessment findings, Landscape

Landscape	
<p>Will the options:</p> <ul style="list-style-type: none"> • Conserve and enhance landscape character? • Conserve and enhance local distinctiveness? • Promote enhancements to green infrastructure networks? • Support the integrity of conservation areas and their settings? 	<p>All of the options, due to the lack of available previously developed land in the sub-region, will lead to the loss of greenfield land; this has the potential to lead to impacts on landscape character.</p> <p>Through limiting housing delivery in Bishop's Stortford, Hertford, Sawbridgeworth, Ware, Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey, Saffron Walden and Great Dunmow, and larger villages in Uttlesford, Option D may reduce the potential for effects on landscape and townscape character in the vicinity of these locations. Options D, E and F, and to a lesser extent, Option A, however have increased potential to lead to impacts on landscape character around Harlow. In terms of Green Belt, Option C, which proposes 6,500 dwellings rather than 2,800-3,000 dwellings proposed by the other options at the two locations close to the A120 (which are outside of the Green Belt) will help limit the overall loss of Green Belt in the sub region. No AONBs or nationally designated landscapes are located in the HMA. Option F would however potentially lead to impacts on the listed gardens at Easton Park at Great Dunmow.</p> <p>Conservation areas are key designations supporting local distinctiveness, townscape character and the quality of the built environment. In this context conservation areas are present in many of the settlements potentially affected by housing delivery proposed through the options. Whilst potential effects on conservation areas from new housing proposed through the options depends on the detailed location, design and layout of development, a number of broad conclusions can be made.</p> <p>In relation to the conservation areas in Great Dunmow and Saffron Walden, Options E has the largest potential to have impacts on the setting of these designated areas through delivering a higher level of housing in the vicinity of the settlements. In relation to the three conservation areas in Loughton (York Hill, Staples Road, Baldwins Hill), Options D and F have most potential to affect their setting. For similar reasons Option F has increased potential to have impacts on the Ware Conservation Area, and Option C has increased potential to have impacts on the setting of the Watton at Stone Conservation Area. In relation to the conservation areas in Hertford, Sawbridgeworth, Chigwell, Chipping Ongar (x3 conservation areas: Great Stoney School, Ongar and Chipping Ongar), Epping (x3 conservation areas: Bell Common, Coopersale and Epping), Theydon Bois and Waltham Abbey, all of the options have the potential to have similar impacts due to comparable housing delivery in the settlements. This is with the exception of Option D, which limits the housing proposed for these settlements.</p> <p>Options D, E and F, through potentially delivering in the region of 2,000 to 2,500 dwellings at Latton Priory may have significant effects on landscape character to the south of Harlow, linked to development of the ridgeline at this location.</p>

Table 3.8: Assessment findings, Low Carbon Development**Low Carbon Development**

Low Carbon Development

Will the options:

- Limit the increase in the carbon footprint of the sub-region resulting from population growth?
- Promote the use of sustainable modes of transport, including walking, cycling and public transport?
- Reduce the need to travel?

Overall, through delivering an increased level of housing growth, Options E and F will do most to increase the built footprint of the HMA. In this context these options have the most potential to stimulate the largest increases in greenhouse gas emissions. However the distribution of development is an important consideration.

Road transport is an increasingly significant contributor to greenhouse gas emissions in the sub-region. The options which direct an increased level of housing provision to the largest settlements in the sub-region, will promote accessibility through directing housing to the settlements with the broadest range of services and facilities. This will help limit the need to travel to services and facilities, therefore helping to limit emissions from transport. In this context Option D and E, which deliver in the region of 17,650 dwellings at Harlow, will deliver an increased level of housing to the largest settlement in the sub-region, with the widest range of amenities. Option D will however deliver 900 fewer dwellings at Bishop's Stortford than the other four options.

Options D, E and F, and to a lesser extent, Option A, through facilitating a larger scale of housing delivery at Harlow, may enable more effective improvements to walking and cycling and public transport links. This will support climate change mitigation. However Options A, B, C, E and F which promote an increased delivery of housing in the parts of the HMA outside of Harlow, may also support the limitation of emissions from transport. Whilst such an approach has the potential to lead to an increased dispersal of development without the requisite amenities being delivered, the delivery of housing at these locations will support the vitality of these settlements, with increased potential to facilitate the development of new housing at locations which are more integrated with the existing built up area of settlements. This has the potential to limit greenhouse gas emissions through supporting infrastructure improvements and reducing the need to travel. However, spreading growth around is likely to be less sustainable than focusing at Harlow because smaller settlements will have less employment opportunities and therefore journeys to work are likely to be longer/ encourage more travel. This is a factor that developers cannot easily mitigate. Dispersed growth is also more difficult to serve by public transport and may not achieve the 'critical mass' necessary to deliver new/improved public transport services to the nearest employment centres. As a result more trips are likely to be made by private car.

In terms of the delivery of low carbon and energy efficient development in the HMA, this depends on the design and layout of new development areas.

Table 3.9: Assessment findings, Transport

Transport

Will the options:

- Reduce the need to travel through sustainable patterns of land use and development?

The options which direct an increased level of housing provision to the largest settlements in the sub-region will promote accessibility and reduce the need to travel through directing housing to the settlements with the broadest range of services and facilities. In this context Options D and E, which deliver in the region of 17,650 dwellings at Harlow, and Option F, which delivers 20,985 dwellings, will deliver an increased level of housing to the largest settlement in the sub-region with the

Transport

- Encourage modal shift to more sustainable forms of travel?
- Enable sustainable transport infrastructure improvements?

widest range of amenities. This provides opportunities to capitalise on the towns good transport connections (for example, good rail links to London, Stansted Airport and Cambridge) and deliver north-south and east-west sustainable transport corridors traversing the town. Option D will however deliver 900 fewer dwellings at the second largest settlement in the sub-region, Bishop's Stortford, than the other four options.

Accessibility will however depend on the provision of sustainable transport infrastructure to accompany new development areas. Option D, E, F, and to a lesser extent, Option A, through facilitating a larger scale of housing delivery at Harlow, may enable more effective improvements to walking and cycling and public transport links to be undertaken. However Options A, B, C and E, which promote the delivery of increased proportion of housing in the parts of the sub-region outside of Harlow, have the potential to facilitate the development of new housing at locations which are more integrated with the existing built up area of settlements, and with increased potential of supporting the viability of existing sustainable transport links at these locations. However, spreading growth across the sub-region may do more to stimulate traffic than focusing housing at Harlow because smaller settlements will have less employment opportunities. This may increase the length of journeys to work and encourage more travel. This is a factor that developers cannot easily mitigate. Dispersed growth is also more difficult to serve by public transport and may not achieve the 'critical mass' necessary to deliver new/improved public transport services to the nearest employment centres. As a result more trips are likely to be made by private car.

In the context of the options considered, well located and coordinated development provides opportunities for the development of sustainable movement corridors which utilises growth to support public transport and walking and cycling corridors. As such the options considered largely make use of existing public transport nodes, facilitating the development of north/south corridors and east west transport corridors in the sub-region. The level of growth considered through the options also offer opportunities for contributing or realising the need for new infrastructure to accompany new development areas. This includes, for example, a second River Stort crossing, or enhancements to junctions on the M11.

Table 3.10: Assessment findings, Water

Water

Will the options:

- Support improvements to water quality?
- Minimise water consumption?
- Ensure that no development takes place in areas at higher risk of flooding, taking the likely effects of climate change into account?

The effect of new development areas on fluvial, surface water and groundwater flooding depends on detailed location and the implementation of measures such as sustainable drainage systems. Similarly, potential effects on water quality depend on the integration of measures to limit point and non-point source pollution. In terms of water efficiency, this depends on the incorporation of appropriate measures within new development areas.

The West Essex and East Herts sub-region has one of the highest water usage rates in the country, and water supply issues regionally have impacted issues relating to the recharge of aquifers (the main source of water for the majority of users within Hertfordshire). Water resource pressures also have significant environmental impacts, with high levels of abstraction leading to some water bodies experiencing low flows. As such, water supply has the potential to become a constraint on

Water

- Improve green infrastructure networks to support adaptation to the potential effects of climate change?
 - Sustainably manage water run-off, ensuring that the risk of flooding is not increased (either within the plan area or downstream) and where possible reduce flood risk?
- growth as it becomes more difficult to match supply with demand.
- In relation to water supply, the NPPF states that local plans should plan positively to ensure the provision of infrastructure for water supply, including an assessment of its quality and capacity (paragraphs 156, 157 and 162). However in the context of the current study, it is anticipated that the Water Resources Management Plans prepared by water supply companies will be expected to address long-term water supply issues associated with growth.
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4 Spatial Option

4.1 Identifying the Spatial Option

Under the requirements of the Duty to Co-operate, the Co-operation for Sustainable Development Member Board (the Co-op Member Board) considered six options (A-F) for accommodating new housing development across the West Essex and East Hertfordshire Housing Market (HMA) area up to 2033. These six options varied in terms of: (i) the overall quantum of development to be provided for across the HMA (ranging from ~48,300 to ~56,250 new houses); and (ii) the spatial distribution of that development, in particular the amount of new housing to be accommodated in and around Harlow town. Varying the overall quantum of development allowed the Co-op Member Board to test the implications of different levels of growth including: 46,100 (the figure for objectively assessed housing need in the Strategic Housing Market Assessment, SHMA); 49,638 (a figure based on the CLG 2012-based household projections); and 54,608 (an updated OAHN figure provided by Opinion Research Services, ORS, in light of recent information including the CLG 2014-based household projections). Varying the spatial distribution of development allowed the Co-op Member Board to explore the implications of focusing different levels of development in different parts of the HMA. In particular, the options varied in terms of the level of development located in and around Harlow, the HMA's key urban centre.

The implications of the six options (A-F) were investigated through four means:

1. Transport modelling to explore their implications in relation to traffic flows and the need for road upgrades or additional highways infrastructure
2. Sustainability Appraisal to assess their implications in relation to a range of topics including biodiversity, community and wellbeing, historic environment, landscape and water
3. Habitat Regulations Assessment to determine the implications, if any, for the integrity of the Epping Forest SAC, Lee Valley SPA/Ramsar site and Wormley Hoddesdonpark Woods SAC
4. Strategic Site Assessment to assess the suitability of the potential sites in and around Harlow that could deliver new housing development

Transport modelling

The transport modelling indicated a 35-40% increase in trips on the network by 2033 based on 14,000 new homes in and around Harlow (and 48,000 across the wider HMA) (NB 14,000 equates to Option A). In light of the transport modelling, it was concluded that a major improvement at Junction 7 of the M11 and a new Junction 7A were both *essential* to deliver growth. It was also concluded that a major improvement at Junction 8 was also *essential* to support HMA growth as well as potential expansion at Stansted Airport beyond the currently consented growth of up to 35 million passengers per annum (mppa).

With respect to Harlow town, in light of the transport modelling, it was also concluded that early delivery of a second crossing over the River Stort was *essential* to enable the development of an effective north-south sustainable travel corridor, significant modal shift towards public transport, walking and cycling and wider network benefits to Harlow (NB sustainable travel corridors are also arguably a key element of any 'garden settlement' approach to development in and around Harlow). In terms of the level of development that can be accommodated in and around Harlow, the transport modelling undertaken to date indicates that growth of between 14,000 and 17,000 new homes in and around Harlow could be accommodated provided that key mitigation measures are delivered during the plan period. For this reason, agreement must be pursued on the *Memorandum of Understanding on Highways and Transportation Infrastructure for the West Essex and East Hertfordshire Housing Market Area*. Growth beyond 2033 may be possible subject to further transport modelling and the identification and delivery of additional strategic highway mitigation measures.

Sustainability Appraisal

The SA process has considered the sustainability performance of the six options with regards to a broad range of environmental and socio-economic considerations. Whilst in many respects the overall sustainability performance of many of the options considered are broadly similar, there are differences between the options in terms of the potential environmental effects that may arise and the socio-economic opportunities offered by the options in specific locations. For example Options A, B, C and E, which promote the delivery of an increased proportion of housing in the parts of the sub-region outside of Harlow, will increase the potential for supporting services and facilities across a broader range of locations than Option D. Option D, through limiting housing delivery in Bishop's Stortford, Hertford, Sawbridgeworth, Ware, Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey, Saffron Walden and Great Dunmow, and larger villages in Uttlesford, may reduce the potential for effects on landscape and townscape character, biodiversity assets and air/noise quality in the vicinity of these locations. However this would come at a significant trade-off in terms of meeting local housing needs and supporting the vitality of these settlements. Similarly, whilst Options D, E and F, and to a lesser extent, Option A have increased potential to lead to environmental effects in the vicinity of Harlow, these options will do more to realise the wider sustainability benefits associated with focusing growth in the primary settlement of the sub-region.

Taken as a whole, at the HMA level, all six options exceed the OAHN for the Housing Market Area (46,100). However, through delivering a larger number of dwellings in the sub-region, Options D, E and F have most potential to deliver a broader range of housing types and tenures, promote the vitality of settlements and support infrastructure delivery.

Overall the sustainability performance of the six options will largely depend on the more detailed elements relating to the delivery of growth in the sub-region. This includes relating to the specific location of new development areas, design and layout of new development and the integration of elements such as enhancements to sustainable transport networks and green infrastructure provision

Habitat Regulations Assessment

Potential effects on the Lee Valley SPA/Ramsar, Epping Forest SAC and Wormley-Hoddesdon Park Woods SAC have been examined in detail through the HRA process undertaken with respect to the strategic spatial options. This considered: disturbance from recreational activities and urbanisation; atmospheric pollution; water abstraction; and water quality.

Atmospheric pollution

With respect to atmospheric pollution and the key issue of transport pollution affecting Epping Forest SAC, the HRA concluded that there was relatively little difference between any of the options. The HRA indicated that no option resulted in a change in nitrogen or acid deposition rate equivalent to (or even close to) 1% of the Critical Load on any road link. It was therefore possible to conclude, in line with relevant (DMRB and AQTAG) guidelines that all options would make an imperceptible or inconsequential contribution to local nitrogen and acid deposition within Epping Forest SAC. As such, it was concluded that there would be no adverse effect on the integrity of Epping Forest SAC from the options, either alone or in combination with other plans and projects (the same conclusion also applied to the other two sites). In practice, the HRA was not therefore material to the ultimate choice of option.

However, it was evident from the HRA work that, even allowing for some improvement in background air quality to 2033 from improved emissions technology, the total nitrogen deposition rates adjacent to all modelled road links would reach, or exceed, the lowest point of the currently used critical load range for Epping Forest SAC. As such, while the modelling indicated that none of the options could be 'blamed' for making a significant contribution to the future elevated nitrogen deposition rates, when all traffic is taken together there would clearly remain potential for a continued negative effect on the SAC by 2033. Therefore, while it may not be required as 'mitigation', it is nonetheless advisable for the HMA authorities to pursue agreement on the draft *Memorandum of Understanding on Managing the impacts of growth within the West Essex/East Hertfordshire Housing Market Area on Epping Forest Special Area of Conservation*, the

anticipated signatories of which include Natural England and the City of London Corporation (Conservators of Epping Forest).

Recreational pressure

In terms of recreational pressures, whilst significant effects from the options considered were not anticipated on Lee Valley SPA/Ramsar site or Wormley Hoddesdonpark Woods SAC, it was recommended that all new development deliver greenspace in line with the Natural England Accessible Natural Greenspace (ANGSt) standard to ensure it is self-sufficient. Adverse effects on Epping Forest SAC due to growth in Epping Forest District in particular could not be dismissed particularly due to development in the following settlements: Loughton, Epping, Waltham Abbey, Theydon Bois and Chigwell. More detailed visitor survey work may be required. Any such survey, and any more refined assessment of impacts and mitigation solutions would be undertaken within the scope of a strategic commitment that all the HMA authorities have made in a Memorandum of Understanding between the HMA authorities, Essex County Council, Hertfordshire County Council, Natural England and the Corporation of London. Once that survey work has been completed, strategic mitigation solutions may follow (such as access management contributions and, for the largest sites, provision of on-site alternative recreational natural greenspace).

Water abstraction and quality

In relation to water abstraction, it was concluded that the options would not result in adverse effects on the Lee Valley SPA/Ramsar site through excessive water drawdown, either alone or in combination with other plans and projects. It was also concluded that there would not be a water quality effect from the options on Lee Valley SPA/Ramsar site either alone or in combination with other projects and plans.

Strategic Site Assessment

The Harlow Strategic Site Assessment study was undertaken to: consider and evaluate potential strategic sites in and around Harlow; establish an up-to-date direction of travel in terms of the acceptability of growth; take account of high-level infrastructure implications of particular sites and in combination across Harlow; enable officers, Members, statutory consultees and land promoters to understand how the sites perform; and provide outputs capable of forming part of the evidence base for the emerging Local Plans.

The Strategic Site Assessment identified that there are sufficient suitable sites in and around Harlow to accommodate close to 16,100 units during the plan period (taking into account sites either already completed or granted planning permission as well as urban brownfield sites) provided that:

- Further detailed traffic modelling for development to the East of Harlow demonstrates growth is deliverable on the scale envisaged;
- Significant infrastructure requirements are met, including highways, sustainable travel options, education, sewerage/drainage etc.;
- Landscape impacts can be mitigated; and
- Development can be distributed amongst several sites in combination (e.g. north and west of Harlow).

4.2 The Spatial Option

In light of this investigation, the Co-op Member Board identified a preferred Spatial Option to deliver c. 51,000 new homes across the HMA to 2033 broken down as follows:

Local authority	Net new dwellings 2011-2033
East Hertfordshire District Council	c. 18,000
Epping Forest District Council	c. 11,400
Harlow District Council	c. 9,200
Uttlesford District Council	c. 12,500
Total across the HMA	c. 51,100
...of which the area in and around Harlow* will provide	c. 16,100

*'in and around Harlow' refers to development in Harlow town as well as around Harlow in adjoining districts

A breakdown of the option in comparison with the six options considered is presented in **Table 4.1** below.

Table 4.1: Preferred Spatial Option alongside the spatial distribution options considered

Spatial area		The Spatial Option ²⁷	Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
			Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ²⁸ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ²⁹)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
East Hertfordshire District								
'Givens' (up to July 2016)	Completions	2625	1951	1951	1951	1951	1951	1951
	Permissions	2435	1839	1839	1839	1839	1839	1839
	Windfall assumption	800	1120	1120	1120	1120	1120	1120
	Sub-total	5860	4910	4910	4910	4910	4910	4910
Potential allocations / broad locations ('choices')	Bishop's Stortford	4142	4321	4321	4321	3421	4321	4321
	Buntingford	0 ³⁰	496	496	496	496	496	496
	East of Stevenage	600	600	600	600	600	600	600
	East of Welwyn	1350	1350	1350	1350	1350	1350	1350
	Harlow fringe (Sites A & E)	3050	2750	1250	1250	4350	4350	4350
	Harlow fringe (Site B)	0	0	0	0	0	0	160
	Harlow fringe (Site C)	0	0	0	0	0	0	50
Harlow fringe (Site G)	0	0	0	0	0	0	900	

²⁷ The Preferred Spatial Option reflects the latest figures for completions, permissions and windfall assumptions; the options were, however, based on spring 2016 figures and the transport modelling is based on these figures

²⁸ The possibility of one of the two new settlements being located in Epping was discussed. However, Epping argued that 1616 may be potentially allocated at North Weald and this position would only be reviewed if/when aviation is found to be unviable in the longer term; no sites of sufficient size for a new settlement have been put forward in the remainder of the District and much of the east of the District is relatively rural with limited public transport connections

²⁹ Figures reduced across settlements in East Herts (Bishop's Stortford, Hertford, Sawbridgeworth and Ware) and Epping Forest to minimise Green Belt incursion; Duty to Cooperate developments at East of Stevenage and East of Welwyn unchanged

³⁰ Numbers at Buntingford are reflected in the figure for permissions (NB there is no further development planned at Buntingford for the remainder of the plan period)

Spatial area		The Spatial Option ²⁷	Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
			Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ²⁸ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ²⁹)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
	Hertford	950	950	950	950	300	950	950
	Sawbridgeworth	500	375	375	375	0	375	375
	Ware	1000 ³¹	200	200	200	0	200	1000
	Larger villages / NP ³²	500	500	500	500	500	500	500
	Other	74	337	337	337	337	337	337
	New settlement (option 1)	N/A	N/A	N/A	0	N/A	N/A	N/A
	New settlement (option 2)	N/A	N/A	N/A	1500	N/A	N/A	N/A
	New settlement (option 3)	N/A	N/A	N/A	0	N/A	N/A	N/A
	New settlement (option 4)	N/A	N/A	N/A	1500 ³³	N/A	N/A	N/A
	New settlement (option 5)	N/A	N/A	N/A	0	N/A	N/A	N/A
	New settlement (option 6)	N/A	N/A	N/A	0	N/A	N/A	N/A
Sub-total	12180	11879	10379	13379	11354	13479	15389	
East Hertfordshire District Total		18040 (OAHN = 16400)	16789 (OAHN = 16400)	15289 (OAHN = 16400)	18289 (OAHN = 16400)	16264 (OAHN = 16400)	18389 (OAHN = 16400)	20299 (OAHN = 19427)
Epping Forest								
'Givens' (up to March	Completions	1173	1007	1007	1007	1007	1007	1007
	Permissions	1250	747	747	747	747	747	747

³¹ The increase at Ware stems from further discussions since the original options were formulated with Hertfordshire County Council highways and education departments which indicate that Ware can now accommodate around 1000 dwellings (NB also reflected in Option F).

³² Allocation to include facilitation of neighbourhood planning

³³ Assume 1500 at each of two new settlements; option 2 (Little Hadham) and option 4 (Watton at Stone) are being tested under Option C for the purposes of the transport modelling

Spatial area		The Spatial Option ²⁷	Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
			Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ²⁸ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ²⁹)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
2016)	Windfall assumption	595	1394	1394	1394	1394	1394	1394
	Sub-total	3018	3148	3148	3148	3148	3148	3148
Epping Forest District part of the Harlow fringe	Latton Priory	1000	1250	1350	350	2000	2000	2250
	West Sumners	1000	1000	0	1000	1100	1100	1200
	West Katherines	1100	750	0	0	800	800	1100
	East of Harlow	750	500	0	0	1500	1500	750
	West Pinnacles	0	0	0	0	0	0	1000
	Land at Riddings Lane	50	0	0	0	0	0	50
	Sub-total	3900	3500	1350	1350	5400	5400	6350
Potential allocations / broad locations ('choices')	Chigwell	410	410	410	410	0	410	410
	Chipping Ongar	314	314	314	314	55	314	314
	Epping	513	513	513	513	413	513	513
	Loughton/Buckhurst Hill	892	892	892	892	1101	892	1101
	Theydon Bois	148	148	148	148	0	148	148
	Waltham Abbey	406	406	406	406	196	406	406
	North Weald ³⁴	1616	1616	1616	1616	0	1616	1616
Larger villages / NP ³⁵	146	146	146	146	0	146	146	

³⁴ North Weald (including the Airfield) is subject to an existing masterplan developed by Epping Forest District Council

³⁵ Allocation to include facilitation of neighbourhood planning

Spatial area		The Spatial Option ²⁷	Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
			Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ²⁸ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ²⁹)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
	Sub-total	8345	7945	5795	5795	7165	9845	11004
Epping Forest District Total		11363 (OAHN = 11300)	11093 (OAHN = 11300)	8943 (OAHN = 11300)	8943 (OAHN = 11300)	10313 (OAHN = 11300)	12993 (OAHN = 11300)	14152 (OAHN = 13278)
Harlow District								
'Givens'(up to 1 April 2016)	Completions	1096	1023	1023	1023	1023	1023	1023
	Permissions	3608	3488	3488	3488	3488	3488	3488
	Windfall assumption	0	0	0	0	0	0	0
	Princess Alexandra Hospital	675³⁶	0	0	0	0	0	675
	Sub-total	5379	4511	4511	4511	4511	4511	5186
'Choices'	Urban brownfield	1196	1389	1389	1389	1389	1389	1389
	Greenfield (east of Harlow)	2600	2000	2000	2000	2000	2000	2600
	Sub-total	3796	3389	3389	3389	3389	3389	3989
Harlow District Total		9175 (OAHN = 5900)	7900 (OAHN = 5900)	7900 (OAHN = 5900)	7900 (OAHN = 5900)	7900 (OAHN = 5900)	7900 (OAHN = 5900)	9175 (OAHN = 7824)
Uttlesford District								
'Givens' (up to 1 April 2016)	Completions	2468	1914	1914	1914	1914	1914	1914
	Permissions	4598	5202	5202	5202	5202	5202	5202
	Windfall assumption	850	900	900	900	900	900	900
	Sub-total	7916	8016	8016	8016	8016	8016	8016

³⁶ On the basis that the site would be vacated during the plan period when the hospital moved to a new location (NB also included under Option F)

Spatial area		The Spatial Option ²⁷	Spatial options to deliver ~46,100 new homes across the SHMA area				Spatial option to deliver ~49,638 new homes	Spatial option to deliver ~57,400 new homes
			Option A – Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)	Option B – Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)	Option C – Less development at Harlow and two new settlements in East Herts ²⁸ (NB ~10,500 at Harlow)	Option D – Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA ²⁹)	Option E – Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)	Option F – Maximum growth across the HMA (NB ~ 20985 at Harlow)
Potential allocations / broad locations ('choices')	Great Dunmow	750	500	500	500	500	500	750
	Saffron Walden	750	500	500	500	500	500	750
	New settlement A120 (1) ³⁷	1400	2000	4000	2000	2000	2000	1400
	New settlement A120 (2) ³⁸	1400	1000	2500	1000	1000	1000	1400
	Larger villages / NP ³⁹	200	500	500	500	250	500	200
	Other	100	0	0	0	0	0	100
	Sub-total	4600	4500	8000	4500	4250	4500	4600
Uttlesford District Total		12516 (OAHN = 12500)	12516 (OAHN = 12500)	16016 (OAHN = 12500)	12516 (OAHN = 12500)	12266 (OAHN = 12500)	12516 (OAHN = 12500)	12616 (OAHN = 14080)
Total in and around Harlow		16125 (medium - higher growth)	14150 (medium growth)	10500 (lower growth)	10500 (lower growth)	17650 (higher growth)	17650 (higher growth)	20985 (maximum growth)
Grand Total		51094 (OAHN = 46100)	48298 (OAHN = 46100)	48148 (OAHN = 46100)	47648 (OAHN = 46100)	46743 (OAHN = 46100)	51798 (CLG 2012-based household projections = 49638 ⁴⁰)	56242 (OAHN = 46100; however, latest ORS advice = 54608)

³⁷ Land at Easton Park

³⁸ Land at Boxted Wood/Andrewsfield developed jointly with Braintree (NB access through Uttlesford which might facilitate quicker delivery on the Uttlesford side)

³⁹ Allocation to include facilitation of neighbourhood planning

⁴⁰ The SHMA states "PPG identifies that the starting point for estimating housing need is the CLG 2012-based household projections. For the 22-year period 2011-33, these projections suggest an increase of 49,638 households across the West Essex and East Hertfordshire HMA: an average growth of 2,256 households each year, comprised of 779 in East Hertfordshire, 653 in Epping Forest, 326 in Harlow and 498 in Uttlesford."

The Spatial Option represents a 'hybrid' of Options A-F (**Table 4.1**). With respect to the overall quantum of c. 51,100 new homes, this reflects the furthest the authorities consider that they can reasonably go in delivering the most recent advice from ORS regarding housing need, i.e. 54,608 homes to 2033, in light of the available evidence. Critically, the figure of c. 51,100 significantly exceeds the formal OAHN of 46,100 established through the SHMA and represents strong progress towards the revised figure. The critical issue in determining the overall quantum is the level of development that can be accommodated in and around Harlow on *suitable* sites *during* the plan period. The Strategic Site Assessment (SSA) work has identified a series of sites in and around Harlow which are considered suitable or potentially suitable for development and the authorities have identified six of these in the draft *Memorandum of Understanding on Distribution of Objectively Assessed Housing Need across the West Essex/East Hertfordshire Housing Market Area*. Critically, Gilston to the north of Harlow is identified in the East Herts Local Plan for up to 10,000 dwellings in the longer-term; however, the evidence suggests that up to only ~3,000 can be accommodated in the plan period to 2033. This is one reason why other sites to the south and west of Harlow in particular are also reflected in the Spatial Option. Importantly, the transport modelling indicates that growth of between 14,000 and 17,000 new homes in and around Harlow can be accommodated provided that the mitigation measures set out in the *Memorandum of Understanding on Highways and Transport Infrastructure for the West Essex and East Hertfordshire Housing Market Area* are delivered during the plan period. The MOU emphasises the importance of developing sustainable travel corridors across Harlow and the north:south corridor, in particular, is partly predicated on development to the south of Harlow (Latton Priory). In light of the transport modelling, is not advisable to advocate more than the proposed figure of c. 16,100 in and around Harlow as significant additional transport infrastructure (perhaps in the form of a Harlow northern bypass) would likely be necessary. In the view of the HMA partners this would be incredibly challenging to deliver *over-and-above* the infrastructure improvements already sought (upgrades to Junctions 7 and 8 and a new Junction 7A). Importantly, the wider HMA beyond Harlow town is highly constrained and, in some parts very rural, and development beyond that advocated in the Spatial Option would not be desirable. While two new settlements are being explored in Uttlesford these would deliver only relatively small levels of development *during* the plan period.

4.3 Reasons for choosing the Spatial Option

In summary, the Spatial Option was identified as the most sustainable choice for the HMA on the basis that:

- At c. 51,000 new homes, the planned level of housing growth is higher than both the established OAHN within the published 2015 SHMA (46,100) and the figure based on the CLG 2012-based household projections (49,638). It is lower than ORS' estimated OAHN figure taking into account recent information including the CLG 2014-based household projections (54,608) but nonetheless represents good progress towards this higher figure. Overall, the figure of c. 51,000 indicates that the four HMA authorities are positively seeking opportunities to meet the development needs of their areas in line with the National Planning Policy Framework (NPPF) and, furthermore, significantly boosting the supply of housing (NPPF, para. 47).
- Harlow represents the most sustainable location within the HMA at which to concentrate development given its role as a sub-regional centre for employment (especially in technology); its Enterprise Zone status; the need to rejuvenate the town centre; the opportunity to capitalise on its transport connections (for example, good rail links to London, Stansted Airport and Cambridge) and deliver north-south and east-west sustainable transport corridors traversing the town; its important location on the London – Stansted – Cambridge corridor; and, above all, the wider economic growth aspirations for the town. The findings and recommendations of the London Stansted Cambridge Corridor (LSCC) Growth Commission report, published in July 2016, stated that *"Broxbourne, Harlow and Stevenage have significant strategies and ambitions for growth and development. They can play an important role in supporting the Corridor's tech and life sciences clusters. Current developments and future plans will greatly improve the industrial, commercial and residential offer. These areas must be supported to provide the*

right types of development that enhance the quality of place for the Corridor's knowledge-based industries and residents" (our emphasis).⁴¹

- The transport modelling undertaken to date demonstrates that growth of between 14,000 and 17,000 new homes in and around Harlow can be accommodated provided that the mitigation measures set out in the Highways and Transportation Infrastructure MOU are delivered during the plan period. Evidence suggests that growth beyond 2033 is likely to be possible subject to further transport modelling and the identification and delivery of additional strategic highway mitigation measures.
- The Strategic Site Assessment indicates that sufficient suitable strategic sites are available in and around Harlow to deliver the figure of c. 16,100 (together with sites either already completed or granted planning permission as well as urban brownfield sites).

⁴¹ London Stansted Cambridge Corridor Growth Commission (2016). Findings and Recommendations of the London Stansted Cambridge Corridor Growth Commission
www.lscgcommission.org.uk/wp-content/uploads/2016/07/LSCC-Growth-Commission-Final-Report-full.pdf.

5 Next Steps

5.1 SAs for Local Plans in the West Essex and East Hertfordshire Housing Market Area

As highlighted in Chapter 4, the current study has, with the transport modelling, Habitat Regulations Assessment and Strategic Site Assessment informed the choice of Spatial Option for the HMA.

The work undertaken by the Co-op. Member Board to develop and test options for distributing different levels of growth across the HMA will form a critical component of the evidence base informing each of the four local plans. This work clearly demonstrates that the questions of (i) how much housing should be delivered across the HMA; and (ii) where should this housing best go have both been robustly addressed. Specifically, the authorities have agreed an overall quantum of development for the HMA as well as a housing figure for each of the four authority areas and a specific figure for the level of development to be accommodated in and around Harlow town. Beyond these agreed figures the four authorities will determine the spatial distribution of housing in their respective areas through their own local plan processes. This study provides an appropriate strategic level basis for the more localised options ('reasonable alternatives') to be explored through the Sustainability Appraisals for the Local Plans for East Hertfordshire, Epping Forest, Harlow and Uttlesford.

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