



North Essex Authorities Strategic Section
One for Local Plans: Draft Publication
(Regulation 19)

**Draft Sustainability Appraisal (SA):
Non-Technical Summary - June 2017**







Contents

1.	Introduction	1
1.1	Background	1
1.2	Section One for Local Plans	1
2.	Sustainability Appraisal / Strategic Environmental Assessment	3
2.1	The Requirement for Sustainability Appraisal	3
2.2	The Sustainability Appraisal Process	4
2.3	The Aim and Structure of this Non-Technical Summary	5
3.	Sustainability Context and Objectives	6
3.1	Environmental Characteristics and Objectives	6
4.	The Approach to Assessing Section One	16
4.1	Introduction	16
5.	The Key Findings of the Sustainability Appraisal of Section One	20
5.1	Key Points from the Assessment of Section One Policies	20
5.2	Key Points from the Assessment of the Garden Community (GC) Options	22
5.3	Key Points from the Cumulative Assessment of the Allocated Garden Communities	27
5.4	The Sustainability of Section One as a Whole	30
5.5	Recommendations, including those taken on board throughout the SA process	36
6.	Next Steps & Monitoring	38
6.1	Consultation	38
6.2	Adoption Statement	39
6.3	Monitoring	39



List of Tables

Table 1: Key Sustainability Issues and Problems and resulting Sustainability Objectives	6
Table 2: Framework for Assessing Garden Community Options	16
Table 3: Summary of Impacts of the Reasonable Garden Community (GC) Options.....	26
Table 4: Overall Impacts of Section One.....	30
Table 5: Monitoring Measures	39



Glossary of Acronyms

AA	Appropriate Assessment
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BDC	Braintree District Council
CA	Conservation Area
CAUSE	Campaign Against Urban Sprawl in Essex
CBC	Colchester Borough Council
CCC	Chelmsford City Council
CO2	Carbon Dioxide
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DPD	Development Plan Document
EA	Environment Agency
EC	European Commission
ECC	Essex County Council
EEFM	East of England Forecasting Model
EHEN	Essex Historic Environment Record
EU	European Union
GC	Garden Community
GCP	Garden City Principle
GTAA	Gypsy & Traveller Accommodation Assessment
Ha	Hectare
HE	Historic England
HMA	Housing Market Area
HRA	Habitats Regulations Assessment
I&O	Issues and Options
IWMP	Integrated Water Management Plan
JNCC	Joint Nature Conservation Committee
KS4	Key Stage 4
LB	Listed Building
LCA	Landscape Character Assessment
LEP	Local Enterprise Partnership
LPA	Local Planning Authority



LNP	Local Nature Partnership
MSA	Minerals Safeguarding Area
NE	Natural England
NEGC	North Essex Garden Communities
NHS	National Health Service
NPPF	National Planning Policy Framework
NVQ	National Vocational Qualification
OAN	Objectively Assessed Need
ONS	Office of National Statistics
PDL	Previously Developed Land
PO	Preferred Options
PPG	Planning Practice Guidance
PRoW	Public Right of Way
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SELEP	South East Local Enterprise Partnership
SFRA	Strategic Flood Risk Assessment
SHLAA	Strategic Housing Land Availability Assessment
SHELA	Strategic Housing and Employment Land Availability
SLAA	Strategic Land Availability Assessment
SHMA	Strategic Housing Market Assessment
SM	Scheduled Monument
SNPP	Sub National Population Projections
SO	Sustainability Objective
SPA	Special Protection Area
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
Sqm	Square Metre
SSSI	Site of Specific Scientific Interest
STW/WRC	Sewage Treatment Works / Water Recycling Centres
SuDS	Sustainable Drainage System
TCPA	Town and Country Planning Association
TDC	Tendring District Council
UDC	Uttlesford District Council
UK	United Kingdom
UPC	Unattributed Population Change
WCS	Water Cycle Study
WPA	Waste Planning Authority



1. Introduction

1.1 Background

Braintree District Council, Colchester Borough Council and Tendring District Council, together forming the 'North Essex Authorities,' in conjunction with Essex County Council as a key partner in its strategic role for infrastructure and service provision, commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for a Strategic Section One for the respective Council's Local Plans.

Place Services are acting as consultants for this work; therefore the content of this SA should not be interpreted or otherwise represented as the formal view of Essex County Council.

1.2 Section One for Local Plans

In Essex, as elsewhere, the influences of population and economic growth do not stop at administrative boundaries. Settlement patterns, migration flows, commuting and strategic infrastructure needs all have significant influences within and between local authority areas.

Local Plans are the main vehicle for conveying an area's growth requirements and how these will be accommodated. However, individual local authority boundaries cannot encapsulate the geographies of issues that transcend those boundaries. Through active and on-going collaboration the authorities can jointly plan, manage and review strategic objectives and requirements for the effective implementation of sustainable development (including minerals and waste) and enhanced environments.

The geographic and functional relationship between the authorities' areas is demonstrated by the fact that, with Chelmsford City Council, they form a single Housing Market Area (HMA) for planning purposes; and they are a major part of the Haven Gateway, an established economic partnership. Within this context, the forecast levels of future population growth together with the geography of North Essex means that considerations for future growth will include options that have clear cross-boundary implications. These include both the expansion of existing towns and villages as well as possible new settlements.

Consequently, Braintree, Colchester and Tendring have agreed to come together because of their shared desire to promote a sustainable growth strategy for the longer term; and the particular need to articulate the strategic priorities within the wider area and how these will be addressed. Central to this is the effective delivery of planned strategic growth, particularly housing and employment development, with the necessary supporting infrastructure.

The Strategic Section One for Local Plans is intended to form part of each of the authorities' separate Local Plans of Braintree, Colchester and Tendring, with the main purpose of covering the strategic Local Plan requirements of:

- Articulating a spatial portrait of the area, including its main settlements and strategic infrastructure, as a framework for accommodating future planned growth;
- Providing a strategic vision for how planned growth in north Essex will be realised, setting strategic objectives and policies for key growth topics;



- Setting out the numbers of additional homes and jobs across the area that will be needed covering the plan period to 2033; and
- Highlighting the key strategic growth locations across the area and the necessary new or upgraded infrastructure to support this growth.

Sections One and Two of the Local Plans of Braintree, Colchester and Tendring form part of a suite of planning documents relevant to each area, including county-wide and local Plans such as:

- ECC Minerals Local Plan (2014);
- ECC Waste Local Plan (emerging);
- ECC Development Management Policies (2011); and
- Neighbourhood Plans.

Other relevant plans and programmes are identified in Annex of the SA. Annex A also includes the description of other environmental protection objectives which are relevant to Section One including Council Directive 79/409/EEC on the conservation of wild birds(a) and the Habitats Directive.



2. Sustainability Appraisal / Strategic Environmental Assessment

2.1 The Requirement for Sustainability Appraisal

The requirement for Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) emanates from a high level national and international commitment to sustainable development. The most commonly used definition of sustainable development is that drawn up by the World Trade Commission on Environment and Development in 1987 which states that sustainable development is:

'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

SEA originates from the European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the 'SEA Directive') which came into force in 2001. It seeks to increase the level of protection for the environment; integrate environmental considerations into the preparation and adoption of plans and programmes; and promote sustainable development.

The Directive was transposed into English legislation in 2004 by the Environmental Assessment of Plans and Programmes Regulations (the 'SEA Regulation') which requires an SEA to be carried out for plans or programmes,

'subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and required by legislative, regulatory or administrative provisions'.

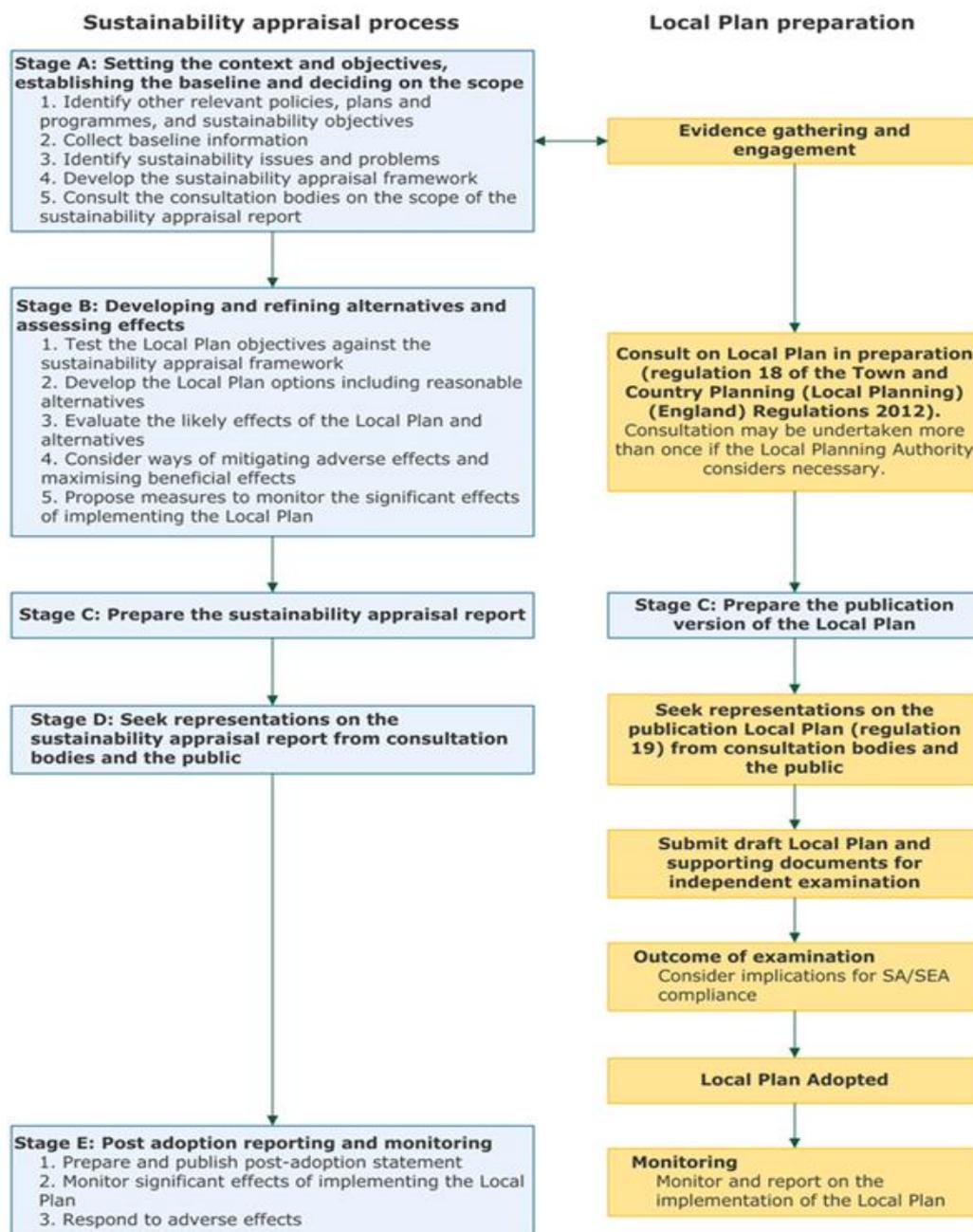
This includes Local Plans. The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme on issues such as *'biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors'* as specified in Annex 1(f) of the Directive. SA examines the effects of proposed plans and programmes in a wider context, taking into account economic, social and environmental considerations in order to promote sustainable development. It is mandatory for Local Plans to undergo a Sustainability Appraisal in accordance with the Planning and Compulsory Purchase Act 2004 as amended by the Planning Act 2008, and in accordance with paragraph 165 of the NPPF.

Whilst the requirements to produce a SA and SEA are distinct, Government guidance considers that it is possible to satisfy the two requirements through a single approach providing that the requirements of the SEA Directive are met. This integrated appraisal process will hereafter be referred to as SA.

2.2 The Sustainability Appraisal Process

The SA of the Common Strategic Section One for Local Plans follows that of the Sustainability Appraisal process as iterated in National Planning Practice Guidance on Sustainability Appraisal requirements for local plans. The following 5 sequential stages are documented below.

Figure 1: Stages in the Sustainability Appraisal Process and Local Plan Preparation





2.3 The Aim and Structure of this Non-Technical Summary

This Non-Technical Summary responds to Stage C in the SA process above; including those requirements of Stage B: assessing strategic options including reasonable alternatives, evaluating the likely effects of the strategic options and alternatives, and considering ways of mitigating adverse effects and maximising beneficial effects.

The production of a Sustainability Appraisal (Environmental) Report is a statutory requirement at this stage, and this SA Report has been produced to accompany the Draft Publication Local Plan consultations for Braintree District Council's Local Plan, Colchester Borough Council's Local Plan and Tendring District Council's Local Plan.

Following the finalisation of this Report, Stage D in the above SA process requires consultation. There are three statutory consultees or 'environmental authorities' that are required to be consulted for all Sustainability Appraisal and Strategic Environmental Assessment documents. These are:

- The Environment Agency;
- Natural England; and
- Historic England.

In addition to these, consultation will seek to engage the wider community in order to encompass comprehensive public engagement. The North Essex Authorities may additionally wish to invite comments from focussed groups, relevant stakeholders and interested parties. The detailed arrangements for consultation are to be determined by the North Essex Authorities.

The environmental authorities and public are to be given 'an early and effective opportunity' within appropriate time-frames to express their opinion. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the 'consultation databases' of the three LPAs. This reflects those persons or bodies who have commented on the SA in previous consultation stages.

3. Sustainability Context and Objectives

3.1 Environmental Characteristics and Objectives

The following table outlines the stages which led to the formulation of the Sustainability Objectives for the Strategic Section One for Local Plans, which were based on key sustainability issues and considerations for the whole Strategic Area. The state of the environment in absence of the Section One is derived from the Baseline Information addressed in Annex B accompanying this report and the wider benefits that can be expected of growth over a large strategic area.

Table 1: Key Sustainability Issues and Problems and resulting Sustainability Objectives

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
Social integration	Some of the highest increases in populations county-wide are forecast to be in Colchester Borough and Tendring District and there is a need to integrate new communities with existing ones.	The absence of a strategic approach across the HMA is likely to lead to the allocation of development across the area that can be considered comparatively more piecemeal and not of the scale to stimulate wider infrastructure benefits, and ancillary development requirements, that can be of wider benefit to new and existing communities.	1) Create safe environments which improve quality of life, community cohesion
Quality of life	Tendring has the highest level of deprivation for a local authority within Greater Essex.		
Population growth	The latest population trend data shows that the population in the HMA area is growing annually. The area's population has been projected to increase (ONS, 2014) to 2021. Some of the highest increases in populations county-wide are forecast to be in Colchester Borough and Tendring District.	Without a strategic approach within the HMA, it is probable that each authority would have to explore the allocation of marginal and less sustainable land.	2) To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
The need for specific housing types	There is an identified need for specific types of housing throughout the strategic area including housing for older people.	As indicated by need, market forces alone can not be expected to deliver all types of housing need in the HMA. The exploration of Spatial Strategy and Section Policies that are wider in scope across the HMA / strategic area, including Garden Community options, enables sustainable growth to be well dispersed in reflection of needs across the HMA. Also and importantly the Section One ensures the delivery of such housing through adhering to Garden City Principles.	
Affordable housing	In 2014/15, 3.8% of the net dwelling completions, which accounts for 10 dwellings, were affordable within Tendring, as opposed to higher percentages in Braintree and Colchester. This indicates that affordable housing is an issue.	The scope of the Section One across the HMA can ensure that affordable housing delivery and units for older people can significantly increase. It is also a Garden City Principle and requirement of such strategic development. In the absence of the Strategic Section One for Local Plans, including Garden Communities, there is a possibility that a higher proportion of smaller sites are allocated for development in Local Plans, which would not provide such significant increases in affordable housing and housing for older people.	
Ageing population	The population structure in Colchester is more weighted towards 20-44 year olds, similar to the trends in Braintree but with less dominance in this age group. Contrastingly, Tendring has a higher population of people aged over 65. This age group is also predicted to increase over Local Plan periods.		
Gypsy and Traveller	Tendring has seen no increase in Gypsy and	Garden Communities, as explored in the Strategic Section One for Local	



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
requirements	<p>Traveller provisions since January 2014. Caravan counts in Braintree have increased since January 2014, but with fluctuations in measuring periods between 2014 and 2016 due to unauthorised sites being removed from the statistics, presumably due to eviction or inclusion in the statistics for tolerated sites. A similar trend is apparent in Colchester.</p>	<p>Plans have the capability, and are likely to provide adequate Gypsy and Traveller provision, located in sustainable areas, that is unlikely to otherwise be forthcoming from call-for-sites processes.</p>	
Healthcare services	<p>Health services in the Strategic Area are either underprovided or otherwise oversubscribed. Life expectancy of residents within Tendring District is lower than the regional and national averages with men living for an average of 78.7 years and women on average living 82.0 years. Braintree and Colchester have higher life expectancies for men and women than the national figures, but are both below the regional figures.</p>	<p>In exploring options for strategic level growth within Section One, relevant strategic policies and Garden Communities have the opportunity to integrate adequate health service and recreation provision into the settlement, or can otherwise ensure that accessibility to healthcare facilities is improved. In the absence of this approach, it is possible that current trends will continue and negative implications be exacerbated.</p>	<p>3) To improve the health of the District's residents and mitigate/reduce potential health inequalities</p>
Participation in sport and obesity	<p>Participation in sport has seen a reduction in Tendring and Colchester, and Braintree also has reduced overall since 2012-13. In addition, obesity in Tendring is more prevalent than Braintree, Colchester, the</p>		



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	region and the nation.		
Business start ups	Compared to sub-national and national figures, Tendring district has experienced a lower start up rate and a lower de-registration rate of businesses indicating a slightly less robust local economy. Braintree and Colchester are more in line with the county and national business registration and de-registration rates.	The link between homes and jobs is a key tenet of sustainability, as is ensuring progressive growth in employment opportunities across a range of sectors. This is best addressed at a strategic level through Section One policies and the opportunities presented by Garden Communities. This ensures that a mix can be adequately provided. In contrast, without such an approach it can be expected that out commuting will continue and the location of new housing and employment opportunities would remain disparate. Garden Communities should also, where sensitively located, ensure that town centres remain viable and offer employment opportunities in easy commuting distance to homes.	4) To ensure and improve the vitality & viability of centres 5) To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways
Rural employment	Tendring District is predominantly rural in nature; however the majority of businesses are located in an urban location. The majority of businesses in Colchester are in urban areas.		
Town centres	Town centres within the North Essex and nationally area are under threat from an increase in non-town centre uses through permitted development rights and out of centre retail opportunities which are less congested.		
Commuting patterns	All the authorities registered significant proportions of residents travelling outside to other local authority areas to find employment. Just		



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	<p>59.9% of residents in Braintree remained in the District for their work, which was the lowest percentage of the Districts and Boroughs. Tendring was the next highest, followed by Colchester with the lowest proportion of residents travelling elsewhere for employment.</p>		
<p>International and European wildlife designations</p>	<p>In the Plan Area there are a number of Ramsar sites which include Hamford Water, and parts of the Colne and Blackwater estuaries which include coastal areas, estuaries, rivers and lakes/reservoirs. These Ramsar sites are also SPAs. There is also one 1 SAC in the area: a large coastal area known as Essex Estuaries</p>	<p>The exploration of strategic growth in a plan led system at an early stage enables the results and recommendations of HRA and AA to be factored into plan making at the strategic level. This ensures that mitigation strategies can be developed as per the recommendations of these studies to alleviate pressure on designations and eradicate any 'likely significant effects.'</p>	<p>6) To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity</p>
<p>National and local wildlife designations</p>	<p>There are a number of National Nature Reserves, SSSIs, Local Wildlife Sites and Local nature Reserves in the strategic area.</p>	<p>The exploration of strategic growth in a plan led system at an early stage, enables the green infrastructure of the strategic area to be interconnected and enhanced through a joined-up approach to new settlements and associated economies of scale that could otherwise not be expected. The scope of Section One ensures that green infrastructure is better integrated across the strategic area.</p>	
<p>Car ownership</p>	<p>Tendring and Colchester are above the regional and national averages for</p>	<p>Car ownership can be expected to increase without the development of solutions that deliver truly sustainable</p>	<p>7) To achieve more sustainable travel behaviour, reduce the</p>

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	households owning 1 or more cars, in contrast with Braintree which is lower.	options at a strategic level that ensure a range of employment opportunities and services are accessible by sustainable means.	need to travel and reduce congestion
Congestion	Congestion is common on specific sections of the strategic road network.		
Air quality	There are a number of AQMAs in Colchester		
Congestion and interconnectivity	There are network efficiency issues on a number of strategic inter-urban routes which are operating at or near to capacity.	Without a strategic plan-led approach to growth, it is possible that development requirements on a district / borough wide basis can conflict in the wider area in regard to congestion. The Section One enables a joined up approach to growth that contributes to wider interconnectivity and better transport solutions / improvements.	8) To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development
Transport infrastructure	There is a strategic need for transport infrastructure improvements associated with the A12 and A120		
Rural transport	The strategic area is largely rural in nature and rural public transport services and interconnectivity is poor.		
Educational achievement	Tending on average has lower proportions of students achieving KS4 results across all measures when compared with Braintree and Colchester. This trend extends to adult qualifications, where Braintree and Colchester are above regional and national averages for adults with NVQ1 level	Solutions to address these two issues can be considered to be feasible and better aligned across the strategic area through a strategic approach. Garden Communities and strategic policies can ensure the incorporation of schools and stimulate the provision of facilities by meeting required dwelling yield thresholds.	



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	qualifications or higher.		
School capacity	School capacities are forecast to be in deficit, when adjusted for new housing requirements		
Heritage assets at risk	According to the Heritage at Risk Register (2016), there are 15 assets listed as being at risk in Tendring. This consists of 7 Scheduled Monuments, 4 Listed Buildings and 4 Conservation Areas. There are 7 assets listed as being at risk in Braintree. This consists of 3 Scheduled Monuments, 2 listed places of worship and 2 Conservation Areas. There are 10 assets listed as being at risk in Colchester. This consists of 4 Scheduled Monuments, 2 listed places of worship, 1 Listed Building and 3 Conservation Areas.	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in more suitable areas regarding the protection of the historic environment; in the absence of this approach district / borough wide needs would be met more independently and development pressures could lead to the allocation of less suitable land or urban concentration / expansion at higher densities. This could impact on Conservation Areas and historic cores. The exploration of a plan-led system at the strategic level ensures a consistency of approach in regard to the historic environment and historic landscapes. Garden Communities at the scales identified also ensures that mitigation strategies can be successfully and holistically integrated over a wide area with additional potential for the enhancement of any heritage assets or their settings.	9) To conserve and enhance historic and cultural heritage and assets and townscape character
Listed buildings	There is a concentration of listed buildings in the district of Braintree and also around historic towns such as Colchester.		
Historic towns	Colchester is the country's oldest town and the historic environment should be effectively protected and valued for its own sake, as an irreplaceable record		

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	which contributes to our understanding of both the present and the past.		
Renewable energy use	Tendring District, Colchester Borough and Braintree District all consume more energy from non-renewable sources as a percentage of their consumption compared to the East of England as a whole	Solutions to address this issue can be considered to be feasible at the strategic level that can incorporate and stimulate the provision for renewable energy and energy efficiency aspirations through economies of scale.	10) To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.
Water scarcity and management	Water management is challenging given the combination of high development growth and it being one of the driest counties in England. In respect of water quantity a significant portion of the resource is considered to be 'water stressed'; the resource availability status of rivers and aquifers show that they are generally over abstracted; and not self-sufficient in relation to local sources of water supply and needs to import substantial quantities of water to satisfy existing demand	In the absence of the strategic Section One for Local Plans, development could come forward that does not explore holistic approaches to meeting water demand within the strategic area.	11) To improve water quality and address water scarcity and sewerage capacity
Fluvial flood risk	Although flooding cannot be completely prevented, its impacts can be avoided and reduced through effective planning and land management. The National Planning Policy Framework seeks to avoid inappropriate	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in areas that are less susceptible to flooding; in the absence of this approach district / borough wide needs would be met more independently and development pressures could lead to	12) To reduce the risk of fluvial, coastal and surface water flooding

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	development in areas at risk of flooding, but where development is necessary, to ensure that it is safe and does not increase flood risk elsewhere.	the allocation of less suitable land or urban concentration / expansion at higher densities which would exacerbate surface water flood risk.	
Surface water flood risk	Surface water flood risk is relatively high with all main settlements assessed being ranked in the top 1,000 settlements most susceptible to surface water flooding.	The exploration of Garden Communities at the scales identified also ensures that sustainable drainage methods can be successfully and holistically integrated over a wide area with additional potential for biodiversity gain.	
Coastal flood risk	Significant levels of flood risk have been identified along the Essex coast and inland along river stretches.		
Air quality	There have been general reductions on the average energy consumption on roads in the area. Similar reductions are apparent on the majority of roads throughout all authorities with the exception of minor roads in Colchester.	There is a need to allocate strategic development in such a way that air quality issues in Colchester are not exacerbated. Without a strategic approach across the HMA, it is possible that the Borough Council would be prompted to allocate less suitable land, or a number of urban extensions to the main town of Colchester, to meet their borough-wide needs as stated in the OAN Report.	13) To improve air quality
AQMA	There are a large number of AQMAs in the town of Colchester.	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in more suitable areas as opposed to any concentration / expansion of towns at higher densities which could exacerbate air quality issues.	

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
AONB pressures	There is one AONB, Dedham Vale, which lies on the border of Suffolk and Essex in Colchester Borough covering an area of 90 sq. km. It has been designated such because it is an exceptional example of a lowland river valley and plans are being explored to extend this designation westward.	It is unlikely that there would be any significant difference in conditions without the implementation of the Section One.	14) To conserve and enhance the quality of landscapes
Agricultural land and soil quality	There are significant areas of Grade 1 agricultural land within Tendring, and smaller areas within Colchester Borough.	It is unlikely that there would be any significant difference in conditions without the implementation of the Section One.	15) To safeguard and enhance the quality of soil and mineral deposits
Preserving mineral deposits	The area has extensive deposits of sand and gravel. The sand and gravel resources in Essex are significant in national, sub-national and local terms - Essex is one of the largest producers in the UK; most geographically extensive and significantly mixed within the centre and north of Essex – namely the districts of Uttlesford, Braintree, Chelmsford, Colchester and Tendring.	It is unlikely that there would be any significant difference in conditions without the implementation of the Section One.	

4. The Approach to Assessing Section One

4.1 Introduction

The SA is required to assess the environmental, social and economic impacts of the strategic content of the three authorities' Local Plan.

The assessment was undertaken by exploring the sustainability implications of the Section One in so far as it will meet the objectives highlighted in the previous table. In addition to assessing Section One this way, the allocation of strategic sites for development ('Garden Communities') contained within Section One have been explored using criteria considered more relevant to sites of this scale. These criteria are contained in the following table.

Table 2: Framework for Assessing Garden Community Options

Objective	Criteria
1. Physical Limitations – Absence of insurmountable problems (e.g. access, ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	<ul style="list-style-type: none"> - Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality) - Incorporation of SuDS.
2. Impacts – Acceptable impacts on high quality agricultural land, important landscape features, townscape features, sites of nature conservation interest and heritage assets	<ul style="list-style-type: none"> - Reflect a fusion of the best of the past while embracing new materials and the needs of modern living - Acceptable impacts only on sites of nature conservation interest. - A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces. - Acceptable impacts only on high quality agricultural land, important landscape features.
3. Environment/Amenity – Acceptable relationship with and impact on occupiers of existing properties and neighbouring areas/towns (maintaining adequate separation)	<ul style="list-style-type: none"> - Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)
4. Transport – Incorporation of integrated and accessible sustainable	<ul style="list-style-type: none"> - New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where



Objective	Criteria
<p>transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport</p>	<p>real plans are already in place for its provision.</p> <ul style="list-style-type: none"> - Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city. - Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes. - Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.
<p>5. Resilience - Positive contribution towards maintaining resilient town centres and identified regeneration and development priority areas and institutions (including Essex University)</p>	<ul style="list-style-type: none"> - Positive contribution towards town centres. - Positive contribution towards identified regeneration priority areas and institutions
<p>6. Housing – Provision of a mix of tenures, including affordable homes and a range of housing types (including self-build/custom build and gypsy and traveller pitches).</p>	<ul style="list-style-type: none"> - Garden Cities (should be) part of a wider strategic approach to meeting the nation’s housing needs. - An appropriate number of homes in a new Garden City must be ‘affordable’ for ordinary people. - Provide mixed-tenure homes and housing types that are genuinely affordable for everyone - An appropriate percentage of the homes that are classified as ‘affordable’ must be for social rent. - Consider life-time homes and the needs of particular social groups, such as the elderly. - A range of housing types including self-build / custom build and gypsy and traveller pitches - Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials. - New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.
<p>7. Employment Opportunities – Provision for a wide range of local jobs within easy commuting distance from homes</p>	<ul style="list-style-type: none"> - New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household being easily accessible - There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.



Objective	Criteria
<p>8. Mixed-use Opportunities – Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.</p>	<ul style="list-style-type: none"> - Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods
<p>9. Environmental Quality & Sustainability – Incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SUDS and zero-carbon/energy-positive technology to ensure climate resilience.</p>	<ul style="list-style-type: none"> - Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities. - Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food. - Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children’s play, teenage interests and the aspirations of elderly in mind. - Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation. - Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions. - In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.
<p>10. Developability / Deliverability - The growth area is available, commercially attractive, and capable of delivering necessary physical/social/green infrastructure and could be viably developed within [6-10] years. Satisfactory mechanisms are in place to capture increase in land value to meet infrastructure costs and manage and maintain assets in the long term</p>	<ul style="list-style-type: none"> - Ensure that the development can self-fund infrastructure costs - Be commercially attractive with strong market conditions and value potential - Availability of land being put forward for development with active landowner/developer interest - Scope for delivery structures through active and positive public and private sector engagement

The basis for making judgements within the assessment of Garden Communities is identified within the following key:



Possible impact	Basis for judgement
++	Strong prospect of fully meeting criteria with significant wider benefits
+	Reasonable prospect of fully meeting criteria
?/-/+	Reasonable prospect of partially meeting criteria / uncertainty / mix of positive and negative impacts
-	Unlikely to fully meet criteria however mitigation possible regarding impacts
--	Unlikely to meet criteria without significant negative impacts (pending further detailed investigation regarding mitigation)



5. The Key Findings of the Sustainability Appraisal of Section One

5.1 Key Points from the Assessment of Section One Policies

The following elements of the Strategic Section One for Local Plans are subject to assessment in the Sustainability Appraisal, with a summary of findings presented in this Non-Technical Summary:

- Vision for the Strategic Area
- Strategic Objectives
- Policy SP1 – Presumption in Favour of Sustainable Development
- Policy SP2 – Spatial Strategy for North Essex
- Policy SP3 – Meeting Housing Needs
- Policy SP4 – Providing for Employment and Retail
- Policy SP5 – Infrastructure and Connectivity
- Policy SP6 – Place Shaping Principles
- Policy SP7 – Development and Delivery of New Garden Communities in Essex
- Policy SP8 – Tendring / Colchester Borders Garden Community
- Policy SP9 – Colchester / Braintree Garden Community
- Policy SP10 – West of Braintree Garden Community

The assessment of Garden Community Options can be found in the corresponding sub-section.

5.1.1 Key Points from the Assessment of Policies SP1-SP7

Policies SP1-SP7 relate to content that is not specifically site related. With that in mind, these policies have been grouped separately in this report, with Policies SP8-SP10 explored to determine whether they suitably address the impacts and issues highlighted within the assessment of the Garden Communities 'on the ground'. Policies SP8-SP10 set the framework to which any successful Garden Community at each location would have to adhere and seek to ensure that their sustainability is maximised.

The following key points can be made regarding the appraisal of the plan's non-site related policies SP1-SP7:

- The strategic vision for the area will have **significant positive impacts** on housing and employment related Sustainability Objectives. The significance of these impacts will increase in the long term through sustainable Garden Communities being developed. These will ensure that housing and employment needs are met, with wider benefits realised beyond each site. This will also be the case for health, the natural environment, and the historic environment through the provision of green infrastructure, new and expanded education and health care facilities and recreational land, and also the protection and enhancement of countryside and heritage assets. There will additionally be significant long term impacts on ensuring the necessary transport



infrastructure to support new development in line with the benefits expected of the Garden Communities as they emerge in the latter stages of the three authorities' Local Plan periods.

- The Spatial Strategy will ensure a large number of **significant positive impacts**, most notably regarding housing delivery, economic growth, public transport improvements and accessibility. The short and medium term impacts of these are related to the notion that development will be accommodated within or adjoining settlements according to their scale and existing role within each individual district.
- Further long term **significant positive impacts** associated with the notion of Garden Communities can be expected to be realised on health, through the integration and requirement of suitable facilities and open space and recreation requirements. There will also be such impacts on sustainable travel through the requirements of sustainable transportation means to be provided, and education and skills through the provision of primary, secondary and early years facilities as per Garden City Principles and Essex County Council infrastructure requirements. Importantly, it should additionally be noted that Section One establishes that infrastructure will be delivered prior and ready for the new communities.
- **Minor positive impacts** can be expected regarding townscapes, where the principle of Garden Communities can alleviate development pressures in existing settlements, which can have design implications. This focus away from the expansion of existing settlements will also help to alleviate air quality pressures in settlements.
- The Section One policies can be seen to ensure **positive impacts** on biodiversity through the integration of green and blue infrastructure throughout the strategic area.
- **Uncertain impacts** can be expected to arise from the principle of Garden Communities regarding landscapes through the development of green field land, however it should be acknowledged that at the specified scale, Garden Communities are capable of mitigating such concerns effectively and creating high quality new environments.
- There will be 'no impact' on internationally important wildlife designations in the wide area. This is identified in a Habitats Regulations Assessment (HRA), incorporating an Appropriate Assessment (AA). This document recommends that, regarding recreational pressures associated with the increase in growth stated within the Section One, Recreation Avoidance and Mitigation Strategies (RAMS) are developed and adhered to. In addition, the AA indicates that the strategic approach and scope of the Section One across the three authorities area enables mitigation to be effectively incorporated.

5.1.2 Key Points from the Assessment of Policies SP8-SP10

The following key points can be made from the appraisal of Policies SP8-SP10:

- There will be **significant positive impacts** regarding any development that complies with the Garden Community policy for the Tendring / Colchester Borders. These include significant positive impacts on the regeneration areas within Colchester town centre and to the east of the town, related to better sustainable transport and more employment opportunities in the broad area.
- There will be largely **significantly positive impacts** generally regarding housing, employment and improving public transport networks in North Essex from all of the Policies SP8-SP10. There will also be significant positive impacts associated with improving the resilience of the town centres of

Colchester and Braintree and also green and blue infrastructure in the wider Strategic Area.

- An example where the policies have been identified as having **uncertain impacts** relates to an aspiration that an appropriate percentage of homes that are classified as 'affordable' be specifically for social rent. It is recommended that such a requirement is included within the policies.
- There can be expected to be **minor negative impacts** on agricultural land and landscapes due to the loss of agricultural land associated with Greenfield development. Regarding landscape however, the policies will ensure that development is of a high standard of design and layout to ensure that the best possible development outcomes are achieved in their broad areas.

5.2 Key Points from the Assessment of the Garden Community (GC) Options

The following table sets out the assessed sustainability impacts of all reasonable Garden Community options explored, with their reason for allocation or rejection as alternatives.

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
Tending / Colchester Borders	Option 1: Southern Land Focus	GCEC1	- 6,611 homes - 7 ha mixed use - 5 ha employment land	The Tending / Colchester Borders Garden Community has more opportunities for sustainable travel links into Colchester than other options, a major regional centre. The Garden Community is also in close proximity to the University and high quality employment opportunities. As one of the major centres in the region, Colchester offers a full range of facilities including a hospital and is a major shopping and cultural destination. This would provide high order services not on the garden community within a closer proximity with the opportunities for public transport, walking and cycling links. Colchester is also a major employer in the region and provides a good level and mix of
	Option 2: A133 to Colchester - Ipswich rail line	GCEC2	- 8,834 homes - 10 ha mixed use - 5 ha employment land	
	Option 3: North to South wrap	GCEC3	- 11,409 homes - 13 ha mixed use - 7 ha employment land	

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
				employment opportunities. There is the opportunity to access these opportunities via public transport, walking and cycling.
North Colchester	Option 1: East of Langham Lane focus	GCNC1	- 6,606 homes - 7 ha mixed use - 7 ha employment land	The discounting of the North Colchester site for a Garden Community was based on the negative environmental impacts of a large Garden Community on an area of significant landscape and environmental value. Additionally, the deliverability and sustainability of Garden Communities was considered to be best served by their location in two distinct areas of the Borough as opposed to adjacent communities such as North Colchester.
	Option 2: Maximum Land Take	GCNC2	- 10,132 homes - 10 ha mixed use - 10 ha employment land	
Colchester / Braintree Borders	Option 1: North and South of A12 / Rail Corridor Focus	GCWC1	- 16,861 homes - 9 ha mixed use - 10 ha employment land	The Colchester Braintree borders site is in closer proximity to the mainline railway station at Marks Tey, which with upgraded facilities would give regular train links to London, Colchester and beyond within walking, cycling or bus rapid transport system to the station. There are also more opportunities for sustainable travel links into Colchester, a major regional centre of facilities and employment. The Colchester Braintree borders site is in closer proximity to Colchester. As one of the major centres in the region, Colchester offers a full range of facilities including a hospital and
	Option 2: South of A120 and North of Marks Tey Existing Settlement	GCWC2	- 17,182 homes - 9 ha mixed use - 11 ha employment land	
	Option 3: South of A120 Focus	GCWC3	- 13,105 homes - 7 ha mixed use - 9 ha employment land	
	Option 4: Maximum Land Take	GCWC4	- 27,841 homes - 16 ha mixed use - 15 ha employment land	

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
				<p>is a major shopping and cultural destination. This would provide high order services not on the garden community within a closer proximity with the opportunities for public transport, walking and cycling links.</p> <p>Colchester is also a major employer in the region and provides a good level and mix of employment opportunities. There is the opportunity to access these opportunities via public transport, walking and cycling.</p>
West of Braintree	Option 1: Braintree DC only	GCWB1	<ul style="list-style-type: none"> - 9,665 homes - 12 ha mixed use - 10 ha employment land 	<p>The West of Braintree garden community is suitable and deliverable. Further work will continue to be undertaken with Uttlesford District Council who will be shortly deciding whether to take forward additional land within UDC. If UDC chose to take this option forward, then further evolutions of the proposals will take place, taking into account a wider development area.</p> <p>Officers have balanced the impacts of development, such as the loss of high quality agricultural land and the change in character of the area, with the benefits of the long term delivery of new homes, infrastructure and community facilities and consider that a new standalone garden community is suitable for West of Braintree and are recommending that this is taken forward in the</p>
	Option 2: Braintree DC and Uttlesford DC Land	GCWB2	<ul style="list-style-type: none"> - 12,949 homes - 16 ha mixed use - 13 ha employment land 	

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
				Local Plan.
CAUSE 'Colchester Metro Plan'	N/A - Option 1: Metro Plan submission	GCMP1	6,000 to 8,000 dwellings proposed by CAUSE Note: Further exploration into the option has led to only a cumulative potential of 2,277 dwellings across the four settlements as identified by TDC's call-for-sites submissions within 10 minute walking distance of each rail station and an indicative density of 35 dwellings per hectare.	The CAUSE option has been rejected due its inability to deliver the required growth, linked to deliverability / developability and the availability / lack of promotion of land within the model to the required scales. It is also not considered that a series of smaller developments can successfully combine to meet the requirements of sustainability / Garden City principles.
Monks Wood	N/A - Option 1: Proposal as submitted	GCMW1	- Up to 15,000 homes (5,151 homes in plan period) - 245,300m ² of non-residential (mix of commercial / retail / leisure etc.)	The option at Monks Wood is currently located on the highly trafficked and single carriageway section of the A120. The only other roads in the vicinity are very rural lanes in the vicinity and no opportunity to access a site of this size by other routes. If the A120 project is to go ahead, 1 of the 5 options could see the new A120 run through the site, the other 4 would be distant from the site. Whilst any upgrade option would provide capacity on the existing A120 network, there are no guarantees that the project will go forward. With the exception of option A travel to the strategic highway network would need to be via Marks Tey to the east or Braintree to the

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
				west. In addition the project is not due to complete until 2026, so completions would not be able to start until that date. The employment market in Braintree is less strong than Colchester and major new employment areas are proposed on the west side of Braintree which is in close proximity to the West of Braintree garden community.

Table 3: Summary of Impacts of the Reasonable Garden Community (GC) Options

GC Option	Sustainability Objectives (SO)									
	1	2	3	4	5	6	7	8	9	10
GCEC1	?	?	+	+	++	++	++	++	++	++
GCEC2	?	?	+	+	++	++	++	++	++	+
GCEC3	?	?/-	?/+	+	++	++	++	++	++	+
GCNC1	?/-	-	?/-	?/-	+	++	+	++	++	+
GCNC2	?/-	-	?/-	?/-	+	++	+	++	++	?
GCWC1	?	?	?/-	?	?/+	++	+	++	++	?
GCWC2	?	?/-	?/-	?	?/+	++	+	++	++	?
GCWC3	?	?	?/-	?	?/+	++	+	++	++	?
GCWC4	?	-	?/-	?/-	?	++	+	++	++	?
GCWB1	?/-	?/-	?/-	?/-	?/+	++	?/+	++	++	?
GCWB2	?/-	?/-	?/-	?/-	?/+	++	?/+	++	++	?
GCMP1	-	--	--	+	++	--	?	?	-	--

GC Option	Sustainability Objectives (SO)									
	1	2	3	4	5	6	7	8	9	10
GCMW1	?	?/-	?/-	-	?/-	++	+	++	++	?

5.2.1 Overview of Impacts from the Garden Community Options Assessment

The most significantly positive impacts are associated with the Tendring / Colchester Borders Garden Community options, followed by the smaller West Braintree Garden Community sub-option. Those sub-options of the Colchester / Braintree Garden Community that do not seek maximum land-take will also offer largely positive outcomes, although there are additionally many uncertain impacts (i.e. ones that could either be positive or negative) at this stage and in the absence of confirmed master plans and solutions contained within a Garden Community specific DPD.

Negative impacts can be seen to be most significant through the Metro Plan option of delivering growth requirements. These impacts are largely due to the model not being able to meet Garden City principles, and no single development being of a scale of land that can reasonably be expected to mitigate any negative impacts on-site and within the identified areas.

The North Colchester option will have negative impacts associated with physical limitations on site, regarding landscape implications of being located in close proximity to an Area of Outstanding Beauty (AONB) and also the impacts associated with being an adjacent community to Colchester to the south. The options also do not benefit from any existing rail links, with effective public transport solutions limited as a result, however the broad location could be considered broadly sustainable aside from these limitations.

The Monks Wood proposal has issues regarding impacts on neighbouring settlements, a lack of rail links and access to the strategic road network. Pertinently, these latter two considerations will likely have significant negative connotations on the neighbouring settlement of Kelvedon, where the closest rail stations exist and where effective rapid bus transit solutions would be unsuitable for integration purposes.

5.3 Key Points from the Cumulative Assessment of the Allocated Garden Communities

5.3.1 Summary of Cumulative Impacts Resulting from the Allocated Garden Communities

The following cumulative conclusions can be made of the appraisal of the allocated Garden Community options:

Water

- The measures provided in the Section Two Local Plans provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section One will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality (HRA / AA, 2017)



Accessibility

- It is not considered that there are any cumulative accessibility issues surrounding the preferred sites, due to their general geographic distribution.

Air Quality

- There may be some cumulative road traffic and associated air quality issues from any of the Garden Communities with any non-strategic site allocations in the Councils' respective Section Twos that are in close-proximity. This should be a focus of the Local Plans' Section Twos.

The Historic Environment

- Cumulative impacts are limited regarding historic environmental features due to the geographic dispersal of the Garden Communities.

Landscape

- Cumulative impacts are limited regarding landscape due to the geographic dispersal of the Garden Communities.

Biodiversity

- The AA identifies the need for a Recreation Avoidance and Mitigation Strategy (RAMS) to be developed and the findings factored into any policies, forthcoming masterplans or Garden Community specific DPDs should increases in the level of recreational land be required at any of the Garden Community allocations.

Neighbouring Properties / Coalescence with Existing Settlements

- There will be no cumulative impacts associated with the effects on occupiers of existing properties and neighbouring areas/towns resulting from the Garden Communities due to their geographic distribution. Garden City principles would have to be adhered to in regard to a surrounding belt of countryside to avoid sprawl, and this minimises any perceived coalescence and resulting impact on existing settlements.
- Cumulatively, no one existing settlement would be negatively affected by any combination of Garden Communities. More holistically, similarly can no single Landscape Character Area be affected by a combination of Garden Communities, of which existing historic settlements form an important part of integrity and sensitivity.
- Benefits will be realised for existing nearby communities regarding an increase in services and local infrastructure in the wider areas beyond the Garden Communities.

Public Transport

- There will be significant positive cumulative impacts resulting from the allocated Garden Communities in response to their individual potential to significantly improve public transport links within the North Essex Authorities area. Positive impacts can also be expected to benefit wider local areas in proximity to the Garden Communities.

Health

- The notion of Garden Communities will have positive synergistic impacts regarding health outcomes, with the level of growth required in the North Essex Authorities being provided through



developments that require walking, cycling and public transport designed to be the most attractive forms of local transport.

Town Centres

- There will be significant positive cumulative impacts resulting from the allocated Garden Communities in response to their individual potential to significantly support and improve the viability of the town centres of Colchester and Braintree within the North Essex Authorities area. Positive impacts can also be expected to benefit wider local areas in proximity to the Garden Communities, with enhanced public transport opportunities to such centres in the locality.

Housing

- All of the Garden Communities can be expected to have significantly positive impacts on housing growth. Cumulatively, these impacts become more positive over the plan period and beyond, with the ability to successfully integrate all housing types and tenures, including gypsy and traveller provision.

Employment

- All of the Garden Communities can be expected to have positive impacts on employment growth. Cumulatively, these impacts can become more positive over the plan period and beyond, with the ability to successfully integrate a wide range of local jobs within easy commuting distance from homes.
- Access and public transport requirements of Garden Communities may in practice result in out-commuting beyond each Garden Community and local centres within the North Essex Authorities area. This should not be considered a criticism of the Garden Communities, being more reflective of travel to work flows and commuting patterns within the North Essex Authorities area.

Mixed-use Developments

- All of the Garden Communities can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community.

Open Space and Sustainable Drainage Systems

- All of the Garden Communities can be expected to have a strong prospect of providing the full suite of open space, allotments/food production areas, biodiversity gains and SuDS. This will ensure cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community.
- There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.
- In addition, the location and scale of any forthcoming recreational land that may be required could result in harmful impacts financially on existing Country Parks within the ECC Country Park model through increased competition.

Soil

- Cumulative impacts are limited regarding the loss of high quality soils due to the geographic

dispersal of the Garden Communities and quality of soils at each individual location.

Climatic Factors

- Whereas negative impacts can be expected regarding carbon emissions, this is more relevant to the level of growth. In this context, the Garden Communities can be expected to offer some small cumulative benefits in so far as energy efficiency can be ensured throughout development in accordance with Garden City principles and the wider policy framework within Section One to which any forthcoming planning applications would have to adhere.

5.4 The Sustainability of Section One as a Whole

The overall impacts of Section One can be seen in the following table. The table effectively represents the cumulative impacts of Section One's policies SP1-SP10. Commentary is given for each sustainability objective.

Table 4: Overall Impacts of Section One

SA Objective	Overall Impact
1. Create safe environments which improve quality of life, community cohesion	Positive impacts

The Strategic Section One for Local Plans can be seen to have positive impacts on this objective where relevant, predominantly through general place shaping principles and the policy criteria relevant specific to the Garden Communities. Although impacts are minor at this stage, impacts can be seen to be strengthened through the Local Plan Section Twos of the three authorities, with the inclusion of design orientated development management policies that will also apply.

SA Objective	Overall Impact
2. To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	Significant positive impacts

There will be significant positive effects in ensuring good quality and inclusive homes. Section One also ensures that objectively assessed housing needs are met throughout Local Plan periods within North Essex, particularly in accordance with each LPA's individual requirements. The Spatial Strategy directs growth to existing sustainable settlements in the first instance, and the Garden Communities ensure that growth needs are met not only in the latter stages of the plan periods, but also make a significant contribution to meeting future needs beyond plan periods. The Strategic Section One for Local Plans, in exploring options and solutions for meeting unmet elements of objectively assessed need over the strategic area will also ensure significant positive cumulative impacts on this objective in accumulation with the individual Spatial Strategies of each authority's Local Plan, including elements of non-strategic needs, and as per the LPA level requirements of the OAN Report. Regarding Policies SP8-10, largely significantly

positive impacts regard the specific policy principles that combine to offer social and economic benefits, such as housing, employment and improving public transport networks in North Essex.

SA Objective	Overall Impact
3. Improve health/reduce health inequalities	Significant positive impacts

There will be significantly positive health impacts associated with the cumulative effects of the Strategic Section One for Local Plans' policies and commitment to delivering Garden Communities as well as the Garden Community polices (SP8-10) themselves. This is largely due to a combination of health related infrastructure provision and also adherence to Garden City Principles regarding walking and cycling infrastructure and the provision of open space and recreational facilities. There will also be positive impacts in this regard associated with the content of each authority's Local Plan policies and designation of non-strategic open space and recreation.

SA Objective	Overall Impact
4. To ensure and improve the vitality & viability of centres	Significant positive impacts

There will be significant cumulative impacts on the town centres of Colchester and Braintree in line with the various policies within Section One. The Spatial Strategy will seek to locate development within such centres in the short-medium term, with long term benefits being experienced in the long term through better infrastructure and connectivity associated with the Garden Communities, particularly regarding public transport networks. There will also be significant positive impacts associated with the individual Section Twos of the Local Plans of Colchester and Braintree. The locations of the Garden Communities are likely to support the town centres of Colchester and Braintree, the two largest centres within the strategic area. Section One is unlikely to support the town centres of Clacton and Harwich within Tendring District, and Witham within Braintree District, however it should be noted that a large amount of non-strategic (within the context of the Section One) development is allocated in such centres within the Tendring District Council and Braintree District Council Local Plan Section Twos.

SA Objective	Overall Impact
5. To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	Significant positive impacts

There can be expected to be significant positive impacts regarding the requirements to ensure job creation through ensuring that employment requirements can be met throughout Local Plan periods within North Essex, particularly in the latter stages and in accordance with each LPA's individual requirements. The preferred strategic Spatial Strategy also conforms to as broad a geographical dispersal as possible across North Essex in light of available land and promoted sites. The Strategic Section One for Local Plans will also ensure significant positive cumulative impacts on this objective



in accumulation with the individual policies and allocations of each authority’s Local Plan, including elements of non-strategic needs and content regarding the rural economy. The Garden Communities are located within locations in which existing strategic employment areas are accessible, with further positive impacts associated with specific employment provision at each Garden Community and with infrastructure commitments of an enhanced public transport offer to key centres.

SA Objective	Overall Impact
6. To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	Positive impacts

The Strategic Section One can be seen to have positive connotations on this objective. Although the level of growth established within Section One, and the allocation of Garden Communities, will lead to the development of significant areas of Greenfield land which could be expected to have negative implications, Section One can ensure effective enhancement to green and blue infrastructure for net biodiversity gains. The Appropriate Assessment indicates that, providing that the North Essex Authorities continue to collaborate and prepare necessary Recreation Avoidance and Mitigation Strategies (RAMS), and in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section a and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in-combination with other plans and projects as a result of recreation. The AA adds that the strategic approach across the North Essex Authorities ensures that cumulative solutions to the possible recreational pressures on Natura 2000 sites can be mitigated successfully. It should be noted however that the findings of these RAMS will need to be adequately factored into any forthcoming masterplanning and Garden Community specific DPDs.

SA Objective	Overall Impact
7. To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	Significant positive impacts

The policies of the Section One for Local Plans can be expected to have significantly positive impacts on this objective. The infrastructure requirements of the Garden Communities, in adhering to sustainable transport Garden City Principles, can be expected to offer wider benefits and gain for neighbouring areas, and the geographical distribution of the preferred Garden Community options ensure that these benefits can be experienced across all three authorities with an inclusive coverage across North Essex. The content of the Local Plan Section Twos ensure that suitable public transport and access solutions are forthcoming to support the Spatial Strategy’s notion of focusing growth to existing settlements within the short-medium term of the plan period.

SA Objective	Overall Impact
8. To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	Significant positive impacts

The policies of the Strategic Section One for Local Plans can be expected to have significantly positive cumulative impacts on accessibility and infrastructure provision. The infrastructure requirements of the Garden Communities, in adhering to sustainable Garden City Principles can be expected to offer wider benefits and gain, particularly regarding accessibility associated with both transport and services for neighbouring areas, and the geographical distribution of the preferred Garden Community options. This ensures that these benefits can be experienced across all three authorities with an inclusive coverage across North Essex. The Garden Communities are of a sufficient size to stimulate educational infrastructure provision. It should also be noted that the interventionist approach of the North Essex Authorities ensures that both infrastructure provision is self-funded through each Garden Community, and that the approach to their development is one of 'infrastructure first'. In addition, the content of the Local Plan Section Twos ensure that suitable supporting infrastructure, including public transport and access solutions are forthcoming to support the Spatial Strategy's notion of focusing growth to existing settlements within the short-medium term of the plan period.

SA Objective	Overall Impact
9. To conserve and enhance historic and cultural heritage and assets and townscape character?	Positive impacts

Within the context of Section One, this objective is largely relevant to the specific Garden Community policies (SP8-10). There could be a perceived negative cumulative impact on the historic environment associated with strategic development at the scale proposed, but despite this, the policies have taken on board those recommendations of the Preferred Options SA and ensure that protection will occur in all instances with enhancement a significant possibility. Forthcoming masterplanning and Garden Community specific DPDs have the potential to enhance site specific assets and their settings and deliver a high quality built environment. Although a degree of uncertainty surrounds the status and content of the masterplans and DPDs and whether their content is appropriate to individual assets and designations, the general distribution of growth across the strategic area and the Section One policy content seeks to address any perceived or possible impacts on the historic environment. It should additionally be noted here however, that such issues are better addressed within the Local Plan Section Twos, with the inclusion of relevant thematic development management policies.

SA Objective	Overall Impact
10. To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.	0

There will be positive impacts regarding energy efficiency as a result of the Section One policies, particularly through the

requirements of the Garden Community policies SP8-10. Despite this, Garden Communities have the potential to incorporate renewable energy generation, although it is uncertain at this stage whether such schemes will be sought. It should be acknowledged that requirements may form part of masterplans and the Garden Community specific DPDs. The impact is highlighted as a minor positive at this stage, in view of the policy content, what can currently be considered a feasible requirement, and in reflection of the early stages of each Garden Community's development through the planning system. It should also be noted that policies exist in the respective authorities; Local Plan Section Twos, with the inclusion of relevant thematic development management policies.

SA Objective	Overall Impact
11. To improve water quality and address water scarcity and sewerage capacity	Uncertain Impacts

It can reasonably be assumed that there could be likely negative implications regarding water scarcity and sewerage emanating from Section One relevant to the level of growth stated in Policy SP2, the Garden Community allocations, and the allocations for development in the Local Plan Section Twos. Despite this, the implications of this are best resolved on a site-by-site basis through early discussions with service providers on a plan-level and in certain areas as required. It should also be noted that all growth in the wider area can be expected to have such impacts; however in the specific context of Garden Communities, Policy SP7 seeks to ensure that such issues are not forthcoming from any successful planning application.

Regarding water quality the AA states that, 'whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice.' It adds that, 'the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.' There are therefore no impacts associated with water quality emanating from Section One.

SA Objective	Overall Impact
12. To reduce the risk of fluvial, coastal and surface water flooding	0

There are no significant identified flood risk concerns resulting from the policies and Garden Communities of Section One. A number of the Garden Community allocations contain small areas of Flood Risk Zones 2 and 3, however these are not significant in response to the scale of the schemes and can be successfully integrated into any open space or green infrastructure requirements. The policy content ensures that flood risk concerns will be considered in any forthcoming planning applications and it should be noted that the scale of the Garden Communities enables the integration of sustainable drainage techniques.



SA Objective	Overall Impact
13. To improve air quality	Positive impacts

There are no identified implications regarding air quality of the specific content of the policies and preferred Garden Community options contained in the Strategic Part for Local Plans. The Garden Community allocations, as per the Spatial Strategy, correspond to the best possible dispersal across the HMA to alleviate air quality issues in Colchester and associated with the A12 and A120. The stance of allocating Garden Communities as opposed to urban extensions seeks partly to ensure that new growth does not impact on AQMAs, such as those found in Colchester town. It can be expected that there could be some general negative connotations on air quality associated with the level of growth required in North Essex, however the distribution of growth and the policies of Section One seek to address this adequately.

SA Objective	Overall Impact
14. To conserve and enhance the quality of landscapes	Uncertain Impacts

There can be expected to be uncertain impacts on landscapes resulting from Section One. These impacts are relevant to the specific Garden Community allocations themselves. Potential negative impacts are associated with the scale of development required on Greenfield land, however policy exists to ensure that development is sensitive to its surroundings in each instance and within the context of wider landscape character areas. It should be noted that this is a general issue relevant to any new development. It should also be noted that beyond the principles contained in Policies SP8-SP10 masterplanning and the Garden Community specific DPDs have further potential to mitigate and minimise site specific issues and deliver a high quality built environment. Landscape related Section Two policies will also have to be adhered to in any successful application.

SA Objective	Overall Impact
15. To safeguard and enhance the quality of soil and mineral deposits?	Uncertain Impacts

There will be minimal impacts on safeguarding mineral deposits and the quality of soil associated with the policy content of Section One. The Garden Community allocation at West of Braintree contains a site allocated within the ECC Minerals Local Plan for mineral extraction. Although not considered an insurmountable problem, the implications of this are that the North Essex Authorities will have to work with the Minerals and Waste Planning Authority and the landowner / developer of this minerals site to seek compromises surrounding the restoration of the site for a use compatible with Garden City principles at the masterplanning stage and within the Garden Community specific DPD for West of Braintree. Uncertain overall impacts are therefore identified for Section one.



5.5 Recommendations, including those taken on board throughout the SA process

5.5.1 The Section One Policies

The following recommendations have been made throughout the appraisal of the Strategic Section One for Local Plans regarding the policies:

- At the Preferred Options stage, the SA recommended that **Policy SP6** could be more explicit as to the requirements of new development in regards to the historic environment and assets and also scope for the policy to regard surface water flood risk. Both of these recommendations have been factored into the Policy. The Preferred Options SA also recommended that the Policy could respond to aspirations to increase renewable energy generation in strategic scale development opportunities. This recommendation is still valid at this stage, and reiterated within this SA; however it should be acknowledged that such integration is not considered to affect the principle of any development coming forward compliant with Policy SP6, and that the requirement at this stage could be considered premature in light of the emerging Garden Community masterplans and what is viable and achievable. A final recommendation regarding Policy SP6 is that as written there may be some level of conflict between the principle that seeks green and blue infrastructure to be integrated with multi-functional public open space requirements. The incorporation of these should be considered separate requirements, as biodiversity features are unlikely to flourish through human disturbance.
- At the preferred options stage, the SA highlighted that for **Policy SP7**, heritage assets exist across all of the Garden Community areas (and additionally potential archaeological deposits that would need to be excavated). At that stage a recommendation was made that Policy SP7 could include a principle that masterplans seek ways to achieve quality and active management of heritage assets and the historic environment as part of a positive strategy for their conservation and enjoyment. This recommendation has since been incorporated into the Policy.
- It can be considered that the majority of the Garden Community options will have some degree of impact on agricultural land, landscape, sites of nature conservation and the historic environment / heritage assets. It should be acknowledged that such issues are not insurmountable at the scales of development proposed in the options and that effective masterplanning and Garden Community specific DPDs can seek to protect and enhance conditions further.
- At the preferred Options stage, the SA recommended that for **Policy SP9** requirements ensuring the protection and/or enhancement of Marks Tey Brickpit SSSI were included within the Policy, as identified by the fact that the broad location is in the SSSI's Impact Risk Zone (IRZ) for the designation. This recommendation has been effectively factored into the policy.
- At the Preferred Options stage, the SA recommended that for **Policy SP10** requirements ensuring the protection and/or enhancement of the heritage asset of the Saling Hall conservation area and areas of deciduous woodland within and adjoining the site could additionally be included to factor in the Registered Park and Garden of Saling Grove. This recommendation has been effectively factored into the policy.
- It is recommended that a Recreation Avoidance and Mitigation Strategy (RAMS) is developed, as



recommended in the Appropriate Assessment (AA, 2017) and the findings factored into any policies, forthcoming masterplans or Garden Community specific DPDs should increases in the level of recreational land be required at any of the Garden Community allocations.

5.5.2 The Allocated Garden Communities

The following recommendations are made regarding the selection of Garden Community options within the three broad locations of the allocated Garden Communities.

Tendring / Colchester Borders

- The SA indicates that option GCEC1 is the most sustainable option, due to its smaller scale and therefore comparatively minimal impacts. Despite this, it is possible that mitigation might be required in the form of habitat creation and management at the Garden Community due to possible impacts on wintering birds, as identified within the AA. With this in mind, it may be more appropriate for a larger option to be considered in order to address this possible requirement. Option GCE3 will require some level of mitigation in regard to the presence of Bullock Wood SSSI, and it is recommended that this localised area be protected in future masterplans. It is recommended that severance issues surrounding the A137 are also addressed in masterplans and transport interconnectivity.

Colchester / Braintree Borders

- Options GCWC1 and GCWC3 represent, broadly, the most sustainable options within the Colchester / Braintree Borders area. Option GCWC1 contains the Marks Tey Brickpit SSSI, however its location at the north east boundary in each instance ensures that this designation can be protected and enhanced through the requirements of a surrounding belt of countryside to prevent sprawl and this is recommended. Issues surrounding the Domsey Brook should also be factored into any development of GCWC3as blue infrastructure. Options GCWC2 and GCWC4 are in close proximity to a Scheduled Monument (a Roman villa 450m south of Warren's Farm to the north) and could affect the setting of this asset, and enhancement of this asset should be sought within the wider detailed masterplan. Impacts on the residential amenity of the settlements of Marks Tey and Little Tey are issues surrounding the options GCWC1, GCWC2 and GCWC4. A buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities and these should be subject to community engagement.

West of Braintree

- The smaller option GCWB1is considered the most sustainable option in West of Braintree due an increased likelihood of negative impacts associated with nature conservation and heritage assets to the western boundary of option GCWB2. Both options will need to address the presence of heritage assets throughout the area, particularly in the north associated with the Conservation Area of Great Saling which contains a range of listed buildings including grade II as well as the Registered Park and Garden of Saling Grove, and seek enhancements at the masterplanning stage. It is also recommended that a buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities, specifically in relation to residents in Stebbing Green and Blake End. The masterplans should be subject to community engagement.



6. Next Steps & Monitoring

6.1 Consultation

This Environmental Report will be subject to consultation alongside the Local Plans of the three Local Planning Authorities. There are three statutory consultees or 'environmental authorities' that are required to be consulted for all Sustainability Appraisal and Strategic Environmental Assessment documents. These are:

- The Environment Agency;
- Natural England; and
- Historic England.

In addition to these, consultation will seek to engage the wider community in order to encompass comprehensive public engagement. The North Essex Authorities may additionally wish to invite comments from focussed groups, relevant stakeholders and interested parties. The detailed arrangements for consultation are to be determined by the North Essex Authorities.

The environmental authorities and public are to be given 'an early and effective opportunity' within appropriate time-frames to express their opinion. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the 'consultation databases' of the three LPAs. This reflects those persons or bodies who have commented on the SA in previous consultation stages.

PLEASE NOTE:

All comments on the content of this Environmental Report should be sent to each authority's online portal in line with the consultation arrangements of each's Local Plan Draft Publication consultation. Where consultation periods differ between each authority, the following links may need to be checked once consultation periods are live.

Comments should be focused on the detail of this SA that pertains to land use implications or issues relevant to each local authority area.

Please check the following links for more information, and direction to relevant consultation portals:

Regarding Braintree District Council:

https://www.braintree.gov.uk/info/200137/consultations/96/contribute_to_a_council_consultation

Regarding Colchester Borough Council:

<http://www.colchester.gov.uk/article/12650/Consultations>

Regarding Tendring District Council:

<http://www.tendringdc.gov.uk/consultation>



6.2 Adoption Statement

Upon adoption Local Plans will be accompanied by an Adoption Statement which will outline those monitoring indicators most appropriate for future monitoring of the Plan in line with Regulation 16 of the Environmental Assessment of Plans and Programmes Regulations 2004. In accordance with Regulation 16 of the Environmental Assessment of Plans and Programmes Regulations 2004, an Adoption Statement is required to address each of the following issues:

- How sustainability considerations have been integrated into the development plan document (Local Plan);
- How the options and consultation responses received on the development plan document (Local Plan) and sustainability appraisal reports have been taken into account;
- The reasons for choosing the development plan document (Local Plan) in light of other reasonable alternatives; and
- Monitoring measures.

6.3 Monitoring

The significant sustainability effects of implementing a Local Plan must be monitored in order to identify unforeseen adverse effects and to be able to undertake appropriate remedial action. The Sustainability Framework contained in this report includes suggested indicators in order to monitor each of the Sustainability Objectives, however these may not all be collected due to limited resources and difficulty in data availability or collection.

Guidance stipulates that it is not necessary to monitor everything included within the Sustainability Framework, but that monitoring should focus on significant sustainability effects, e.g. those that indicate a likely breach of international, national or local legislation, that may give rise to irreversible damage or where there is uncertainty and monitoring would enable preventative or mitigation measures to be taken.

The monitoring indicators for each broad sustainability theme relevant to the North Essex area are included below.

Table 5: Monitoring Measures

SA Objective	Potential Indicators
1. Create safe environments which improve quality of life, community cohesion	<ul style="list-style-type: none"> - All crime – number of crimes per 1000 residents per annum - Number of new community facilities granted planning permission - Number of new cultural facilities granted planning permission, including places of worship
2. To ensure that everyone	<ul style="list-style-type: none"> - The number of net additional dwellings

SA Objective	Potential Indicators
has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	<ul style="list-style-type: none"> - Affordable housing completions - Number of zero-carbon homes completed - Number of additional Gypsy and Traveller pitches - Number of starter homes completed - Number of homes for older people completed
3. Improve health/reduce health inequalities	<ul style="list-style-type: none"> - Percentage of new residential development within 30mins of public transport time of a GP or hospital - Percentage of new residential development that adheres to Natural England's Accessible Natural Greenspace Standards - Percentage of new residential development within walking and cycling distance to schools - Percentage of new residential development within walking and cycling distance to sport and recreation facilities / open space
4. To ensure and improve the vitality & viability of centres	<ul style="list-style-type: none"> - Amount of completed retail, office and leisure development delivered (and in centres) - Amount of completed retail, office and leisure development across the three authority area
5. To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	<ul style="list-style-type: none"> - Amount of floor space developed for employment, sqm - Successful employment use applications in rural areas - Number of jobs created in the ports - Number of developments approved associated with the tourism sector - Level 2 qualifications by working age residents. - Level 4 qualifications and above by working age residents. - Employment status of residents. - Average gross weekly earnings. - Standard Occupational Classification.
6. To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	<ul style="list-style-type: none"> - Impacts (direct and indirect) on designated sites - Amount of development in designated areas - Area of land offset for biodiversity
7. To achieve more	<ul style="list-style-type: none"> - Percentage of journeys to work by walking and cycling and percentage of journeys to

SA Objective	Potential Indicators
sustainable travel behaviour, reduce the need to travel and reduce congestion	work by public transport
8. To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	<ul style="list-style-type: none"> - Number / amount of new homes / employment development completed at ward level within Growth / Regeneration Areas - Percentage of new development within 30 minutes of community facilities (as defined by each authority) - Percentage of new residential development within 30 minutes of public transport time of a GP, hospital, primary and secondary school, employment and a major retail centre - Additional capacity of local schools / incidents of new school applications
9. To conserve and enhance historic and cultural heritage and assets and townscape character?	<ul style="list-style-type: none"> - Percentage of new and converted dwellings on previously developed land - Number of listed buildings demolished, repaired or brought back to use, including locally listed buildings - New Conservation Area Appraisals adopted - Number of Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens (and percentage at risk) - Area of highly sensitive historic landscape characterisation type(s) which have been altered and their character eroded - Number of major development projects that enhance or detract from the significance of heritage assets or historic landscape character - Percentage of planning applications where archaeological investigations were required prior to approval or mitigation strategies developed or implemented
10. To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.	<ul style="list-style-type: none"> - Total CO2 emissions - Renewable Energy Installed by Type - Number of zero carbon homes delivered
11. To improve water quality and address water scarcity and sewerage capacity	<ul style="list-style-type: none"> - Quality of Rivers (number achieving ecological good status) - Number of planning permissions granted contrary to the advice of the Environment Agency on grounds of water quality
12. To reduce the risk of fluvial, coastal and surface	<ul style="list-style-type: none"> - Number of planning permissions granted contrary to the advice of the Environment Agency



SA Objective	Potential Indicators
water flooding	Agency on flood defence grounds - Number of SuDS schemes approved by ECC
13. To improve air quality	- Number of Air Quality Management Areas
14. To conserve and enhance the quality of landscapes	- Percentage of new and converted dwellings on previously developed land - Number of proposals permitted within areas noted for their high landscape value - Number of proposals permitted contrary to a desire to restrict coalescence
15. To safeguard and enhance the quality of soil and mineral deposits	- Percentage of new development on high quality agricultural land (ALC) - Number of developments proposed within MSAs - Contaminated land brought back into beneficial use, hectares



Place Services

Essex County Council

County Hall, Chelmsford, Essex CM1 1QH

T: +44 (0)333 013 6840

E: enquiries@placeservices.co.uk

www.placeservices.co.uk

June 2017



Essex County Council



North Essex Authorities Strategic Section One for Local Plans: Draft Publication (Regulation 19)

Draft Sustainability Appraisal (SA): Environmental Report - June 2017





Contents

1.	Introduction	1
1.1	Background	1
1.2	Strategic Section One for Local Plans	1
1.3	Local Plan Progress of the Relevant Authorities	2
2.	Sustainability Appraisal / Strategic Environmental Assessment	8
2.1	The Requirement for Sustainability Appraisal	8
2.2	The Sustainability Appraisal Process	9
2.3	The Aim and Structure of this Report	10
2.4	Quality Assurance Checklist	11
3.	Sustainability Context, Baseline and Objectives	18
3.1	Introduction	18
3.2	Plans and Programmes (Stage A1)	18
3.3	Baseline Information (Stage A2)	26
3.4	Key Sustainability Issues and Problems and Sustainability Objectives (Stage A3)	38
4.	The Approach to Assessing Section One	49
4.1	Introduction	49
4.2	An Overview of the Three Authorities Local Plan SA Sustainability Objectives	50
4.3	Developing a Common Sustainability Framework for Assessing Options: Policy Content	52
4.4	The Appraisal of Policy Content	58
4.5	Developing a Common Framework for Assessing Options: Garden Communities	60
5.	The Appraisal of the Section One Policies including Reasonable Alternatives	67
5.1	Introduction	67
5.2	Vision for the Strategic Area	68
5.3	Strategic Objectives	71
5.4	Policy SP1 – Presumption in Favour of Sustainable Development	74
5.5	Policy SP2 – Spatial Strategy for North Essex	76
5.6	Policy SP3 – Meeting Housing Needs	85
5.7	Policy SP4 – Providing for Employment and Retail	90
5.8	Policy SP5 – Infrastructure and Connectivity	95
5.9	Policy SP6 – Place Shaping Principles	98
5.10	Policy SP7 – Development and Delivery of New Garden Communities in Essex	100
5.11	Policy SP8 – Tendring / Colchester Borders Garden Community	104



5.12	Policy SP9 – Colchester / Braintree Borders Garden Community	112
5.13	Policy SP10 – West of Braintree Garden Community	119
6.	Cumulative and Synergistic Impacts of Section One Policies	127
6.1	Cumulative and Synergistic Impacts of Policies SP1-SP7	127
6.2	Cumulative and Synergistic Impacts of Policies SP8-SP10	142
7.	Conclusions and Recommendations	146
7.1	Key Points from the Assessment of Policies SP1-SP10	146
7.2	The Sustainability of Section One as a Whole	149
7.3	Key Points from the Assessment of the Garden Community (GC) Options (in Appendix 1)	156
7.4	Key Points from the Cumulative Assessment of the Allocated Garden Communities	158
7.5	Recommendations, including those taken on board throughout the SA process	161
8.	Next Steps & Monitoring	164
8.1	Consultation	164
8.2	Adoption Statement	165
8.3	Monitoring	165
	Appendix1: Appraisal of the Garden Community Options and Alternative Permutations	169
	Why Garden Communities?	169
	The Identification of Reasonable Garden Community Options	185
	The Appraisal of Reasonable Garden Community (GC) Options – Creating a Level Playing Field	190
	Cumulative & Synergistic Impacts of the Allocated Garden Communities	221
	The Assessment of Alternative (Cumulative) Garden Community (GC) Option Permutations	226



List of Tables

Table 1:	Quality Assurance Checklist.....	11
Table 2:	Key Documents	18
Table 3:	Key Sustainability Issues and Problems	38
Table 4:	Sustainability Objectives for the Three Authorities Local Plan SAs	50
Table 5:	Sustainability Framework for Assessing Policy Content	52
Table 6:	Impact on Sustainability Objectives.....	58
Table 7:	Framework for Assessing Garden Community Options	61
Table 8:	Impact on Sustainability Objectives: Vision for the Strategic Area.....	69
Table 9:	Impact on Sustainability Objectives: Strategic Objectives.....	72
Table 10:	Impact on Sustainability Objectives: Policy SP1	75
Table 11:	Impact on Sustainability Objectives: Policy SP2	78
Table 12:	Impact on Sustainability Objectives: Policy SP3	86
Table 13:	Impact on Sustainability Objectives: Policy SP4	92
Table 14:	Impact on Sustainability Objectives: Policy SP5	97
Table 15:	Impact on Sustainability Objectives: Policy SP6	99
Table 16:	Impact on Sustainability Objectives: Policy SP7	103
Table 17:	Impact on Sustainability Objectives: Policy SP8	108
Table 18:	Impact on Sustainability Objectives: Policy SP9	116
Table 19:	Impact on Sustainability Objectives: Policy SP10	123
Table 20:	Cumulative and Synergistic Impacts of Policies SP8-SP10.....	142
Table 21:	Summary of Long Term Impacts of Policies SP1-SP7	146
Table 22:	Overall Impacts of Section One.....	149
Table 23:	Summary of Impacts of the Reasonable Garden Community (GC) Options.....	157
Table 24:	Monitoring Measures	165
Table 25:	'Garden Communities', 'New Towns' or 'Traditional Approaches' to Strategic Scale Growth ..	172
Table 26:	The Garden Community Options.....	185
Table 27:	Impact on Sustainability Objectives: The Garden Community Options (Allocations & Alternatives)	193
Table 28:	The Performance of the Allocated Garden Community (GC) Options	221
Table 29:	The Cumulative & Synergistic Impacts of the Allocated Garden Community (GC) Options	221
Table 30:	The Reasons for Rejecting the Alternative Garden Community (GC) Option Permutations	241





Glossary of Acronyms

AA	Appropriate Assessment
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BDC	Braintree District Council
CA	Conservation Area
CAUSE	Campaign Against Urban Sprawl in Essex
CBC	Colchester Borough Council
CCC	Chelmsford City Council
CO2	Carbon Dioxide
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DPD	Development Plan Document
EA	Environment Agency
EC	European Commission
ECC	Essex County Council
EEFM	East of England Forecasting Model
EHEN	Essex Historic Environment Record
EU	European Union
GC	Garden Community
GCP	Garden City Principle
GTAA	Gypsy & Traveller Accommodation Assessment
Ha	Hectare
HE	Historic England
HMA	Housing Market Area
HRA	Habitats Regulations Assessment
I&O	Issues and Options
IWMP	Integrated Water Management Plan
JNCC	Joint Nature Conservation Committee
KS4	Key Stage 4
LB	Listed Building
LCA	Landscape Character Assessment
LEP	Local Enterprise Partnership
LPA	Local Planning Authority



LNP	Local Nature Partnership
MSA	Minerals Safeguarding Area
NE	Natural England
NEGC	North Essex Garden Communities
NHS	National Health Service
NPPF	National Planning Policy Framework
NVQ	National Vocational Qualification
OAN	Objectively Assessed Need
ONS	Office of National Statistics
PDL	Previously Developed Land
PO	Preferred Options
PPG	Planning Practice Guidance
PRoW	Public Right of Way
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SELEP	South East Local Enterprise Partnership
SFRA	Strategic Flood Risk Assessment
SHLAA	Strategic Housing Land Availability Assessment
SHELA	Strategic Housing and Employment Land Availability
SLAA	Strategic Land Availability Assessment
SHMA	Strategic Housing Market Assessment
SM	Scheduled Monument
SNPP	Sub National Population Projections
SO	Sustainability Objective
SPA	Special Protection Area
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
Sqm	Square Metre
SSSI	Site of Specific Scientific Interest
STW/WRC	Sewage Treatment Works / Water Recycling Centres
SuDS	Sustainable Drainage System
TCPA	Town and Country Planning Association
TDC	Tendring District Council
UDC	Uttlesford District Council
UK	United Kingdom
UPC	Unattributed Population Change
WCS	Water Cycle Study
WPA	Waste Planning Authority



1. Introduction

1.1 Background

Braintree District Council, Colchester Borough Council and Tendring District Council, together forming the 'North Essex Authorities,' in conjunction with Essex County Council as a key partner in its strategic role for infrastructure and service provision, commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for a Strategic Section One for the respective Council's Local Plans.

Place Services are acting as consultants for this work; therefore the content of this SA should not be interpreted or otherwise represented as the formal view of Essex County Council.

1.2 Strategic Section One for Local Plans

In Essex, as elsewhere, the influences of population and economic growth do not stop at administrative boundaries. Settlement patterns, migration flows, commuting and strategic infrastructure needs all have significant influences within and between local authority areas.

Local Plans are the main vehicle for conveying an area's growth requirements and how these will be accommodated. However, individual local authority boundaries cannot encapsulate the geographies of issues that transcend those boundaries. Through active and on-going collaboration the authorities can jointly plan, manage and review strategic objectives and requirements for the effective implementation of sustainable development (including minerals and waste) and enhanced environments.

The geographic and functional relationship between the authorities' areas is demonstrated by the fact that, with Chelmsford City Council, they form a single Housing Market Area (HMA) for planning purposes; and they are a major part of the Haven Gateway, an established economic partnership. Within this context, the forecast levels of future population growth together with the geography of North Essex means that considerations for future growth will include options that have clear cross-boundary implications. These include both the expansion of existing towns and villages as well as possible new settlements.

Consequently, Braintree, Colchester and Tendring have agreed to come together because of their shared desire to promote a sustainable growth strategy for the longer term; and the particular need to articulate the strategic priorities within the wider area and how these will be addressed. Central to this is the effective delivery of planned strategic growth, particularly housing and employment development, with the necessary supporting infrastructure.

The Strategic Section One for Local Plans is intended to form part of each of the authorities' separate Local Plans, with the main purpose of covering the strategic Local Plan requirements of:

- Articulating a spatial portrait of the area, including its main settlements and strategic infrastructure, as a framework for accommodating future planned growth;
- Providing a strategic vision for how planned growth in north Essex will be realised, setting strategic objectives and policies for key growth topics;
- Setting out the numbers of additional homes and jobs across the area that will be needed



covering the plan period to 2033; and

- Highlighting the key strategic growth locations across the area and the necessary new or upgraded infrastructure to support this growth.

1.3 Local Plan Progress of the Relevant Authorities

1.3.1 Braintree District Council Local Plan

The Council consulted on a Local Plan Issues and Scoping Report in January – March 2015. Relevant to the scope of the Strategic Section One for Local Plans, the Local Plan Issues and Scoping Report highlighted the following key issues:

- Large numbers of new homes are required in the District to support the growing population;
- The District may not have enough brownfield sites (those where buildings have previously been located) to accommodate the new homes that need to be provided; and
- The Council must balance new homes with protection of the natural and historic environment.

This document highlighted the need to demonstrate that the new Plan can achieve and maintain a supply of readily available development sites for new homes, meeting a much higher target than in the past. Regarding this, and in response to the above key issues, it looked at a number of options, including:

- Focusing new homes in the existing towns and larger villages;
- Building new homes in one or more new villages;
- Dispersing new homes between all areas of the District;
- Building new homes in areas where they can provide funding for major infrastructure projects such as new roads; and
- Building new homes on the existing public transport/rail network to encourage sustainable travel.

Braintree District Council undertook an 8 week public consultation on a Draft Local Plan (Preferred Options stage) in June 2016. The Plan included numerous policy approaches and non-strategic (in the context of this Section One) site allocations to meet the following plan objectives:

- Creating a successful economy
 - To promote a local economy which supports the growth of existing businesses and encourages new entrepreneurial enterprises and employers to locate in the District, by providing high-quality land and buildings in sustainable locations, to meet the needs of businesses, and seeks to reduce travel outside the District to work.
- Retail and Town Centres
 - To support the changing role of town centres as a location for retail, employment, community services and cultural facilities by encouraging new development and regeneration schemes to support the function of the towns as major service centres. The major regional shopping destination of Braintree Freeport and Retail Park continues to be supported. Shops and retail facilities will also be provided on new developments where appropriate.



- **Housing Need**
 - To provide a range of housing sizes, types and tenures which meet local need, including affordable homes, starter homes, and those residents with specialist accommodation needs. New homes will be created in balanced sustainable communities.
- **Transport Infrastructure**
 - New developments must contribute towards the improvement of the road network in the District, including schemes to ensure safety and aid congestion. Developments will make appropriate provision for public transport, walking and cycling, both within developments and connections to the wider network.
- **Broadband**
 - To work with Essex County Council and service providers, to secure the earliest availability of universal broadband coverage and the fastest available connections speeds in the District and to ensure that these are made available to all new developments, where it is viable to do so.
- **Education and Skills**
 - To facilitate the best possible education system for District residents of all ages, by supporting the construction of new schools and other educational buildings which support life-long learning and skills development in the District and which provides the skills necessary for businesses in the District to thrive.
- **Protection of the Environment**
 - To protect and enhance the natural and historic environment and varied landscape character of the District, promoting local distinctiveness and character. The Council will seek to minimise the impact of all forms of pollution on the health and amenity of local communities and the natural and built environment.
- **Good Quality Design**
 - All new developments in the District will be of high-quality design, easily maintainable and will respect the scale, style and setting of the site with reference to historic townscapes, natural landscapes and existing infrastructure. Development would use materials which respect and enhance their setting and contribute to local character.
- **Healthy Communities**
 - All residents of the District are able to keep active and make healthy choices by ensuring outdoor community areas are preserved and enhanced and appropriate new areas to enable sports and recreation are created. Cycle ways and pedestrian links are also to be provided in all new developments to encourage walking and cycling. Land will be made available to support the expansion of local physical and mental health facilities.
- **Social Infrastructure**
 - Residents of the District should have access to the best local and community facilities which provide inclusive places for communities to meet, play and learn. New developments will make contributions to existing facilities or provide land and contributions for new facilities.



- Sustainability
 - To ensure that all development takes place in the most well-connected areas, making the best use of sites that have been previously development. The use of natural resources should be minimised and developments should encourage the use of renewable energy and energy efficiency measures.
- Empowering Local People
 - Creating a planning environment in which local residents and businesses feel fully involved and empowered to engage in shaping the future of the District. Documents are written in a way which is accessible and decisions are taken in a transparent way.

1.3.2 Colchester Borough Council

The Council consulted on an Issues and Options Local Plan in early 2015. This document included key issues regarding:

- Development of realistic housing targets for both market and affordable housing.
- Allocation of new housing sites in the most sustainable locations.
- Integrating new housing into the community by getting the right densities and character appropriate to the Borough's diverse neighbourhoods ranging from the Town Centre.
- Building housing of different types and sizes to cater for the full range of ages and needs, with particular regard to the needs of specific groups including students, families, people with disabilities, ethnic minorities such as gypsies and travellers, and older residents.
- Addressing the issue of supporting people who want to build their own homes.
- Achieving high quality sustainable housing design with policies that strike a balance between ensuring quality through standards and supporting innovation through a flexible approach.
- Seeking to ensure, in addressing all of the issues above, that the end result is the creation of high quality, sustainable places.
- Ensuring the delivery of well-located sites to support employment with particular regard to growing sectors of the economy.
- Development of policies to support new investment and help existing businesses overcome barriers to success and to help train new workers.
- Ensuring there is sufficient land across the plan period to support housing growth
- Development of a retail hierarchy which safeguards the pre-eminence of the Town Centre while supporting appropriate levels of growth in other areas.
- Review of existing Town Centre boundary, primary shopping area and primary shopping frontages.
- Development of policies for the Town Centre that help to create a balanced mix of activities in the daytime, evening and night time.
- Development of policies which support tourism, leisure, culture and the arts.

The responses to this consultation were collated and analysed. The Council has been collecting evidence



and commissioning studies which has informed the new Local Plan's evidence base. For example evidence has been gathered through a 'Call for Sites' exercise whereby the Council invited proposals for new uses of land in the Borough for potential inclusion in the new Local Plan. In addition these sites have been assessed thoroughly in a Strategic Land Availability Assessment, which explored the suitability, availability and achievability of all land use proposals proposed in the Borough.

The Council undertook a consultation on a Draft Local Plan, outlining the Council's preferred options for growth in the Borough in July 2016. The Plan included numerous policy approaches and non-strategic (in the context of this Section One) site allocations to meet the following plan objectives:

- Sustainable Growth
 - Ensure new development is sustainable and minimises the use of scarce natural resources and addresses the causes and potential impacts of climate change, and encourages renewable energy.
 - Focus new development at sustainable locations to create new communities with distinctive identities whilst supporting existing communities, local businesses, and sustainable transport.
 - Provide high quality housing of all tenures at accessible locations to accommodate our growing community.
 - Ensure there are sufficient sites allocated in the right locations to support employment growth over the plan period.
 - Focus development at accessible locations which support public transport, walking and cycling, and reduce the need to travel.
 - Secure infrastructure to support new development.
 - Promote of healthy lifestyles through the provision and enhancement of sport and recreation facilities, public open space and green infrastructure.
- Natural Environment
 - Protect the countryside and coast
 - Develop a green infrastructure network across the borough
 - Ensure new development avoids areas of flood risk and reduce future flood risk where possible.
 - Protect and enhance landscapes, biodiversity, green spaces, air and water quality, and river corridors.
- Places
 - Ensure the unique qualities of different communities and environments in the Borough are identified, protected and enhanced through policies and allocations which ensure high quality, consistency, equity and responsiveness to local character.
 - Promote high quality design and sustain Colchester's historic character, found in its buildings, townscape and archaeology.
 - Improve streetscapes, open spaces and green links to provide attractive and accessible spaces for residents to live, work and play.



1.3.3 Tendring District Council

Tendring District Council consulted on an Issues and Options Local Plan in 2015. Representing the first stage in the plan-making process, this involved the LPA exploring 'issues and options' across the District in order to develop spatial strategy selection and scenarios surrounding growth. The key issues emanating from and included within the Issues and Options covered needs to:

- Plan for the right number of new homes, of the right size, type and tenure to be built and in the right locations for current and future generations
- Meet the challenges presented by a lack of brownfield land
- Build homes to boost the economy by building more homes and increasing the population in the right locations to boost the demand for goods and services, unlock land for businesses and deliver new infrastructure
- Support growth locations and prioritising economic development projects
- Target growth sectors and promote sectors of the economy with greatest potential for significant growth in the future
- Improve knowledge and skills through working with businesses, schools and colleges to provide the training and work experience the residents need to address shortages in skills
- Support existing businesses through working closely with existing businesses, supporting them to expand and diversify

The development of 'issues and options', and their subsequent SA, ensured that the LPA is making every effort to meet housing needs. The Issues and Options Local Plan 2015 looked at broad locations for growth.

In addition, a number of additional growth options or scenarios were developed alongside additional options for the distribution of growth in different areas of the District as can be considered reasonable. These are in consideration of available land as put forward for allocation in a call-for-sites exercise that ran concurrently with the Issues and Options consultation. A range of evidence base documents have been commissioned to inform the development of the Local Plan, including a Strategic Housing and Employment Land Availability study.

The District Council provided the public with a chance to make representations on a Preferred Options Local Plan in July 2016 through best practice in plan-making. This Preferred Options Local Plan included numerous policy approaches and non-strategic (in the context of this Section One) site allocations to meet the following plan objectives:

- Housing Delivery
 - To provide new dwellings within Tendring District up to 2033 of sufficient variety in terms of sites, size, types, tenure and affordability to meet the needs of a growing and ageing population; and
 - To deliver high quality sustainable new communities.
- Employment/Commercial
 - To provide for the development of employment land on a variety of sites to support a diversity of employment opportunities and to achieve a better balance between the location of jobs and housing, which will reduce the need to travel and promote



sustainable growth up to the period of 2033.

- Retail Development
 - To promote the vitality and viability of the town centres, exploiting the benefit of enhanced growth of the town whilst retaining the best and valued aspects of its existing character.
- Infrastructure Provision
 - To make efficient use of existing transport infrastructure and ensure sustainable transport opportunities are promoted in all new development. Where additional capacity is required in the form of new or upgraded transport infrastructure, to ensure this is provided alongside new development.
 - To enable provision of upgraded broadband infrastructure and services.
 - To ensure that new growth brings opportunities to enhance existing services, facilities and infrastructure for the benefit of existing and new communities.
- Education and Healthcare Needs
 - To improve and provide good quality educational opportunities and prospects for Tendring's residents as part of sustainable community strategy. This includes practical vocational training and apprenticeships.
 - To work with partners in the National Health Service, local health organisations and local community groups to ensure adequate provision of healthcare facilities to support growing communities.
- Sustainability
 - To locate development within Tendring District where it will provide the opportunity for people to satisfy their day-to-day needs for employment, shopping, education, and other services locally or in locations which minimise the need to travel and where there are modes of transport available in addition to the use of car.
- Cultural Heritage
 - To conserve and enhance Tendring District's heritage, respecting historic buildings and their settings, links and views.
- Biodiversity
 - To provide a network of multi-functional green spaces which secures a net gain in biodiversity, provides for the sporting and recreational needs of the population, promotes healthy lifestyles and enhances the quality of the natural and built environment.
- Water and Climate Change
 - To reduce the risk of flooding by securing the appropriate location and design of new development, having regard to the likely impact of climate change.
- Tourism Promotion
 - To work with partners to provide an enhanced environment for tourism and the maritime sector and its associated services.



2. Sustainability Appraisal / Strategic Environmental Assessment

2.1 The Requirement for Sustainability Appraisal

The requirement for Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) emanates from a high level national and international commitment to sustainable development. The most commonly used definition of sustainable development is that drawn up by the World Trade Commission on Environment and Development in 1987 which states that sustainable development is:

'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

This definition is consistent with the themes of the NPPF, which draws upon The UK Sustainable Development Strategy Securing the Future's five 'guiding principles' of sustainable development: living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly.

SEA originates from the European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the 'SEA Directive') which came into force in 2001. It seeks to increase the level of protection for the environment; integrate environmental considerations into the preparation and adoption of plans and programmes; and promote sustainable development.

The Directive was transposed into English legislation in 2004 by the Environmental Assessment of Plans and Programmes Regulations (the 'SEA Regulation') which requires an SEA to be carried out for plans or programmes,

'subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and required by legislative, regulatory or administrative provisions'.

This includes Local Plans. The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme 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'* as specified in Annex 1(f) of the Directive. SA examines the effects of proposed plans and programmes in a wider context, taking into account economic, social and environmental considerations in order to promote sustainable development. It is mandatory for Local Plans to undergo a Sustainability Appraisal in accordance with the Planning and Compulsory Purchase Act 2004 as amended by the Planning Act 2008, and in accordance with paragraph 165 of the NPPF.

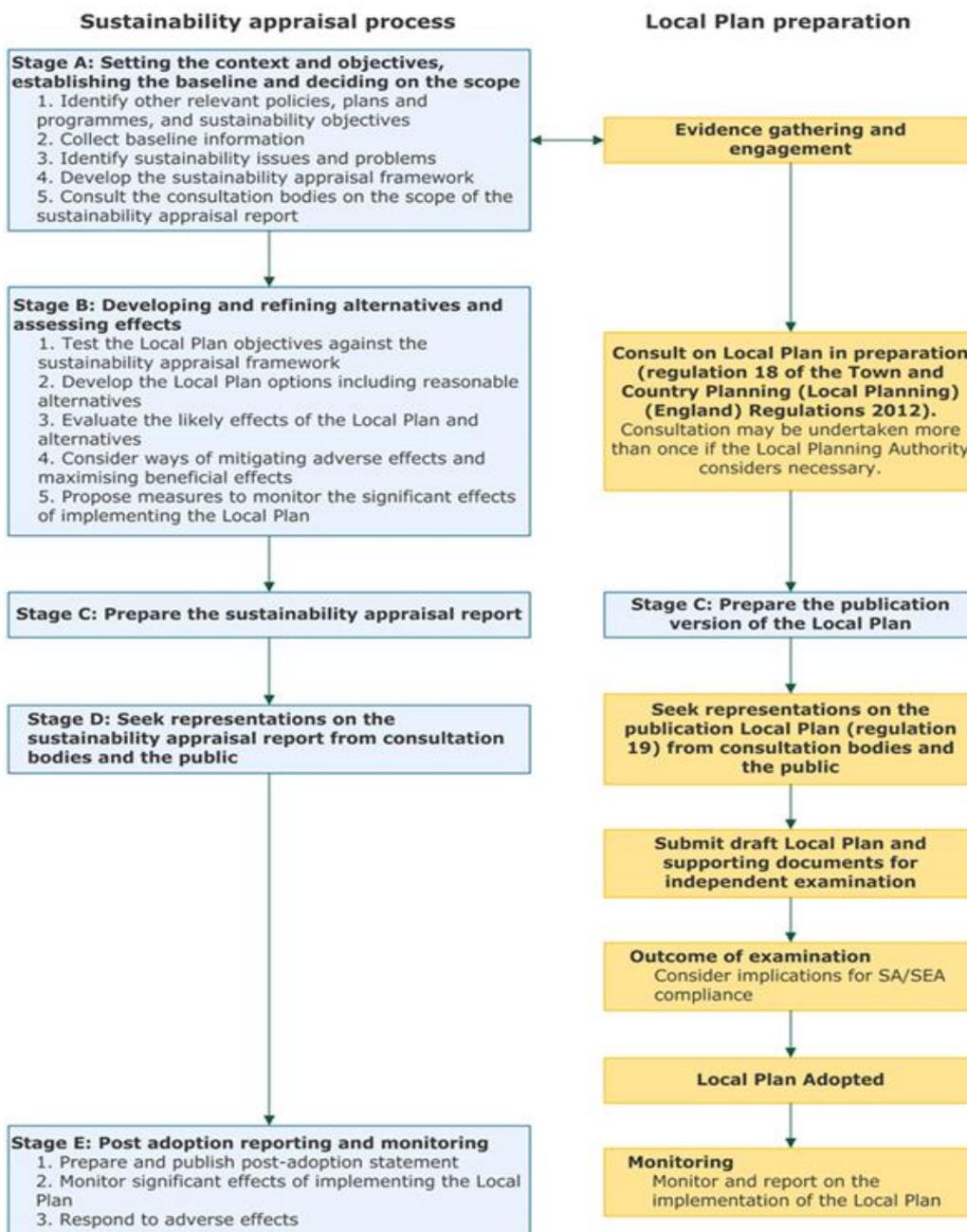
Whilst the requirements to produce a SA and SEA are distinct, Government guidance considers that it is possible to satisfy the two requirements through a single approach providing that the requirements of the SEA Directive are met. This integrated appraisal process will hereafter be referred to as SA.



2.2 The Sustainability Appraisal Process

The SA of the Common Strategic Section One for Local Plans follows that of the Sustainability Appraisal process as iterated in National Planning Practice Guidance on Sustainability Appraisal requirements for local plans. The following 5 sequential stages are documented below.

Figure 1: Stages in the Sustainability Appraisal Process and Local Plan Preparation





2.3 The Aim and Structure of this Report

This report responds to Stage C in the SA process above; including those requirements of Stage B: assessing strategic options including reasonable alternatives, evaluating the likely effects of the strategic options and alternatives, and considering ways of mitigating adverse effects and maximising beneficial effects.

The production of a Sustainability Appraisal (Environmental) Report is a statutory requirement at this stage, and this SA Report has been produced to accompany the Draft Publication Local Plan consultations for Braintree District Council's Local Plan, Colchester Borough Council's Local Plan and Tendring District Council's Local Plan.

This report is accompanied by a number of Annexes. These respond to:

- Annex A – Plans and Programmes
- Annex B – Baseline Information
- Annex C – History of Alternatives and Consultation Comments

Following the finalisation of this Report, Stage D in the above SA process requires consultation. There are three statutory consultees or 'environmental authorities' that are required to be consulted for all Sustainability Appraisal and Strategic Environmental Assessment documents. These are:

- The Environment Agency;
- Natural England; and
- Historic England.

In addition to these, consultation will seek to engage the wider community in order to encompass comprehensive public engagement. The North Essex Authorities may additionally wish to invite comments from focussed groups, relevant stakeholders and interested parties. The detailed arrangements for consultation are to be determined by the North Essex Authorities.

The environmental authorities and public are to be given 'an early and effective opportunity' within appropriate time-frames to express their opinion. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the 'consultation databases' of the three LPAs. This reflects those persons or bodies who have commented on the SA in previous consultation stages.

2.4 Quality Assurance Checklist

The Quality Assurance Checklist shows where in this Environment Report the requirements as set out in the SEA Directive (annex 1) and the Quality Assurance checklist (figure 25) from the Department of Communities and Local Government document: A Practical Guide to the Strategic Environmental Assessment Directive (2006) are covered. It shows that this SA of Section One for Local Plans complies with legislation and best practice.

Table 1: Quality Assurance Checklist

SEA Directive Requirements	Where covered in this SA Environmental Report...
General	
a) an outline of the contents, main objectives of the plan, and relationship with other relevant plans and programmes;	Section 1 and Annex A.
b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan;	Section 3 and Annex B.
c) the environmental characteristics of areas likely to be significantly affected;	Section 3 and Annex B.
d) any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	Section 3 and Annex B.
e) the environmental protection objectives, established at international, Community or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation;	Section 3 and Annex A.
f) the likely significant effects 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	Sections 5, 6, 7 and Appendix 1.

SEA Directive Requirements	Where covered in this SA Environmental Report...
and the interrelationship between the above factors (these effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative impacts);	
g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;	Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Proposed Mitigation Measures / Recommendations') and Section 7.
h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Alternatives Considered').
i) a description of the measures envisaged concerning monitoring;	Section 4.
j) a non-technical summary of the information provided under the above headings.	A separate Non-Technical Summary has been provided.

Objectives and context

The plan/strategy's purpose and objectives are made clear.	Section 1 and Sections 5, 6 and Appendix 1.
Environmental issues and constraints, including international and EC environmental protection objectives, are considered in developing objectives and targets.	Section 3 and Annex B and Section 4.
SEA objectives, where used, are clearly set out and linked to indicators and targets as appropriate.	Sections 5, 6 and Appendix 1.
Links with other related plans, programmes and policies are identified and explained.	Section 3 and Annex A.
Conflicts that exist between SEA objectives, between SEA and plan objectives and between SEA objectives and other plan objectives are identified	Sections 5, 6 and Appendix 1 where relevant.



SEA Directive Requirements	Where covered in this SA Environmental Report...
and described.	
Consultation Bodies are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report.	Consultation has been undertaken alongside the Plan at all relevant statutory stages.
The assessment focuses on significant issues.	Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Significant and Temporal Effects').
Technical, procedural and other difficulties encountered are discussed; assumptions and uncertainties are made explicit.	Sections 5, 6 and Appendix 1 where relevant.
Reasons are given for eliminating issues from further consideration.	Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Alternatives Considered').
Realistic options are considered for key issues, and the reasons for choosing them are documented.	Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Alternatives Considered').
Alternatives include 'do minimum' and/or 'business as usual' scenarios wherever relevant.	Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Alternatives Considered' where relevant).
The environmental effects (both adverse and beneficial) of each alternative are identified and compared.	Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Alternatives Considered').
Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained.	Sections 5, 6 and Appendix 1 where relevant.

Baseline information

Relevant aspects of the current state of the plan area (including social and economic characteristics) and their likely evolution without the plan are described.	Section 3 and Annex B.
Environmental characteristics of areas likely to be significantly affected are described, including areas wider than the physical boundary of the plan area where it is likely to be affected by the plan.	Section 3 and Annex B.

SEA Directive Requirements	Where covered in this SA Environmental Report...
Difficulties such as deficiencies in data or methods are explained.	Section 3 and Annex B.

Prediction and evaluation of likely significant environmental effects

Effects identified include wider sustainability issues (employment, housing, transport, community cohesion, education etc) in addition to the types listed in Annex 1(f) of the SEA Directive (biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage and landscape).	Sections 5, 6 and Appendix 1 (within relevant subsections entitled 'Significant and Temporal Effects' and 'Secondary Effects').
Both positive and negative effects are considered, and the duration of effects (short, medium or long-term) is addressed.	Sections 5, 6 and Appendix 1 (within relevant subsections entitled 'Significant and Temporal Effects').
Likely secondary, cumulative and synergistic effects are identified where practicable.	Sections 5, 6 and Appendix 1 (within relevant subsections entitled 'Significant and Temporal Effects' and 'Secondary Effects'). Sections include assessment of cumulative and synergistic impacts.
Inter-relationships between effects are considered where practicable.	Sections 5, 6 and Appendix 1 (within relevant subsections entitled 'Significant and Temporal Effects' and 'Secondary Effects'). Sections include assessment of cumulative and synergistic impacts.
The prediction and evaluation of effects makes use of relevant accepted standards, regulations, and thresholds.	Sections 5, 6 and Appendix 1 (within relevant subsections entitled 'Significant and Temporal Effects' and 'Secondary Effects'). Sections include assessment of cumulative and synergistic impacts and draw on the Section One's specific evidence base and baseline information.

Mitigation measures

Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan are indicated.	Sections 5, 6 and Appendix 1 (within relevant subsections entitled 'Proposed Mitigation Measures / Recommendations') and Section 8.
Issues to be taken into account in project consents are identified	Sections 5, 6 and Appendix 1 (within relevant subsections entitled 'Proposed Mitigation Measures /

SEA Directive Requirements	Where covered in this SA Environmental Report...
	Recommendations') and Section 7 where relevant.

The Environmental Report

Is clear and concise in its layout and presentation	The SA is clear and concise, with a separate non-technical summary.
Uses simple, clear language and avoids or explains technical terms	The SA uses simple, clear language and avoids or explains technical terms, with a separate non-technical summary.
Uses maps and other illustrations where appropriate	The SA uses tables and the use of colour coding / symbols to help identify and illustrate impacts.
Explains the methodology used	Section 4.
Explains who was consulted and what methods of consultation were used	Consultation has been and will be undertaken alongside the Plan at all relevant statutory stages. The environmental authorities and public are to be given 'an early and effective opportunity' within appropriate time-frames to express their opinion. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the 'consultation databases' of the three LPAs. This reflects those persons or bodies who have commented on the SA in previous consultation stages.
Identifies sources of information, including expert judgement and matters of opinion	Sections 5, 6 and Appendix 1.
Contains a non-technical summary covering the overall approach to the SEA, the objectives of the plan, the main options considered, and any changes to the plan resulting from the SEA.	A separate Non-Technical Summary has been provided.

Consultation

The SEA is consulted on as an integral part of the plan-making process.	Consultation has been and will be undertaken alongside the Plan at all relevant statutory stages.
---	---

SEA Directive Requirements	Where covered in this SA Environmental Report...
<p>Consultation Bodies and the public likely to be affected by, or having an interest in, the plan or programme are consulted in ways and at times which give them an early and effective opportunity within appropriate time frames to express their opinions on the draft plan and Environmental Report.</p>	<p>Consultation has been and will be undertaken alongside the Plan at all relevant statutory stages. The SA will be made available for comment in accordance with the consultation procedures of the three LPAs. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the 'consultation databases' of the three LPAs. This reflects those persons or bodies who have commented on the SA in previous consultation stages.</p>

Decision-making and information on the decision

<p>The environmental report and the opinions of those consulted are taken into account in finalising and adopting the plan or programme.</p>	<p>Consultation comments have been considered throughout the plan-making and SA processes, including those that identify new options for consideration. These have been factored into the SA for appraisal where relevant.</p>
<p>An explanation is given of how they have been taken into account.</p>	<p>Annex C details responses and actions to individual consultation comments received to date.</p>
<p>Reasons are given for choosing the plan as adopted, in the light of other reasonable options considered.</p>	<p>Sections 5, 6 and Appendix 1 (within relevant sub-sections entitled 'Alternatives Considered').</p>

Monitoring measures

<p>Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SEA.</p>	<p>Section 8 outlines the approach to monitoring, which will be undertaken as part of the Council's existing monitoring arrangements. An Adoption Statement will include more detailed monitoring arrangements once the Plan is adopted.</p>
<p>Monitoring is used, where appropriate, during implementation of the plan or programme to make good deficiencies in baseline information in the SEA.</p>	<p>Section 8 outlines the approach to monitoring, which will be undertaken as part of the Council's existing monitoring arrangements. An Adoption Statement will include more detailed monitoring arrangements once Plans are adopted.</p>
<p>Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects may</p>	<p>To be addressed in an Adoption Statement once Plans are adopted.</p>



SEA Directive Requirements	Where covered in this SA Environmental Report...
include predictions which prove to be incorrect.)	
Proposals are made for action in response to significant adverse effects.	To be addressed in an Adoption Statement once Plans are adopted.

3. Sustainability Context, Baseline and Objectives

3.1 Introduction

The following section outlines the key findings of the three authorities' Local Plan Scoping Reports which includes an outline of the plans and programmes, the baseline information profile for the area.

3.2 Plans and Programmes (Stage A1)

Local Plans, including the content of the Strategic Section One for Local Plans, must have regard to existing policies, plans and programmes at national and regional levels and strengthen and support other local plans and strategies. It is therefore important to identify and review those policies, plans and programmes and Sustainability Objectives which are likely to influence the Strategic Section One for Local Plans at an early stage. The content of these plans and programmes can also assist in the identification of any conflicting content of plans and programmes in accumulation with the Strategic Section One for Local Plans. Local supporting documents have also been included within this list as they will significantly shape policies and decisions in the three authority area.

It is recognised that no list of plans or programmes can be definitive and as a result this report describes only the key documents which influence the Plan. Table 2 outlines the key documents, whilst a comprehensive description of these documents together with their relevance to the Plan is provided within Annex A.

Table 2: Key Documents

International Plans and Programmes
European Commission (EC) (2011) A Resource-Efficient Europe – Flagship Initiative Under the Europe 2020 Strategy, Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee of the Regions.
European Landscape Convention (Florence, 2002)
European Union Water Framework Directive 2000
European Union Nitrates Directive 1991
European Union Noise Directive 2002
European Union Floods Directive 2007



European Union Air Quality Directive 2008 (2008/50/EC) and previous directives (96/62/EC; 99/30/EC; 2000/69/EC & 2002/3/EC)

European Union Directive on the Conservation of Wild Birds 2009

European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992

European Community Biodiversity Strategy to 2020

United Nations Kyoto Protocol

World Commission on Environment and Development 'Our Common Future' 1987

The World Summit on Sustainable Development Johannesburg Summit 2002

Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations).

The Conservation of Habitats and Species Regulations, 2010

Review of the European Sustainable Development Strategy (2009)

Environment 2010: Our Future, Our Choice (2003)

SEA Directive 2001

The Industrial Emissions Directive 2010

Energy Performance of Buildings Directive 2010 on the energy performance of buildings 2010/31/EU

The Drinking Water Directive 1998

The Packaging and Packaging Waste Directive 1994

EU Seventh Environmental Action Plan (2002-2012)

European Spatial Development Perspective (1999)

European Convention on the Protection of the Archaeological Heritage (Valletta, 1992)

Aarhus Convention (1998)

National Plans and Programmes

National Planning Practice Guidance (2016)



The Localism Act 2011
National Planning Policy Framework (March 2012)
The Housing White Paper (February 2017)
The Future of Transport White Paper 2004
Housing Act (2004)
Building a Greener Future: Policy Statement (July 2007)
Community Infrastructure Levy Guidance (April 2013)
Underground, Under Threat - Groundwater protection: policy and practice (GP3)
Model Procedures for the Management of Land Contamination – Contaminated Land Report 11 (September 2004)
Natural Environment and Rural Communities Act 2006
Countryside and Rights of Way Act 2000
Planning and Compulsory Purchase Act 2004
The Education (School Information) (England) (Amendments) Regulations, 2002
Childcare Act, 2006
Flood & Water Management Act 2009
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)
Safeguarding Our Soils: A Strategy for England (2009)
Natural Environment White Paper: The Natural Choice: Securing the Value of Nature (2011)
The National Adaptation Programme – Making the Country Resilient to a Changing Climate (2013)
Planning Policy for Traveller Sites (2012)
National Planning Policy for Waste (2014)
Adapting to Climate Change: Ensuring Progress in Key Sectors (2013)



DECC National Energy Policy Statement EN1 (2011)
DCLG: An Introduction to Neighbourhood Planning (2012)
JNCC/Defra UK Post-2010 Biodiversity Framework (2012)
Mainstreaming Sustainable Development (2011)
UK Marine Policy Statement, HM Government (2011)
Electricity Market Reform White Paper 2011
DfT (2013) Door to Door: A strategy for improving sustainable transport integration
DCLG (2011) Laying the Foundations: A Housing Strategy for England
DEFRA (2011) Securing the Future: Delivering UK Sustainable Development Strategy
DECC (2011) UK Renewable Energy Roadmap (updates setting out progress and changes to the strategy dated 2013 and 2013)
Community Energy Strategy (DECC, 2014)
The National Flood and Coastal Erosion Risk Management Strategy for England (Environment Agency, 2011)
Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy (HM Government, 2013)
Future Water: The Government's Water Strategy for England (DEFRA, 2008)
Water for People and the Environment: Water Resources Strategy for England and Wales (Environment Agency, 2009)
Safeguarding our Soils: A Strategy for England (DEFRA, 2009)
Sub-national Plans and Programmes
Essex Gypsy and Traveller and Travelling Showpeople Accommodation Assessment – on behalf of EPOA (July 2014)
Looking Back, Moving Forward – Assessing the Housing Needs of Gypsies and Travellers in Essex (2006)
Greater Essex Demographic Forecasts Phase 7 (2015)



Essex Transport Strategy: the Local Transport Plan for Essex (2011)
2011 Essex Biodiversity Action Plan
Commissioning School Places in Essex 2015-2020
Essex County Council Joint Municipal Waste Management Strategy 2007-2032
Anglian River Basin Management Plan (2015)
Essex Wildlife Trust Living Landscape plans
Essex Wildlife Trust Living Landscape Statements
Respecting our Past, Embracing our Future: A Strategy for Rural Essex (2016)
ECC Parking Standards: Design and Good Practice (September 2009)
The Essex Local Area Agreement – ‘Health and Opportunity for the People of Essex’ 2008 – 2011 (2010 Refresh)
ECC Development Management Policies (February 2011)
The Essex Strategy 2008 – 2018
Sustainable Drainage Systems Design and Adoption Guide 2012
Essex Minerals Local Plan (2014)
Essex Replacement Waste Local Plan (submitted June 2016)
Haven Gateway: Programme of Development: A framework for Growth, 2008 – 2017 (2007)
Haven Gateway: Integrated Development Plan (2008)
South East LEP Investment and Funding (March/April 2014)
Anglian Water Business Plan (2015-2020) (2012)
Draft Water Resource Management Plan (2014-2039) (2014)
Combined Essex Catchment Abstraction Management Plan (2013)
Haven Gateway Water Cycle Study: Stage 1 and 2 Reports (2008)



South East LEP Growth Deal and Strategic Economic Plan (2004)
ECC Developer's Guide to Infrastructure Contributions (Revised Edition 2016)
Vision for Essex 2013-2017: Where Innovation Brings Prosperity (2013)
Corporate Outcomes Framework 2014-2018 Essex County Council (2014)
Colchester Draft Surface Water Management Plan (2014)
A12/A120 Route Based Strategy (2013)
Highway Authority's Development Management Policies (2011)
Economic Plan for Essex (2014)
Essex Design Guide (2005)
North Essex Catchment Flood Management Plan (2009)
Essex and South Suffolk Shoreline Management Plan (second phase) (2011)
Dedham Vale AONB and Stour Valley Management Plan 2010 – 2015
Local Plans and Programmes
Braintree District Council, Chelmsford City Council, Colchester Borough Council, Tendring District Council, Objectively Assessed Housing Need Study - Peter Brett Associates (July 2015 and updated 2016)
North Essex Concept Feasibility Study (AECOM) - July 2016
Colchester Metro Town Evaluation of Alternatives (AECOM) – April 2017
Monks Wood, Braintree Evaluation of Alternatives (AECOM) – April 2017
HRA Report for North Essex Authorities Strategic Section 1 for Local Plans (LUC) (including Appropriate Assessment) – May 2017
Braintree Local Plan Preferred Option Assessment Highways/Transport Planning -March 2017
Colchester Borough Council, Braintree District Council, Tendring District Council and Essex County Council North Essex Garden Communities Employment & Demographic Studies – February 2017
North Essex Garden Communities Movement and Access Study – March 2017



Colchester Infrastructure Delivery Plan Report - March 2017
Retail and Town Centre Uses Study Colchester Borough Council: Retail Update 2013 (2013)
Landscape Character Assessment (Chris Blandford Associates, September 2006)
Habitat Regulations Assessment Survey and Monitoring Programme, Final Report, Colchester Borough Council (December 2013)
Colchester Coastal Protection Belt Review (Chris Blandford's Associates 2016)
CBC Strategic Housing Market Assessment (SHMA) (2014)
Creative Colchester Strategy & Action Plan (2012)
Safer Colchester Partnership: Strategic Assessment of Crime and Annual Partnership Plan 2012-2013 (2012)
CBC Townscape Character Assessment (2006)
CBC Scott Wilson Strategic Flood Risk Assessment (2008)
CBC Affordable Housing SPD (2011)
CBC Communities Facilities SPD (updated 2013)
CBC Better Town Centre SPD (2012)
CBC Sustainable Design and Construction SPD (2011)
Colchester Borough Council Housing Strategy (2012)
CBC Local Air Quality Management Progress Report (2013)
2016 Air Quality Annual Status Report (ASR) - July 2016
Colchester Environmental Strategy 2014-2019 draft (2014)
Colchester Borough Council's Comprehensive Climate Risk Assessment (2010)
Colchester Borough Council Landscape Strategy (2013)
Colchester Cycling Strategy SPD (2012)
CBC Core Strategy (2008)



CBC Development Policies DPD (2010)
CBC Site Allocations Policies DPD (2010)
Colchester Borough Green Infrastructure Strategy (2011)
Tendring economic development strategy (2013)
Tendring Strategic Housing Market Assessment (2013)
Braintree District Core Strategy (2011)
Babergh Adopted Core Strategy and Adopted Policies (2011 – 2031) Local Plan Document (2014)
Sustainable Development, Tendring District Council Local Plan Proposed Submission Draft Written Statement 2012 (as amended by the 2014 Focused Changes)
TDC Strategic Flood Risk Assessment (SFRA) (2009)
Tendring Open Space Strategy (October 2009)
Landscape Character Assessment, Vol. 1 & Vol. 2, Land Use Consultants on behalf of Tendring District Council, November 2001
Affordable Housing Viability Study, Tribal Consulting Ltd, October 2010, Viability Testing, Peter Brett, August 2013, reports prepared on behalf of Tendring District Council
Clacton Town Centre Vision, Intend, 2009
Celebrate-on-Sea – ‘Putting the fun back into Clacton’ (2010)
Infrastructure Study, Part 2 (January 2010)
Tendring District Historic Characterisation Project, Essex County Council, 2008
Tendring Geodiversity Characterisation Report, Essex County Council, 2009
Climatic Change Strategy 2010-2016, Tendring District Council
Tendring Economic Strategy (October 2013)
Retail Study Update (September 2010)
Chelmsford City Council – Emerging Local Plan and associated evidence base documents

3.3 Baseline Information (Stage A2)

Annex B details the complete Baseline Information profile for the strategic area relevant to the content of the Strategic Section One for Local Plans.

The following section outlines a summary of the key baseline information and therefore the current state of the environment for the three authorities' strategic area.

3.3.1 Economy

- The area covered by this strategic planning approach comprises a large part of the Haven Gateway, an established partnership area which is identified in a range of existing strategy and investment documents. The Haven Gateway includes the Essex administrative areas of Braintree, Colchester, Maldon and Tendring Councils and extends northwards into parts of Suffolk.
- Braintree and Colchester are the major centres of employment within the strategic area. While there are high levels of commuting to London, many residents work and live within the area with significant commuting across borough and district boundaries, reflecting a functional economic geography.
- The area has a mixed economy focused on the service sector, including wholesale and retail, business services, tourism, health and education, alongside manufacturing, logistics and construction. Due to the extensive rural area outside urban settlements, agriculture and its related industries play an important part in the overall economy.
- This rurality also means that there are large areas of open countryside, including protected natural and historic landscapes. Areas of importance for nature conservation are to be found particularly along the coast and river estuaries, while the villages and towns include many built heritage assets.
- Braintree District has a wide employment base of mainly small and medium-sized businesses. In 2011, approximately 58,000 residents worked within the District, 15,000 travelled into the District to work and 32,000 travelled from the District to work in the major centres of London, Chelmsford and Colchester. Unemployment and youth employment rates have been falling and are below the national average.
- Tendring District includes Harwich International Port which has developed into a highly efficient, multi-purpose freight and passenger port handling bulk and container ships as well as roll-on, roll-off ferries and cruise ships. Harwich is one of the major UK ports for ferry and cruise tourism. Harwich is also one of the leading UK freight ports for bulk and container ships.
- The sector employing the most people in Tendring, according to an Economic Development Strategy (2013), was Health which accounted for approximately 17% of jobs, followed by Retail and Education. The Cultural, Visitor and Tourism sector encompasses a range of activities which play an important role in the District's economy. This sector is worth more than £353 million per



annum to the economy and is estimated to provide 7,900 jobs across Tendring District. The majority of jobs and businesses in this sector are located in and around Clacton.

- Model based unemployment figures for Tendring District during the period January 2015 – December 2015 show that the unemployment rate was 5.3% which is higher than that for the East of England.
- Colchester has maintained good levels of employment growth over the last two decades with declining industrial employment being offset by a growth in office jobs.
- Colchester registered 92,300 workforce jobs in 2014 representing an increase of 20% over 1991 levels. This increase was higher than in the UK (14.6%) and similar to the East of England (19.6%), but was lower than employment growth recorded across Essex as a whole (27.9%) over the same period.
- The town centre of Colchester serves as a centre not only for the Borough but for a much wider area of North East Essex, with residents of Braintree, Maldon and Tendring districts travelling into the town to work, shop and use its community facilities.
- Compared to sub-national and national figures, Tendring district has experienced a lower start up rate and a lower de-registration rate of businesses indicating a slightly less robust local economy. Braintree and Colchester are more in line with the county and national business registration and de-registration rates.

3.3.2 Housing

- Braintree District has been one of the fastest growing areas in the country over the past decade. The population of the District is currently approximately 150,000 and is projected to rise substantially by 2033. As life expectancy increases, the age structure is expected to change, with a marked increase in the number and proportion of the population who will be aged 65 and over. The number of one-person households is also expected to increase.
- Colchester delivered 12,644 new homes between 2001/02 and 2014/15 at an average rate of 903 dwellings per year. Given the continuing pressures on the South East housing market, Colchester will need to maintain its good rate of delivery over the next plan period to meet the Objectively Assessed Need figure of 920 houses a year, while also ensuring that increasing quantity is matched with high design quality and sustainable construction.
- In 2014/15, 3.8% of the net dwelling completions, which accounts for 10 dwellings, were affordable within Tendring, as opposed to 73.9% in Braintree and 40.0% in Colchester. This data indicates that affordable housing is an issue, particularly in Tendring and to a lesser extent, in Colchester.
- The average dwelling price within Tendring District is £168,829. This is significantly lower than the county and national averages. The average dwelling prices for Essex is similar to the national average, but Tendring District is much lower. Braintree has a higher average dwelling price than Tendring and Colchester at £215,851.
- Meeting the housing needs in the Districts and Borough is an important issue. The updated SHMA for Braintree, Colchester, Chelmsford and Tendring Councils indicates that the majority of market housing and affordable housing should be 2 and 3 bedroom properties. This trend is replicated when assessing all housing, with 70.3% of housing need across the Districts and

Boroughs is 2 and 3 bedroom dwellings.

- Tendring has seen no increase in Gypsy and Traveller provisions since January 2014. Caravan counts in Braintree have increased since January 2014, but with fluctuations in measuring periods between 2014 and 2016 due to not tolerated sites being removed from the statistics, presumably due to eviction or inclusion in the statistics for tolerated sites. A similar trend is apparent in Colchester, with an overall increase in sites for Gypsy and Traveller populations.

3.3.3 Biodiversity

- Ramsar sites are wetlands of international importance designated under the Ramsar Convention which have a high degree of protection. They often incorporate Special Protection Areas (SPAs) and Special Areas for Conservation (SACs). In the Plan Area there are a number of Ramsar sites which include Hamford Water, and parts of the Colne and Blackwater estuaries which include coastal areas, estuaries, rivers and lakes/reservoirs. These Ramsar sites are also SPAs.
- SACs are sites of international importance designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive). There is 1 SAC in the area: a large coastal area known as Essex Estuaries stretching from Shoeburyness to Jaywick Sands.
- Tendring District has a rich geodiversity which is varied and largely irreplaceable. There are 10 sites of Special Scientific Interest (SSSIs) in the District, notified specifically for their geological value. The District is also home to the Stour, Orwell and Colne Estuaries and Hamford Water, SPA and Ramsar sites, designated for the conservation and protection of the habitats of migratory and endangered birds, scarce plants and invertebrates and for the conservation of wetlands and are sites of national and international importance.
- Colchester has a similarly rich biodiversity, including 8 SSSIs, the Colne Estuary SPA, the Blackwater Estuary and Abberton Reservoir SPA.
- There are a number of National Nature Reserves located in the Plan Area: Blackwater Estuary, Colne Estuary, Dengie and Hamford Water.
- All 15 SSSIs in Tendring and all 8 sites in Colchester are meeting the target of at least 95% of the SSSI area being brought into favourable condition. 3 of the 4 SSSIs in Braintree are meeting the target, but Bovingdon Hall Woods is at 93.30% favourable or unfavourable recovering. Colne Estuary in Tendring and Colchester, Stour Estuary in Tendring, Bovingdon Hall in Braintree and Blackwater Estuary in Colchester are the only SSSIs and not meeting the PSA target for 100% of their area, however the area not in a favourable or favourable recovering condition is small.

3.3.4 Landscapes

- Within the area's landscape there are many areas of special interest which have been designated and protected from inappropriate development. The main areas of importance are Landscape Character Areas (LCAs), an Area of Outstanding Natural Beauty (AONB), Protected Lanes and Special Verges.
- The Essex Landscape Character Assessment (Chris Blandford Associates, 2003) is based on the Countryside Agency's guidance, and establishes a 'baseline' of the existing character of the

Essex landscape. The assessment involved a broad review of the landscape identifying 'Landscape Character Areas' within Essex. They are areas with a recognisable pattern of landscape characteristics, both physical and experiential, that combine to create a distinct sense of place.

- Protected lanes have significant historic and landscape values. They generally originate from pre-historic track ways, which have been in continual (if lighter) use since. Protected lanes are often narrow, sunken and enclosed by a combination of mixed deciduous hedges and mature trees, ditches and raised verges that can be indications of great age. The volume weights and speed of traffic is often limited to preserve the special character and due to their age and use they also have great biological value. Protected Lanes and on-statutory assets, however hold some weight in planning decisions. Braintree District Council include consideration of Protected Lanes and Colchester Borough Council have emerging evidence base on the matter.
- In Colchester and the north west of Tendring District is the Dedham Vale Area of Outstanding Natural Beauty (AONB) covering an area of 90 sq. km, designated for conservation due to its significant landscape value. Made famous by the paintings of Constable and Gainsborough, its traditional grasslands, wildflower meadows and hedgerows provide an opportunity for both residents and visitors to enjoy the peace and beauty of what are among some of England's most precious and vulnerable landscapes. In addition, there are discussions currently underway regarding the possibility of expanding the Dedham Vale AONB westward into the northern part of Braintree District. Proposed by the Stour Valley Partnership, the proposals are supported by Essex County Council, Braintree District Council and Colchester Borough Council.
- Tendring has a significant concentration of grade 1 and 2 agricultural land to the north west of the District on the border with Colchester Borough. The majority of the central party of the District is grade 3 land, with small areas of grade 2 running from south west to north east through the centre of Tendring. Coastal areas have lower quality land, with grade 4 land to the south around Colne Point and Holland-on-Sea and grade 4 and 5 land around Harwich and Dovercourt.
- Grade 1 and 2 agricultural land is predominantly in the north east of Colchester Borough, with some areas of grade 2 land to the west and north west. Land to the south of the borough is lower quality, the majority of which is grade 3 with some areas of grade 4 and 5 along the banks of the river Colne and Abberton reservoir.
- Braintree predominantly features grade 2 agricultural land across the majority of the District, with areas of grade 3 land throughout. Some more concentrations of grade 3 land are notable towards the north of the District. There is an area of poor quality grade 5 land to the east of Stisted and Braintree town.

3.3.5 Population and Social (including Health and Education and Skills)

- The area's population has been projected to increase (ONS, 2014) to 2021. Some of the highest increases in populations county-wide are forecast to be in Braintree District, Colchester Borough and Tendring District.
- The population in Tendring, Braintree and Colchester are all predicted to increase over Local Plan Periods, with the highest growth rates in Colchester, followed by Tendring and Braintree. The population structure in Colchester is more weighted towards 20-44 year olds, similar to the trends in Braintree but with less dominance in this age group. Contrastingly, Tendring has a



higher population of people aged over 65. This age group is also predicted to increase over Local Plan periods.

- Within Tendring District, the 2011 Census puts the population at approximately 138,100 with an average density of 4.1 people per hectare.
- Tendring District is projected to grow by 14.4% (from 2011 Census numbers) to approximately 158,000 by the end of the plan period. Recent decades have seen a trend towards an ageing population in the District and this is projected to continue in the future.
- Based on the 2011 Census, there were 62,105 households in the Tendring District, the majority of which were privately owned housing. Average household size in the district was 2.2 people, slightly lower than the national, regional and county, averages.
- The average property price in September 2012 in Tendring District was £180,408; this is noticeably lower than average prices in England and Essex.
- At the time of writing there were 47 academy schools in Tendring District, 40 primary schools and 7 secondary schools. There were also 2 adult education centres. Primary school numbers, as forecast in the Commissioning Schools for Essex document, are set to rise in the five year period 2013-2018 to 9,928, due to rising births and new housing, requiring plans to be developed with local schools to increase the provision in the District.
- Overall pupil numbers in secondary schools in Clacton are predicted to decline in the period 2013/18 to 8,000. However, demand for year 7 places in Clacton is forecast to increase from 2017/2018 onwards to 8,395 once pupils from anticipated new housing are included in the forecast.
- Colchester Borough's population has grown by 15.6% between 2001 and 2014 and was estimated to stand at 180,420 people in mid-2014. The borough's growing population is accommodated within a spatial structure defined by the urban area at its centre, surrounded by a rural hinterland with three smaller centres, Tiptree, West Mersea and Wivenhoe.
- In Braintree District, the level of demand for secondary school places in Year 7 is predicted to rise over the course of the next 5 years. In Colchester, pressure on primary school places is forecast to continue in line with considerable housing development in the area. In the Stanway area in particular new housing developments are progressing and there is likely to be more pressure on school places, which will be monitored closely.
- Secondary school Year 7 intakes in Colchester are forecast to rise significantly from September 2017 onwards and options are being explored in active collaboration with the schools in Colchester town to provide the additional places required.
- Tendring has the highest level of deprivation for a local authority within Greater Essex. It is estimated that almost a fifth of people in the District live in seriously deprived neighbourhoods.
- While Colchester is less deprived than Essex as a whole, 2 small areas in Colchester were in the top 10% most deprived in England in 2010, Magnolia in St. Andrew's Ward and St Anne's Estate in St Anne's ward. Sustainable development for the future will require the development of sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities.
- Of the 326 local authorities within England, Tendring ranks within the top 25% for extent and the top 16% for the remaining three measures –local concentration, average score and average



rank. Braintree and Colchester are less deprived, with Colchester ranking 6th in Essex on average and Braintree less deprived ranking 8th in Essex on average.

- Life expectancy of residents within Tendring District is lower than the regional and national averages with men living for an average of 78.7 years and women on average living 82.0 years. Braintree and Colchester have higher life expectancies for men and women than the national figures, but are both below the regional figures. In general, life expectancy is increasing within the Districts and nationwide. Colchester has the highest life expectancies of the three Districts for women, at 83.5 and Braintree has the highest for men at 80.1. The implications of this will mean that as people live longer there will be increased pressure on services and housing for the elderly.
- Participation in sport has seen a reduction in Tendring and Colchester from the previous year, and Braintree also has reduced overall since 2012-13 despite a small increase in the previous year. In addition, obesity in Tendring is more prevalent than Braintree, Colchester, the region and the nation. Braintree also has a higher proportion of adults classified as obese but a lower proportion of children aged 4-5. Colchester has lower percentages of both adults and children aged 4-5 classified as obese.
- Braintree District Council has invested in new and enhanced leisure facilities in the District. In 2014 a new leisure centre with swimming pool and gym opened in Witham, and facilities at Braintree Sports & Health Club and at Braintree Swimming and Fitness were expanded and enhanced. Outdoor gyms have also been provided in Braintree and Witham.

3.3.6 Air Quality and Noise

- There are no Air Quality Management Areas (AQMAs) located in Braintree District. The main air quality issues in the District relate to nitrogen dioxide (NO₂) and particulate emissions from vehicles travelling on the A12 and A120.
- There are no AMQAs within Tendring District.
- There are four Air Quality Management Areas in Colchester, located in the following areas:
 - Area 1 - Central Corridors (including High Street Colchester; Head Street; North Hill; Queen Street; St. Botolph's Street; St. Botolph's Circus; Osborne Street; Magdalen Street; Military Road; Mersea Road; Brook Street; and East Street).
 - Area 2 - East Street and the adjoining lower end of Ipswich Road.
 - Area 3 - Harwich Road/St Andrew's Avenue junction.
 - Area 4 - Lucy Lane North, Stanway; Mersea Road; and Brook Street.
- The Tendring District Council Air Quality Progress Report shows that Tendring District is currently meeting the air quality objectives. The automatic data does show there is a risk of exceeding the nitrogen dioxide objective at the Clacton Town Hall site; however this site experienced low data capture due to networking problems.

3.3.7 Climatic Factors

- Tendring District, Colchester Borough and Braintree District all consume more energy from non-



renewable sources as a percentage of their consumption compared to the East of England as a whole. More than three quarters of Tendring and Braintree District's 2,532.2GWh and 3,019.1GWh respective energy consumption is from petroleum products and natural gas. For Colchester, the percentage is just below 75% for the same energy sources. Colchester and Braintree are closer to the East of England average than Tendring. Registering 38.27% of their consumption deriving from petroleum, Tendring is lower than the percentage for Braintree, Colchester and the East of England. In contrast only 20.6GWh of energy consumed is from renewable bioenergy and waste sources, equating to just 0.81% of energy consumption in Tendring. This is comparatively low when measured against the 0.94% in Braintree and 1.01% achieved across the East of England region, but higher than the 0.71% achieved in Colchester.

- Industry, domestic and transport each produce roughly 1/3 of the total CO2 emissions within Colchester, however there is more variation in the statistics for Tendring and Braintree. The industry and commercial sector produces the smallest amount in every District at 28.8% for Tendring, 29.7% in Braintree and 31.6% in Colchester. Transport produces the most in Braintree at 37.4%, whereas domestic emissions are the highest in Tendring and Colchester at 41.6% and 34.8% respectively.
- Tendring has one of the lowest reductions in CO2 emissions relative to the 2005 data of all the Districts in Essex at just 11.5%. This is 6.1% below the average reduction per capita for Essex. Braintree and Colchester are higher than the Essex average at 18.7% and 18.6% respectively.

3.3.8 Transport

- The area's strategic road and rail network is heavily used, particularly given the proximity to and connectivity with London. The principal roads are the A12 and A120, while the A130, A131, A133 and A414 also form important parts of the strategic road network.
- The Great Eastern Main Line provides rail services between London Liverpool Street and the East of England, including Witham, Chelmsford, Colchester and Clacton-on-Sea. It also carries freight traffic to and from Harwich International Port, which handles container ships and freight transport to and from the rest of the UK. Harwich is also one of the major UK ports for ferry and cruise departures.
- Crossrail is expected to start operating in the first part of this plan period with services commencing just south of Chelmsford in Shenfield. The opportunities that Crossrail will bring in terms of additional capacity and quicker journeys to a wider choice of destinations will be a contributor to the continued attractiveness of north Essex as a place to live and to do business.
- The growing demand for the use of airports, including London Stansted, will create additional associated pressures on road and rail infrastructure. The County Council, along with South East Local Enterprise Partnership, local and national agencies and other organisations, will also need to work collaboratively with the Local Planning Authorities to ensure infrastructure meets demand for enhanced economic growth.
- Transportation provision in Tendring District includes 14 railway stations with connections to Colchester, Chelmsford, Ipswich, Norwich, Stratford and London. The average journey time between Clacton-on-Sea and London Liverpool Street is 1 hour 26 minutes.
- Within Tendring, there are numerous bus routes throughout the District including frequent inter-

urban routes linking villages to the larger urban areas of the district and the large town of Colchester in the adjoining borough. The dispersed geography of the District means that there is a reliance on the use of private cars.

- Colchester Borough's self-containment rate (share of residents who also work within the Borough) was 69% in 2011, with 24,850 employed residents leaving the Borough to work. Of these 25% go to Greater London, 15% to Tendring District, 15% to Braintree District and 10% to Chelmsford City. The Local Plan will need to manage the continuing pressures of vehicle congestion and parking while developing practical solutions to minimise the need to travel and provide non-car based alternatives to movement around the Borough.
- There are network efficiency issues on a number of strategic inter-urban routes which are operating at or near to capacity. In addition, the capacity of the A12 is further constrained by the operation of the junctions and sub-standard slip roads. The A12, managed by Highways England, has recognised issues with poor reliability and delays, and the Roads Investment Strategy (2015 – 2020) seeks to implement major improvements to address these issues. The A120 between Braintree and the A12 junction suffers from heavy congestion, high accident risk and poor journey reliability. ECC is leading a project, with Highways England, to study options for dualling this section of the route. A number of key junctions on the local highway network also operate at 'over capacity' during peak hours.
- Proportionately more households own 1 car or van within Tendring District at 45.3%, which is slightly higher than national and regional statistics. Colchester is also higher than the regional and national figures at 43.8% and Braintree has the lowest proportion of households owning 1 or more car at 40.3%.
- Tendring and Colchester are above the regional and national averages for households owning 1 or more cars, in contrast with Braintree which is lower. Despite this, a lower proportion of people use a private car or van to travel to work. Similarly, Colchester has fewer employees travelling to work by car or van, which could be as a result of a higher number of employment opportunities closer to their homes negating the need for travel by car. The same reasoning applies to Braintree, where more employment opportunities are in rural locations and more people travel to work by car or van.
- All Districts and Boroughs registered significant proportions of residents travelling outside to other local authority areas to find employment. Just 59.9% of residents in Braintree remained in the District for their work, which was the lowest percentage of the Districts and Boroughs. Tendring was the next highest, followed by Colchester with the lowest proportion of residents travelling elsewhere for employment.

3.3.9 Water

- The main rivers in the area are the Colne and the Pant/Blackwater. The north of the area has relatively high contamination vulnerability because of the porosity of the underlying chalk.
- In addition to natural water bodies there are various artificial water bodies in the county. Abberton is one of the County's largest inland water resources.
- Water management is challenging in the Strategic Area given the combination of high development growth and it being one of the driest counties in England. Annual rainfall in the

area is only 65% of the average in England and Wales. In respect of water quantity a significant portion of the resource is considered to be 'water stressed'; the resource availability status of rivers and aquifers show that they are generally over abstracted; and not self-sufficient in relation to local sources of water supply and needs to import substantial quantities of water to satisfy existing demand.

- The latest Colchester Water Cycle Study identified issues with a number of smaller ward areas within the Borough. These are:
 - North Colchester – Wastewater treatment and Wastewater Infrastructure
 - Colchester Town Centre and Fringe – Wastewater Treatment and Wastewater Infrastructure
 - South Colchester (Garrison) – Wastewater Treatment and Wastewater Infrastructure
 - East Colchester - Wastewater Treatment and Wastewater Infrastructure
 - Stanway - Wastewater Treatment and Wastewater Infrastructure
 - Colchester other areas - Wastewater Treatment
 - Wivenhoe/Rowhedge - Wastewater Treatment and Wastewater Infrastructure
 - Tiptree – Water Supply Resources, Wastewater Infrastructure and more recently Environment – Water Quality
 - West Mersea – Wastewater Infrastructure
 - Marks Tey – Wastewater Treatment and Environment – Water Quality
 - Other Villages – Eight Ash Green (EAG) and Langenhoe - Wastewater Treatment
- The key activities required to resolve the “red” time periods above are:
 - Water Supply - Implementation of proposed transfer of water from Planning Zone 56 - Colchester to Planning Zone 63 - Tiptree
 - Wastewater - Implement proposed discharge consent increases and process improvements at Colchester STW and Copford STW. Upgrade/extension of existing sewers or implementation of new sewer
 - Water Quality - Implementation of BAT technologies, and therefore significant investment, to keep pollution levels within consent.
- The latest Tendring Water Cycle Study identified issues with a number of smaller wards within the District. These are:
 - Jaywick – Wastewater Treatment and Wastewater Infrastructure
 - Frinton-on-Sea and Walton-on-the-Naze – Wastewater Infrastructure
 - Brightlingsea – Wastewater Infrastructure
 - Lawford, Manningtree and Mistley – Wastewater Infrastructure
 - Thorpe le Soken – Wastewater Infrastructure
 - St Osyth – Wastewater Infrastructure
- The key activities required to resolve the “red” time periods above are:
 - Wastewater - Detailed review of development and discharges to establish the required increase in the consented DWF for Jaywick STW, and apply if necessary.

- Extension and upgrade/capacity increase of current sewer network.
- In Braintree, the latest Water Cycle Study concludes that potable water may require an upgrade, but that potable water supply can support the predicted growth in the District. A stage 2 report explores the possibility of reducing water demand through dwelling design. Additional Wastewater Treatment Works (now Water Recycling Centres) and Sewerage Networks may be required as environmental water quality is highlighted as a cause for concern, but again there is confidence that existing treatment facilities can support the additional wastewater.

3.3.10 Flooding

- The National Planning Policy Framework seeks to avoid inappropriate development in areas at risk of flooding, but where development is necessary, to ensure that it is safe and does not increase flood risk elsewhere.
- Surface water flood risk is relatively high with all main settlements assessed being ranked in the top 1,000 settlements most susceptible to surface water flooding.
- Significant levels of flood risk have been identified along the Essex coast and inland along river stretches.

3.3.11 Cultural Heritage and Townscape

- The historic environment should be effectively protected and valued for its own sake, as an irreplaceable record which contributes to our understanding of both the present and the past.
- There is a concentration of listed buildings in the district of Braintree and also around historic towns such as Colchester.
- Tendring District has more than 960 Listed Buildings. The District also benefits from 27 Scheduled Monuments which include above and below ground features, 3 Historic Parks and Gardens and 9 Protected Lanes, preserved for their historic indication of ancient road patterns in the District. The District also contains 20 Conservation Areas.
- Archaeological deposits across Tendring, Braintree and Colchester range in date from the Palaeolithic, through to structures related to the Cold War. However, it should also be remembered that the EHER records represent only the known deposits with many new sites being identified each year. Archaeological sites (and their setting) constitute a finite, non-renewable resource which is vulnerable to damage. There is a need for updated Historic Characterisation Studies within the Districts and Borough to provide a more accurate description of the archaeological deposits in order to better understand the vulnerability of the historic environment.
- According to the Heritage at Risk Register (2016), there are 15 assets listed as being at risk in Tendring. This consists of 7 Scheduled Monuments, 4 Listed Buildings and 4 Conservation Areas. There are 7 assets listed as being at risk in Braintree. This consists of 3 Scheduled Monuments, 2 listed places of worship and 2 Conservation Areas. There are 10 assets listed as being at risk in Colchester. This consists of 4 Scheduled Monuments, 2 listed places of worship, 1 Listed Building and 3 Conservation Areas.
- Colchester Borough boasts 52 Scheduled Monuments, which is the highest number when



compared with Braintree and Tendring. Braintree District contains 40 Scheduled Monuments and Tendring District benefits from 27 Scheduled Monuments which include above and below ground features.

- There are 3 Registered Parks and Gardens within Tendring District, 8 Registered Parks and Gardens within Braintree District and 4 Registered Parks and Gardens within Colchester Borough which have each been designated by English Heritage as being “a park or garden of special historic interest”.
- Braintree has the most Conservation Areas of the 3 authorities with 39. Both Tendring and Colchester have 22 Conservation Areas which are defined as historical settlements and buildings having ‘special architectural or historical interest, the character of which is desirable to preserve or enhance’.

3.3.12 Minerals and Waste

- The Strategic Area has extensive deposits of sand and gravel. The sand and gravel resources in Essex are significant in national, sub-national and local terms - Essex is one of the largest producers in the UK; most geographically extensive and significantly mixed within the centre and north of Essex – namely the districts of Uttlesford, Braintree, Chelmsford, Colchester and Tendring.
- The Replacement Waste Local Plan (Inspector’s report due soon following Examination in Public in late 2016), as published by Essex County Council and Southend-on-Sea as the combined Waste Planning Authority, allocates 4 sites within Tendring, 1 in Braintree and 2 within Colchester for the treatment of biological waste, inert waste, inert landfill and other waste management. These are:
 - Tendring
 - Morses Lane, Brightlingsea
 - Sloughs Farm, Ardleigh
 - Sunnymead, Elmstead & Heath Farms
 - Wivenhoe Quarry Plant area
 - Braintree
 - Rivenhall
 - Colchester
 - Bellhouse Landfill Site
 - Fingringhoe Quarry
- Three sites within Braintree District have been identified as preferred or reserved sites for primary mineral extraction of sand and gravel in the Essex Minerals Plan (Policy P1, Table 5), which was adopted in July 2014. These include sites at Bradwell Quarry (Rivenhall Airfield) comprising Site No’s A3 – A7; one site at Broadfield Farm, Rayne (Site No A9); and one site on land at Colemans Farm (Site No A46).
- There are two sites within Tendring identified as preferred or reserved for primary mineral extraction of sand and gravel. These are Site Nos A20 – Sunnymead, Alresford and B1 – Slough



Farm, Ardleigh.

- There is one site within Colchester identified as preferred or reserved for primary mineral extraction of sand and gravel. This is Site No A13 - Colchester Quarry, Fiveways.
- The majority of the sand and gravel produced in Essex (about 78%) is used within the County itself. This position looks unlikely to change over the long-term. Consequently the main factor influencing production of sand and gravel in the future will be the need to meet the minerals demand for the whole of Essex created by major development and new infrastructure projects within Essex itself.
- The silica sand resources in Essex are processed for industrial purposes at Ardleigh from a mixed resource, north-east of Colchester. Industrial uses include glassmaking, foundry casting, ceramics, chemicals and water filtration

3.3.13 Trans-national Implications

The Scoping Report explored the state of the environment within the North Essex area, however consideration has since been given to the possibility of trans-national impacts resulting from the scale of growth and those broad locations identified for development within Section One.

In view of this, no trans-national effects were deemed likely as a result of the Section One content singularly or in combination with the relevant Section Twos of the three Local Plans or any other plans and programmes. This is as result of the Section One Habitats Regulation Assessment Screening Assessment and associated Appropriate Assessment (AA) (2017) which explores the environmental impacts of the Section One on international and national designations for nature conservation. The AA identifies that although impacts arise as a result of the level of growth in Section One due to recreation, effective mitigation is possible.

3.3.14 Data Limitations

Not all the relevant information was available for the each authority in the Strategic Area on a comparable basis, or at the relevant level; as a result there are some gaps within the data set. It is believed however that the available information shows a comprehensive view on sustainability within the Strategic Area. New data that becomes available will be incorporated in the SA.

It should be noted that while the baseline will be continually updated throughout the SA process, the information outlined within this report represents a snapshot of the information available at the beginning of April 2017.

3.4 Key Sustainability Issues and Problems and Sustainability Objectives (Stage A3)

The outcome of Stages A1 – A2 in the SA Process is the identification of key sustainability issues and problems facing the Strategic Area which assist in the finalisation of a set of relevant Sustainability Objectives. Issues are also identified from the review of plans and programmes and a strategic analysis of the baseline information.

Sustainability Objectives are also drawn from an amalgamation of the SA Scoping Report of each authority's Local Plan in order to align the separate SAs of both the Strategic Section One for Local Plans and individual Local Plans (representing Section Two in each authority).

The appraisal of the Strategic Section One for Local Plans will be able to evaluate, in a clear and consistent manner, the nature and degree of impact and whether significant effects are likely to emerge from the Strategic Section One for Local Plan's proposed content. The alignment between the Sustainability Objectives in this SA with the Objectives of each authority's separate Local Plan SA will ensure an integrated approach between strategic issues and those that are local and specific to each authority.

The following table outlines the stages which led to the formulation of the Sustainability Objectives for the Strategic Section One for Local Plans, which were based on key sustainability issues and considerations for the whole Strategic Area. The state of the environment in absence of the Section One is derived from the Baseline Information addressed in Annex B accompanying this report and the wider benefits that can be expected of growth over a larger strategic area and in accordance with Garden City principles.

Table 3: Key Sustainability Issues and Problems

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
Social integration	Some of the highest increases in populations county-wide are forecast to be in Colchester Borough and Tendring District and there is a need to integrate new communities with existing ones.	The absence of a strategic approach across the HMA is likely to lead to the allocation of development across the area that can be considered comparatively more piecemeal and not of the scale to stimulate wider infrastructure benefits, and ancillary development requirements, that can be of wider benefit to new and existing communities.	1) Create safe environments which improve quality of life, community cohesion
Quality of life	Tendring has the highest level of deprivation for a local authority within Greater Essex.		

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
Population growth	<p>The latest population trend data shows that the population in the HMA area is growing annually.</p> <p>The area's population has been projected to increase (ONS, 2014) to 2021. Some of the highest increases in populations county-wide are forecast to be in Colchester Borough and Tendring District.</p>	Without a strategic approach within the HMA, it is probable that each authority would have to explore the allocation of marginal and less sustainable land.	2) To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford
The need for specific housing types	There is an identified need for specific types of housing throughout the strategic area including housing for older people.	As indicated by need, market forces alone can not be expected to deliver all types of housing need in the HMA. The exploration of Spatial Strategy and Section Policies that are wider in scope across the HMA / strategic area, including Garden Community options, enables sustainable growth to be well dispersed in reflection of needs across the HMA. Also and importantly the Section One ensures the delivery of such housing through adhering to Garden City Principles.	
Affordable housing	In 2014/15, 3.8% of the net dwelling completions, which accounts for 10 dwellings, were affordable within Tendring, as opposed to higher percentages in Braintree and Colchester. This indicates that affordable housing is an issue.	The scope of the Section One across the HMA can ensure that affordable housing delivery and units for older people can significantly increase. It is also a Garden City Principle and requirement of such strategic development. In the absence of the Strategic Section One for Local Plans, including Garden Communities, there is a possibility that a higher proportion of smaller sites are allocated for development in Local Plans, which would not provide such significant	
Ageing population	The population structure in Colchester is more weighted		



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	<p>towards 20-44 year olds, similar to the trends in Braintree but with less dominance in this age group. Contrastingly, Tendring has a higher population of people aged over 65. This age group is also predicted to increase over Local Plan periods.</p>	<p>increases in affordable housing and housing for older people.</p>	
<p>Gypsy and Traveller requirements</p>	<p>Tendring has seen no increase in Gypsy and Traveller provisions since January 2014. Caravan counts in Braintree have increased since January 2014, but with fluctuations in measuring periods between 2014 and 2016 due to unauthorised sites being removed from the statistics, presumably due to eviction or inclusion in the statistics for tolerated sites. A similar trend is apparent in Colchester.</p>	<p>Garden Communities, as explored in the Strategic Section One for Local Plans have the capability, and are likely to provide adequate Gypsy and Traveller provision, located in sustainable areas, that is unlikely to otherwise be forthcoming from call-for-sites processes.</p>	
<p>Healthcare services</p>	<p>Health services in the Strategic Area are either underprovided or otherwise oversubscribed. Life expectancy of residents within Tendring District is lower than the regional and national averages with men living for an average of 78.7 years and women on average living 82.0 years. Braintree and Colchester have higher life</p>	<p>In exploring options for strategic level growth within Section One, relevant strategic policies and Garden Communities have the opportunity to integrate adequate health service and recreation provision into the settlement, or can otherwise ensure that accessibility to healthcare facilities is improved. In the absence of this approach, it is possible that current trends will continue and negative implications be exacerbated.</p>	<p>3) To improve the health of the District's residents and mitigate/reduce potential health inequalities</p>

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	<p>expectancies for men and women than the national figures, but are both below the regional figures.</p>		
<p>Participation in sport and obesity</p>	<p>Participation in sport has seen a reduction in Tendring and Colchester, and Braintree also has reduced overall since 2012-13. In addition, obesity in Tendring is more prevalent than Braintree, Colchester, the region and the nation.</p>		
<p>Business start ups</p>	<p>Compared to sub-national and national figures, Tendring district has experienced a lower start up rate and a lower de-registration rate of businesses indicating a slightly less robust local economy. Braintree and Colchester are more in line with the county and national business registration and de-registration rates.</p>	<p>The link between homes and jobs is a key tenet of sustainability, as is ensuring progressive growth in employment opportunities across a range of sectors. This is best addressed at a strategic level through Section One policies and the opportunities presented by Garden Communities. This ensures that a mix can be adequately provided. In contrast, without such an approach it can be expected that out commuting will continue and the location of new housing and employment opportunities would remain disparate. Garden Communities should also, where sensitively located, ensure that town centres remain viable and offer employment opportunities in easy commuting distance to homes.</p>	<p>4) To ensure and improve the vitality & viability of centres</p> <p>5) To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways</p>
<p>Rural employment</p>	<p>Tendring District is predominantly rural in nature; however the majority of businesses are located in an urban location. The majority of businesses in Colchester are in urban areas.</p>		

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
Town centres	Town centres within the North Essex and nationally area are under threat from an increase in non-town centre uses through permitted development rights and out of centre retail opportunities which are less congested.		
Commuting patterns	All the authorities registered significant proportions of residents travelling outside to other local authority areas to find employment. Just 59.9% of residents in Braintree remained in the District for their work, which was the lowest percentage of the Districts and Boroughs. Tendring was the next highest, followed by Colchester with the lowest proportion of residents travelling elsewhere for employment.		
International and European wildlife designations	In the Plan Area there are a number of Ramsar sites which include Hamford Water, and parts of the Colne and Blackwater estuaries which include coastal areas, estuaries, rivers and lakes/reservoirs. These Ramsar sites are also SPAs. There is also one 1 SAC in the area: a large coastal area known as Essex Estuaries	The exploration of strategic growth in a plan led system at an early stage enables the results and recommendations of HRA and AA to be factored into plan making at the strategic level. This ensures that mitigation strategies can be developed as per the recommendations of these studies to alleviate pressure on designations and eradicate any 'likely significant effects.'	6) To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
National and local wildlife designations	There are a number of National Nature Reserves, SSSIs, Local Wildlife Sites and Local nature Reserves in the strategic area.	The exploration of strategic growth in a plan led system at an early stage, enables the green infrastructure of the strategic area to be interconnected and enhanced through a joined-up approach to new settlements and associated economies of scale that could otherwise not be expected. The scope of Section One ensures that green infrastructure is better integrated across the strategic area.	
Car ownership	Tendring and Colchester are above the regional and national averages for households owning 1 or more cars, in contrast with Braintree which is lower.	Car ownership can be expected to increase without the development of solutions that deliver truly sustainable options at a strategic level that ensure a range of employment opportunities and services are accessible by sustainable means.	7) To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion
Congestion	Congestion is common on specific sections of the strategic road network.		
Air quality	There are a number of AQMAs in Colchester		
Congestion and interconnectivity	There are network efficiency issues on a number of strategic inter-urban routes which are operating at or near to capacity.	Without a strategic plan-led approach to growth, it is possible that development requirements on a district / borough wide basis can conflict in the wider area in regard to congestion.	8) To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development
Transport infrastructure	There is a strategic need for transport infrastructure improvements associated with the A12 and A120	The Section One enables a joined up approach to growth that contributes to wider interconnectivity and better transport solutions / improvements.	
Rural transport	The strategic area is largely rural in nature and rural		

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	public transport services and interconnectivity is poor.		
Educational achievement	Tendring on average has lower proportions of students achieving KS4 results across all measures when compared with Braintree and Colchester. This trend extends to adult qualifications, where Braintree and Colchester are above regional and national averages for adults with NVQ1 level qualifications or higher.	Solutions to address these two issues can be considered to be feasible and better aligned across the strategic area through a strategic approach. Garden Communities and strategic policies can ensure the incorporation of schools and stimulate the provision of facilities by meeting required dwelling yield thresholds.	
School capacity	School capacities are forecast to be in deficit, when adjusted for new housing requirements		
Heritage assets at risk	According to the Heritage at Risk Register (2016), there are 15 assets listed as being at risk in Tendring. This consists of 7 Scheduled Monuments, 4 Listed Buildings and 4 Conservation Areas. There are 7 assets listed as being at risk in Braintree. This consists of 3 Scheduled Monuments, 2 listed places of worship and 2 Conservation Areas. There are 10 assets listed as being at risk in Colchester. This consists of 4 Scheduled Monuments, 2 listed places of worship, 1 Listed Building	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in more suitable areas regarding the protection of the historic environment; in the absence of this approach district / borough wide needs would be met more independently and development pressures could lead to the allocation of less suitable land or urban concentration / expansion at higher densities. This could impact on Conservation Areas and historic cores. The exploration of a plan-led system at the strategic level ensures a consistency of approach in regard to the historic environment and historic landscapes. Garden Communities at the scales identified also ensures that	9) To conserve and enhance historic and cultural heritage and assets and townscape character

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	and 3 Conservation Areas.	mitigation strategies can be successfully and holistically integrated over a wide area with additional potential for the enhancement of any heritage assets or their settings.	
Listed buildings	There is a concentration of listed buildings in the district of Braintree and also around historic towns such as Colchester.		
Historic towns	Colchester is the country's oldest town and the historic environment should be effectively protected and valued for its own sake, as an irreplaceable record which contributes to our understanding of both the present and the past.		
Renewable energy use	Tendring District, Colchester Borough and Braintree District all consume more energy from non-renewable sources as a percentage of their consumption compared to the East of England as a whole	Solutions to address this issue can be considered to be feasible at the strategic level that can incorporate and stimulate the provision for renewable energy and energy efficiency aspirations through economies of scale.	10) To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.
Water scarcity and management	Water management is challenging given the combination of high development growth and it being one of the driest counties in England. In respect of water quantity a significant portion of the resource is considered to be 'water stressed'; the resource availability status of rivers and aquifers show that they are generally over	In the absence of the strategic Section One for Local Plans, development could come forward that does not explore holistic approaches to meeting water demand within the strategic area.	11) To improve water quality and address water scarcity and sewerage capacity

Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	abstracted; and not self-sufficient in relation to local sources of water supply and needs to import substantial quantities of water to satisfy existing demand		
Fluvial flood risk	Although flooding cannot be completely prevented, its impacts can be avoided and reduced through effective planning and land management. The National Planning Policy Framework seeks to avoid inappropriate development in areas at risk of flooding, but where development is necessary, to ensure that it is safe and does not increase flood risk elsewhere.	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in areas that are less susceptible to flooding; in the absence of this approach district / borough wide needs would be met more independently and development pressures could lead to the allocation of less suitable land or urban concentration / expansion at higher densities which would exacerbate surface water flood risk. The exploration of Garden Communities at the scales identified also ensures that sustainable drainage methods can be successfully and holistically integrated over a wide area with additional potential for biodiversity gain.	12) To reduce the risk of fluvial, coastal and surface water flooding
Surface water flood risk	Surface water flood risk is relatively high with all main settlements assessed being ranked in the top 1,000 settlements most susceptible to surface water flooding.		
Coastal flood risk	Significant levels of flood risk have been identified along the Essex coast and inland along river stretches.		
Air quality	There have been general reductions on the average energy consumption on roads in the area. Similar reductions are apparent on	There is a need to allocate strategic development in such a way that air quality issues in Colchester are not exacerbated. Without a strategic approach across the HMA, it is	13) To improve air quality



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	<p>the majority of roads throughout all authorities with the exception of minor roads in Colchester.</p>	<p>possible that the Borough Council would be prompted to allocate less suitable land, or a number of urban extensions to the main town of Colchester, to meet their borough-wide needs as stated in the OAN Report.</p>	
<p>AQMAs</p>	<p>There are a large number of AQMAs in the town of Colchester.</p>	<p>A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in more suitable areas as opposed to any concentration / expansion of towns at higher densities which could exacerbate air quality issues.</p>	
<p>AONB pressures</p>	<p>There is one AONB, Dedham Vale, which lies on the border of Suffolk and Essex in Colchester Borough covering an area of 90 sq. km. It has been designated such because it is an exceptional example of a lowland river valley and plans are being explored to extend this designation westward.</p>	<p>It is unlikely that there would be any significant difference in conditions without the implementation of the Section One.</p>	<p>14) To conserve and enhance the quality of landscapes</p>
<p>Agricultural land and soil quality</p>	<p>There are significant areas of Grade 1 agricultural land within Tendring, and smaller areas within Colchester Borough.</p>	<p>It is unlikely that there would be any significant difference in conditions without the implementation of the Section One.</p>	<p>15) To safeguard and enhance the quality of soil and mineral deposits</p>
<p>Preserving mineral deposits</p>	<p>The area has extensive deposits of sand and gravel. The sand and gravel resources in Essex are significant in national, sub-national and local terms -</p>	<p>It is unlikely that there would be any significant difference in conditions without the implementation of the Section One.</p>	



Local Plans and Programmes	Description / Supporting Evidence	State of environment in absence of the Strategic Section One for Local Plans	Sustainability Objective (SO)
	<p>Essex is one of the largest producers in the UK; most geographically extensive and significantly mixed within the centre and north of Essex – namely the districts of Uttlesford, Braintree, Chelmsford, Colchester and Tendring.</p>		



4. The Approach to Assessing Section One

4.1 Introduction

As previously set out, the strategic Section One for Local Plans is intended to form part of each of the authorities' separate Local Plan, with the main purpose of covering the strategic Local Plan requirements of:

- Articulating a spatial portrait of the area, including its main settlements and strategic infrastructure, as a framework for accommodating future planned growth;
- Setting out the numbers of additional homes and jobs across the area that will be needed covering the plan period to 2033;
- Providing a strategic vision for how planned growth in north Essex will be realised;
- Setting strategic objectives and policies for key growth topics; and
- Highlighting the key strategic growth locations across the area and the necessary new or upgraded infrastructure to support this growth.

The SA, in line with the scope of the Strategic Section One for Local Plans, is required to assess the impacts of the three authorities' strategic content. For this purpose, and as required of SA, a broad sustainability framework relevant to the geographical scope of the three authorities has been devised. In addition, and again relevant to the key sustainability issues of the three authorities, a site assessment framework has been developed for the purpose of assessing the sustainability of Garden Community options in the whole area on a quantitative and comparable basis and crucially to the same level of detail.

The sustainability frameworks contained in this report form the basis of the methods used to evaluate the effects of the Section One for Local Plans. Quantitative analysis is used where available, however the broad scope of the Section One and differing level of detail available for all options explored, lead to a number of assumptions being required in order to make qualitative and comparable judgements. It is important that a level playing field is ensured for the assessment of options, with the same level of information being used to assess all option. Assumptions are set out in the relevant sections of this SA in which specific elements of the Section One are appraised.

The methodology adopted for the SA of the Strategic Section One for Local Plans represents an amalgamation of the work undertaken for each authority's Local Plan Sustainability Appraisal Scoping Report, all of which have been subject to formal consultation as per the requirements of the SEA Regulations. This work has also been factored into formulating an appraisal framework for assessing Garden Community options and alternatives.

4.2 An Overview of the Three Authorities Local Plan SA Sustainability Objectives

Work has been undertaken by the North Essex Authorities and ECC in selecting suitable strategic or large scale development sites in conjunction with the site assessment criteria / frameworks of each authority's SA. This work identified the Sustainability Objectives of each authority's Local Plan SA and sought to develop a common framework for the purpose of assessing cross-boundary Garden Community options across Braintree, Colchester and Tendring.

In response to the emergence of a Strategic Section One for Local Plans, it is considered that this work, and the principle of amalgamating the SA methodologies of the three authorities, is highly relevant for assessing all strategic elements of the three authorities' Local Plans. The development of each authority's Local Plan SA methodologies have been developed initially with such an alignment in mind, in order to effectively assess any cross-boundary sites and themes across the Housing Market Area (HMA). The following table summarises the three authorities' respective Local Plan SA Framework Objectives.

Table 4: Sustainability Objectives for the Three Authorities Local Plan SAs

Braintree District Council	Colchester Borough Council	Tendring District Council
1. Safe environments/ quality of life/community cohesion	1.Decent/Affordable Homes	1.Decent/affordable homes
2.Decent homes	2.Sustainable location/efficient use of land	2.Harness the District's economic strengths
3.Improve health/reduce health inequalities	3. Prosperous economy – opportunities for jobs/vitality of centres	3.Skills base/learning opportunities
4.Vitality & viability of centres	4.Sustainable travel behaviour	4.Sustainable travel/international gateways
5.Levels of prosperity & economic growth	5.Resilient communities/better economic & social outcomes	5.Wellbeing through community cohesion & social capital
6.Biological & geological diversity	6.Reduce inequalities in health/safety by community cohesion	6.Reduce levels of poverty & exclusion
7.Sustainable transport choices & uptake	7.Conservation/townscape/ heritage assets	7.Reduce contributions to climate change

Braintree District Council	Colchester Borough Council	Tendring District Council
8. Accessibility & transport infrastructure	8.Natural environment/ biodiversity	8.Natural and historic assets
9. Education & skills	9.Efficient use of energy/reduce/reuse/recycle	9.Prudent use of natural resources
10. Cultural heritage	10.Reduce contributions to climate change	
11.Reduce climate change		
12. Water quality & address water scarcity/sewerage capacity		
13. Reduce flood risk		
14.Improve air quality		
15. Maintain/enhance landscape/townscape quality		
16.Safeguard/enhance soil quality		

It is considered that there is sufficient overlap between the three authorities' Local Plan SA Objectives so as to create a single framework that would be applicable and relevant to the wider area. Despite this, it is felt necessary to create two frameworks to assess different elements / content of the Strategic Section One for Local Plans. Whereas the Objectives above reflect the topics required of sustainability appraisal in line with the requirements of Local Plans as set out in in the NPPF, there is a need to ensure that issues of local distinctiveness are captured. With that in mind, two separate frameworks have been formulated: one to assess content relevant to the policy content of the Section One, providing a strategic vision for planned growth and strategic objective, and another to reflect Garden Community options in line with more locally distinctive pressures in specific locations.

4.3 Developing a Common Sustainability Framework for Assessing Options: Policy Content

The following framework sets out the amalgamation of each authority's Local Plan SA framework for the assessment of options regarding housing and employment growth, a strategic vision, common strategic objectives and other policy content.

Table 5: Sustainability Framework for Assessing Policy Content

SA Objective	SA Criteria	Potential Indicators
1. Create safe environments which improve quality of life, community cohesion	<ul style="list-style-type: none"> - Does it seek to improve / supply community facilities for young people? - Does it seek to increase cultural activities or suitable development to stimulate them? - Does it seek to support cultural identity and social inclusion? - Will there be measures to increase the safety and security of new development and public realm? 	<ul style="list-style-type: none"> - All crime – number of crimes per 1000 residents per annum - Number of new community facilities granted planning permission - Number of new cultural facilities granted planning permission, including places of worship
2. To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	<ul style="list-style-type: none"> - Will it increase the range and affordability of housing to support the growing population and for all social groups? - Does it respond to the needs of an ageing population? - Does it seek to provide appropriate rural affordable housing? - Will it deliver well designed and sustainable housing? - Will it contribute to meeting Gypsy and Traveller pitch requirements of the GTAA? 	<ul style="list-style-type: none"> - The number of net additional dwellings - Affordable housing completions - Number of zero-carbon homes completed - Number of additional Gypsy and Traveller pitches - Number of starter homes completed - Number of homes for older people completed
3. Improve health/reduce health inequalities	<ul style="list-style-type: none"> - Will it ensure access to health facilities? - Will it ensure access to sport and recreation facilities, open space and 	<ul style="list-style-type: none"> - Percentage of new residential development within 30mins of public transport time of a GP or hospital - Percentage of new residential development that adheres to

SA Objective	SA Criteria	Potential Indicators
	<p>accessible green space?</p> <ul style="list-style-type: none"> - Will it encourage access by walking or cycling? 	<p>Natural England's Accessible Natural Greenspace Standards</p> <ul style="list-style-type: none"> - Percentage of new residential development within walking and cycling distance to schools - Percentage of new residential development within walking and cycling distance to sport and recreation facilities / open space
<p>4. To ensure and improve the vitality & viability of centres</p>	<ul style="list-style-type: none"> - Does it seek to prevent loss of retail and other services in rural areas? - Does it promote and enhance the viability of existing centres by focusing development in such centres? - Does it seek to locate development in close proximity to town centres? - Does it seek to located development within easy public travelling distance to town centres? - Does it seek to improve public transport networks to town centres? 	<ul style="list-style-type: none"> - Amount of completed retail, office and leisure development delivered (and in centres) - Amount of completed retail, office and leisure development across the three authority area
<p>5. To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways</p>	<ul style="list-style-type: none"> - Will it improve the delivery of a range of employment opportunities to support the growing population? - Will it tackle employment associated deprivation? - Will it enhance the area's potential for tourism? - Will it promote development of the ports? - Will it encourage the rural economy and diversification of it? - Will it support business innovation, diversification, entrepreneurship and changing economies? - Does it seek to improve existing training and learning facilities and/or create more facilities? 	<ul style="list-style-type: none"> - Amount of floor space developed for employment, sqm - Successful employment use applications in rural areas - Number of jobs created in the ports - Number of developments approved associated with the tourism sector - Level 2 qualifications by working age residents. - Level 4 qualifications and above by working age residents. - Employment status of residents. - Average gross weekly earnings. - Standard Occupational Classification.

SA Objective	SA Criteria	Potential Indicators
	<ul style="list-style-type: none"> - Will the employment opportunities available be mixed to suit a varied employment skills base? 	
<p>6. To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity</p>	<ul style="list-style-type: none"> - Will development have a potential impact on a national, international or European designated site (SPA, SAC, Ramsar, SSSI)? - Will it maintain and enhance sites otherwise designated for their nature conservation interest? - Will it conserve and enhance natural/semi natural habitats? - Will it conserve and enhance species diversity, and in particular avoid harm to indigenous BAP priority species? 	<ul style="list-style-type: none"> - Impacts (direct and indirect) on designated sites - Amount of development in designated areas - Area of land offset for biodiversity
<p>7. To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion</p>	<ul style="list-style-type: none"> - Will it increase and/or improve the availability and usability of sustainable transport modes? - Will it seek to encourage people to use alternative modes of transportation other than private vehicle? - Will it lead to the integration of transport modes? - Will it improve rural public transport? - Does it seek to increase the uptake or viability of walking and cycling as methods of transportation, through new infrastructure or integration? 	<ul style="list-style-type: none"> - Percentage of journeys to work by walking and cycling and percentage of journeys to work by public transport
<p>8. To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development</p>	<ul style="list-style-type: none"> - Will it contribute positively to reduce social exclusion by ensuring access to jobs, shopping, services and leisure facilities for all? - Does it seek to concentrate development and facilities where access via sustainable travel is greatest? - Does it seek to minimise congestion 	<ul style="list-style-type: none"> - Number / amount of new homes / employment development completed at ward level within Growth / Regeneration Areas - Percentage of new development within 30 minutes of community facilities (as defined by each authority) - Percentage of new residential

SA Objective	SA Criteria	Potential Indicators
	<p>at key destinations / areas that witness a large amount of vehicle movements at peak times?</p> <ul style="list-style-type: none"> - Would the scale of development require significant supporting transport infrastructure in an area of identified need? - Will it ensure adequate school places (through expansion / new facilities) and early years provision to support growth? - Will it ensure the required improvements to utilities infrastructure? - Will it ensure the required improvements in capacity to GP services? - Will it provide a suitable amount of sports, recreational, leisure and open space facilities? 	<p>development within 30 minutes of public transport time of a GP, hospital, primary and secondary school, employment and a major retail centre</p> <ul style="list-style-type: none"> - Additional capacity of local schools / incidents of new school applications
<p>9. To conserve and enhance historic and cultural heritage and assets and townscape character?</p>	<ul style="list-style-type: none"> - Will it protect and enhance designations, features and areas of historical, archaeological and cultural value in both urban and rural areas? - Will it have a negative impact on the significance of a designated historic environment asset or its setting? - Does it seek to enhance the range and quality of the public realm and open spaces? - Will it reduce the amount of derelict, degraded and underused land? - Does it encourage the use of high quality design principles to respect local character? - Will / can any perceived adverse impacts be reduced through adequate mitigation? 	<ul style="list-style-type: none"> - Percentage of new and converted dwellings on previously developed land - Number of listed buildings demolished, repaired or brought back to use, including locally listed buildings - New Conservation Area Appraisals adopted - Number of Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens (and percentage at risk) - Area of highly sensitive historic landscape characterisation type(s) which have been altered and their character eroded - Number of major development projects that enhance or detract

SA Objective	SA Criteria	Potential Indicators
		<p>from the significance of heritage assets or historic landscape character</p> <ul style="list-style-type: none"> - Percentage of planning applications where archaeological investigations were required prior to approval or mitigation strategies developed or implemented
<p>10. To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.</p>	<ul style="list-style-type: none"> - Will it reduce emissions of greenhouse gases by reducing energy consumption? - Will it lead to an increased generation of energy from renewable sources? - Will it encourage greater energy efficiency? - Will it improve the efficient use of natural resources, minimising waste and promoting recycling? 	<ul style="list-style-type: none"> - Total CO2 emissions - Renewable Energy Installed by Type - Number of zero carbon homes delivered
<p>11. To improve water quality and address water scarcity and sewerage capacity</p>	<ul style="list-style-type: none"> - Will it lead to no deterioration on the quality of water bodies? - Will water resources and sewerage capacity be able to accommodate growth? 	<ul style="list-style-type: none"> - Quality of Rivers (number achieving ecological good status) - Number of planning permissions granted contrary to the advice of the Environment Agency on grounds of water quality
<p>12. To reduce the risk of fluvial, coastal and surface water flooding</p>	<ul style="list-style-type: none"> - Does it promote the inclusion of Sustainable Drainage Systems (SuDS) in new developments and will their integration be viable? - Does it seek to avoid development in areas at risk of flooding (fluvial, coastal, surface water)? - Does it seek to avoid increasing flood risk (fluvial, surface water, groundwater) in areas away from initial development? 	<ul style="list-style-type: none"> - Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds - Number of SuDS schemes approved by ECC
<p>13. To improve air quality</p>	<ul style="list-style-type: none"> - Will it improve, or not detrimentally affect air quality along the A12 or A120? 	<ul style="list-style-type: none"> - Number of Air Quality Management Areas

SA Objective	SA Criteria	Potential Indicators
	<ul style="list-style-type: none"> - Does it direct growth away from AQMAs? - Does it seek to improve or avoid increasing traffic flows generally? 	
14. To conserve and enhance the quality of landscapes	<ul style="list-style-type: none"> - Will landscapes sensitive to development be protected? - Will it lead to rural expansion or development outside development boundaries/limits that increases coalescence with neighbouring settlements? - Is the scale / density of development in keeping with important and valued features of the local landscape? 	<ul style="list-style-type: none"> - Percentage of new and converted dwellings on previously developed land - Number of proposals permitted within areas noted for their high landscape value - Number of proposals permitted contrary to a desire to restrict coalescence
15. To safeguard and enhance the quality of soil and mineral deposits?	<ul style="list-style-type: none"> - Will it avoid the loss of high quality agricultural land? - Will it avoid the sterilisation of mineral deposits / is the site within a Minerals Safeguarding Area (MSA)? - Will it support or lead to the remediation of contaminated land, avoiding environmental pollution or exposure of occupiers or neighbouring land uses to unacceptable health risk? 	<ul style="list-style-type: none"> - Percentage of new development on high quality agricultural land (ALC) - Number of developments proposed within MSAs - Contaminated land brought back into beneficial use, hectares



4.4 The Appraisal of Policy Content

The SA of the Strategic Section One for Local Plans appraises the document’s policies against the Sustainability Objectives (SOs) outlined in the above framework. The aim is to assess the sustainability effects of the document following implementation. The appraisal will look at the secondary, cumulative, synergistic, short, medium and long-term permanent and temporary effects in accordance with Annex 1 of the SEA Directive, as well as assess alternatives and suggest mitigation measures where appropriate. The findings will be accompanied by an appraisal matrix which will document the effects over time.

For clarity, within this Environmental Report, appraisals will be set out in the same format as shown in the following table.

Table 6: Impact on Sustainability Objectives

	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short Term															
Medium Term															
Long Term															

The content to be included within the table responds to those ‘significant effects’ of the policy or element of the Strategic Section One for Local Plans subject to appraisal. Appraisals will also look at the following:

- Temporal effects;
- Secondary, Cumulative and Synergistic effects;
- The appraisal of Alternatives;
- Impacts on indicators; and
- Proposed mitigation measures / recommendations

These, and ‘significant effects’ are further described in the following sub-sections.



4.4.1 Description of ‘Significant Effects’

The strength of impacts can vary dependant on the relevance of the policy content to certain sustainability objectives or themes. Where the policies have been appraised against the Sustainability Objectives the basis for making judgements within the assessment is identified within the following key:

Possible impact	Basis for judgement
++	Strong prospect of there being significant positive impacts
+	Strong prospect of there being minor positive impacts
?	Possibility of either positive or negative impacts, or general uncertainty where there is a lack on current information (to be elaborated in commentary in each instance)
0	No impact
N/A	Not applicable to the scope or context of the appraised content
-	Strong prospect of there being minor negative impacts and mitigation would be possible
--	Strong prospect of there being significant negative impacts with mitigation unlikely to be possible (pending further investigation)

Commentary is also included to describe the significant effects of the policy on the sustainability objectives.

4.4.2 Description of ‘Temporal Effects’

The appraisals of the policies contained within the Strategic Section One for Local Plans document recognise that impacts may vary over time. Three time periods have been used to reflect this and are shown in the appraisal tables as S (short term), M (medium term) and L (long term). For the purpose of the policy elements of the Plan S, M and L depict:

- (S) Short term: early stages of the plan period.
- (M) Medium Term: middle stages of the plan period.
- (L) Long term: latter stages of the plan period (2033) and where relevant beyond

4.4.3 Description of ‘Secondary, Cumulative and Synergistic Effects’

In addition to those effects that may arise indirectly (secondary effects), relationships between different policies will be assessed in order to highlight any possible strengthening or weakening of impacts from their implementation together. Cumulative effects respond to impacts occurring directly from two different policies together, and synergistic effects are those that offer a strengthening or worsening of more than one policy that is greater than any individual impact.



4.4.4 Description of 'Alternatives Considered'

Planning Practice Guidance states that reasonable alternatives are the different realistic options considered by the plan-maker in developing the policies in its plan. They must be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. The alternatives must be realistic and deliverable.

Alternatives for the direction of policies will be appraised and chronicled alongside each appraisal where relevant and identified, together with the reason for their rejection / non-progression.

4.4.5 Description of 'Proposed Mitigation Measures / Recommendations'

Negative or uncertain impacts may be highlighted within appraisals. As such, mitigation measures may be needed and these will be highlighted in this section for each policy where relevant. In addition to this, this section will also include any recommendations that are not directly linked to negative or uncertain impacts, but if incorporated may lead to sustainability improvements.

4.5 Developing a Common Framework for Assessing Options: Garden Communities

Paragraph 179 of the NPPF sets out that Local Planning Authorities should work collaboratively with other bodies to ensure that strategic priorities across local boundaries are properly coordinated and clearly reflected in individual Local Plans. Joint working should enable local planning authorities to work together to meet development requirements which cannot wholly be met within their own areas – for instance, because of a lack of physical capacity or because to do so would cause significant harm to the principles and policies of the NPPF. As part of this process, they should consider producing joint planning policies on strategic matters and informal strategies such as joint infrastructure and investment plans.

In view of this, this SA covers the strategic area of Braintree, Colchester and Tendring Councils. As distinct areas in their own right, the SA has to reflect the individual characteristics of the three LPAs, being both broad enough to be relevant to the whole strategic area, yet also detailed enough to respond to the key characteristics, and sustainability issues of each LPA including smaller areas within each authority.

The following framework sets out the amalgamation of each authority's Local Plan SA Site Assessment Framework with the additional incorporation of TCPA Garden City Principles for the assessment of options regarding Garden Communities. It has been developed in conjunction with the Local Plan SA Objectives from each authority. The framework shows each amalgamated objective in turn alongside corresponding relevant TCPA Garden City Principles and any other considerations required. This framework has been developed in order to capture each principle of a successful Garden City, with evidence of local considerations in the area of the three authorities.

The basis for making judgements within the assessment of Garden Communities is identified within the following key:

Possible impact	Basis for judgement
++	Strong prospect of fully meeting criteria with significant wider benefits
+	Reasonable prospect of fully meeting criteria
?/-/+	Reasonable prospect of partially meeting criteria / uncertainty / mix of positive and negative impacts
-	Unlikely to fully meet criteria however mitigation possible regarding impacts
--	Unlikely to meet criteria without significant negative impacts (pending further detailed investigation regarding mitigation)

The appraisal of Garden Community options have been assessed on a largely qualitative basis in line with the strategic nature of each option and the level of information available for each option at the present time. With this in mind, this SA is intended to be a high level tool to assist the relevant authorities in the selection of Garden Communities across the wider area including the scale of communities in the chosen locations.

It should also be noted that in the appraisal of options, judgements have been made in line with the eventual scope and scale of each proposal. To that effect, what would constitute a significant constraint for a smaller or non-strategic site may represent a significant opportunity at the scale of an effective Garden Community. This is particularly relevant for infrastructure requirements and it should be acknowledged that Garden Communities can often meet the necessary thresholds to deliver and stimulate infrastructure provision to the benefit of the new and wider existing communities.

In addition to the individual appraisal of the Garden Community options, commentary will be included that explores various broad cumulative impacts within the scope of the Strategic Section One for Local Plans document, and also any other strategic issues in the wider area.

Table 7: Framework for Assessing Garden Community Options

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
1. Physical Limitations – Absence of insurmountable problems (e.g. access, ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	<ul style="list-style-type: none"> - Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality) - Incorporation of SuDS. 	(Adapted from NPPG, BDC SA Objectives 13 & 14)

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
2. Impacts – Acceptable impacts on high quality agricultural land, important landscape features, townscape features, sites of nature conservation interest and heritage assets	<ul style="list-style-type: none"> - Reflect a fusion of the best of the past while embracing new materials and the needs of modern living - Acceptable impacts only on sites of nature conservation interest. - A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces. - Acceptable impacts only on high quality agricultural land, important landscape features. 	(Adapted from NPPG, BDC SA Objectives 6, 10, 15 & 16 CBC SA Objectives 7 & 8, TDC SA Objective 8)
3. Environment/Amenity – Acceptable relationship with and impact on occupiers of existing properties and neighbouring areas/towns (maintaining adequate separation)	<ul style="list-style-type: none"> - Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation) 	(Adapted from NPPG)
4. Transport – Incorporation of integrated and accessible sustainable transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport	<ul style="list-style-type: none"> - New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision. - Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city. - Ensure a comprehensive and safe network of footpaths and 	(Adapted GCP9, BDC SA Objectives 7 & 8, CBC SA Objective 4, TDC SA Objective 4).

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
	<p>cycleways throughout the development, and public transport nodes within a short walking distance of all homes.</p> <ul style="list-style-type: none"> - Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs. 	
<p>5. Resilience - Positive contribution towards maintaining resilient town centres and identified regeneration and development priority areas and institutions (including Essex University)</p>	<ul style="list-style-type: none"> - Positive contribution towards town centres. - Positive contribution towards identified regeneration priority areas and institutions 	<p>(Adapted NPPG, BDC SA Objectives 4 & 5, CBC SA Objective 3).</p>
<p>6. Housing – Provision of a mix of tenures, including affordable homes and a range of housing types (including self-build/custom build and gypsy and traveller pitches).</p>	<ul style="list-style-type: none"> - Garden Cities (should be) part of a wider strategic approach to meeting the nation’s housing needs. - An appropriate number of homes in a new Garden City must be ‘affordable’ for ordinary people. - Provide mixed-tenure homes and housing types that are genuinely affordable for everyone - An appropriate percentage of the homes that are classified as ‘affordable’ must be for social rent. - Consider life-time homes and the needs of particular social groups, such as the elderly. - A range of housing types including self-build / custom 	<p>(Adapted GCP4, BDC SA Objective 2, CBC SA Objective 1, TDC SA Objective 1).</p>

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
	<p>build and gypsy and traveller pitches</p> <ul style="list-style-type: none"> - Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials. - New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs. 	
7. Employment Opportunities – Provision for a wide range of local jobs within easy commuting distance from homes	<ul style="list-style-type: none"> - New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household being easily accessible - There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes. 	(GCP5, CBC SA Objective 3, TDC SA Objective 2).
8. Mixed-use Opportunities – Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.	<ul style="list-style-type: none"> - Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods 	(GCP8).
9. Environmental Quality & Sustainability – Incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SUDS and zero-carbon/energy-positive	<ul style="list-style-type: none"> - Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities. - Strong emphasis should be placed on homes with gardens and on space for both 	(Adapted GCP7, BDC SA Objective 11, CBC SA Objectives 9 & 10, TDC SA Objective 7).

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
<p>technology to ensure climate resilience.</p>	<p>allotments and community gardens and orchards to provide for healthy local food.</p> <ul style="list-style-type: none"> - Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind. - Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation. - Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions. - In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques. 	
<p>10. Developability / Deliverability - The growth area is available, commercially attractive, and capable of delivering necessary physical/social/green infrastructure and could be viably developed within</p>	<ul style="list-style-type: none"> - Ensure that the development can self-fund infrastructure costs - Be commercially attractive with strong market conditions and value potential - Availability of land being put forward for development with active landowner/developer 	<p>(NPPF, NPPG, GCP1, GCP3, BDC SA Objective 12, CBC SA Objective 6, TDC SA Objective 5).</p>



Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
<p>[6-10] years. Satisfactory mechanisms are in place to capture increase in land value to meet infrastructure costs and manage and maintain assets in the long term</p>	<p>interest</p> <ul style="list-style-type: none"> - Scope for delivery structures through active and positive public and private sector engagement 	



5. The Appraisal of the Section One Policies including Reasonable Alternatives

5.1 Introduction

The following sub-sections respond to the appraisal of each element of the Strategic Section One for Local Plans. This responds to an appraisal of each policy within the document. In each sub-section, an appraisal of all identified reasonable alternatives has been included for transparency and robustness. The process behind the identification of each alternative has been included, citing the source of each alternative in each instance. The following elements of the Strategic Section One for Local Plans are subject to assessment in this Sustainability Appraisal:

- Vision for the Strategic Area
- Strategic Objectives
- Policy SP1 – Presumption in Favour of Sustainable Development
- Policy SP2 – Spatial Strategy for North Essex
- Policy SP3 – Meeting Housing Needs
- Policy SP4 – Providing for Employment and Retail
- Policy SP5 – Infrastructure and Connectivity
- Policy SP6 – Place Shaping Principles
- Policy SP7 – Development and Delivery of New Garden Communities in Essex
- Policy SP8 – Tendring / Colchester Borders Garden Community
- Policy SP9 – Colchester / Braintree Garden Community
- Policy SP10 – West of Braintree Garden Community

The appraisal of Garden Community Options is contained within Appendix 1 of this report.

5.2 Vision for the Strategic Area

5.2.1 Context / Justification

It is important that addressing growth at any spatial scale is founded on a clear vision of how and where change should occur. The vision for North Essex sets this out at a strategic level and provides a context for the more detailed vision for the growth of each individual authority's area.

The Vision has been identified as how the Strategic Area would like progress over a 15 year plan period to 2033. The National Planning Policy Framework expects local authorities to set out the strategic priorities for the area in the Local Plan, addressing:

- the homes and jobs needed in the area
- the provision of infrastructure for transport and telecommunications
- the provision of education, health, community and cultural infrastructure, and
- conservation and enhancement of the natural and historic environment, including landscape

The Vision for the Strategic Area is as follows:

Vision for the Strategic Area

North Essex will be an area of significant growth over the period to 2033 and beyond, embracing positively the need to build well-designed new homes, create jobs and improve and develop infrastructure for the benefit of existing and new communities.

Sustainable development principles will be at the core of the strategic area's response to its growth needs, balancing social, economic and environmental issues. Green and blue infrastructure and new and expanded education and health care facilities will be planned and provided along with other facilities to support the development of substantial new growth; while the countryside and heritage assets will be protected and enhanced.

At the heart of our strategic vision for North Essex are new garden communities, the delivery of which is based on Garden City Principles covered by Policy SP7. The garden communities will attract residents and businesses who value innovation, community cohesion and a high quality environment, and who will be provided with opportunities to take an active role in managing the garden community to ensure its continuing success.

Residents will live in high quality, innovatively designed, contemporary homes, accommodating a variety of needs and aspirations, located in well-designed neighbourhoods where they can meet their day-to-day needs. There will be a network of tree-lined streets and green spaces, incorporating and enhancing existing landscape features and also accommodating safe and attractive routes and space for sustainable drainage solutions; and leisure and recreation opportunities for both residents and visitors of the garden communities.

Suitable models for the long term stewardship of community assets will be established and funded to provide long term management and governance of assets. All Garden City

principles as specified in the North Essex Garden Communities Charter will be positively embraced including new approaches to delivery and partnership working and sharing of risk and reward for the benefit of the new communities.

5.2.2 Significant and Temporal Effects

Table 8: Impact on Sustainability Objectives: Vision for the Strategic Area

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	+	+	N/A	+	+	?	N/A	+	N/A	N/A	N/A	N/A	N/A	N/A
Medium	N/A	+	+	N/A	+	+	?	N/A	+	N/A	N/A	N/A	N/A	N/A	N/A
Long	N/A	++	++	N/A	++	++	++	N/A	++	N/A	N/A	N/A	N/A	N/A	N/A

The strategic vision for the area will have short and medium term positive impacts on housing and employment related Sustainability Objectives (SO2 and SO5 respectively). The significance of these impacts will increase in the long term with the principle of sustainable Garden Communities being developed as part of a sustainable strategy for growth and in response to objectively assessed housing and employment needs, and also their wider benefits. This will also be the case for health (SO3), the natural environment (SO5), and the historic environment (SO9) through the provision of green infrastructure, new and expanded education and health care facilities and recreational land and also the protection and enhancement of countryside and heritage assets.

There will additionally be significant long term impacts on ensuring the necessary transport infrastructure to support new development (SO7) in line with the emergence of the Garden Communities in the latter stages of the three authorities' Local Plan periods. There will be an uncertainty in the short and medium term regarding these impacts, where it is unclear at this stage whether the transport and connectivity improvements associated with the A120 re-routing will be suitably aligned to the initial phases of the Garden Communities; this is not a criticism of the Vision however, which need not be explicit of such details at such an early stage of a long and detailed process.

It should be noted that the specific Garden Community options highlighted have not been subject to appraisal as part of the Vision; these and reasonable alternatives are appraised within their own context as land allocations within a specific section of this SA. As such, there will be no assessed impact on a large amount of the Sustainability Objectives relevant to more site or policy specific considerations as these are subject to more focused assessment within the appraisal of the specific Garden Communities themselves.



5.2.3 Secondary Effects

The emergence of Garden Communities within the three authorities' area can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. Garden Communities, in line with and in conformity to TCPA Garden City Principles, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

5.2.4 Alternatives Considered

The Vision can be seen as a general summary of the content of the Strategic Section One for Local Plans. As such, the Vision as written was selected. The individual elements of the Vision are elaborated on in more detail within other policies of the document. Alternatives are explored in more detail within the assessment of these policies later within this SA, commensurate to their individual context.

5.2.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.



5.3 Strategic Objectives

5.3.1 Context / Justification

The following strategic objectives are designed to support the vision for the area and provide a basis for the development of strategic topic-based policies that will help in achieving the vision.

The appraisal of the strategic objectives explores whether the objectives are compatible with those objectives formulated for the Sustainability Appraisal. This has involved a compatibility matrix, which looks to see whether the Sustainability Objectives are met, with the overall purpose of ensuring that the Strategic Area's key sustainability issues are adequately covered with a mind to their resolution where possible.

The Strategic Objectives for the Strategic Area are as follows:

Strategic Objectives

- **Providing Sufficient New Homes – to provide for a level and quality of new homes to meet the needs of a growing and ageing population in North Essex; to achieve this by ensuring the availability of developable land in appropriate locations and that the market delivers a suitable mix of housing types and tenures.**
- **Fostering Economic Development – to strengthen and diversify local economies to provide more jobs; and to achieve a better balance between the location of jobs and housing, which will reduce the need to travel and promote sustainable growth.**
- **Providing New and Improved Transport & Communication Infrastructure – to make efficient use of existing transport infrastructure and to ensure sustainable transport opportunities are promoted in all new development. Where additional capacity is required in the form of new or upgraded transport infrastructure to support new development, ensuring that this is delivered in a phased & timely way to minimise the impact of new development. To ensure that enabled communication is provided as part of new developments as enabled communication is essential for modern living and broadband infrastructure and related services will be critical for business, education and residential properties.**
- **Addressing Education and Healthcare Needs – to provide good quality educational opportunities as part of a sustainable growth strategy, including practical vocational training and apprenticeships linked to local job opportunities. To work with partners in the NHS, Public Health and local health partnerships to ensure adequate provision of healthcare facilities to support new and growing communities.**
- **Ensuring High Quality Outcomes – to promote greater ambition in planning and delivering high-quality sustainable new communities. Overall, new development must secure high standards of urban design and green infrastructure which creates attractive and sustainable places where people want to live and spend time.**

5.3.2 Significant and Temporal Effects

Table 9: Impact on Sustainability Objectives: Strategic Objectives

Sustainability Objectives	Strategic Objective				
	Providing Sufficient New Homes	Fostering Economic Development	Providing New and Improved Transport & Communication Infrastructure	Addressing Education and Healthcare Needs	Ensuring High Quality Outcomes
1.Safe Environments	N/A	N/A	N/A	N/A	+
2. Decent homes	++	N/A	N/A	N/A	N/A
3. Health inequalities	N/A	N/A	N/A	++	N/A
4. Vitality & Viability of centres	N/A	+	+	N/A	N/A
5. Sustainable employment	N/A	++	+	+	N/A
6. Natural environment	N/A	N/A	N/A	N/A	N/A
7. Sustainable travel	+	+	++	N/A	N/A
8. Accessibility / infrastructure	+	+	++	++	N/A
9. Historic environment	N/A	N/A	N/A	N/A	+
10. Climate change	N/A	N/A	N/A	N/A	+
11. Water / sewerage	N/A	N/A	N/A	N/A	N/A
12. Flood risk	N/A	N/A	N/A	N/A	N/A
13. Air quality	N/A	N/A	N/A	N/A	N/A

Sustainability Objectives	Strategic Objective				
	Providing Sufficient New Homes	Fostering Economic Development	Providing New and Improved Transport & Communication Infrastructure	Addressing Education and Healthcare Needs	Ensuring High Quality Outcomes
14. Landscape quality	N/A	N/A	N/A	N/A	N/A
15. Soil and minerals	N/A	N/A	N/A	N/A	N/A

A number of significant positive impacts have been assessed as forthcoming on Sustainability Objectives related to sustainable housing and employment provision (SO2 and SO5), health (SO3), sustainable travel (SO7), and transport infrastructure (SO8). These impacts can be expected to be experienced in the short to long term.

The Strategic Section One for Local Plans' Strategic Objectives could be perceived to not fulfil the aspirations of a considerable proportion of the Sustainability Objectives devised for the document's appraisal, however it should be acknowledged that the document is strategic in nature and in that regard is focused specifically on those areas of sustainability that are best addressed at a strategic level. Those Sustainability Objectives not addressed by the Strategic Objectives can be deemed as more relevant to the content and context of each of the three authorities' Section Two Local Plans.

5.3.3 Secondary Effects

For the purposes of exploring the compatibility of the Strategic and Sustainability Objectives, secondary impacts have been highlighted as minor positive impacts. These can be seen as additional expected benefits emanating from the successful delivery of strategic outcomes. Positive secondary impacts have been assessed as forthcoming regarding community cohesion (SO1), the vitality and viability of town centres (SO4), sustainable travel and accessibility (SO6 and SO7), townscape (SO9) and climate change adaptation (SO10).

5.3.4 Alternatives Considered

Similar to the Vision, the Strategic Objectives can be seen as a general summary of the content of the Strategic Section One for Local Plans. The Strategic Objectives reflect those of the strategic area and the requirements of local plans as espoused within the NPPF; as a result of this, the objectives were selected and no other alternatives can be considered reasonable. The individual elements of the Strategic Objectives are elaborated on in more detail within other policies of the document. Alternatives are explored in more detail within the assessment of these policies later within this SA, commensurate to their individual context.



5.3.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

5.4 Policy SP1 – Presumption in Favour of Sustainable Development

5.4.1 Context / Justification

The authorities will apply a presumption in favour of sustainable development in accordance with guidance in the National Planning Policy Framework.

The policy is as follows:

Policy SP1 – Presumption in Favour of Sustainable Development

When considering development proposals the Local Planning Authorities will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. They will always work pro-actively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Sustainable development in North Essex will demonstrably contribute to the strategic and local vision and objectives and will accord with the policies in this Local Plan (and, where relevant, with policies in neighbourhood plans). Development that complies with the Plan in this regard will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- **Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole or**
- **Specific policies in that Framework or the Plan that indicate that development should be restricted**

5.4.2 Significant and Temporal Effects

Table 10: Impact on Sustainability Objectives: Policy SP1

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Medium	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Long	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

There will be positive impacts resulting from the inclusion of the wider position of, and the Strategic Section One for Local Plan's relationship with, the NPPF. Impacts are assessed as generally minor within this SA relevant to the strategic context of the document. It should be noted that enhancements of sustainability benefits and impacts are likely to be possible only within a local context and in line with local distinctiveness resulting from each of the three authorities' Section Two Local Plan policies.

5.4.3 Secondary Effects

There will be no secondary impacts arising from the implementation of this policy.

5.4.4 Alternatives Considered

Comments received during the Preferred Options consultation stage identified a possible approach that the policy insist upon an 'infrastructure first' qualification. The notion of 'infrastructure first' is established throughout the plan and included within the Section One at more relevant points. As such, no alternative approaches can be considered reasonable as the policy reiterates the thread of sustainable development as espoused in the NPPF. As such the Policy was selected. Any alternative that deviates from this approach would be contrary to NPPF and therefore an unsound approach.

5.4.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.



5.5 Policy SP2 – Spatial Strategy for North Essex

5.5.1 Context / Justification

Future growth will contribute to maintaining and enhancing a well-connected network of sustainable settlements across North Essex. New homes, jobs, retail and leisure facilities serviced by new and upgraded infrastructure will be accommodated as part of existing settlements according to their scale, sustainability and role, and by the creation of strategic scale new settlements. The countryside will be protected and enhanced. For the majority of settlements these issues are addressed in the second part of the Local Plan dealing with each authority's area. However, it is relevant here to set out the spatial strategy at an appropriate level, as it relates to the main settlements and strategic-scale new development.

- In Braintree District the growth will be mainly addressed via a mixture of urban extensions and new communities. Braintree town, as the largest service centre in the District, will have a number of new urban extensions. Over 4,000 new homes will be allocated in this area. The other main focus for development will be the A12 corridor with the main town of Witham and service villages of Hatfield Peverel, Kelvedon and Feering with allocations of over 2,000 new homes. Other parts of the District, including the town of Halstead, will have smaller allocations to reflect a more local need and make the best use of brownfield sites, recognising that these areas are not as sustainable. A new strategic scale garden community will be located to the west of Braintree, on the boundary with Uttlesford.
- In Colchester Borough, the urban area of Colchester will continue to be a focus for growth due to its pre-eminent role as a centre for jobs, services and transport, with 4,000 new homes expected to be delivered over the Local Plan period. The urban area of Colchester, however, has a limited and diminishing supply of available brownfield sites, so new communities are included in the spatial hierarchy as a sustainable option for further growth of homes and jobs, focussing on locations to the east and west of Colchester. Approximately 1,200 new homes will be allocated in the Rural District Centres of Tiptree, West Mersea and Wivenhoe. Smaller sustainable settlements will receive limited allocations proportionate to their role in the spatial hierarchy.
- In Tendring District the spatial hierarchy promotes growth in settlements that are the most accessible to the strategic road network, public transport and offer a range of services. Clacton and Harwich with Dovercourt are classified as strategic urban settlements and will accommodate around 5,000 new homes. A new cross-boundary garden community will be located in the west of the district and to the east of Colchester. The smaller urban settlements of: Frinton with Walton and Kirby Cross; Manningtree with Lawford and Mistley; and Brightlingsea; along with rural service centres including Alresford, Great Bentley and Weeley have all seen the granting of planning permissions for major housing developments since April 2013.

The above urban extensions and other housing allocations within the wider Local Plans of Colchester, Braintree and Tendring are set out within the Section Twos of the respective authorities' Plans, and their appraisal individually and cumulatively (including with allocated Garden Communities) is included within the accompanying Section Two SAs.

The assessment of Spatial Strategy options does not factor in the specific impacts of the assessed Garden Communities elsewhere in this report. The assessment of the Spatial Strategy can be seen as specifically



relevant to the notion of allocating three Garden Communities, with housing provision in each LPA area. For this purpose, the assessment of the Spatial Strategy can be inclusive of those alternative Garden Community options at Monks Wood and North Colchester. The assessment of permutations exploring different combinations of Garden Community options (including the cumulative assessment of those Garden Community locations shown on Map 3.3 of the Plan and the Proposals Map) is included elsewhere in this Report.

The policy is as follows:

Policy SP2 – Spatial Strategy for North Essex

Existing settlements will be the principal focus for additional growth across North Essex within the Local Plan period. Development will be accommodated within or adjoining settlements according to their scale, sustainability and existing role both within each individual district and, where relevant, across the wider strategic area.

Future growth will be planned to ensure settlements maintain their distinctive character and role. Re-use of previously-developed land within settlements is an important objective, although this will be assessed within the broader context of sustainable development principles, particularly to ensure that development locations are accessible by a choice of means of travel.

Each local authority will identify a hierarchy of settlements where new development will be accommodated according to the role of the settlement, sustainability, its physical capacity and local needs.

Beyond the main settlements the authorities will support diversification of the rural economy and conservation and enhancement of the natural environment.

Three new garden communities will be developed and delivered as part of the sustainable strategy for growth at the locations shown on Map 3.3 below and the Proposals Map. These new communities will provide strategic locations for at least 7,500 additional homes within the Plan period in North Essex. Employment development will also be progressed with the expectation that substantial additional housing and employment development will be delivered in each community beyond the current Local Plan periods. They will be planned and developed drawing on Garden City principles, with necessary infrastructure and facilities provided and a high quality of place-making and urban design.



5.5.2 Significant and Temporal Effects

Table 11: Impact on Sustainability Objectives: Policy SP2

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	+	++	+	++	++	+	++	?	?	?	0	?	?	+	N/A
Medium	+	++	+	++	++	+	++	?	?	?	0	?	?	+	N/A
Long	+	++	++	++	++	?	++	++	+	?	0	?	+	?	N/A

The Spatial Strategy will have a large number of significant positive impacts on the Sustainability Objectives, most notably on those that correspond to housing delivery (SO2), the vitality and viability of centres (SO4), economic growth (SO5), sustainable transport (SO7) and accessibility (SO8). The short and medium term impacts of these are related to the notion that development will be accommodated within or adjoining settlements according to their scale and existing role within each individual district; these correspond to the NPPF requirements of each LPA in the formulation of a Local Plan and offer a local distinctiveness to the strategic area relevant to local needs and communities. Significant long term impacts correspond to the requirement for Garden Communities in the latter stages of the plan period to meet unmet or residual needs in a sustainable manner and in sustainable locations.

Further long term significant positive impacts associated with Garden Communities can be expected to be realised on health (SO3), through the integration and requirement of suitable facilities and open space and recreation requirements. There will be additional positive impacts on social objectives through the provision of primary, secondary and early years facilities as per Garden City Principles and Essex County Council infrastructure requirements. Minor positive impacts can be expected through Garden Community development regarding townscapes (SO9) in the long term through a combined alleviation of pressures on existing settlements at the expected scale and also in conjunction with design expectations and opportunities. The focus away from the expansion of existing settlements will also alleviate air quality pressures in settlements (SO13), although there will likely to be uncertain impacts on climate change associated with the level of growth and the feasibility of identifying renewable energy schemes at this stage. Further uncertain impacts can be expected to arise from the principle of Garden Communities regarding the natural environment (SO6), landscapes (SO14) through the development of green field land in the long term, however it should be acknowledged that at the specified scale, and commensurate with the density requirements of Garden City Principles, Garden Communities are capable of mitigating such concerns effectively and can even lead to opportunities regarding biodiversity gain. Regarding water quality (SO11), no impacts have been highlighted, due to the findings of the AA, which states that ‘the safeguards which will be included within the Section 2 Local Plans... will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice.’

Areas of short to medium term uncertainty relate to the school capacity pressures (SO8) experienced within many of the strategic area’s existing settlements, and a lack of available land in many instances to meet the thresholds required for school expansion or provision. In addition, focusing development to existing



settlements may also conflict with the conservation objectives of preservation and enhancement within historic cores and areas (SO9). A focus on existing settlements can also be expected to exacerbate air quality issues associated with town centres and urban junctions (SO13). Despite these impacts however, the NPPF requires the authorities' Local Plans to contain specific policy requirements to alleviate such impacts in the first instance and otherwise seek appropriate mitigation measures. It should also be noted that a range of positive impacts can be anticipated from focusing development in such centres, particularly those related to social and economic objectives and those that seek to protect the natural environment.

5.5.3 Secondary Effects

Positive secondary effects can be expected to affect the majority of the sustainability objectives in line with their combined reflection of sustainable aspirations within the strategic area and also each authority.

5.5.4 Alternatives Considered

The preferred Spatial Strategy across the strategic area has been devised in conjunction with those of the Local Plans of the three authorities of Colchester, Braintree and Tendring as a result of this has been selected. Although the scope of the Strategic Section One for Local Plans is strategic, elements of the Spatial Strategy above can be seen to be non-strategic as per the remit of the three authorities' Local Plans. It should be acknowledged however that additional Spatial Strategy options may be considered reasonable within the wider area and have been explored throughout the plan-making process. It should additionally be noted however that their benefits (see below) have not been considered as significant as the selected approach. This is related to the associated benefits that will be realised in the short-long term (and beyond the plan period) arising from non-strategic and strategic level growth within each of, and across, the three authority areas.

The alternative approaches relate to a focus on different component parts of the preferred spatial strategy and were initially explored and expanded as sole scenarios for delivering and distributing growth across the strategic area throughout the plan process. The following alternatives represent a list of reasonable options:

- Alternative 1 – A focus on allocating all of the explored Garden Community options proposed in the Strategic Area at smaller individual scales
- Alternative 2 – The allocation of one Garden Community only
- Alternative 3 – The allocation of two Garden Communities only
- Alternative 4 – A focus on existing settlements only across the Strategic Area, commensurate to proportionate growth (exploring whether needs can be met without the allocation of Garden Communities).
- Alternative 5 – A focus on stimulating infrastructure and investment opportunities across the Strategic Area

In addition to the above, a sixth alternative was submitted to the North Essex Authorities for consideration as a Garden Community option, however could be reasonably explored as a spatial strategy option due to its spatial distribution of growth. The Campaign Against Urban Sprawl in Essex group (CAUSE) have created a vision for growth. This alternative, referred to as 'CAUSE's Metro Plan', seeks to deliver infrastructure first (where it does not already exist), making use of a rail asset for the purpose of a frequent metro service. The



proposal looks at housing and related growth for Colchester and Tendring, based on the Colchester to Clacton line, and to some extent the Walton branch. The CAUSE submission indicates that the Colchester-Clacton rail corridor would accommodate a substantial amount of housing growth, estimated at 6,000 – 8,000 homes (the submission additionally states that 7,000 – 9,000 homes could be delivered if higher densities are felt to be acceptable at the heart of these settlements), depending on land constraints. This rail-based growth would be distributed between the station catchment area of Alresford, Great Bentley, Weeley, and Thorpe le Soken.

- Alternative 6 – CAUSE’s Metro Plan

All alternatives have been re-appraised at this stage of the SA to explore whether the preferred Spatial Strategy is still appropriate and reflects the most sustainable option. For all of the alternatives, an assumption has been made in the appraisal that reflects the long term aspirations of the Garden Community options, and possible commencement in the latter stages of the plan period. In the short to medium term, those relevant elements of the Spatial Strategy (above) that apply have been extended into the appraisal of the alternatives. As such, short to medium term impacts are identified as the same as the preferred Spatial Strategy.

The re-appraisal is as follows:

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Alternative 1 - A focus on allocating all Garden Community options															
Short	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Medium	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Long	+	++	++	++	?	--	?	++	?	+	?	?	+	--	0
Alternative 2 - The allocation of one larger Garden Community only															
Short	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Medium	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Long	+	--	?	?	?	?	-	+	+	+	?	?	+	+	0
Alternative 3 - The allocation of two Garden Communities only															
Short	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Medium	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Long	+	-	+	?	?	?	?	+	+	+	?	?	+	?	0
Alternative 4 - A focus on existing settlements, commensurate to proportionate growth across the Strategic Area															



Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
(exploring whether needs can be met without the allocation of Garden Communities)															
Short	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Medium	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Long	?	--	-	-	-	?	?	--	?	0	0	?	--	-	0
Alternative 5 - A focus on stimulating infrastructure and investment opportunities across the Strategic Area															
Short	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Medium	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Long	+	++	++	++	?	?	++	++	?	+	?	?	--	--	0
Alternative 6 – CAUSE’s Metro Plan: Colchester – Clacton Metro Option															
Short	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Medium	+	++	+	++	++	+	++	?	?	?	?	?	?	+	N/A
Long	?	--	-	+	?	--	+	-	-	?	?	?	+	-	0

Alternative 1 - A focus on allocating all Garden Community options

A re-appraisal of the alternative in light of the additional number of Garden Community options has led to a number of negative impacts. Although this alternative could offer some benefits in terms of a wider scope of infrastructure provision in principle related to the provision of new schools and open space / recreational facilities, it would not respond to the need for a distribution of growth across existing settlements (i.e. the centres of largest population for each District/Borough). This is based on an assumption that unless the scope of each Garden Community option is significantly reduced, there could be no primary focus on proportionate growth at the existing settlements unless the North Essex Authorities area plans for growth significantly above that of OAN. A foremost focus on existing settlements is not only a principle of the Section One Spatial Strategy, but also that of the respective ‘Section Two’ Spatial Strategies of Braintree, Colchester and Tendring Councils. This also allows non-strategic growth to ensure housing delivery is forthcoming in the early stages of the plan period, particularly in the first five years. Although more a focus of the Section Two SAs, this report reiterates the notion that focusing proportionate growth to existing settlements in the first instance is the most sustainable strategy across each individual LPA area and the combined North Essex Authorities area. Should OAN targets remain the focus of growth in the plan period, then it can be considered that each Garden Community option would be required to come forward earlier than currently planned. This would either result in less sustainable outcomes associated with the likely absence of effective masterplanning due to the required timescales of commencement dates earlier in the plan period (particularly



affecting the Garden Communities' 'infrastructure first' approach), or lead to difficulties in providing a five year housing land supply due to deliverability concerns. More generally, this alternative would lead to likely overprovision in the Colchester area, and would create housing and employment inequalities across the strategic area. Impacts can be expected to be similar at the broad strategic level, however in line with the housing requirements of the Strategic Area, the short to medium term impacts could be expected to be uncertain on housing (SO2) and employment (SO4) related objectives in so far as the needs of existing communities would unlikely be met. For these reasons, and in relation to the existing sustainability of focusing development within the capacity of and adjacent to existing settlements at appropriate scales, the alternative has been rejected.

Alternative 2 - The allocation of one larger Garden Community only

Alternative 2 has been assessed as not meeting the North Essex Authorities' housing requirement in so far as no single proposal would be suitable or sustainable at the scale required. In addition, no single proposal has been submitted or identified throughout the plan-making process at the required scale. It can be seen that the geographic distribution and scales proposed for the allocated Garden Communities within the spatial strategy responds to ensuring benefits across all Councils in meeting their own long term needs in the plan period, as well as each being of a scale suitable that existing settlements remain resilient. Impacts have been predicted similarly for the preferred spatial strategy option in the short-medium term; however the notion of a single Garden Community that could meet the growth requirements of the three LPAs would likely have significant impacts on the natural and historic environment. It would also be unlikely that mitigation would be possible. This alternative has been rejected as it would not meet the North Essex Authorities' housing requirement and does not exist as a viable and available option. Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process, its inability to meet the strategic area's OAN requirements (or otherwise be at a scale that would likely result in significant negative impacts on landscape and inclusive access throughout the whole scheme) means that it can not now be considered a 'reasonable' alternative at this Publication Draft stage. For this reason the alternative has been rejected.

Alternative 3 - The allocation of two Garden Communities only

Alternative 3 has also been assessed as not meeting the North Essex Authorities' housing requirement in so far as no combination of two proposals is considered suitable, appropriate or broadly sustainable (in regard to their required scale and impact on the environment) at the scale required. It can be seen that the geographic distribution and scales proposed for the allocated Garden Communities within the spatial strategy responds to ensuring benefits across all Councils in meeting their own long term needs in the plan period, as well as each being of a scale suitable that existing settlements remain resilient. In contrast, this alternative can be said to have negative effects on social criteria as a result, with a lack of such distribution providing housing more widely across the strategic area. Impacts have been predicted similarly for the preferred spatial strategy option in the short-medium term, however the reliance on two Garden Communities would likely lead to them being required at a scale that would not be suitable in regard to natural or historic environmental conditions; it would be likely that impacts would be significant to the point that mitigation would be difficult. This alternative has been rejected as it would not meet the North Essex Authorities' housing requirement. Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process, its inability to meet the strategic area's OAN requirements means that it can not now be considered a 'reasonable' alternative at this Publication Draft stage. For this reason the alternative has been rejected.



Alternative 4 - A focus on existing settlements only, commensurate to proportionate growth across the Strategic Area (exploring whether needs can be met without the allocation of Garden Communities).

This alternative essentially represents a 'business as usual / do nothing scenario' and explores whether the North Essex Area can feasibly meet identified growth needs without the allocation of Garden Communities. Please note that an assessment of the principles of Garden Communities against more traditional approaches to meeting strategic growth requirements is explored later on in this SA. The need for Garden Communities was identified through the Issues and Options stage Local Plans of the respective authorities, who identified early in the plan making process that needs could not be met within the plan period in each administrative area alone, and solutions had to be found within the wider area. A re-assessment of the alternative at this Draft Publication stage has led to some revised conclusions surrounding the impacts of extending existing settlements in potential unsustainable areas in the latter stages of the plan period and beyond. Notionally, over a wide Strategic Area this alternative would represent a sustainable option, however the presence of a Section One, including Garden Communities, is validated by the need to meet housing and employment needs that can not be met in the latter stages of the plan period by a focus on proportionate growth across the North Essex Authorities area's settlements alone. It should be acknowledged that the principle of this alternative exists as a fundamental part of the Section One Spatial Strategy in order to deliver sustainable growth in the short to medium term stages of plan period. This is also in accordance with the Section Two Spatial Strategies of the respective Councils and the allocation of sites for non-strategic level growth in order to demonstrate a five year housing land supply. In order to represent a 'reasonable' alternative, this alternative would require the formulation of a joint or combined settlement hierarchy. Proportionately this would lead to significant focus on Colchester. The appraisal of this alternative has been undertaken on the basis that existing settlements would have to respond to allowing higher densities and the development of more marginal peripheral land. There would be a significant amount of increasing impacts associated with this theoretical trend, culminating in a large amount of uncertain and negative impacts in the long term, when Garden Communities have been identified as required to come forward to meet unmet housing and employment needs. The alternative would not correspond to the Local Plan requirements of the NPPF on a LPA basis, and could lead to the overexpansion of some settlements through the possible development of unsuitable extensions with no wider sustainability benefits. Strategically, it would also not offer a sustainable distribution across the wider area, or reflect that some settlements within the Strategic Area serve an important function in terms of services despite not having a significant population. This alternative was explored at an earlier stage of the plan-making process, with findings presented in the Preferred Options SA. Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process, its inability to meet the strategic area's OAN requirements means that it can not now be considered a 'reasonable' alternative at this Publication Draft stage.

Alternative 5 - A focus on stimulating infrastructure and investment opportunities across the Strategic Area

A re-appraisal of this alternative has led to a number of likely negative impacts, becoming more significant in the long term, associated with a possible unsustainable concentration of sites in certain areas where infrastructure improvements would be economically beneficial, and also the allocation of sites that are not done so with sustainability at the forefront of the selection process. The size threshold for Garden Communities is set at that which would require the delivery of a new secondary school in each instance, as determined in the ECC Developers' Guide to Infrastructure Contributions Update 2016. Despite this, to entirely



focus on the premise of distributing growth to those areas in order to deliver additional secondary school capacity in the wider area would not be a sustainable one, in so far as it would not take into consideration the benefits and indicative impacts associated with other tenets of sustainability, in particular those that are environmental in nature and seek to protect such assets. To extend the premise further to other infrastructure requirements across the strategic area would not allocate Garden Communities in response their ability to meet Garden City principles. Infrastructure requirements in less marketable areas can be expected to warrant notions of housing and employment delivery unviable. Although infrastructure considerations partly represent the case for their preferred status, it should be acknowledged that the preferred Garden Community options represent sustainable and developable options in their own right as well as in consideration of their distribution as part of a wider Spatial Strategy. The alternative has been rejected in line with the selection and allocation of Garden Communities based on the balance of opportunities and constraints and sustainability, rather than solely economic purposes.

Alternative 6 – CAUSE’s Metro Plan: Colchester – Clacton Metro Option

This alternative has been deemed as having likely negative impacts due to the focus of growth in Tendring only, and not distributing growth throughout the North Essex Authorities area. It is unlikely that the geographic distribution will benefit from the economies of scale of a fewer amount of larger Garden Communities, this not only impacts on the ability of locations to stimulate infrastructure, such as schools, and also the ability to mitigate any negative environmental impacts. The Metro Plan, as a Spatial Strategy option, will have positive impacts associated with sustainable transport and air quality; however it should be acknowledged that accessibility is poor at each location regarding A-classified roads and additional public transport infrastructure choices. In consideration of the OAN Report, it could be considered that this distribution would not meet the existing needs of Colchester or Braintree District; in particular the requirements to ensure affordable housing and jobs in a range of sectors that could be expected from a wider distribution of growth, including the locations of the allocated Garden Communities. This is contrary to the NPPF, stating that local planning authorities should positively seek opportunities to meet the development needs of their area, to which the notion of the Section One covering the North Essex Authorities area is in response to. The alternative does not consider the lack of available land within the stated focal points for growth in Tendring. It also does not consider the suitability of land, especially in regard to alternative sites. This alternative was explored at an earlier stage of the plan-making process, with findings presented in the Preferred Options SA. Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process, its inability to meet the strategic area’s OAN requirements means that it can not now be considered a ‘reasonable’ spatial strategy alternative at this Publication Draft stage.

5.5.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.



5.6 Policy SP3 – Meeting Housing Needs

5.6.1 Context / Justification

Provision of sufficient housing is critical to meet the needs of a growing population and for the effective functioning of local economies. The North Essex authorities are committed to plan positively for new homes and to significantly boost the supply of housing to meet the needs of the area. To meet the requirements of national policy to establish the number and type of new homes, the authorities commissioned Peter Brett Associates to produce an Objectively Assessed Housing Need Study building on earlier work. This was first published in July 2015 and updated in January 2016. It meets the requirements of the NPPF to prepare a Strategic Housing Market Assessment (SHMA). Detailed analysis in the report suggests that a Housing Market Area comprising Braintree, Colchester, Chelmsford and Tendring Council areas forms a sound basis for assessing housing need.

Demographic projections are the starting point for assessing how much housing will be required across an area. Based on 2012 national projections covering the period 2013 to 2037, some 4,910 more people will be living in the area each year. This translates to 2,589 additional households per year, which generates a need for an additional 2,691 new homes each year.

Analysis of economic forecasts reveals that to support the expected jobs growth would require 3,090 net new homes per year. This represents an uplift of 399 additional homes, or 15%, over the demographically projected need referred to above. The report concludes that this 15% 'future employment' uplift over the whole HMA will cover any 'market signals' adjustment that can reasonably be justified. It also makes an allowance for additional London-related migration.

The conclusion reached is that the objectively assessed need across the Housing Market Area is 3,090 new homes a year over the period 2013 – 2037. This is the number of new homes needed to provide sufficient labour to meet the number of forecast jobs. The total requirement across north Essex, excluding Chelmsford City Council's area, is 2,315 new homes per year. The North Essex Authorities all accept that in future Local Plan periods the Housing needs (OAN) for the whole of North Essex (the three Districts) will be calculated and the estimated supply from all the Garden Communities in North Essex will be deducted first from the overall housing need leaving a local residual District need to be assessed for each District

The Objectively Assessed Housing Need Study and SHMA update seek to establish a balance between jobs and homes across the area, although there is some uncertainty in relation to this arising from unattributed population change (UPC) within Tendring. 550 dwellings a year is suggested as the indicative objectively assessed need for Tendring because at this level of provision affordable need can be met. This reasonable rounded figure, which should be kept under review, is considered an appropriate response to the uncertainty arising from the UPC.

Evidence on the requirements of Gypsies and Travellers and Travelling Showpeople accommodation will be set out in more detail within the individual Local Plans. Garden Communities need to be mixed and balanced communities and will be expected to provide 30% affordable housing as set out in the Plan.

The policy is as follows:

Policy SP3 – Meeting Housing Needs

The local planning authorities will identify sufficient deliverable sites or broad locations for their respective plan period, against the requirement in the table below.

Each authority will maintain a sufficient supply of deliverable sites to provide for at least five years' worth of housing and will work proactively with applicants to bring forward sites that accord with the overall spatial strategy and relevant policies in the plan.

Local Authority	Net additional dwellings per annum	Minimum net additional homes in the Plan period
Braintree	716	14,320
Colchester	920	18,400
Tendring	550	11,000
Total	2,186	43,720

A Development Plan Document will be developed for each of the garden communities to set out the principles of their design, development and phasing as well as a mechanism to appropriately distribute housing completions to the three Councils and this will be agreed through a Memorandum of Understanding.

5.6.2 Significant and Temporal Effects

Table 12: Impact on Sustainability Objectives: Policy SP3

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	++	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	?	N/A
Medium	N/A	++	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	?	N/A
Long	N/A	++	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	?	N/A

Please note that a lot of the Sustainability Objectives are more relevant to site specifics and impacts reflective of individual and cumulative site allocations within the Section One and the respective Councils' Section Two Local Plans. For more detailed information of such impacts, please see the assessments of the Garden Communities in this SA and the findings of the respective Section Two SAs.

Significant positive impacts have been highlighted in the short to long term associated with the housing need (SO2) targets set out in the Policy.

There will be 'no impact' on biodiversity (SO6) as a result of the findings of the Appropriate Assessment (AA)



(2017) of the Section One, regarding recreational pressures associated with the significant increase in growth stated within the Policy. The AA concludes that 'providing that the North Essex Authorities continue to collaborate and prepare the necessary Recreation Avoidance and Mitigation Strategies (RAMS) ... in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section 1 and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in combination with other plans and projects as a result of recreation.' In addition, the AA indicates that the strategic approach and scope of the Section One enables mitigation to be effectively incorporated.

Regarding water quality (SO11), the AA adds the following, 'the measures provided in the Section 2 Local Plans will (also) provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.' The Policy will therefore have no impact on this sustainability objective.

Uncertain impacts have been identified for landscapes (SO14) at this level of housing growth due to the requirements of a significant amount of development on Greenfield land. Such impacts have been identified as reflective of the level of growth stated across the North Essex Authorities area; however more detailed impacts are identified in the Section Two SAs of the respective Councils.

For context, the OAN Report states that projections are robust, 'with one exception: the figures for Tendring are heavily affected by Unattributable Population Change - an error in the Census which we are unable to explain. Depending on the view taken about the UPC, the official projections may overstate need in Tendring. If we use an alternative projection that adjusts for the UPC, the demographically projected need for Tendring falls from 705 to 479 dpa.'

In considering the assessment of the Policy alongside the alternatives (see below), it should be acknowledged that 550 dwellings a year is suggested as the indicative objectively assessed need for Tendring because at this level of provision affordable need can be met. This, in conjunction with review, is considered an appropriate response to the uncertainty arising from the UPC and for this reason has been selected, in line with Tendring's Local Plan policy and evidence base requirements.

Please note that for the rest of the Sustainability Objectives, 'N/A' has been highlighted. This is due to many of these objectives being more closely related to the detailed distribution of housing in specific areas. In focusing the appraisal of this policy on more direct or directly relevant Objectives, the conclusions of the Strategic Section One for Local Plans can be better informed in relation to the whole document, with recommendations being more focused to the specific purpose of relevant elements or Policies.

5.6.3 Secondary Effects

There will be a long term secondary effect associated with the 'education and skills' elements of Sustainability Objective 5. This is due to the development of Garden Communities to meet residual unmet need beyond the identification of suitable sites within the context of the authorities' Local Plan requirements. This is associated with the principles of such settlements, in addition to the indirect effects of identifying growth requirements in conjunction with housing growth in order to provide sufficient labour to meet forecasted employment requirements.

5.6.4 Alternatives Considered

The NPPF is clear that the HMA as whole should work to meet its OAN in full, provided that it has the sustainable capacity to do so consistent with the policies in the NPPF. How provision should be distributed between districts will depend on supply factors and policy objectives. In response to this, it should be noted that each authority has identified a justified and achievable indicative housing target in line with their work towards a Local Plan in each instance and these needs are reflected in the policy. This work has factored in the requirements of LPAs to identify a 5 year housing supply in line with, and as well as other requirements of the NPPF, notably regarding the evidence gathered through Local Plan call-for-sites processes and resultant work in the production of Strategic (Housing) Land Availability Assessments (S[H]LAAs). This work identifies land that is suitable, achievable and available (within Local Plan periods) and alternatives surrounding each authority's capacity for new growth are explored in more detail in the SA of their Section Two Local Plans, which also factor in non-strategic allocations.

The scope of the Strategic Section One for Local Plans explores options for the delivery of the residual or 'unmet' growth beyond those sites that represent a 5 year housing supply and are otherwise suitable, achievable and available over Local Plan periods in each authority. On this basis, the alternative options for both housing and employment supply largely represent the conclusions of this SA - in exploring the sustainability of the proposed Garden Community options.

Nevertheless, at the strategic level alternatives exist that could initially be perceived as reasonable across the HMA and more specifically within the three authorities participating in exploring options within the Strategic Section One for Local Plans document. The Objectively Assessed Housing Need Study and SHMA update seek to establish a balance between jobs and homes across the area, although there is some uncertainty in relation to this arising from unattributed population change (UPC) within Tendring. A total of 550 dwellings a year is suggested as the indicative objectively assessed need for Tendring because at this level of provision affordable need can be met. This reasonable rounded figure, which should be kept under review, is considered an appropriate response to the uncertainty arising from the UPC.

For the purposes of fully meeting OAN, the Policy has been selected. For robustness however, the alternative scenarios presented in the OAN Report have been subject to appraisal in this report. These respond to different percentage uplifts in future employment than for the 15% iterated within the preferred policy above. The alternatives, as sourced within the OAN Report are:

- Alternative 1 – A lower uplift than the policy approach. This responds to 8% uplift over the HMA and represents an indicative split where Tendring still meets its SNPP provision and the uplift is reduced for the HMA partner authorities. This has been appraised as specific to the OAN alternative, and also of an 'indicative lower' level of growth.
- Alternative 2 – A higher uplift than the policy approach. This responds to 17% uplift over the HMA and represents an approach where Tendring provides only enough homes to meet its projection before any uplift is applied. This has been appraised as specific to the OAN alternative, and also of an 'indicative higher' level of growth.

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Alternative 1 - A lower uplift than the policy approach															
Short	N/A	?	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	?	N/A
Medium	N/A	?	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	?	N/A
Long	N/A	?	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	?	N/A
Alternative 2 - A higher uplift than the policy approach															
Short	N/A	++	N/A	N/A	N/A	?	N/A	N/A	N/A	N/A	?	N/A	N/A	-	N/A
Medium	N/A	++	N/A	N/A	N/A	?	N/A	N/A	N/A	N/A	?	N/A	N/A	-	N/A
Long	N/A	++	N/A	N/A	N/A	?	N/A	N/A	N/A	N/A	?	N/A	N/A	-	N/A

Alternative 1 - A lower uplift than the policy approach

Alternative 1 has been appraised to represent an indicative lower uplift than the 15% used in the preferred policy approach. The implications of this scenario are that housing requirements are comparatively evenly spread across the three authorities, with approximately 700 dwellings per annum identified for Tendring. The OAN Report indicates that under this alternative scenario it is possible that Tendring would have a surplus of homes against those needed to support the HMA baseline job growth and commuting patterns would shift slightly. Although similar impacts could be expected for both this alternative and the preferred policy approach, it is important to consider that this is based on two key assumptions; that housing provision in Tendring meets the SNPP 2012 housing demand, and that any surplus of workers over jobs is available to work in the rest of the HMA. For this reason impacts are uncertain. Work towards agreeing a housing requirement undertaken by Tendring District Council for the purposes of their Local Plan calculates that capacity exists as indicated and espoused in the preferred policy, as evidenced by extant planning permissions, windfall allowances, submitted sites in the LPAs call-for-sites process as deemed suitable, achievable and available in their SHLAA and inconformity to their settlement hierarchy. For these reasons this alternative has been rejected. There will be no impacts on biodiversity and water quality in line with the findings of Section One's level of growth stated in the Appropriate Assessment (AA). Uncertain impacts have been highlighted for landscapes where impacts are largely unknown, however it should be added that a lower growth scenario can be expected to have comparatively less implications than those of the level of growth stated in the policy.

Alternative 2 - A higher uplift than the policy approach

Alternative 2 has been appraised to represent an indicative higher uplift than the 15% used in the preferred policy approach. In this alternative the scale of the uplift in new homes needed increases from 15% to 17% for the HMA. This is because the OAN 'starting position' for Tendring is now lower than the SNPP. This



responds to an additional 50 dwellings per annum in Tendring over the plan period, with no additional changes to the preferred policy approach's housing requirement figures for the other two authorities. Although this could be perceived as a small increase over the entire HMA, which is reflected in the above appraisal, it does not address the question regarding UPC and would have implications on available land in Tendring. Impacts would be similar largely due to the alternative not being distinctly different from the preferred policy approach at the strategic level over the HMA; however the implications at the micro level, in Tendring are likely to be more significant. As per Alternative 1, work towards agreeing a housing requirement undertaken by Tendring District Council for the purposes of their Local Plan calculates that capacity exists as indicated and espoused in the preferred policy, as evidenced by extant planning permissions, windfall allowances, submitted sites in the LPAs call-for-sites process as deemed suitable, achievable and available in their SHLAA and inconformity to their settlement hierarchy. For these reasons this alternative has been rejected. There will be uncertain impacts on Natura 2000 designations (biodiversity and water quality) due to higher growth; this is related to the initial findings of the HRA Screening for the Section One and the fact that the AA has not tested the implications of a higher growth scenario. There will be negative impacts on landscapes where higher growth can be expected to have comparatively stronger negative implications than those of the level of growth stated in the policy.

5.6.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

5.7 Policy SP4 – Providing for Employment and Retail

5.7.1 Context / Justification

A key objective for the area is to strengthen and diversify local economies to provide more jobs; and to achieve a better balance between the location of jobs and housing, which will reduce the need to travel and promote sustainable growth.

Braintree District's employment is relatively focused on industrial-type sectors, including construction and manufacturing. London Stansted airport plays a significant role in not only employing residents of the District, but through the indirect economic benefits associated with proximity with such a large employment hub.

Retail is the second largest sector by employment and plays an important role in sustaining the District's three key town centres. The financial and insurance sector, where Braintree District traditionally has a relatively small proportion of employment, has seen some strong employment growth in recent years. This may be a growth sector in the future.

Colchester is the dominant town within the Essex Haven Gateway and will accommodate much of the future growth in the sub-region. It is one of the UK's fastest growing towns and has developed a strong economy, linked to the town's historic character, cultural activities and its university.

Tendring District has a diverse economy with local employment across a range of activities. Health, retail and education are the largest sectors in terms of the number of jobs and together represent 45% of the District's total employment. Harwich is home to Harwich International Port – one of the District's major employers. To the west of the District, the economy and labour market of Manningtree is influenced by its relative proximity

to Colchester and good transport links to London. The interior of the District is largely rural and is characterised by a high-quality environment, interspersed with small settlements.

Opportunities have been identified for Tendring to develop potential future strengths in offshore wind and the care and assisted living sector.

As part of the SHMA work, an analysis of economic forecasts was undertaken together with demographic projections to establish the inter-relationship between population growth, forecasts of new jobs and the number of new homes needed to accommodate these levels of growth. Employment Land Needs Assessments have been carried out by each authority which set out the amount of employment land that is required within the Plan periods. The policy is as follows:

Policy SP4 – Providing for Employment and Retail

A strong, sustainable and diverse economy will be promoted across North Essex with the Councils pursuing a flexible approach to economic sectors showing growth potential across the Plan period.

Employment forecasts have been developed using two standard models (East of England Forecasting Model (EEFM) and Experian 2016) which forecast total job growth for each of the local authorities based on past trends. Each local authority has been advised on the most appropriate modelling figure to use in the context of reconciling job and housing demand. These figures are set out for the housing market as follows for the period 2013-2037:

	Annual Jobs Forecast
Braintree (EEFM)	490
Colchester (EEFM)	928
Tendring (Experian)	490

In terms of specific B use land provision, each local authority has undertaken work to establish what quantum of employment land would be required within the Plan period to meet the demand identified below for additional B use employment land. These B use employment areas are distributed between each local authority area and based on achieving a sustainable balance between jobs and the available labour force through population growth. As noted above, calculations of employment land required are affected by a range of issues that lead to different employment land portfolios for each local authority area, resulting in a proportionately greater quantum of new floorspace per job in Braintree and Tendring than in Colchester. This is a function of the prominence of higher density office requirements in Colchester and lower density logistics and industrial uses in Braintree and Tendring. The table below sets out the three authorities' employment land requirements for the period 2016 – 33 for two plausible scenarios, baseline and higher growth. These two bookends provide flexibility to allow for each authority's supply trajectory to reflect their differing requirements.

Hectares of B use employment land

	required	
	Baseline (2012 Based SNPP)	Higher Growth Scenario
Braintree	23.0	43.3
Colchester	22.0	55.8
Tendring	20.0	40
North Essex	65ha	139.1

5.7.2 Significant and Temporal Effects

Table 13: Impact on Sustainability Objectives: Policy SP4

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	N/A	N/A	0	++	N/A									
Medium	N/A	N/A	N/A	0	++	N/A									
Long	N/A	N/A	N/A	0	++	N/A									

It should be noted that the Preferred Options Section One Plan presented only the hectares of B use employment land required rather than also including an annual jobs forecast. This move towards presenting employment requirements in jobs is a clearer approach in demonstrating the links between housing and jobs in the North Essex area. There is also more focus on the importance of the retail sector, however it is not considered important that more information is provided in Section One, with the Council's respective Section Twos providing additional policy content. For this reason, 'no impacts' have been identified on the vitality and viability of town centres (SO4). It can be considered however that there will be positive implications on the town centre of Colchester as a result of the higher annual jobs forecast representing a higher degree of retail expansion and B1 uses in comparison to other centres in the strategic area.

The forecasts used in the SHMA work / OAN Report have an underlying principle: that planning for housing, economic land uses and community facilities / services should be integrated, so that the demand for labour is fulfilled and there is no unsustainable commuting. They have been taken from the East of England Economic Model (EEFM) which provides integrated economic, demographic and housing need forecasts. In the EEFM, population change, and the resulting household change and housing demand, are partly driven by job opportunities.

The principle of these links to identifying future job growth to housing provision is a key tenet of sustainability and as such, there will be significant positive impacts associated with employment (SO5). Short to medium term impacts are more closely related to the strategic principles will underpin the approach to economic

growth across North Essex, with long term impacts associated with the development of Garden Communities that will provide a closely aligned mix of employment. There will also be long term positive impacts on the labour market through the development of the transport infrastructure elements of the Garden Communities.

Please note that for the rest of the Sustainability Objectives, 'N/A' has been highlighted. This is due to many of these objectives being more closely related to the detailed distribution of employment in specific areas. In focusing the appraisal of this policy on more direct or directly relevant Objectives, the conclusions of the Strategic Section One for Local Plans can be better informed in relation to the whole document, with recommendations being more focused to the specific purpose of relevant elements or Policies.

5.7.3 Secondary Effects

There will be a long term secondary effect associated with the 'education and skills' element of Sustainability Objective 5. This is due to the development of Garden Communities. This is associated with the principles of such settlements, in addition to the indirect effects of identifying growth requirements in a range of employment sectors tailored to needs and shortages.

5.7.4 Alternatives Considered

The OAN Report calculates need by starting from the East of England Economic Model (EEFM), as taken forward into a study's jobs-led scenarios (Edge Analytics, Phase 7 Study) and then uses a model to fix ratios; rather than to use the EEFM adjustments which used unemployment rates.

The OAN Report states that, 'in short, EEFM uses 'economic migration' to balance the local relationship between jobs and labour. Its housing forecasts are job-led forecasts: they estimate the numbers of dwellings that would be required to meet housing demand, including the demand resulting from changing employment opportunities. The job-led scenarios in the Edge Phase 7 study have the same intention and use a broadly similar approach. These scenarios take from the EEFM future workplace jobs and people employed, and three other key variables: unemployment rates, economic activity rates and commuting ratios. But to model the relationship of workplace jobs to resident population to housing demand, Edge Analytics uses its own model, PopGroup, whose mechanics are different from EEFM's. In particular, in PopGroup there is no demand-side link whereby the resident population creates local jobs through its consumption of local services; and the supply link is based on fixed ratios, rather than the dynamic adjustment through unemployment rates used in the EEFM.'

As can be seen, the above identifies an alternative approach. This is:

- Alternative 1 – Forecasts based on EEFM findings only (an indicative higher amount of jobs).

Please note that a second alternative was also analysed in the OAN Report. This was a different forecasting model, known as Experian, developed by Cambridge Econometrics. This forecast showed considerably less growth than the other alternatives, and so it was not considered further in the OAN Report, nor can it be considered a reasonable alternative for the purposes of assessment in this SA.



Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Alternative 1 - Forecasts based on EEFM findings only															
Short	N/A	N/A	N/A	N/A	+	N/A									
Medium	N/A	N/A	N/A	N/A	+	N/A									
Long	N/A	N/A	N/A	N/A	++	N/A									

Alternative 1: Forecasts based on EEFM findings only

Alternative 1 assumes that labour demand depends partly on the size of the local population and local consumption of services (creating jobs) and partly on wider national or even global demand. Numbers of jobs are translated into resident workers. Regarding labour supply, the future resident population is determined by natural change and trend-driven migration. The OAN Report states that, ‘in short, EEFM uses ‘economic migration’ to balance the local relationship between jobs and labour. Its housing forecasts are job-led forecasts: they estimate the numbers of dwellings that would be required to meet housing demand, including the demand resulting from changing employment opportunities.’ This method does not factor in unemployment rates, economic activity rates and commuting ratios however, which vary across the HMA, unlike the preferred methodology used in the OAN Report in which there is no demand-side link whereby the resident population creates local jobs through its consumption of local services.

The impacts of the alternative will be similar to the preferred policy methodology, with significant positive impacts on long term employment (SO5), in line with the ‘mixed use’ and sustainable transport infrastructure opportunities associated with Garden Communities. Impacts in the short to medium term are however less significant, due to the alternative primarily not initially factoring in commuting; this leads to forecasts showing a disparity between population growth and job growth. The OAN Report indicates that in Braintree and Colchester there would be a higher population than identified in the 2012 Sub National Population Projections (SNPP), suggesting that if population grows in line with the official projection it may not provide enough workers. This issue would rely on being resolved by changes in commuting. The OAN Report also adds that for Tendring the EEFM figure would be well below the SNPP, confirming that trend-based population growth would result in a labour surplus. For these reasons, the alternative has been rejected and the preferred policy approach selected.

5.7.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

5.8 Policy SP5 – Infrastructure and Connectivity

5.8.1 Context / Justification

Infrastructure and connectivity requirements are expected to the strategic transport network, the inter-urban road network, the A12, the A120, the A130, route based strategies; rail; public transport, walking and cycling, education and healthcare and broadband.

The policy is as follows:

Policy SP5 – Infrastructure and Connectivity

Development must be supported by provision of infrastructure, services and facilities that are identified to serve the needs arising from new development.

The following are strategic priorities for infrastructure provision or improvements within the strategic area:

Transport

- **New and improved infrastructure required to support economic growth, strategic and site-specific priorities outlined in the second part of each Local Plan**
- **Substantially improved connectivity by promoting more sustainable travel patterns, introducing urban transport packages to increase transport choice, providing better public transport infrastructure and services, and enhanced inter-urban transport corridors**
- **Increased rail capacity, reliability and punctuality; and reduced overall journey times by rail**
- **Support changes in travel behaviour by applying the modal hierarchy and increasing opportunities for sustainable modes of transport that can compete effectively with private vehicles**
- **Prioritise public transport, particularly in the urban areas, including new and innovative ways of providing public transport including;**
 - **high quality rapid public transport networks and connections, in and around urban areas with links to the new Garden Communities**
 - **maximising the use of the local rail network to serve existing communities and locations for large-scale growth**
 - **a bus network that is high quality, reliable, simple to use, integrated with other modes and offers flexibility to serve areas of new demand**
 - **promoting wider use of community transport schemes**
- **Improved road infrastructure and strategic highway connections to reduce congestion and provide more reliable journey times along the A12, A120, and A133 to improve access to markets and suppliers for business, widen employment opportunities and support growth**



- Improved junctions on the A12 and other main roads to reduce congestion and address safety
- A dualled A120 between the A12 and Braintree
- A comprehensive network of segregated walking and cycling routes linking key centres of activity contributing to an attractive, safe, legible and prioritised walking/cycling environment
- Develop innovative strategies for the management of private car use and parking including support for electric car charging points.

Education

- Provide sufficient school places in the form of expanded or new primary and secondary schools together with early years and childcare facilities, with larger developments setting aside land and/or contributing to the cost of delivering land for new schools where required
- Facilitate and support provision of practical vocational training, apprenticeships, and further and higher education.

Health

- Ensure that essential healthcare infrastructure is provided as part of new developments of appropriate scale in the form of expanded or new healthcare facilities including primary and acute care; pharmacies; dental surgeries; opticians, supporting community services including hospices, treatment and counselling centres.
- Require new development to maximise its positive contribution in creating healthy communities and minimise its negative health impacts, both in avoidance and mitigation, as far as is practicable.

Broadband

Roll-out of superfast broadband across North Essex to secure the earliest availability for universal broadband coverage and fastest connection speeds for all existing and new developments (residential and non-residential), where all new properties allow for the provision for superfast broadband in order to allow connection to that network as and when it is made available.

5.8.2 Significant and Temporal Effects

Table 14: Impact on Sustainability Objectives: Policy SP5

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	N/A	++	++	++	0	++	++	N/A	0	N/A	N/A	N/A	N/A	N/A
Medium	N/A	N/A	++	++	++	0	++	++	N/A	0	N/A	N/A	N/A	N/A	N/A
Long	N/A	N/A	++	++	++	0	++	++	N/A	0	N/A	N/A	N/A	N/A	N/A

There will be significant positive impacts associated with those Sustainability Objectives related to infrastructure delivery that would specifically be related to strategic level growth and stimulated by it across the Strategic Area; these being health (SO3) and sustainable transport (SO7). Additionally, significant positive impacts have been highlighted for those specific assurances in the Policy; those being economic growth (SO5) through new and improved infrastructure requirements to support economic growth and strategic and site-specific priorities, and accessibility and public transport infrastructure (SO8 and SO7) through various identified improvements required to the strategic road and rail network to accommodate the level of growth in the Strategic Area. These measures will also have significant positive impacts on the vitality and viability of town centres (SO4).

'No impacts' have been identified for sustainability objectives associated with the natural environment and biodiversity (SO6) and renewable energy (SO10). There are opportunities for combined strategic level growth to stimulate aspirational improvements regarding these themes for wider gains or benefits; however the policy does not seek to ensure this. It should be acknowledged however that such requirements are included within Policy SP6.

No impact has also been highlighted for water scarcity / sewerage (SO11). This is due to such infrastructure being beyond the remit of such a plan and a prerequisite of the suitability of all development. Such infrastructure requirements will be specified by the relevant service provider.

5.8.3 Secondary Effects

The impacts on housing delivery (SO2) can be considered secondary in line with the requirement of the stated infrastructure being required to support sustainable growth and communities in the first instance. This is also true of air quality (SO14) which can be expected to improve in line with assurances of sustainable transport infrastructure as contained within the Policy.

5.8.4 Alternatives Considered

The infrastructure requirements are specific to the content of the Strategic Section One for Local Plans and no other alternatives can be considered reasonable. As such, the Policy was selected. It can be considered that alternatives could only regard different permutations of alternatives explored within this SA, in particular



those related to Spatial Strategy and Garden Community options explored within this SA and considered in the plan-making process.

5.8.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

5.9 Policy SP6 – Place Shaping Principles

5.9.1 Context / Justification

New development must reflect high standards of urban and architectural design. It must also be functional and viable. Major new developments will be planned carefully with the use of masterplans and design codes where appropriate. This requirement for high design standards will apply to public and private buildings across all scales of development as well as to infrastructure projects. Enhancements to the public realm, landscaping measures and attention to architectural detail will be important features that the authorities will wish to see included in new developments. Strategic scale and more local green infrastructure can make a vital contribution to quality of place, biodiversity and health outcomes.

The policy is as follows:

Policy SP6 – Place Shaping Principles

All new development must meet the highest standards of urban and architectural design. The local authorities encourage the use of development frameworks, masterplans and other design guidance documents and will use design codes where appropriate for strategic scale developments.

All new development should reflect the following principles:

- Respond positively to local character and context to preserve and enhance the quality of existing communities and their environs;
- Provide buildings that exhibit individual architectural quality within well-considered public and private realms;
- Protect and enhance assets of historical or natural value;
- Create well-connected places that prioritise the needs of pedestrians, cyclists and public transport services above use of the private car;
- Where possible, provide a mix of land uses, services and densities with well-defined public and private spaces to create sustainable well-designed neighbourhoods;
- Enhance the public realm through additional landscaping, street furniture and other distinctive features that help to create a sense of place;
- Provide streets and spaces that are overlooked and active and promote inclusive access;
- Include parking facilities that are well integrated as part of the overall design and are adaptable if levels of private car ownership fall;

- Provide an integrated network of multi-functional public open space and green and blue infrastructure that connects with existing green infrastructure where possible;
- Include measures to promote environmental sustainability including addressing energy and water efficiency, and provision of appropriate wastewater and flood mitigation measures; and
- Protect the amenity of existing and future residents and users with regard to noise, vibration, smell, loss of light and overlooking.

5.9.2 Significant and Temporal Effects

Table 15: Impact on Sustainability Objectives: Policy SP6

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	++	N/A	+	+	N/A	+	++	++	++	+	+	++	+	0	N/A
Medium	++	N/A	+	+	N/A	+	++	++	++	+	+	++	+	0	N/A
Long	++	N/A	+	+	N/A	+	++	++	++	+	+	++	+	0	N/A

There will be significant positive impacts resulting from the Policy on aspirations regarding community safety (SO1), sustainable transport (SO7), accessibility (SO8), townscapes and the historic environment (SO9), and minimising flood risk (SO12). Minor positive impacts will be realised for health (SO3) through public open space requirements, the vitality of centres (SO4) and water quality (SO11).

There may however be a conflict between the principle that seeks biodiversity gain (SO6) through green and blue infrastructure that is also integrated with multi-functional public open space. The incorporation of these should be considered separate requirements, as biodiversity features are unlikely to flourish through human disturbance. The Policy responds to aspirations to address energy efficiency in strategic scale development opportunities (SO10), however does not seek any renewable solutions to energy generation. For these reasons, only minor positive impacts are highlighted.

It should be acknowledged that further positive impacts can be expected to arise from relevant individual LPA Section Two Local Plan policies, which can also respond to requirements for local distinctiveness as required.

5.9.3 Secondary Effects

There will be secondary positive impacts regarding transport related air quality (SO13) through requirements that development prioritise the needs of pedestrians, cyclists and public transport services above use of the private car.



5.9.4 Alternatives Considered

In so far as the place shaping principles of the Policy reiterate sustainable land use requirements as espoused in the NPPF and PPG, it is considered that there are no reasonable alternative approaches that could be considered distinctively different yet still meet tests of soundness. As such the preferred policy approach has been selected.

5.9.5 Proposed Mitigation Measures / Recommendations

Policy SP6 could be more explicit as to the requirements of new development in regards to renewable energy generation in strategic scale development opportunities.

There may be some level of conflict between the principle that seeks green and blue infrastructure to be integrated with multi-functional public open space requirements. The incorporation of these should be considered separate requirements, as biodiversity features are unlikely to flourish through human disturbance.

5.10 Policy SP7 – Development and Delivery of New Garden Communities in Essex

5.10.1 Context / Justification

A key element of the spatial strategy for North Essex is the development of three new large-scale garden communities. At least two of the three garden communities will be cross-boundary, and continued close joint working between the authorities involved will be required to secure their successful delivery. Each of the authorities is committed to ensuring that the new garden communities are as sustainable and high quality as possible and that the infrastructure needed to support them is delivered at the right time. These new communities will accommodate a substantial amount of the housing and employment growth planned for North Essex within the plan period and beyond in a sustainable way that meets the strategic objectives.

The North Essex Garden Communities will be holistically planned new settlements that respond directly to their regional, local and individual site context and opportunities to create developments underpinned by a series of interrelated principles which are based on the Town and Country Planning Association (TCPA) Garden City Principles, adapted for the specific North Essex context.

Whilst Uttlesford District Council is in a separate housing market area and are therefore not part of this Strategic Plan for North Essex, there will continue to be ongoing discussions regarding the extent of the garden community at West of Braintree. The Uttlesford Issues and Options Plan published in October 2015 included an area of search to the west of Braintree. Uttlesford District Council is proposing to undertake preferred options consultation on its Local Plan in the summer of 2017. It should also be noted that the Uttlesford Local Plan SA has adopted a compatible and aligned assessment framework in accordance with the methodology used in this SA.

It should be noted that the appraisal of Policy SP7 should not be taken as that of the Garden Communities themselves. The appraisal of the Garden Communities, alongside reasonable alternatives, is included later in this report. The appraisal of Policy SP7 explores whether the impacts and issues raised in the assessment of the Garden Communities are addressed in the policy in way of mitigation or avoidance as a requirement of any successful planning application, as well as including any general aspirations in line with the Sustainability Objectives.

The policy is as follows:

Policy SP7 – Development and Delivery of New Garden Communities in Essex

The following three new garden communities are proposed in North Essex.

- **Tendring/Colchester Borders, a new garden community will deliver 2,500 homes within the Plan period (as part of an overall total of between 7,000-9,000 homes to be delivered beyond 2033)**
- **Colchester/Braintree Borders, a new garden community will deliver 2,500 within the Plan period (as part of an overall total of between 15,000 – 24,000 homes to be delivered beyond 2033)**
- **West of Braintree in Braintree DC, a new garden community will deliver 2,500 homes within the Plan period (as part of an overall total of between 7,000- 10,000 homes to be delivered beyond 2033)**

Each of these will be an holistically and comprehensively planned new community with a distinct identity that responds directly to its context and is of sufficient scale to incorporate a range of homes, employment, education & community facilities, green space and other uses to enable residents to meet the majority of their day-to-day needs, reducing the need for outward commuting. Delivery of each new community will be phased and underpinned by a comprehensive package of infrastructure.

The Councils will need to be confident, before any consent is granted, that the following requirements have been secured either in the form of appropriate public ownership, planning agreements and obligations and, if necessary a local infrastructure tariff.

The design, development and phased delivery of each new garden community will conform with the following principles

- i. **Community and stakeholder empowerment in the design and delivery of each garden community from the outset and a long-term community engagement and activation strategy**
- ii. **The public sector working pro-actively and collaboratively with the private sector to design, and bring forward these garden communities, deploying new models of delivery, sharing risk and reward and ensuring that the cost of achieving the following is borne by landowners and those promoting the developments: (a) securing a high-quality of place-making, (b) ensuring the timely delivery of both on-site and off-site infrastructure required to address the impact of these new communities, and (c) providing and funding a mechanism for future stewardship, management, maintenance and renewal of community infrastructure and assets. Given the scale of and time period for development of these new garden communities, the appropriate model of delivery will secure a comprehensive**



approach to the delivery of each new community in order to achieve the outcomes outlined above, avoid a piecemeal approach to development, provide the funding and phasing of both development and infrastructure, and be sustainable and accountable in the long term.

- iii. Promotion and execution of the highest quality of planning, design and management of the built and public realm so that the Garden Communities are characterised as distinctive places that capitalise on local assets and establish environments that promote health, happiness and well-being. This will involve developing a cascade of design guidance including concept frameworks, detailed masterplans and design codes and other guidance in place to inform and guide development proposals and planning applications. Planning applications and any local development orders or other consenting mechanisms for the garden communities will be expected to be consistent with approved design guidance
- iv. Sequencing of development and infrastructure provision (both on-site and off-site) to ensure that the latter is provided ahead of or in tandem with the development it supports to address the impacts of the new garden communities, meet the needs of residents and establish sustainable travel patterns.
- v. Development that provides for a truly balanced and inclusive community and meets the housing needs of local people including a mix of dwelling sizes, tenures and types including provision for self- and custom-built homes and provision for the aging population; to meet the requirements of those most in need including 30% affordable housing in each garden community.
- vi. Provide and promote opportunities for employment within each new community and within sustainable commuting distance of it
- vii. Plan the new communities around a step change in integrated and sustainable transport systems for the North Essex area that put walking, cycling and rapid public transit networks and connections at the heart of growth in the area, encouraging and incentivising more sustainable active travel patterns
- viii. Structure the new communities to create sociable, vibrant and walkable neighbourhoods with equality of access for all to a range of community services and facilities including health, education, retail, culture, community meeting spaces, multi-functional open space, sports and leisure facilities
- ix. Develop specific garden community parking approaches and standards that help promote the use of sustainable transport and make efficient use of land.
- x. Create distinctive environments which relate to the surrounding environment and that celebrate natural and historic environments and systems, utilise a multi-functional green-grid to create significant networks of new green infrastructure including new country parks at each garden community, provide a high degree of connectivity to existing corridors and networks and enhance biodiversity
- xi. Secure a smart and sustainable approach that fosters climate resilience and a 21st century environment in the design and construction of each garden community to secure net gains in local biodiversity, highest standards of energy efficiency and



innovation in technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste and mineral management.

Ensure that the costs and benefits of developing a garden community are shared by all landowners, with appropriate measures being put in place to equalise the costs and land contributions

- xii. Consideration of potential on-site mineral resources through a Minerals Resource Assessment as required by the Minerals Planning Authority
- xiii. Establishment at an early stage in the development of the garden communities, of appropriate and sustainable long-term governance and stewardship arrangements for community assets including green space, public realm areas and community and other relevant facilities; such arrangements to be funded by the developments and include community representation to ensure residents have a stake in the long term development, stewardship and management of their community.

These principles are elaborated upon in the North Essex Garden Community Charter.

A Development Plan Document will be developed for each of the garden communities to set out the principles of their design, development and phasing as well as a mechanism to appropriately distribute housing completions to the three Councils and this will be agreed through a Memorandum of Understanding.

5.10.2 Significant and Temporal Effects

Table 16: Impact on Sustainability Objectives: Policy SP7

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Long	++	++	++	++	++	++	++	++	+	+	++	+	+	+	0

It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period. There will however be significant long term positive impacts associated with the majority of the Sustainability Objectives through the policy requirements and principles.

Areas that do not have significant impacts include renewable energy generation (SO10) and surface water flooding (SO12) where reference is not directly explicit in the policy. In addition, minor impacts will be expected for sustainability objectives related to air quality (SO13), landscapes (SO14) and the historic environment (SO9), although it should be acknowledged that significantly positive impacts and enhancements may not be considered possible associated with new Greenfield development at the scales



proposed. There will also be no impacts on soil and mineral deposits through the general principles of the Garden Communities.

5.10.3 Secondary Effects

The emergence of Garden Communities within the three authorities' area can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. Garden Communities, in line with and in conformity to the general principles set out in the Policy, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

5.10.4 Alternatives Considered

The requirements are specific to the content of the Strategic Section One for Local Plans and no other alternatives can be considered reasonable. It can be considered that alternatives could only regard different permutations of alternatives explored, in particular those Spatial Strategies and Garden Communities explored within this SA and considered in the plan-making process. As such the preferred policy approach has been selected.

5.10.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

5.11 Policy SP8 – Tendring / Colchester Borders Garden Community

5.11.1 Context / Justification

The preferred scale and range of land uses for the Tendring / Colchester Borders Garden Community are set out in the following policy in addition to specific principles and requirements that have been identified as needing incorporation into a forthcoming masterplan and Garden Community specific DPD.

The SA of this Policy serves to explore whether the range of requirements are suitable to address those sustainability concerns raised in the appraisal of the Garden Community later in this report,

It should be noted that the appraisal of Policy SP8 should not be taken as that of the Garden Community itself. The appraisal of the Garden Communities, alongside reasonable alternatives, is included later in this report. The appraisal of Policy SP8 explores whether the impacts and issues raised in the assessment of the Garden Community are addressed in the policy in way of mitigation or avoidance as a requirement of any successful planning application, as well as including any general aspirations in line with the Sustainability Objectives and Garden City Principles.



The policy is as follows:

Policy SP8 – Tendring / Colchester Borders Garden Community

The adopted policies map identifies the broad location for the development of a new garden community of which the details and final number of homes will be set out in a Strategic Growth Development Plan Document to be prepared jointly between Colchester BC and Tendring DC and which will incorporate around 2,500 dwellings within the Plan period (as part of an overall total of between 7,000-9,000 homes) and provision for Gypsy and Travellers.

The Strategic Growth DPD will set out the nature, form and boundary of the new community. The document will be produced in consultation with stakeholders and will include a concept plan showing the disposition and quantity of future land-uses, and give a three dimensional indication of the urban design and landscape parameters which will be incorporated into any future planning applications; together with a phasing and implementation strategy which sets out how the rate of development will be linked to the provision of the necessary social, physical and environmental infrastructure to ensure that the respective phases of the development do not come forward until the necessary infrastructure has been secured. The DPD will provide the framework for the subsequent development of more detailed masterplans and other design and planning guidance for the Tendring / Colchester Borders Garden Community.

The DPD and any planning application will address the following principles and requirements in the design, development and delivery of the new garden community:

A. Place-making and design quality

1. The development of a new garden community to high standards of design and layout drawing on its context and the considerable assets within its boundaries such as woodland, streams and changes in topography, as well as the opportunities afforded by the proximity of the University of Essex campus to create a new garden community that is innovative, contemporary and technologically enabled, set within a strong green framework with new neighbourhood centres at its heart. It will be designed and developed to have its own identity and be as self-sustaining as possible recognising its location close to the edge of Colchester. It will secure appropriate integration with Colchester and the nearby University of Essex campus by the provision of suitable walking and cycling links and rapid public transport systems and connections to enable residents of the new community to have convenient access to town centre services and facilities in Colchester as well as Elmstead Market. Clear separation will be maintained between the new garden community and the nearby villages of Elmstead Market and Wivenhoe.
2. Detailed masterplans and design guidance will be put in place to inform and guide development proposals and planning applications. Planning applications for this garden community will be expected to be consistent with approved DPDs and subsequent masterplans and design and planning guidance.

**B. Housing**

3. A mix of housing types and tenures including self- and custom-build and starter homes will be provided on the site, including a minimum of 30% affordable housing. The affordable housing will be phased through the development;
4. New residential development will seek to achieve appropriate densities which reflect both context, place-making aspirations and opportunities for increased levels of development around neighbourhood centres and transport hubs.

C. Employment and jobs

5. Provision for a wide range of job, skills and training opportunities will be created in the garden community. This may include B1 and/or non B class employment generating uses towards the south of the site in proximity to the existing University of Essex and Knowledge Gateway and provision for B1, B2 and B8 businesses to the north of the site close to the A120;
6. High speed and reliable broadband will be provided and homes will include specific spaces to enable working from home.

D. Transportation

7. A package of measures will be introduced to encourage smarter transport choices to meet the needs of the new community and maximise the opportunities for sustainable travel including the provision of a network of footpaths, cycleways and bridleways to enhance permeability within the site and to access and to access the adjoining areas; development of a public rapid transit system connecting the garden community to Essex University and Colchester town centre; park and ride facilities and other effective integrated measures to mitigate the transport impacts of the proposed development on the strategic and local road network. Longer term transport interventions will need to be carefully designed to minimise the impacts on the strategic and local road network and fully mitigate any environmental or traffic impacts arising from the development. These shall include bus (or other public transit provisions) priority measures between the site, University of Essex, Hythe station and Colchester Town Centre;
8. Foot and cycle ways shall be provided throughout the development and connecting with the surrounding urban areas and countryside, including seamlessly linking key development areas to the University of Essex, Hythe station and Colchester Town Centre;
9. Primary vehicular access to the site will be provided off the A120 and A133.
10. Other specific transport-related infrastructure requirements identified through the Strategic Growth Development Plan Document and masterplans for this garden community will be delivered in a phased manner.

E. Community Infrastructure

11. District and neighbourhood centres of an appropriate scale will be provided to serve the proposed development. The centres will be located where they will be



easily accessible by walking, cycling and public transit to the majority of residents in the garden community.

12. Community meeting places will be provided within the local centres.
13. Primary healthcare facilities will be provided to serve the new development
14. A secondary school, primary schools and early-years facilities will be provided to serve the new development;
15. A network of multi-functional green infrastructure will be provided within the garden community incorporating key elements of the existing green assets within the site. It will include community parks , allotments, a new country park, the provision of sports areas with associated facilities; and play facilities;
16. Indoor leisure and sports facilities will be provided with the new community, or contributions made to the improvement of off-site leisure facilities to serve the new development

F. Other Requirements

17. Provision of improvements to waste water treatment including an upgrade to the Colchester Waste Water Treatment Plant and off-site drainage improvements;
18. Provision, management and on-going maintenance of sustainable surface water drainage measures to manage and mitigate the risk of flooding on site and which will reduce the risk of flooding to areas downstream or upstream of the development;
19. Landscape buffers between the site and existing development in Colchester, Wivenhoe and Elmstead Market;
20. Protection and/or enhancement of heritage and biodiversity assets within and surrounding the site;
21. Provision of appropriate buffers along strategic road and rail infrastructure to protect new development
22. Provision of appropriate design and infrastructure that incorporates the highest standards of innovation in energy efficiency and technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste / recycling management facilities.
23. Measures to support the development of the new community including provision of community development support workers (or other provision) for a minimum of ten years from initial occupation of the first homes and appropriate community governance structures
24. Establishment at an early stage in the development of the garden community, of appropriate and sustainable long-term governance and stewardship arrangements for community assets including green space, public realm areas and community and other relevant facilities; such arrangements to be funded by the development and include community representation to ensure residents have a stake in the

long term development, stewardship and management of their community.

5.11.2 Significant and Temporal Effects

Please note that the following appraisal explores the compatibility of the principles of the policy with the Garden City principles in terms of compatibility. In addition, the appraisal of this policy has been considered in light of the appraisal of the specific Garden Community at Tendring / Colchester later in this report. This is in order to determine whether the policy principles are appropriate in light of that initial appraisal and any sustainability issues identified. It should be noted however that some constraint-based criteria need not be the focus of the principles of the development in the absence of any identified issues and in addition general themes are ensured through the content of Policy SP7. In those instances, 'N/A' has been highlighted.

Table 17: Impact on Sustainability Objectives: Policy SP8

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
1. Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A
	- Incorporation of SuDS.	++
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A
	- Acceptable impacts only on sites of nature conservation interest.	++
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	++
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	++
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	++
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A
5. Resilience	- Positive contribution towards town centres.	++
	- Positive contribution towards identified regeneration priority areas and institutions	++
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	?
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	++
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials.	N/A
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	++
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++
9. Environmental Quality &	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++



Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
Sustainability	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food.	++
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children’s play, teenage interests and the aspirations of elderly in mind.	++
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation.	++
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	++
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	++
10. Developability / Deliverability	- Ensure that the development can self-fund infrastructure costs	++
	- Be commercially attractive with strong market conditions and value potential	++
	- Availability of land being put forward for development with active landowner/developer interest	++
	- Scope for delivery structures through active and positive public and private sector engagement	++

There will be significant positive impacts associated with the majority of the Garden City principles, in consideration of the policy and the appraisal of the preferred Garden Community option at the Tendring / Colchester Borders. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period. This includes the impact on the regeneration areas within Colchester town centre and to the east of the town, due largely to the Policy content; in particular those related to sustainable transport, in conjunction with the general location of the option.

An example where the policy will not ensure significant positive impacts against the Garden City Principles however relates to the aspiration that an appropriate percentage of homes that are classified as ‘affordable’ be for social rent. In addition, the policy is not explicit in a need to consider life-time homes, however does imply provision, including requirements for a mix of housing types and tenures and provision for Gypsies and Travellers accommodation.

Although there will be a loss of agricultural land, positive impacts regarding landscapes have been highlighted in response to the policy ensuring that development is of a high standard of design and layout, drawing on its context and considerable assets in this regard. The development of a Garden Community in this location, and with the specific policy principles regarding landscape, can be seen to ensure that the best



possible development outcomes are achieved in this broad area.

5.11.3 Secondary Effects

The emergence of this Garden Community can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. The Garden Community, in line with and in conformity to the general principles set out in the Policy and Policy SP7, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

5.11.4 Alternatives Considered

The principles and requirements of this Policy are specific to the Garden Community, to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such no other alternatives can be considered reasonable and the preferred policy approach has been selected.

5.11.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed.

5.12 Policy SP9 – Colchester / Braintree Borders Garden Community

5.12.1 Context / Justification

The preferred scale and range of land uses for the Colchester / Braintree Borders Garden Community are set out in the following policy in addition to specific principles and requirements that have been identified as needing incorporation into a forthcoming masterplan and Garden Community specific DPD.

It should be noted that the appraisal of Policy SP9 should not be taken as that of the Garden Community itself. The appraisal of the Garden Communities, alongside reasonable alternatives, is included later in this report. The appraisal of Policy SP9 explores whether the impacts and issues raised in the assessment of the Garden Community are addressed in the policy in way of mitigation or avoidance as a requirement of any successful planning application, as well as including any general aspirations in line with the Sustainability Objectives and Garden City Principles.

The policy is as follows:

Policy SP9 – Colchester / Braintree Borders Garden Community

The adopted policies map identifies a strategic area for development of a new garden community of which the details and final number of homes will be set out in a Strategic Growth Development Plan Document to be prepared jointly between Colchester BC and Braintree DC and which will incorporate provision of around 2,500 dwellings within the Plan period (as part of an overall total of between 15,000 to 24,000 homes) and provision for Gypsy and Travellers.

The Strategic Growth DPD will set out the nature, form and boundary of the new community. The document will be produced in consultation with stakeholders and will include a concept plan showing the disposition and quantity of future land-uses, and give a three dimensional indication of the urban design and landscape parameters which will be incorporated into any future planning applications; together with a phasing and implementation strategy which sets out how the rate of development will be linked to the provision of the necessary social, environmental and physical infrastructure to ensure that the respective phases of the development do not come forward until the necessary infrastructure has been secured. The DPD will provide the framework for the subsequent development of more detailed masterplans and other design and planning guidance for the Colchester/Braintree Borders Garden Community.

The DPD and any planning application will address the following principles and requirements in the design, development and delivery of the new garden community:

A. Place-making and design quality

1. The development of a new garden community to high standards of design and layout drawing on its context and the assets within its boundaries including streams, land drains and ditches, mature hedgerows and field boundaries, woodland, existing and re-established habitats, and historic buildings. A mixed

use district centre will provide a vibrant heart to this new community supplemented by neighbourhood centres to form foci for new neighbourhoods. The design of the community will also address the challenges offered by other features in particular the severance created by the A12 and A120 and maximise the opportunities afforded through integration with the existing community of Marks Tey, and the presence of the railway station, all underpinned by a strong green-grid of connected green space that provides great recreational opportunities for residents and connection to the wider countryside. The garden community will be designed and developed to have its own identity and be as self-sustaining as possible. Clear separation will be maintained between the new garden community and the nearby settlements of Coggeshall, Stanway Easthorpe and Feering.

2. Detailed masterplans and design guidance will be put in place to inform and guide development proposals and planning applications. Planning applications for this garden community will be expected to be consistent with approved DPDs and subsequent masterplans and design and planning guidance.

B. Housing

3. A mix of housing types and tenures including self- and custom-build and affordable housing will be provided on the site, including a minimum of 30% affordable housing. The affordable housing will be phased through the development;
4. New residential development will seek to achieve appropriate densities which reflect both context, place-making aspirations and opportunities for increased levels of development around neighbourhood centres and transport hubs.

C. Employment and jobs

5. Employment – additional wording pending further evidence base findings. Provision for a wide range of job, skills and training opportunities will be created in the garden community. This may include B1 and/or non B class employment generating uses around the rail station as part of mixed use urban development to provide for a wide range of local employment opportunities where appropriate;
6. High speed and reliable broadband will be provided and homes will include specific spaces to enable working from home

D. Transportation

7. A package of measures will be introduced to encourage smarter transport choices to meet the needs of the new community and maximise the opportunities for sustainable travel including the provision of a network of footpaths, cycleways and bridleways to enhance permeability within the site and to access the adjoining area; development of a public rapid transit system connecting this new garden community to the wider Colchester context; development of opportunities to improve accessibility to Marks Tey rail station (or provide for its relocation to a more central location within the garden community); and effective measures to mitigate the transport impacts of the proposed development on the strategic and local road network. Longer term transport interventions will need to be carefully

designed to minimise the impacts on the strategic road network and fully mitigate any environmental or traffic impacts. Other specific transport-related infrastructure requirements identified through the subsequent Strategic Growth Development Plan Document and masterplans for this garden community will be delivered in a phased manner

8. Primary vehicular access to the site will be provided via the strategic road network.
9. Improvements to the local road infrastructure will be necessary to mitigate adverse traffic impacts and serve the new development. These shall include bus/rapid transit priority measures between the site, Colchester and Braintree town centres, employment areas and rail stations;
10. Foot and cycle ways shall be provided throughout the development and existing communities and surrounding countryside, including seamlessly linking key development areas to the wider network
11. Opportunities will be explored to establish how Marks Tey rail station can be made more accessible to residents of the new community including relocation of the station to a more central location and improvement of walking, cycling and public transport links to the station.

E. Community Infrastructure

12. District and local centres of an appropriate scale will be provided to serve the proposed development. The centres will be located where they will be easily accessible by walking, cycling and public transit to the majority of residents in the garden community including residents of the existing Marks Tey village.
13. Community meeting places will be provided within the district and local centres.
14. Primary healthcare facilities will be provided to serve the new development
15. At least one secondary school, primary schools and early-years facilities will be provided to serve the new development;
16. A network of multi-functional green infrastructure will be provided within the garden community incorporating key elements of the existing green assets within the site. It will include community parks, allotments, a new country park and the provision of sports areas with associated facilities and play facilities;
17. Indoor leisure and sports facilities will be provided with the new community, or contributions made to the improvement of off-site leisure facilities to serve the new development

F. Other Requirements

18. Provision of improvements to waste water treatment including an upgrade to the Colchester Waste Water Treatment Plant and off-site drainage improvements;
19. Provision, management and on-going maintenance of sustainable surface water drainage measures to manage and mitigate the risk of flooding on site and which



will reduce the risk of flooding to areas downstream or upstream of the development;

20. Landscape buffers between the site and Coggeshall, Feering, Stanway and Easthorpe;
21. Protection and/or enhancement of heritage and biodiversity assets within and surrounding the site including the SSSI at Marks Tey brick pit, Marks Tey Hall, Easthorpe Hall Farm, Easthorpe Hall and the habitats along and adjoining the Domsey Brook and Roman River corridors.
22. Provision of appropriate buffers along strategic road and rail infrastructure to protect new development
23. Provision of appropriate design and infrastructure that incorporates the highest standards of innovation in energy efficiency and technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste / recycling management facilities.
24. Measures to support the development of the new community including provision of community development support workers (or other provision) for a minimum of ten years from initial occupation of the first homes and appropriate community governance structures
25. Establishment at an early stage in the development of the garden community, of appropriate and sustainable long-term governance and stewardship arrangements for community assets including green space, public realm areas and community and other relevant facilities; such arrangements to be funded by the development and include community representation to ensure residents have a stake in the long term development, stewardship and management of their community.

Please note that the following appraisal explores the compatibility of the principles of the policy with the Garden City principles in terms of compatibility. In addition, the appraisal of this policy has been considered in light of the appraisal of the specific Garden Community at Colchester / Braintree later in this report. This is in order to determine whether the policy principles are appropriate in light of that initial appraisal and any sustainability issues identified. It should be noted however that some constraint-based criteria need not be the focus of the principles of the development in the absence of any identified issues and in addition general themes are ensured through the content of Policy SP7. In those instances, 'N/A' has been highlighted.

5.12.2 Significant and Temporal Effects

Table 18: Impact on Sustainability Objectives: Policy SP9

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
1. Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A
	- Incorporation of SuDS.	++
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A
	- Acceptable impacts only on sites of nature conservation interest.	++
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	++
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	++
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	++
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A
5. Resilience	- Positive contribution towards town centres.	++
	- Positive contribution towards identified regeneration priority areas and institutions	+

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	?
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	++
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials.	N/A
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	++
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++
9. Environmental Quality & Sustainability	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++
	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food.	++
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation.	++
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	++
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	++
10. Developability / Deliverability	- Ensure that the development can self-fund infrastructure costs	++
	- Be commercially attractive with strong market conditions and value potential	++
	- Availability of land being put forward for development with active landowner/developer interest	++
	- Scope for delivery structures through active and positive public and private sector engagement	++

There will be significant positive impacts associated with the majority of the Garden City principles, in consideration of the policy and the appraisal of the preferred Garden Community option at the Colchester / Braintree Borders. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period.

An example where the policy will not ensure significant positive impacts against the Garden City Principles however relates to the aspiration that an appropriate percentage of homes that are classified as 'affordable' be for social rent. In addition, the policy is not explicit in a need to consider life-time homes, however does include requirements for a mix of housing types and tenures including provision for Gypsies and Travellers.

Although there will be a loss of agricultural land, positive impacts regarding landscapes have been highlighted in response to the policy ensuring that development is of a high standard of design and layout, drawing on its context and considerable assets in this regard. The development of a Garden Community in this location, and with the specific policy principles regarding landscape, can be seen to ensure that the best possible development outcomes are achieved in this broad area.

5.12.3 Secondary Effects

The emergence of this Garden Community can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. The Garden Community, in line with and in conformity to the general principles set out in the Policy and Policy SP7, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

5.12.4 Alternatives Considered

The principles and requirements of this Policy are specific to the Garden Community, to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such no other alternatives can be considered reasonable and the preferred policy approach has been selected.

5.12.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed.

5.13 Policy SP10 – West of Braintree Garden Community

5.13.1 Context / Justification

The preferred scale and range of land uses for the West of Braintree Garden Community are set out in the following policy in addition to specific principles and requirements that have been identified as needing incorporation into a forthcoming masterplan and Garden Community specific DPD.

It should be noted that the appraisal of Policy SP10 should not be taken as that of the Garden Community itself. The appraisal of the Garden Communities, alongside reasonable alternatives, is included later in this report. The appraisal of Policy SP10 explores whether the impacts and issues raised in the assessment of the Garden Community are addressed in the policy in way of mitigation or avoidance as a requirement of any successful planning application, as well as including any general aspirations in line with the Sustainability Objectives and Garden City Principles.

The policy is as follows:

Policy SP10 – West of Braintree Garden Community

The adopted policies map, identifies a strategic area for development of a new garden community of which the details and final number of homes will be set out in a Strategic Growth Development Plan Document to be prepared jointly between Braintree DC and Uttlesford DC if applicable and which will incorporate provision of around 2,500 homes within the Plan period (as part of an overall total of between 7,000 – 10,000 homes) and provision for Gypsy and Travellers

Broadfield Farm lies within the garden community search area and is an allocated minerals extraction site within the Essex County Council adopted Minerals Local Plan. The mineral extraction, restoration and after care of the minerals site will need to be planned alongside the wider development of the garden community.

The Strategic Growth DPD will set out the nature and form of the new community. The DPD will be produced in consultation with stakeholders will include a concept plan showing the disposition and quantity of future land-uses, and give a three dimensional indication of the urban design and landscape parameters which will be incorporated into any future planning

applications; together with a phasing and implementation strategy which sets out how the rate of development will be linked to the provision of the necessary social and physical infrastructure to ensure that the respective phases of the development do not come forward until the necessary infrastructure has been secured. The DPD will provide the framework for the subsequent development of more detailed masterplans and other design and planning guidance for the West of Braintree Garden Community.

The DPD and any planning application will address the following principles and requirements in the design, development and delivery of the new garden community:

A. Place-making and design quality

1. The development of a new garden community to high standards of design and layout drawing on its context and the assets within and close to its boundaries including Boxted Wood, Golden Grove, Rumley Wood, Pods Brook and the historic airfield. The gently sloping topography to the south of the site also affords opportunities for long distance views. These key assets will provide a context to build a new green-grid upon to provide an attractive setting for the new community and linking to the wider countryside. The new community will also address the relationship with existing communities close to its boundaries and maintain a separation between them including Great Saling, Stebbing Green and Rayne. The garden community will be designed and developed to have its own identity and be as self-sustaining as possible.
2. Detailed masterplans and design guidance will be put in place to inform and guide development proposals and planning applications. Planning applications for this garden community will be expected to be consistent with approved DPDs and subsequent masterplans and design and planning guidance.

B. Housing

3. A mix of housing types and tenures including self- and custom-build and starter homes will be provided on the site, including a minimum of 30% affordable housing. The affordable housing will be phased through the development;
4. New residential development will seek to achieve appropriate densities which reflect context, place-making aspirations and opportunities for increased levels of development around neighbourhood centres and transport hubs.

C. Employment and jobs

5. Employment – additional wording pending further evidence base findings. Provision for a wide range of job, skills and training opportunities will be created within the garden community. This may include space for B1, B2 and B8 businesses in the southern part of the community close to the A120 as well as on non-employment park locations throughout the Garden Community to provide for a wide range of local employment opportunities
6. High speed and reliable broadband will be provided and homes will include specific spaces to enable working from home

D. Transportation

7. A package of measures will be introduced to encourage smarter transport choices to meet the needs of the new community and maximise the opportunities for sustainable travel including the provision of a network of footpaths, cycleways and bridleways to enhance permeability within the site and to access the adjoining area; development of an effective public transport system; development of opportunities to improve accessibility to local rail stations; and effective measures to mitigate the transport impacts of the proposed development on the strategic and local road network. Improvements to the local road infrastructure will be necessary to mitigate adverse traffic impacts and serve the new development. These shall include bus / rapid transit priority measures between the site, Braintree town centre, rail station and employment areas including the Skyline business park and London Stansted Airport. Longer term transport interventions will need to be carefully designed to minimise the impacts on the strategic and local road network and fully mitigate any environmental or traffic impacts arising from the development.
8. Primary vehicular access to the site will be provided via the A120 and B1256.
9. Foot and cycle ways shall be provided throughout the development, including linking the site to Braintree town through the existing Flich Way linear country park;
10. Other specific transport-related infrastructure requirements identified through the Strategic Growth Development Plan Documents and masterplans for this garden community will be delivered in a phased manner.

E. Community Infrastructure

11. District and local centres of an appropriate scale will be provided to serve the proposed new community. The centres will be located where they will be easily accessible by walking, cycling and public transit to the majority of residents in the garden community.
12. Community meeting places will be provided within the district and local centres.
13. Primary healthcare facilities will be provided to serve the new development.
14. Secondary school, primary schools and early-years facilities will be provided to serve the new development;
15. A network of multi-functional green infrastructure will be provided within the garden community. It will include community parks, allotments, the provision of sports areas with associated facilities and play facilities;
16. Indoor leisure and sports facilities will be provided with the new community, or contributions made to the improvement of off-site leisure facilities to serve the new development.

F. Other Requirements

17. Provision of improvements to waste water treatment and off-site drainage improvements;

18. Provision, management and on-going maintenance of sustainable surface water drainage measures to manage and mitigate the risk of flooding on site and which will reduce the risk of flooding to areas downstream or upstream of the development;
19. Landscape buffers between the site and Great Saling, Stebbing, Stebbing Green and Rayne;
20. Protection and/or enhancement of heritage and biodiversity assets within and surrounding the site including Great Saling Hall conservation area and areas of deciduous woodland within and adjoining the site.
21. Provision of appropriate buffers along strategic road infrastructure to protect new development
22. Provision of appropriate design and infrastructure that incorporates the highest standards of energy efficiency and innovation in technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste / recycling management facilities.
23. Measures to support the development of the new community including provision of community development support workers (or other provision) for a minimum of ten years from initial occupation of the first homes and appropriate community governance structures
24. Establishment at an early stage in the development of the garden community, of appropriate and sustainable long-term governance and stewardship arrangements for community assets including green space, public realm areas and community and other relevant facilities; such arrangements to be funded by the development and include community representation to ensure residents have a stake in the long term development, stewardship and management of their community.

5.13.2 Significant and Temporal Effects

Please note that the following appraisal explores the compatibility of the principles of the policy with the Garden City principles in terms of compatibility. In addition, the appraisal of this policy has been considered in light of the appraisal of the specific Garden Community at West of Braintree later in this report. This is in order to determine whether the policy principles are appropriate in light of that initial appraisal and any sustainability issues identified. It should be noted however that some constraint-based criteria need not be the focus of the principles of the development in the absence of any identified issues and in addition general themes are ensured through the content of Policy SP7. In those instances, 'N/A' has been highlighted.

Table 19: Impact on Sustainability Objectives: Policy SP10

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
1. Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A
	- Incorporation of SuDS.	++
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A
	- Acceptable impacts only on sites of nature conservation interest.	++
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	++
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	++
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	++
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A
5. Resilience	- Positive contribution towards town centres.	++
	- Positive contribution towards identified regeneration priority areas and institutions	+
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	?
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	++
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials.	N/A
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	++
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++
9. Environmental Quality & Sustainability	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++
	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food.	++
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind.	++
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	++
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	++
10. Developability / Deliverability	- Ensure that the development can self-fund infrastructure costs	++
	- Be commercially attractive with strong market conditions and value potential	++
	- Availability of land being put forward for development with active landowner/developer interest	++
	- Scope for delivery structures through active and positive public and private sector engagement	++

There will be significant positive impacts associated with the majority of the Garden City principles, in consideration of the policy and the appraisal of the preferred Garden Community option at the West of Braintree. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period.

An example where the policy will not ensure significant positive impacts against the Garden City Principles however relates to the aspiration that an appropriate percentage of homes that are classified as 'affordable' be for social rent. In addition, the policy is not explicit in a need to consider life-time homes, however does include requirements for a mix of housing types and tenures including provision for Gypsies and Travellers.

Although there will be a loss of agricultural land, positive impacts regarding landscapes have been highlighted in response to the policy ensuring that development is of a high standard of design and layout, drawing on its context and considerable assets in this regard. The development of a Garden Community in this location, and with the specific policy principles regarding landscape, can be seen to ensure that the best possible development outcomes are achieved in this broad area.

5.13.3 Secondary Effects

The emergence of this Garden Community can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. The Garden Community, in line with and in conformity to the general principles set out in the Policy and Policy SP7, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

5.13.4 Alternatives Considered

The principles and requirements of this Policy are specific to the Garden Community, to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful



proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such, the Policy was selected and no other alternatives can be considered reasonable.

5.13.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed.

6. Cumulative and Synergistic Impacts of Section One Policies

6.1 Cumulative and Synergistic Impacts of Policies SP1-SP7

This section explores the cumulative and synergistic impacts of the Strategic Section One for Local Plan's policies SP1-SP7. These policies have been grouped for this purpose as they respond to strategic policy content as opposed to the more site specific content of Policies SP8-SP10. Cumulative impacts are identified per sustainability objective, with each option exploring whether any exist on a thematic basis.

6.1.1 Sustainability Objective 1: Create safe environments which improve quality of life, community cohesion

Policy	Impact on SO1
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	+
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	0

The Strategic Section One for Local Plans' policy content, including the Spatial Strategy of SP2, can be seen to have positive impacts on this objective where relevant. There will however be no cumulative impacts associated with this objective, where the objective is more closely concerned with on-site design features and development principles or guidelines.



6.1.2 Sustainability Objective 2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

Policy	Impact on SO2
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	++
SP3: Meeting Housing Needs	++
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	N/A
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

There can be expected to be a cumulative strengthening of impacts ensuring good quality and inclusive homes through similarly ensuring that objectively assessed housing can be met throughout Local Plan periods within North Essex, particularly in the latter stages and in accordance with each LPA’s individual requirements. The preferred strategic Spatial Strategy also conforms to as broad a geographic dispersal as possible across the North Essex area in light of available land and promoted sites. The Strategic Section One for Local Plans, in exploring options and solutions for meeting unmet elements of objectively assessed need over the strategic area will also ensure significant positive cumulative impacts on this objective in accumulation with the individual Spatial Strategies of each authority’s Local Plan, including elements of non-strategic needs, and as per the LPA level requirements of the OAN Report.

6.1.3 Sustainability Objective 3: To improve the health of the District's residents and mitigate/reduce potential health inequalities

Policy	Impact on SO3
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	++
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	++
SP6: Place Shaping Principles	+
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

There will be significantly positive health impacts associated with the cumulative effects of the Strategic Section One for Local Plans' policies and commitment to delivering Garden Communities. This is largely due to a combination of health related infrastructure provision and also adherence to Garden City Principles regarding walking and cycling infrastructure and the provision of open space and recreational facilities. There will also be cumulative positive impacts in this regard associated with the content of each authority's Local Plan policies and designation of non-strategic open space and recreation.

6.1.4 Sustainability Objective 4: To ensure and improve the vitality & viability of centres

Policy	Impact on SO4
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	++
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	0
SP5: Infrastructure and Connectivity	++
SP6: Place Shaping Principles	+
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

There will be significant cumulative impacts on the town centres of Colchester and Braintree in line with the various policies. The Spatial Strategy will seek to locate development within such centres in the short-medium term, with long term benefits being experienced in the long term through better infrastructure and connectivity associated with the Garden Communities, particularly regarding public transport networks. There will also be significant positive impacts associated with the individual Section Twos of the Local Plans of Colchester and Braintree. The locations of the Garden Communities are unlikely to support the town centres of Clacton and Harwich within Tendring, other than for seasonal tourism, however it should be noted that a large amount of non-strategic (within the context of the Section One) development is allocated in such centres within the Tendring District Council Local Plan Section Two, particularly in the Clacton area.

6.1.5 Sustainability Objective 5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

Policy	Impact on SO5
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	++
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	++
SP5: Infrastructure and Connectivity	++
SP6: Place Shaping Principles	N/A
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

As per those iterated for Sustainability Objective 2, there can be expected to be a cumulative strengthening of requirements to ensure job creation through similarly ensuring that employment requirements can be met throughout Local Plan periods within North Essex, particularly in the latter stages and in accordance with each LPA's individual requirements. The preferred strategic Spatial Strategy also conforms to as broad a geographical dispersal as possible across North Essex in light of available land and promoted sites. The Strategic Section One for Local Plans will also ensure significant positive cumulative impacts on this objective in accumulation with the individual policies and allocations of each authority's Local Plan, including elements of non-strategic needs and content regarding the rural economy.

6.1.6 Sustainability Objective 6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

Policy	Impact on SO6
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	?
SP3: Meeting Housing Needs	0
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	0
SP6: Place Shaping Principles	+
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	+

The Strategic Section One can be seen to have positive connotations on this objective. Although the development of significant areas of Greenfield land could be expected to have negative implications, the policies of the Section One and the allocation of large strategic Garden Communities to meet growth needs can ensure effective enhancement to green infrastructure is forthcoming for net biodiversity gains. The Appropriate Assessment indicates that, providing that the North Essex Authorities continue to collaborate and prepare necessary Recreation Avoidance and Mitigation Strategies (RAMS), and in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section 1 and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in-combination with other plans and projects as a result of recreation. The AA adds that the strategic approach across the North Essex Authorities ensures that cumulative solutions to the possible recreational pressures on Natura 2000 sites can be mitigated successfully. It should be noted however that the findings of these RAMS will need to be adequately factored into any forthcoming masterplanning and Garden Community specific DPDs.

6.1.7 Sustainability Objective 7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

Policy	Impact on SO7
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	++
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	++
SP6: Place Shaping Principles	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

The policies of the Strategic Section One for Local Plans can be expected to have significantly positive cumulative impacts on this objective. The infrastructure requirements of the Garden Communities, in adhering to sustainable transport Garden City Principles, can be expected to offer wider benefits and gain for neighbouring areas, and the geographical distribution of the preferred Garden Community options ensure that these benefits can be experienced across all three authorities with an inclusive coverage across North Essex.

6.1.8 Sustainability Objective 8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

Policy	Impact on SO7
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	++
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	++
SP6: Place Shaping Principles	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

The policies of the Strategic Section One for Local Plans can be expected to have significantly positive cumulative impacts on accessibility and infrastructure provision. The infrastructure requirements of the Garden Communities, in adhering to sustainable Garden City Principles can be expected to offer wider benefits and gain, particularly regarding accessibility associated with both transport and services for neighbouring areas, and the geographical distribution of the preferred Garden Community options. These ensure that these benefits can be experienced across all three authorities with an inclusive coverage across North Essex.

6.1.9 Sustainability Objective 9: To conserve and enhance historic and cultural heritage and assets and townscape character

Policy	Impact on SO9
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	+
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	++
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	+

Although more relevant to the selection of specific Garden Communities, there could be a perceived negative cumulative impact on the historic environment associated with strategic development at the scale proposed, particularly associated with field boundaries and patterns. Despite this, the policies have taken on board those recommendations of the Preferred Options SA and ensure that protection will occur in all instances with enhancement a significant possibility. Forthcoming masterplanning and Garden Community specific DPDs have the potential to enhance site specific assets and their settings and deliver a high quality built environment. Although a degree of uncertainty surrounds the status and content of the masterplans and DPDs and whether their content is appropriate to individual assets and designations, the general distribution of growth across the strategic area and the Section One policy content seeks to address any perceived or possible impacts on the historic environment.

6.1.10 Sustainability Objective 10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.

Policy	Impact on SO10
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	?
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	0
SP6: Place Shaping Principles	+
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	0

There will be cumulative positive impacts regarding energy efficiency through the possibilities presented by strategic growth that adheres to Garden City Principles however these will be associated with these new developments only. Garden Communities have the potential to incorporate renewable energy generation, although it is uncertain at this stage whether such schemes will be sought. It should be acknowledged that requirements may form part of masterplans and the Garden Community specific DPDs. The cumulative impact is highlighted as a minor positive at this stage, in view of the policy content, what can currently be considered a feasible requirement, and in reflection of the early stages of each Garden Community's development through the planning system.

6.1.11 Sustainability Objective 11: To improve water quality and address water scarcity and sewerage capacity

Policy	Impact on SO11
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	0
SP3: Meeting Housing Needs	0
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	+
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	?

Although the individual policies do not have negative impacts highlighted, these impacts respond more closely to water quality. It can reasonably be assumed that there could be likely cumulative negative implications regarding water scarcity and sewerage emanating from Section One relevant to the level of growth stated in Policy SP2, and the allocations for development in both Sections One and Two of the three authority's Local Plans. Despite this, the implications of this are best resolved on a site-by-site basis through early discussions with service providers on a plan-level and in certain areas as required. It should also be noted that all growth in the wider area can be expected to have such impacts; however in the specific context of Garden Communities, Policy SP7 seeks to ensure that such issues are not forthcoming from any successful planning application. Regarding water quality the AA states that, 'whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice.' It adds that, 'the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.' There are therefore no cumulative impacts associated with water quality emanating from Section One.

6.1.12 Sustainability Objective 12: To reduce the risk of fluvial, coastal and surface water flooding

Policy	Impact on SO12
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	?
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	++
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	0

There are no significant identified flood risk concerns resulting from the policies and Garden Communities of the Strategic Section One for Local Plans. Flood risk issues are considered more relevant to site specific considerations regarding alleviation. Policy content ensures that flood risk concerns will be considered in any forthcoming planning applications and it should be noted that the scale of the Garden Communities enables the integration of sustainable drainage techniques.

6.1.13 Sustainability Objective 13: To improve air quality

Policy	Impact on SO13
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	+
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	+
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	+

There are no identified cumulative implications of the specific content of the policies and preferred Garden Community options contained in the Strategic Part for Local Plans. The preferred Garden Community options, as per the Spatial Strategy, correspond to the best possible dispersal across the HMA to alleviate air quality issues in Colchester and associated with the A12 and A120. There are likely to be some general negative connotations on air quality associated with the level of growth required in North Essex however the distribution of growth and the policies of Section One seek to address this adequately.

6.1.14 Sustainability Objective 14: To conserve and enhance the quality of landscapes

Policy	Impact on SO14
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	?
SP3: Meeting Housing Needs	?
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	0
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	?

Although more relevant to the specific Garden Communities, there can be expected to be uncertain cumulative impacts on landscapes from the above policies. Potential negative impacts are associated with the scale of development required on Greenfield land, however policy exists to ensure that development is sensitive to its surroundings in each instance and within the context of wider landscape character areas. It should be noted that this is a general issue relevant to any new development. It should also be noted that beyond the principles contained in Policies SP8-SP10 masterplanning and the Garden Community specific DPDs have further potential to mitigate and minimise site specific issues and delivery a high quality built environment.



6.1.15 Sustainability Objective 15: To safeguard and enhance the quality of soil and mineral deposits

Policy	Impact on SO15
SP1: Presumption in Favour of Sustainable Development	+
SP2: Spatial Strategy for North Essex	N/A
SP3: Meeting Housing Needs	N/A
SP4: Providing for Employment and Retail	N/A
SP5: Infrastructure and Connectivity	N/A
SP6: Place Shaping Principles	N/A
SP7: Development and Delivery of New Garden Communities in Essex	0
Cumulative Impact	0

There will be no cumulative impacts on safeguarding mineral deposits and the quality of soil associated with the policy content of the Strategic Section One for Local Plans.

6.2 Cumulative and Synergistic Impacts of Policies SP8-SP10

This section explores the cumulative and synergistic impacts of the Strategic Section One for Local Plan's policies SP8-SP10. There have been explored separately from Policies SP1-SP7 in so far as they have been assessed using a different framework and are focused more on how the relevant policies respond to specific principles and site considerations rather than general strategic themes. For the impacts of the specific Garden Communities, please refer to the relevant appraisals later in this report.

Table 20: Cumulative and Synergistic Impacts of Policies SP8-SP10

Objective	Corresponding Garden City Principle(s) and any additional considerations	SP8	SP9	SP10	Cumulative Impact
1. Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A	N/A	N/A	N/A
	- Incorporation of SuDS.	++	++	++	No impact
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A	N/A	N/A	N/A
	- Acceptable impacts only on sites of nature conservation interest.	++	++	++	No impact
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++	++	++	No impact
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+	+	+	No impact
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	++	++	++	N/A
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	++	++	++	Significant positive impact



Objective	Corresponding Garden City Principle(s) and any additional considerations	SP8	SP9	SP10	Cumulative Impact
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	++	++	++	Positive impact
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++	++	++	Positive impact
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A	N/A	N/A	N/A
5. Resilience	- Positive contribution towards town centres.	++	++	++	Significant positive impact
	- Positive contribution towards identified regeneration priority areas and institutions	++	+	+	Positive impact
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++	++	++	Significant positive impact
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++	++	++	Significant positive impact
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++	++	++	Significant positive impact
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	?	?	?	Uncertain impact
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+	+	+	Significant positive impact
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	++	++	++	Significant positive impact
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design	N/A	N/A	N/A	N/A

Objective	Corresponding Garden City Principle(s) and any additional considerations	SP8	SP9	SP10	Cumulative Impact
	and materials.				
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++	++	++	Positive impact
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++	++	++	Significant positive impact
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	++	++	++	Significant positive impact
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++	++	++	No impact
9. Environmental Quality & Sustainability	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++	++	++	No impact
	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food.	++	++	++	No impact
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind.	++	++	++	No impact
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation.	++	++	++	Positive impacts

Objective	Corresponding Garden City Principle(s) and any additional considerations	SP8	SP9	SP10	Cumulative Impact
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	++	++	++	Positive impacts
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	++	++	++	No impact
10. Developability / Deliverability	- Ensure that the development can self-fund infrastructure costs	++	++	++	No impact
	- Be commercially attractive with strong market conditions and value potential	++	++	++	No impact
	- Availability of land being put forward for development with active landowner/developer interest	++	++	++	No impact
	- Scope for delivery structures through active and positive public and private sector engagement	++	++	++	No impact

The benefits associated with the policy requirements of SP8-SP10 extend to wider areas beyond the Garden Communities themselves. For that reason, significant positive impacts are likely for those Garden City principles that combine to offer wider benefits and impacts beyond those identified for each Garden Community policy individually.

Largely significantly positive impacts regard the specific policy principles that combine to offer social and economic benefits, such as housing, employment and improving public transport networks in North Essex. There will also be positive impacts associated with improving the resilience of the town centres of Colchester and Braintree. There will also be some minor positive impacts on improving green and blue infrastructure in the strategic area.

An uncertain cumulative impact is highlighted for the principle that there are an appropriate percentage of homes classified as 'affordable' that are for social rent, where the policies do not explicitly state that this is a requirement. This is not to say that such provision would not be forthcoming however.

In addition, cumulative impacts can be expected to be significant in accumulation with the 'Section Two' of each of the authorities' Local Plans, which will look to build on this long term strategic growth with short and medium term solutions on a non-strategic level.

7. Conclusions and Recommendations

7.1 Key Points from the Assessment of Policies SP1-SP10

7.1.1 Key Points from the Assessment of Policies SP1-SP7

The following table sets out the combined long term sustainability impacts assessed in the individual appraisal of each policy as well as that of the Vision and the Strategic Objectives of the Strategic Section One for Local Plans.

Table 21: Summary of Long Term Impacts of Policies SP1-SP7

Policy	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Vision	N/A	++	++	N/A	++	++	++	N/A	++	N/A	N/A	N/A	N/A	N/A	N/A
Objs	+	++	++	+	++	N/A	++	++	+	+	N/A	N/A	N/A	N/A	N/A
SP1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SP2	+	++	++	++	++	?	++	++	+	?	0	?	+	?	N/A
SP3	N/A	++	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	?	N/A
SP4	N/A	N/A	N/A	++	N/A										
SP5	N/A	N/A	++	++	++	0	++	++	N/A	0	N/A	N/A	N/A	N/A	N/A
SP6	++	N/A	+	+	N/A	+	++	++	++	+	+	++	+	0	N/A
SP7	++	++	++	++	++	++	++	++	+	+	++	+	+	+	0

The following key points can be made regarding the appraisal of the plan's non-site related policies:

- The strategic vision for the area will have positive impacts on housing and employment related Sustainability Objectives. The significance of these impacts will increase in the long term with the principle of sustainable Garden Communities being developed as part of a sustainable strategy for growth and in response to objectively assessed housing and employment needs, and also their wider benefits. This will also be the case for health, the natural environment, and the historic environment through the provision of green infrastructure, new and expanded education and health care facilities and recreational land and also the protection and enhancement of countryside and heritage assets. There will additionally be significant long term impacts on



ensuring the necessary transport infrastructure to support new development in line with the benefits expected of the Garden Communities as they emerge in the latter stages of the three authorities' Local Plan periods.

- Employment forecasts have an underlying principle: that planning for housing, economic land uses and community facilities / services should be integrated, so that the demand for labour is fulfilled and there are no unsustainable levels of out-commuting. The principle of these links to identifying future job growth to housing provision is a key tenet of sustainability and as such, there will be further significant positive impacts associated with employment and housing arising from the Section One Plan.
- The Spatial Strategy will ensure a large number of significant positive impacts, most notably regarding housing delivery, economic growth, public transport improvements and accessibility. The short and medium term impacts of these are related to the notion that development will be accommodated within or adjoining settlements according to their scale and existing role both within each individual district; these correspond to the NPPF requirements of each LPA in the formulation of a Local Plan and offers a local distinctiveness to the strategic area relevant to local needs and communities. Long term impacts will become more significant in line with the emergence of the Garden Communities.
- Further long term significant positive impacts associated with Garden Communities can be expected to be realised on health, through the integration and requirement of suitable facilities and open space and recreation requirements; sustainable travel through the requirements of sustainable transportation means to be provided, and education and skills through the provision of primary, secondary and early years facilities as per Garden City Principles and Essex County Council infrastructure requirements.
- Minor positive impacts can be expected through Garden Community developments associated with townscapes through a combined alleviation of pressures on existing settlements at the expected scale and also in conjunction with design expectations and opportunities. This focus away from the expansion of existing settlements will also help to alleviate air quality pressures in settlements.
- Uncertain impacts can be expected to arise from the principle of Garden Communities regarding landscapes through the development of green field land, however it should be acknowledged that at the specified scale, and commensurate with the density requirements of Garden City Principles, Garden Communities are capable of mitigating such concerns effectively and creating high quality new environments.
- Further uncertainty surrounds those impacts of integrating renewable energy technologies explicitly in policy.
- Regarding water quality, the AA states that, 'whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice. Therefore, in conclusion, the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the



overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.' There are therefore no significant impacts on water quality resulting from Section One and the level of growth.

- There will be 'no impact' on Natura 2000 sites as a result of the findings of the Appropriate Assessment (AA) (2017) of the Section One, regarding recreational pressures associated with the significant increase in growth stated within the Policy. The AA concludes that 'providing that the North Essex Authorities continue to collaborate and prepare the necessary Recreation Avoidance and Mitigation Strategies (RAMS) ... in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section 1 and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in-combination with other plans and projects as a result of recreation.' In addition, the AA indicates that the strategic approach and scope of the Section One enables mitigation to be effectively incorporated.
- The Section One policies can be seen to ensure biodiversity benefits in regard to the integration of green and blue infrastructure throughout the strategic area.

7.1.2 Key Points from the Assessment of Policies SP8-SP10

The following key points can be made from the appraisal of Policies SP8-SP10:

- There will be significant positive impacts associated with the majority of the Garden City principles, in consideration of the policy and the appraisal of the preferred Garden Community option at the Tendring / Colchester Borders. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period. This includes the impact on the regeneration areas within Colchester town centre and to the east of the town, due largely to the Policy content; in particular those related to sustainable transport, in conjunction with the general location of the option.
- There will be largely significantly positive impacts regarding the specific policy principles that combine to offer social and economic benefits, such as housing, employment and improving public transport networks in North Essex. There will also be positive impacts associated with improving the resilience of the town centres of Colchester and Braintree and also green and blue infrastructure in the wider Strategic Area.
- An example where the policies will not ensure significant positive impacts against the Garden City Principles however relates to the aspiration that an appropriate percentage of homes that are classified as 'affordable' be specifically for social rent. It is recommended that such a requirement is included within the policies. In addition, the policies are not explicit in a need to consider life-time homes, however do imply provision, including requirements for a mix of housing types and tenures.
- There can be expected to be minor negative impacts on agricultural land and landscapes due to the loss of agricultural land associated with Greenfield development. Regarding landscape

however, the policies will ensure that development is of a high standard of design and layout drawing on their context and abilities in this regard. The development of Garden Communities in the locations specified, and with the specific policy principles regarding landscape, can be seen to ensure that the best possible development outcomes are achieved in their broad areas.

7.2 The Sustainability of Section One as a Whole

The overall impacts of Section One can be seen in the following table. The table effectively represents the cumulative impacts of Section One's policies SP1-SP10. Commentary is given for each sustainability objective.

Table 22: Overall Impacts of Section One

SA Objective	Overall Impact
1. Create safe environments which improve quality of life, community cohesion	Positive impacts

The Strategic Section One for Local Plans can be seen to have positive impacts on this objective where relevant, predominantly through general place shaping principles and the policy criteria relevant specific to the Garden Communities. Although impacts are minor at this stage, impacts can be seen to be strengthened through the Local Plan Section Twos of the three authorities, with the inclusion of design orientated development management policies that will also apply.

SA Objective	Overall Impact
2. To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	Significant positive impacts

There will be significant positive effects in ensuring good quality and inclusive homes. Section One also ensures that objectively assessed housing needs are met throughout Local Plan periods within North Essex, particularly in accordance with each LPA's individual requirements. The Spatial Strategy directs growth to existing sustainable settlements in the first instance, and the Garden Communities ensure that growth needs are met not only in the latter stages of the plan periods, but also make a significant contribution to meeting future needs beyond plan periods. The Strategic Section One for Local Plans, in exploring options and solutions for meeting unmet elements of objectively assessed need over the strategic area will also ensure significant positive cumulative impacts on this objective in accumulation with the individual Spatial Strategies of each authority's Local Plan, including elements of non-strategic needs, and as per the LPA level requirements of the OAN Report. Regarding Policies SP8-10, largely significantly positive impacts regard the specific policy principles that combine to offer social and economic benefits, such as housing, employment and improving public transport networks in North Essex.

SA Objective	Overall Impact
3. Improve health/reduce health inequalities	Significant positive impacts

There will be significantly positive health impacts associated with the cumulative effects of the Strategic Section One for Local Plans' policies and commitment to delivering Garden Communities as well as the Garden Community polices (SP8-10) themselves. This is largely due to a combination of health related infrastructure provision and also adherence to Garden City Principles regarding walking and cycling infrastructure and the provision of open space and recreational facilities. There will also be positive impacts in this regard associated with the content of each authority's Local Plan policies and designation of non-strategic open space and recreation.

SA Objective	Overall Impact
4. To ensure and improve the vitality & viability of centres	Significant positive impacts

There will be significant cumulative impacts on the town centres of Colchester and Braintree in line with the various policies within Section One. The Spatial Strategy will seek to locate development within such centres in the short-medium term, with long term benefits being experienced in the long term through better infrastructure and connectivity associated with the Garden Communities, particularly regarding public transport networks. There will also be significant positive impacts associated with the individual Section Twos of the Local Plans of Colchester and Braintree. The locations of the Garden Communities are likely to support the town centres of Colchester and Braintree, the two largest centres within the strategic area. Section One is unlikely to support the town centres of Clacton and Harwich within Tendring District, and Witham within Braintree District, however it should be noted that a large amount of non-strategic (within the context of the Section One) development is allocated in such centres within the Tendring District Council and Braintree District Council Local Plan Section Twos.

SA Objective	Overall Impact
5. To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	Significant positive impacts

There can be expected to be significant positive impacts regarding the requirements to ensure job creation through ensuring that employment requirements can be met throughout Local Plan periods within North Essex, particularly in the latter stages and in accordance with each LPA's individual requirements. The preferred strategic Spatial Strategy also conforms to as broad a geographical dispersal as possible across North Essex in light of available land and promoted sites. The Strategic Section One for Local Plans will also ensure significant positive cumulative impacts on this objective in accumulation with the individual policies and allocations of each authority's Local Plan, including elements of non-strategic needs and content regarding the rural economy. The Garden Communities are located within locations in which

existing strategic employment areas are accessible, with further positive impacts associated with specific employment provision at each Garden Community and with infrastructure commitments of an enhanced public transport offer to key centres.

SA Objective	Overall Impact
6. To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	Positive impacts

The Strategic Section One can be seen to have positive connotations on this objective. Although the level of growth established within Section One, and the allocation of Garden Communities, will lead to the development of significant areas of Greenfield land which could be expected to have negative implications, Section One can ensure effective enhancement to green and blue infrastructure for net biodiversity gains. The Appropriate Assessment indicates that, providing that the North Essex Authorities continue to collaborate and prepare necessary Recreation Avoidance and Mitigation Strategies (RAMS), and in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section 1 and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in combination with other plans and projects as a result of recreation. The AA adds that the strategic approach across the North Essex Authorities ensures that cumulative solutions to the possible recreational pressures on Natura 2000 sites can be mitigated successfully. It should be noted however that the findings of these RAMS will need to be adequately factored into any forthcoming masterplanning and Garden Community specific DPDs.

SA Objective	Overall Impact
7. To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	Significant positive impacts

The policies of the Section One for Local Plans can be expected to have significantly positive impacts on this objective. The infrastructure requirements of the Garden Communities, in adhering to sustainable transport Garden City Principles, can be expected to offer wider benefits and gain for neighbouring areas, and the geographical distribution of the preferred Garden Community options ensure that these benefits can be experienced across all three authorities with an inclusive coverage across North Essex. The content of the Local Plan Section Twos ensure that suitable public transport and access solutions are forthcoming to support the Spatial Strategy's notion of focusing growth to existing settlements within the short-medium term of the plan period.

SA Objective	Overall Impact
8. To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	Significant positive impacts

The policies of the Strategic Section One for Local Plans can be expected to have significantly positive cumulative impacts on accessibility and infrastructure provision. The infrastructure requirements of the Garden Communities, in adhering to sustainable Garden City Principles can be expected to offer wider benefits and gain, particularly regarding accessibility associated with both transport and services for neighbouring areas, and the geographical distribution of the preferred Garden Community options. This ensures that these benefits can be experienced across all three authorities with an inclusive coverage across North Essex. The Garden Communities are of a sufficient size to stimulate educational infrastructure provision. It should also be noted that the interventionist approach of the North Essex Authorities ensures that both infrastructure provision is self-funded through each Garden Community, and that the approach to their development is one of 'infrastructure first'. In addition, the content of the Local Plan Section Twos ensure that suitable supporting infrastructure, including public transport and access solutions are forthcoming to support the Spatial Strategy's notion of focusing growth to existing settlements within the short-medium term of the plan period.

SA Objective	Overall Impact
9. To conserve and enhance historic and cultural heritage and assets and townscape character?	Positive impacts

Within the context of Section One, this objective is largely relevant to the specific Garden Community policies (SP8-10). There could be a perceived negative cumulative impact on the historic environment associated with strategic development at the scale proposed, but despite this, the policies have taken on board those recommendations of the Preferred Options SA and ensure that protection will occur in all instances with enhancement a significant possibility. Forthcoming masterplanning and Garden Community specific DPDs have the potential to enhance site specific assets and their settings and deliver a high quality built environment. Although a degree of uncertainty surrounds the status and content of the masterplans and DPDs and whether their content is appropriate to individual assets and designations, the general distribution of growth across the strategic area and the Section One policy content seeks to address any perceived or possible impacts on the historic environment. It should additionally be noted here however, that such issues are better addressed within the Local Plan Section Twos, with the inclusion of relevant thematic development management policies.

SA Objective	Overall Impact
10. To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.	0

There will be positive impacts regarding energy efficiency as a result of the Section One policies, particularly through the requirements of the Garden Community policies SP8-10. Despite this, Garden Communities have the potential to incorporate renewable energy generation, although it is uncertain at this stage whether such schemes will be sought. It should be acknowledged that requirements may form part of masterplans and the Garden Community specific DPDs. The impact is highlighted as a minor positive at this stage, in view of the policy content, what can currently be considered a feasible requirement, and in reflection of the early stages of each Garden Community's development through the planning system. It should also be noted that policies exist in the respective authorities; Local Plan Section Twos, with the inclusion of relevant thematic development management policies.

SA Objective	Overall Impact
11. To improve water quality and address water scarcity and sewerage capacity	Uncertain Impacts

It can reasonably be assumed that there could be likely negative implications regarding water scarcity and sewerage emanating from Section One relevant to the level of growth stated in Policy SP2, the Garden Community allocations, and the allocations for development in the Local Plan Section Twos. Despite this, the implications of this are best resolved on a site-by-site basis through early discussions with service providers on a plan-level and in certain areas as required. It should also be noted that all growth in the wider area can be expected to have such impacts; however in the specific context of Garden Communities, Policy SP7 seeks to ensure that such issues are not forthcoming from any successful planning application.

Regarding water quality the AA states that, 'whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice.' It adds that, 'the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.' There are therefore no impacts associated with water quality emanating from Section One.

SA Objective	Overall Impact
12. To reduce the risk of fluvial, coastal and surface water flooding	0

There are no significant identified flood risk concerns resulting from the policies and Garden Communities of Section One. A number of the Garden Community allocations contain small areas of Flood Risk Zones 2 and 3, however these are not significant in response to the scale of the schemes and can be successfully integrated into any open space or green infrastructure requirements. The policy content ensures that flood risk concerns will be considered in any forthcoming planning applications and it should be noted that the scale of the Garden Communities enables the integration of sustainable drainage techniques.

SA Objective	Overall Impact
13. To improve air quality	Positive impacts

There are no identified implications regarding air quality of the specific content of the policies and preferred Garden Community options contained in the Strategic Part for Local Plans. The Garden Community allocations, as per the Spatial Strategy, correspond to the best possible dispersal across the HMA to alleviate air quality issues in Colchester and associated with the A12 and A120. The stance of allocating Garden Communities as opposed to urban extensions seeks partly to ensure that new growth does not impact on AQMAs, such as those found in Colchester town. It can be expected that there could be some general negative connotations on air quality associated with the level of growth required in North Essex, however the distribution of growth and the policies of Section One seek to address this adequately.

SA Objective	Overall Impact
14. To conserve and enhance the quality of landscapes	Uncertain Impacts

There can be expected to be uncertain impacts on landscapes resulting from Section One. These impacts are relevant to the specific Garden Community allocations themselves. Potential negative impacts are associated with the scale of development required on Greenfield land, however policy exists to ensure that development is sensitive to its surroundings in each instance and within the context of wider landscape character areas. It should be noted that this is a general issue relevant to any new development. It should also be noted that beyond the principles contained in Policies SP8-SP10 masterplanning and the Garden Community specific DPDs have further potential to mitigate and minimise site specific issues and delivery a high quality built environment. Landscape related Section Two policies will also have to be adhered to in any successful application.



SA Objective	Overall Impact
15. To safeguard and enhance the quality of soil and mineral deposits?	Uncertain Impacts

There will be minimal impacts on safeguarding mineral deposits and the quality of soil associated with the policy content of Section One. The Garden Community allocation at West of Braintree contains a site allocated within the ECC Minerals Local Plan for mineral extraction. Although not considered an insurmountable problem, the implications of this are that the North Essex Authorities will have to work with the Minerals and Waste Planning Authority and the landowner / developer of this minerals site to seek compromises surrounding the restoration of the site for a use compatible with Garden City principles at the masterplanning stage and within the Garden Community specific DPD for West of Braintree. Uncertain overall impacts are therefore identified for Section one.

7.3 Key Points from the Assessment of the Garden Community (GC) Options (in Appendix 1)

The following table sets out the assessed sustainability impacts of all reasonable Garden Community options explored. For clarity, the full reference for each option is reiterated:

Option	Sub-Option	Reference number for purposes of assessment
Tending / Colchester Borders	Option 1: Southern Land Focus	GCEC1
	Option 2: A133 to Colchester - Ipswich rail line	GCEC2
	Option 3: North to South wrap	GCEC3
North Colchester	Option 1: East of Langham Lane focus	GCNC1
	Option 2: Maximum Land Take	GCNC2
Colchester / Braintree Borders	Option 1: North and South of A12 / Rail Corridor Focus	GCWC1
	Option 2: South of A120 and North of Marks Tey Existing Settlement	GCWC2
	Option 3: South of A120 Focus	GCWC3
	Option 4: Maximum Land Take	GCWC4
West of Braintree	Option 1: Braintree DC only	GCWB1
	Option 2: Braintree DC and Uttlesford DC Land	GCWB2
CAUSE 'Colchester Metro Plan'	N/A - Option 1: Metro Plan submission	GCMP1
Monks Wood	N/A - Option 1: Proposal as submitted	GCMW1

Table 23: Summary of Impacts of the Reasonable Garden Community (GC) Options

GC Option	Sustainability Objectives (SO)									
	1	2	3	4	5	6	7	8	9	10
GCEC1	?	?	+	+	++	++	++	++	++	++
GCEC2	?	?	+	+	++	++	++	++	++	+
GCEC3	?	?/-	?/+	+	++	++	++	++	++	+
GCNC1	?/-	-	?/-	?/-	+	++	+	++	++	+
GCNC2	?/-	-	?/-	?/-	+	++	+	++	++	?
GCWC1	?	?	?/-	?	?/+	++	+	++	++	?
GCWC2	?	?/-	?/-	?	?/+	++	+	++	++	?
GCWC3	?	?	?/-	?	?/+	++	+	++	++	?
GCWC4	?	-	?/-	?/-	?	++	+	++	++	?
GCWB1	?/-	?/-	?/-	?/-	?/+	++	?/+	++	++	?
GCWB2	?/-	?/-	?/-	?/-	?/+	++	?/+	++	++	?
GCMP1	-	--	--	+	++	--	?	?	-	--
GCMW1	?	?/-	?/-	-	?/-	++	+	++	++	?

Overview of Impacts Resulting from the Garden Community Options

As can be seen, the most significantly positive impacts are associated with the Tendring / Colchester Borders Garden Community options, followed by the smaller West Braintree Garden Community sub-option. Those sub-options of the Colchester / Braintree Garden Community that do not seek maximum land-take will also offer largely positive outcomes, although there are additionally many uncertain impacts (i.e. ones that could either be positive or negative at this stage) at this stage and in the absence of confirmed master plans and solutions contained within a Garden Community specific DPD.

Negative impacts can be seen to be most significant through the Metro Plan option of delivering growth requirements. These impacts are largely due to the model not being able to meet Garden City principles, and no single development being of a scale of land that can reasonably be expected to mitigate any negative impacts on-site and within the identified areas.

The North Colchester option will have negative impacts associated with physical limitations on site, regarding landscape implications of being located in close proximity to an Area of Outstanding Beauty (AONB) and also the impacts associated with being an adjacent community to Colchester to the south. The options also

do not benefit from any existing rail links, with effective public transport solutions limited as a result, however the broad location could be considered broadly sustainable aside from these limitations.

The Monks Wood proposal has issues regarding impacts on neighbouring settlements, a lack of rail links and access to the strategic road network. Pertinently, these latter two considerations will likely have significant negative connotations on the neighbouring settlement of Kelvedon, where the closest rail stations exist and where effective rapid bus transit solutions would be unsuitable for integration purposes.

7.4 Key Points from the Cumulative Assessment of the Allocated Garden Communities

7.4.1 Summary of Cumulative Impacts Resulting from the Allocated Garden Communities

The emerging masterplans for the allocated Garden Communities of Tendring / Colchester Borders, Colchester / Braintree Borders and West of Braintree most closely represent:

- Tendring / Colchester Borders – GCEC3
- Colchester / Braintree Borders – GCWC1
- West of Braintree – GCWB1

The following cumulative conclusions can be made of the appraisal of the allocated Garden Community options:

Water

- The AA states that, 'whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice. Therefore, in conclusion, the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.'

Accessibility

- It is not considered that there are any cumulative accessibility issues surrounding the preferred sites, due to their general geographic distribution.

Air Quality

- There may be some cumulative road traffic and associated air quality issues from any of the Garden Communities with any non-strategic site allocations in the Councils' respective Section Twos that are in close-proximity. This should be a focus of the Local Plans' Section Twos.



The Historic Environment

- Cumulative impacts are limited regarding historic environmental features due to the geographic dispersal of the Garden Communities.

Landscape

- Cumulative impacts are limited regarding landscape due to the geographic dispersal of the Garden Communities.

Biodiversity

- The AA identifies the need for a Recreation Avoidance and Mitigation Strategy (RAMS) to be developed and the findings factored into any policies, forthcoming masterplans or Garden Community specific DPDs should increases in the level of recreational land be required at any of the Garden Community allocations.

Neighbouring Properties / Coalescence with Existing Settlements

- There will be no cumulative impacts associated with the effects on occupiers of existing properties and neighbouring areas/towns resulting from the Garden Communities due to their geographic distribution. Garden City principles would have to be adhered to in regard to a surrounding belt of countryside to avoid sprawl, and this minimises any perceived coalescence and resulting impact on existing settlements.
- Cumulatively, no one existing settlement would be negatively affected by any combination of Garden Communities. More holistically, similarly can no single Landscape Character Area be affected by a combination of Garden Communities, of which existing historic settlements form an important part of integrity and sensitivity.
- Benefits will be realised for existing nearby communities regarding an increase in services and local infrastructure in the wider areas beyond the Garden Communities.

Public Transport

- There will be significant positive cumulative impacts resulting from the allocated Garden Communities in response to their individual potential to significantly improve public transport links within the North Essex Authorities area. Positive impacts can also be expected to benefit wider local areas in proximity to the Garden Communities.

Health

- The notion of Garden Communities will have positive synergistic impacts regarding health outcomes, with the level of growth required in the North Essex Authorities being provided through developments that require walking, cycling and public transport designed to be the most attractive forms of local transport.

Town Centres

- There will be significant positive cumulative impacts resulting from the allocated Garden Communities in response to their individual potential to significantly support and improve the



viability of the town centres of Colchester and Braintree within the North Essex Authorities area. Positive impacts can also be expected to benefit wider local areas in proximity to the Garden Communities, with enhanced public transport opportunities to such centres in the locality.

Housing

- All of the Garden Communities can be expected to have significantly positive impacts on housing growth. Cumulatively, these impacts become more positive over the plan period and beyond, with the ability to successfully integrate all housing types and tenures, including gypsy and traveller provision.

Employment

- All of the Garden Communities can be expected to have positive impacts on employment growth. Cumulatively, these impacts can become more positive over the plan period and beyond, with the ability to successfully integrate a wide range of local jobs within easy commuting distance from homes.
- Access and public transport requirements of Garden Communities may in practice result in out-commuting beyond each Garden Community and local centres within the North Essex Authorities area. This should not be considered a criticism of the Garden Communities, being more reflective of travel to work flows and commuting patterns within the North Essex Authorities area.

Mixed-use Developments

- All of the Garden Communities can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community.

Open Space and Sustainable Drainage Systems

- All of the Garden Communities can be expected to have a strong prospect of providing the full suite of open space, allotments/food production areas, biodiversity gains and SuDS. This will ensure cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community.
- There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.
- In addition, the location and scale of any forthcoming recreational land that may be required could result in harmful impacts financially on existing Country Parks within the ECC Country Park model through increased competition.

Soil

- Cumulative impacts are limited regarding the loss of high quality soils due to the geographic dispersal of the Garden Communities and quality of soils at each individual location.

Climatic Factors

- Whereas negative impacts can be expected regarding carbon emissions, this is more relevant to

the level of growth. In this context, the Garden Communities can be expected to offer some small cumulative benefits in so far as energy efficiency can be ensured throughout development in accordance with Garden City principles and the wider policy framework within Section One to which any forthcoming planning applications would have to adhere.

7.5 Recommendations, including those taken on board throughout the SA process

7.5.1 The Section One Policies

The following recommendations have been made throughout the appraisal of the Strategic Section One for Local Plans:

- At the Preferred Options stage, the SA recommended that **Policy SP6** could be more explicit as to the requirements of new development in regards to the historic environment and assets and also scope for the policy to regard surface water flood risk. Both of these recommendations have been factored into the Policy. The Preferred Options SA also recommended that the Policy could respond to aspirations to increase renewable energy generation in strategic scale development opportunities. This recommendation is still valid at this stage, and reiterated within this SA; however it should be acknowledged that such integration is not considered to affect the principle of any development coming forward compliant with Policy SP6, and that the requirement at this stage could be considered premature in light of the emerging Garden Community masterplans and what is viable and achievable. A final recommendation regarding Policy SP6 is that as written there may be some level of conflict between the principle that seeks green and blue infrastructure to be integrated with multi-functional public open space requirements. The incorporation of these should be considered separate requirements, as biodiversity features are unlikely to flourish through human disturbance.
- At the preferred options stage, the SA highlighted that for **Policy SP7**, heritage assets exist across all of the Garden Community areas (and additionally potential archaeological deposits that would need to be excavated). At that stage a recommendation was made that Policy SP7 could include a principle that masterplans seek ways to achieve quality and active management of heritage assets and the historic environment as part of a positive strategy for their conservation and enjoyment. This recommendation has since been incorporated into the Policy.
- It can be considered that the majority of the Garden Community options will have some degree of impact on agricultural land, landscape, sites of nature conservation and the historic environment / heritage assets. It should be acknowledged that such issues are not insurmountable at the scales of development proposed in the options and that effective masterplanning and Garden Community specific DPDs can seek to protect and enhance conditions further.
- At the preferred Options stage, the SA recommended that for **Policy SP9** requirements ensuring the protection and/or enhancement of Marks Tey Brickpit SSSI were included within the Policy, as identified by the fact that the broad location is in the SSSI's Impact Risk Zone (IRZ) for the designation. This recommendation has been effectively factored into the policy.

- At the Preferred Options stage, the SA recommended that for **Policy SP10** requirements ensuring the protection and/or enhancement of the heritage asset of the Saling Hall conservation area and areas of deciduous woodland within and adjoining the site could additionally be included to factor in the Registered Park and Garden of Saling Grove. This recommendation has been effectively factored into the policy.
- It is recommended that a Recreation Avoidance and Mitigation Strategy (RAMS) is developed and the findings factored into any policies, forthcoming masterplans or Garden Community specific DPDs should increases in the level of recreational land be required at any of the Garden Community allocations.

7.5.2 The Allocated Garden Communities

The Garden Communities are being carefully developed through effective masterplanning, in order to positively adhere to issues surrounding physical limitations, in particular access arrangements to sites, infrastructure requirements and strategies regarding permeability and interconnectivity within the new settlements.

The following recommendations are made regarding the selection of Garden Community options within the three broad locations of the allocated Garden Communities.

Tendring / Colchester Borders

- The SA indicates that option GCEC1 is the most sustainable option, due to its smaller scale and therefore comparatively minimal impacts. Despite this, it is possible that mitigation might be required in the form of habitat creation and management at the Garden Community due to possible impacts on wintering birds, as identified within the AA. With this in mind, it may be more appropriate for a larger option to be considered in order to address this possible requirement. Option GCE3 will require some level of mitigation in regard to the presence of Bullock Wood SSSI, and it is recommended that this localised area be protected in future masterplans. It is recommended that severance issues surrounding the A137 are also addressed in masterplans and transport interconnectivity.

Colchester / Braintree Borders

- Options GCWC1 and GCWC3 represent, broadly, the most sustainable options within the Colchester / Braintree Borders area. Option GCWC1 contains the Marks Tey Brickpit SSSI, however its location at the north east boundary in each instance ensures that this designation can be protected and enhanced through the requirements of a surrounding belt of countryside to prevent sprawl and this is recommended. Issues surrounding the Domsey Brook should also be factored into any development of GCWC3 as blue infrastructure. Options GCWC2 and GCWC4 are in close proximity to a Scheduled Monument (a Roman villa 450m south of Warren's Farm to the north) and could affect the setting of this asset, and enhancement of this asset should be sought within the wider detailed masterplan. Impacts on the residential amenity of the settlements of Marks Tey and Little Tey are issues surrounding the options GCWC1, GCWC2 and GCWC4. A buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities and these should be subject to community engagement.



West of Braintree

- The smaller option GCWB1 is considered the most sustainable option in West of Braintree due to an increased likelihood of negative impacts associated with nature conservation and heritage assets to the western boundary of option GCWB2. Both options will need to address the presence of heritage assets throughout the area, particularly in the north associated with the Conservation Area of Great Saling which contains a range of listed buildings including grade II as well as the Registered Park and Garden of Saling Grove, and seek enhancements at the masterplanning stage. It is also recommended that a buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities, specifically in relation to residents in Stebbing Green and Blake End. The masterplans should be subject to community engagement.



8. Next Steps & Monitoring

8.1 Consultation

This Environmental Report will be subject to consultation alongside the Local Plans of the three Local Planning Authorities. There are three statutory consultees or 'environmental authorities' that are required to be consulted for all Sustainability Appraisal and Strategic Environmental Assessment documents. These are:

- The Environment Agency;
- Natural England; and
- Historic England.

In addition to these, consultation will seek to engage the wider community in order to encompass comprehensive public engagement. The North Essex Authorities may additionally wish to invite comments from focussed groups, relevant stakeholders and interested parties. The detailed arrangements for consultation are to be determined by the North Essex Authorities. The environmental authorities and public are to be given 'an early and effective opportunity' within appropriate time-frames to express their opinion. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the 'consultation databases' of the three LPAs. This reflects those persons or bodies who have commented on the SA in previous consultation stages.

PLEASE NOTE:

All comments on the content of this Environmental Report should be sent to each authority's online portal in line with the consultation arrangements of each's Local Plan Draft Publication consultation. Where consultation periods differ between each authority, the following links may need to be checked once consultation periods are live.

Comments should be focused on the detail of this SA that pertains to land use implications or issues relevant to each local authority area.

Please check the following links for more information, and direction to relevant consultation portals:

Regarding Braintree District Council:

https://www.braintree.gov.uk/info/200137/consultations/96/contribute_to_a_council_consultation

Regarding Colchester Borough Council:

<http://www.colchester.gov.uk/article/12650/Consultations>

Regarding Tendring District Council:

<http://www.tendringdc.gov.uk/consultation>

8.2 Adoption Statement

Upon adoption Local Plans will be accompanied by an Adoption Statement which will outline those monitoring indicators most appropriate for future monitoring of the Plan in line with Regulation 16 of the Environmental Assessment of Plans and Programmes Regulations 2004. In accordance with Regulation 16 of the Environmental Assessment of Plans and Programmes Regulations 2004, an Adoption Statement is required to address each of the following issues:

- How sustainability considerations have been integrated into the development plan document (Local Plan);
- How the options and consultation responses received on the development plan document (Local Plan) and sustainability appraisal reports have been taken into account;
- The reasons for choosing the development plan document (Local Plan) in light of other reasonable alternatives; and
- Monitoring measures.

8.3 Monitoring

The significant sustainability effects of implementing a Local Plan must be monitored in order to identify unforeseen adverse effects and to be able to undertake appropriate remedial action. The Sustainability Framework contained in this report includes suggested indicators in order to monitor each of the Sustainability Objectives, however these may not all be collected due to limited resources and difficulty in data availability or collection.

Guidance stipulates that it is not necessary to monitor everything included within the Sustainability Framework, but that monitoring should focus on significant sustainability effects, e.g. those that indicate a likely breach of international, national or local legislation, that may give rise to irreversible damage or where there is uncertainty and monitoring would enable preventative or mitigation measures to be taken.

The monitoring indicators for each broad sustainability theme relevant to the North Essex area are included below.

Table 24: Monitoring Measures

SA Objective	Potential Indicators
1. Create safe environments which improve quality of life, community cohesion	<ul style="list-style-type: none"> - All crime – number of crimes per 1000 residents per annum - Number of new community facilities granted planning permission - Number of new cultural facilities granted planning permission, including places of worship

SA Objective	Potential Indicators
2. To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	<ul style="list-style-type: none"> - The number of net additional dwellings - Affordable housing completions - Number of zero-carbon homes completed - Number of additional Gypsy and Traveller pitches - Number of starter homes completed - Number of homes for older people completed
3. Improve health/reduce health inequalities	<ul style="list-style-type: none"> - Percentage of new residential development within 30mins of public transport time of a GP or hospital - Percentage of new residential development that adheres to Natural England's Accessible Natural Greenspace Standards - Percentage of new residential development within walking and cycling distance to schools - Percentage of new residential development within walking and cycling distance to sport and recreation facilities / open space
4. To ensure and improve the vitality & viability of centres	<ul style="list-style-type: none"> - Amount of completed retail, office and leisure development delivered (and in centres) - Amount of completed retail, office and leisure development across the three authority area
5. To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	<ul style="list-style-type: none"> - Amount of floor space developed for employment, sqm - Successful employment use applications in rural areas - Number of jobs created in the ports - Number of developments approved associated with the tourism sector - Level 2 qualifications by working age residents. - Level 4 qualifications and above by working age residents. - Employment status of residents. - Average gross weekly earnings. - Standard Occupational Classification.
6. To value, conserve and enhance the natural environment, natural resources, biodiversity and	<ul style="list-style-type: none"> - Impacts (direct and indirect) on designated sites - Amount of development in designated areas - Area of land offset for biodiversity

SA Objective	Potential Indicators
geological diversity	
7. To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion	<ul style="list-style-type: none"> - Percentage of journeys to work by walking and cycling and percentage of journeys to work by public transport
8. To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	<ul style="list-style-type: none"> - Number / amount of new homes / employment development completed at ward level within Growth / Regeneration Areas - Percentage of new development within 30 minutes of community facilities (as defined by each authority) - Percentage of new residential development within 30 minutes of public transport time of a GP, hospital, primary and secondary school, employment and a major retail centre - Additional capacity of local schools / incidents of new school applications
9. To conserve and enhance historic and cultural heritage and assets and townscape character?	<ul style="list-style-type: none"> - Percentage of new and converted dwellings on previously developed land - Number of listed buildings demolished, repaired or brought back to use, including locally listed buildings - New Conservation Area Appraisals adopted - Number of Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens (and percentage at risk) - Area of highly sensitive historic landscape characterisation type(s) which have been altered and their character eroded - Number of major development projects that enhance or detract from the significance of heritage assets or historic landscape character - Percentage of planning applications where archaeological investigations were required prior to approval or mitigation strategies developed or implemented
10. To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.	<ul style="list-style-type: none"> - Total CO2 emissions - Renewable Energy Installed by Type - Number of zero carbon homes delivered
11. To improve water quality and address water	<ul style="list-style-type: none"> - Quality of Rivers (number achieving ecological good status) - Number of planning permissions granted contrary to the advice of the Environment

SA Objective	Potential Indicators
scarcity and sewerage capacity	- Agency on grounds of water quality
12. To reduce the risk of fluvial, coastal and surface water flooding	<ul style="list-style-type: none"> - Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds - Number of SuDS schemes approved by ECC
13. To improve air quality	- Number of Air Quality Management Areas
14. To conserve and enhance the quality of landscapes	<ul style="list-style-type: none"> - Percentage of new and converted dwellings on previously developed land - Number of proposals permitted within areas noted for their high landscape value - Number of proposals permitted contrary to a desire to restrict coalescence
15. To safeguard and enhance the quality of soil and mineral deposits	<ul style="list-style-type: none"> - Percentage of new development on high quality agricultural land (ALC) - Number of developments proposed within MSAs - Contaminated land brought back into beneficial use, hectares



Appendix 1: Appraisal of the Garden Community Options and Alternative Permutations

Why Garden Communities?

Meeting Objectively Assessed Need (OAN) for Housing

Within the Issues and Options Local Plans of Colchester, Braintree and Tendring, the option of Garden Communities, or 'new settlements' was explored, in response to the emerging growth needs identified across the Housing Market Area (HMA), as identified in the initial work from a Strategic Housing Market Assessment (SHMA) 2014. This SHMA provided estimated requirements representing a significant increase over the previous targets of the three authorities. These requirements were identified 'objectively', responding to the Objectively Assessed Need (OAN) for housing as required to be identified across HMAs in the NPPF.

Further work was carried out to focus requirements for the three authorities' Plans, reflecting up-to-date evidence available on population growth, and housing supply and demand. This was presented in the 'Braintree District Council, Chelmsford City Council, Colchester Borough Council, Tendring District Council - Objectively Assessed Housing Need Study (Peter Brett Associates)' which was finalised in July 2015.

'Traditional' Growth Solutions and 'New Towns'

The authorities have a strong history of making use of, or redeveloping previously developed land (PDL). As a result of this, the authorities have a very limited and diminishing supply of PDL (brownfield sites) that can contribute to the accommodation of the additional growth requirements. Objectively Assessed Need (OAN) is at a level which means that brownfield development can only reasonably accommodate a very small proportion of total growth requirements.

Focussing growth or new development within and around existing settlements proportionately represents the foremost strategy to deliver sustainable development spatially within this Section One and the respective Section Twos of the North Essex Authorities. This traditional approach to development ensures that new communities are located in a sustainable manner in terms of distances to existing infrastructure, jobs and services. However as urban areas continue to expand further into the countryside similarly can development become more distanced from centres, and put pressure on existing infrastructure and services. Whereas the principle of focusing development in this manner is established as a traditional solution to meeting housing needs, growth requirements are such that this would have to occur exponentially over the plan period and beyond. In short, it can not be seen as the solution to meeting housing needs forever.

The distribution of growth within and around existing settlements can be seen as meeting short-medium needs within the context of Objectively Assessed Need (OAN) for housing over the plan period. With housing needs so high in the North Essex Authorities, issues surrounding the sustainability of any further expansion of existing settlements were quickly recognised in the plan-making processes of the North Essex Authorities,



particularly regarding the impacts on existing infrastructure.

The NPPF requires OAN to be met in full across the Housing Market Area (HMA). The position of the LPAs in maintaining and identifying a 5 year housing land supply (as additionally required by the NPPF) was such that the North Essex Authorities identified that solutions to meeting housing needs would have to be addressed through new settlements. This approach was decided to address the need for new development to meet the shortfalls in meeting OAN in the strategic area in the latter stages of the plan period and beyond, whilst also maximising sustainability through planning at a scale or critical-mass that could deliver the infrastructure required to support such growth outright without affecting the viability of proposals. This approach seeks to avoid the pitfalls of more traditional development, delivering communities that are self-sustainable and with the principle that infrastructure would be delivered first in each new community's progression.

In addition to the notion of 'traditional approaches' to strategic growth, as set out above, this SA explores the differences in sustainability of 'new towns' against the Garden Community model. New towns in context represent development at the same scale, but without the interventionist approach as adopted by the North Essex Authorities.

The Principle of 'Garden Communities' in Context

It is vital that new developments which accommodate the housing growth required create sustainable, well-designed communities, supported by the appropriate infrastructure. In response to Paragraph 52 of the National Planning Policy Framework (NPPF), the notion of new settlements, or 'Garden Communities', is established. Paragraph 52 of the NPPF states,

'The supply of new homes can sometimes be best achieved through planning for larger scale development, such as new settlements or extensions to existing villages and towns that follow the principles of Garden Cities.

Working with the support of their communities, local planning authorities should consider whether such opportunities provide the best way of achieving sustainable development'.

More recently, and in addition to the content of the NPPF, the Housing White Paper (February, 2017) states of Garden Villages, in Section 1.35,

'We need to make the most of the potential for new settlements alongside developing existing areas. Well-planned, well-designed, new communities have an important part to play in meeting our long-term housing needs. Provided they are supported by the necessary infrastructure, they are often more popular with local communities than piecemeal expansion of existing settlements.'

The Housing White Paper adds that,

'The Government is interested in the opportunities that garden cities, towns and villages might offer for bringing large-scale development forward in ways that streamline planning procedures and encourage locally-led, high quality environments



to be created.'

In October 2016 the Leaders and Chief Executives of Braintree, Colchester, Tendring and Essex Councils asked Lord Kerslake to lead a peer review to look at their approach to delivering Garden Communities in North Essex. The 'North Essex Garden Communities Peer Review' (Lord Bob Kerslake Published: January 2017) acknowledges the principle of Garden Communities being required in the strategic area. In setting the context for the review, the report states that,

'In common with many areas of the UK, Essex faces a significant challenge to deliver the required number of homes to sustain both its economic aspirations and the needs of its population. Traditional approaches to housing development have led to problems with delivery and sustainability. The four councils have entered into a collaborative partnership to deliver a significant proportion of the housing required for this part of Essex on Garden Community principles, together with the economic and employment opportunities and the transport and community infrastructure to support these new communities.'

Should there be 'Garden Communities', 'New Towns' or more 'Traditional Approaches' to Strategic Scale Growth in the North Essex Area?

As stated in the above sub-sections, 'traditional approaches' to strategic scale growth often respond to expansions of existing urban areas and other settlements within the strategic area. Whereas this is an established approach and sustainable notionally, the OAN requirements of the strategic area are sufficiently high that questions have to be asked of the sustainability of growth in such areas, particularly socially and environmentally. New Towns respond to strategic growth delivered in a more traditional manner than the interventionist approach adopted by the North Essex Authorities in ensuring compliance with the Garden City model.

It is appropriate and necessary to address such questions within this SA. The following table explores the comparative sustainability pros and cons of each approach in rationalising and aiding the North Essex Authorities in selecting the approach of allocating Garden Communities within their Local Plans. Please note that the criteria / objective based approach to assessing the sustainability of each approach is derived from Stage A of the SA process, as outlined and explained in Section 2 of this report.

The assessment follows a number of common assumptions to enable a comparable assessment. Firstly is that of scale, and the ability to meet OAN over the plan period. For this purpose, traditional approaches to the delivery of the growth required would have to meet that of the identified plan period shortfall of 7,500 as identified as the number developable through the Garden Communities in the latter stages of the plan period. Secondly, a key assumption surrounds the notion that the solutions have to be met beyond the plan period, in order to ensure solutions in the plan period do not exacerbate sustainability issues beyond 2033. Thirdly, specific locations are not taken into account within this assessment, which explores principles notionally rather than attempt to compare the sustainability merits of developing different areas of land as identified throughout the plan-making process. Such comparisons are explored in other sections of this SA and the LPA's respective Section Two SAs as appropriate and against criteria more specifically designed for this purpose. This assesses and compares options on a 'like with like' basis. Further to specific locations not being identified or used in the following appraisal, it must also be assumed that the level of growth required

would lead to the need to expand and extend a wide range of existing settlements, including those in more rural areas commensurate to a comparable level of existing population and sustainability (in the form of services) across the three authority's settlement hierarchies.

For the purposes of this assessment, impacts are highlighted using the following key:

Impact	Symbol
The approach is likely to meet the sustainability criteria.	+
It is uncertain / unknown whether the approach is likely to meet the sustainability criteria	?
The approach is unlikely to meet the sustainability criteria.	-
No impact.	N

Commentary is also included on a sustainability objective basis.

Table 25: 'Garden Communities', 'New Towns' or 'Traditional Approaches' to Strategic Scale Growth

Sustainability Objective	Sustainability Criteria	'GCs'	'New Towns'	'Traditional Approaches'
1. Create safe environments which improve quality of life, community cohesion	Will it improve / supply community facilities for young people?	+	+	?
	Will it increase cultural activities or suitable development to stimulate them?	+	+	+
	Will it support cultural identity and social inclusion?	+	+	-
	Will there be measures to increase the safety and security of new development and public realm?	+	+	+
Commentary	A key benefit to the notion of Garden Communities is that existing communities are comparably less affected than those that will experience strategic scale growth in neighbouring areas. This is also true of New Towns. Negative impacts on existing communities through urban expansion is likely to increase exponentially at the levels of growth required, resulting in issues surrounding social inclusion. The scale and principles of Garden Communities is such that coalescence with existing settlements can be minimised, and this can also be seen as equally valid for New Towns			



Sustainability Objective	Sustainability Criteria	‘GCs’	‘New Towns’	‘Traditional Approaches’
	through general planning policy principles. The notion and scale of Garden Communities and New Towns can similarly ensure the inclusion of a number of community facilities that otherwise would not be likely to be forthcoming through the delivery of smaller growth solutions due a lack of available land.			
2. To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford	Will it increase the range and affordability of housing to support the growing population and for all social groups?	+	+	?
	Does it respond to the needs of an ageing population?	+	?	?
	Will it provide appropriate rural affordable housing?	?	?	-
	Will it deliver well designed and sustainable housing?	+	+	-
	Will it contribute to meeting Gypsy and Traveller pitch requirements of the GTAA?	+	?	-
Commentary	<p>At the scale of growth required to meet OAN, it is unlikely that traditional approaches to growth focused in and around existing settlements would be able to provide rural affordable housing in an appropriate manner, stretching the definitions of what could be considered appropriate and proportionate for the majority of smaller settlements within the three authority’s settlement hierarchies. Similarly, aspirational targets for affordable housing would be unlikely to be appropriate in the majority of such settlements, with a greater possibility of higher affordable housing thresholds being viable through exploring new settlements. Garden Communities and New Towns can ensure that affordable housing can be appropriately located with the context of a whole settlement, through masterplanning, rather than being located disparately in peripheral or marginal areas of existing settlements. The notion of Garden Communities and New Towns can also ensure that housing can be well related to the new supporting infrastructure, services and facilities that they will be required to provide. This is also true of considering the needs of Gypsy and Traveller communities within Garden Communities, to ensure access to facilities. In contrast it can be considered comparably unlikely that traditional approaches to strategic growth and New Towns, with more reliance on market forces, would provide accommodation for Gypsies and Travellers as well as more broadly in regard to the requirements for a mix of dwelling types (including for older people). The relationship of development and the surroundings regarding design can be considered more appropriate in the context of Garden Communities, particularly surrounding densities. Arguments as to what can be considered ‘proportionate’ aside, at the scales of growth required to meet OAN a focus on the expansion of existing settlements only is</p>			

Sustainability Objective	Sustainability Criteria	'GCs'	'New Towns'	'Traditional Approaches'
	likely to result in development at densities that are not appropriate in consideration of local characteristics, particularly in more rural settlements. This is also likely to further affect the delivery of a range of housing types.			
3. Improve health / reduce health inequalities	Will it ensure access to health facilities?	+	?	?
	Will it ensure access to sport and recreation facilities, open space and accessible green space?	+	+	?
	Will it encourage access by walking or cycling?	+	+	?
Commentary	<p>Access to health services is an important consideration in the location of new development, both in terms of availability in close proximity and those that have existing capacity. It should be acknowledged however that the planning system can not ensure or determine the provision of new health facilities as part of development schemes. With this in mind, the assessment of Garden Communities, New Towns and traditional approaches to growth are based on an assumption regarding delivery models. Regarding Garden Communities, the model is that LPAs essentially act as the developer in their promotion and delivery. This model allows collaborative working and consultation with the appropriate health service providers and commissioning groups. Large scale schemes in this regard also identify issues regarding existing capacity and identified need for health facilities early on in the process, as opposed to issues becoming apparent to their full extent once the cumulative impacts from a larger number of smaller developments are known. The availability of land for new health facilities is similarly an issue regarding more traditional approaches to strategic growth. This is also the case regarding sport and recreation facilities, open space and accessible green space requirements on a site by site basis. It is considered that the scale of Garden Communities and New Towns, in addition to their proposed delivery model, ensures that sport and recreation facilities, open space and accessible green space requirements are of a scale appropriate to the level of growth, and that all new facilities are located in accessible locations to housing by walking and cycling.</p>			
4. To ensure and improve the vitality & viability of centres	Will it prevent loss of retail and other services in rural areas?	?	?	+
	Will it promote and enhance the viability of existing centres by focusing development in such centres?	+	+	+



Sustainability Objective	Sustainability Criteria	‘GCs’	‘New Towns’	‘Traditional Approaches’
	Will it locate development in close proximity to town centres?	?	?	+
	Will it locate development within easy public travelling distance to town centres?	+	?	?
	Will it improve public transport networks to town centres?	+	?	?
Commentary	<p>The vitality and viability of centres can be viewed as benefitting from increased footfalls and from specific regeneration schemes. A focus on existing settlements through traditional approaches will in principle support those centres, although it should be acknowledged that the Garden Communities, developed in line with Garden City principles (as set out later on this report), will be developed in line with ensuring public transport choices to existing centres in order to support the function of town centres. This is also a key criterion in the identification of appropriate broad locations for Garden Communities, and their selection, by the North Essex Authorities. It is uncertain whether New Towns would seek such a location in the first instance. Garden Communities and New Towns can both be expected to come forward in the latter stages of the plan period and beyond, with short-medium term growth directed to existing settlements proportionately. With this in mind, the Local Plans of Braintree, Colchester and Tendring will seek to ensure the benefits from both the options explored in this section.</p>			
5. To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways	Will it improve the delivery of a range of employment opportunities to support the growing population?	+	+	?
	Will it tackle employment associated deprivation?	N	N	N
	Will it enhance the area’s potential for tourism?	N	N	N
	Will it promote development of the ports?	N	N	N
	Will it encourage the rural economy and diversification of it?	?	?	+
	Will it support business innovation, diversification, entrepreneurship and	+	+	?



Sustainability Objective	Sustainability Criteria	‘GCs’	‘New Towns’	‘Traditional Approaches’
	changing economies?			
	Will it improve existing training and learning facilities and/or create more facilities?	+	+	-
	Will the employment opportunities available be mixed to suit a varied employment skills base?	+	+	?
Commentary	<p>Regarding the provision of employment opportunities as part of new development, Garden Communities and New Towns can be considered to have a better possibility of ensuring this is not only integrated, but in the case of Garden Communities also in appropriate locations for sustainable transport infrastructure. In contrast, more traditional approaches can be seen as having comparably more difficulty should appropriate locations not be forthcoming. There will also be uncertainties surrounding the availability of land, which can be seen as exponentially less sustainable as more peripheral locations are sought in the latter stages of the plan period and beyond. At the quantum of growth required, it can be expected that all existing settlements that currently experience a certain level of population and services will be required for expansion across the strategic area. This will include rural settlements and there can be expected to be some positive implications regarding rural employment growth as a result, however likely not across a range of sectors as required. Comparably, there will be uncertainties surrounding the Garden Communities and New Towns regarding their status within the countryside and whether employment at such locations as appropriate would constitute or reflect rural employment needs. The scale of Garden Communities and New Towns, and the concentration of growth requirements at a few locations across the strategic area allows there to be significant infrastructure planned within the wider developments, and in early stages of each scheme’s development (however there is less chance of this being ensured through New Towns in the absence of a specific ‘infrastructure first’ commitment). There is also the opportunity for development to be supported by the means for effective home working. For this reason, positive impacts have been highlighted for business innovation and learning facilities. More traditional approaches of extensions to existing settlements will comparably have more difficulty in delivering such facilities due to assumptions regarding the availability of land in sustainable locations. Thresholds for the delivery of new infrastructure are also unlikely to be met in some instances due to a reliance on a larger number of smaller sites. Whereas facilities are likely to be provided through a cumulative requirement, there is further uncertainty surrounding where these can be provided with inclusive access to all new communities, and whether such access has been effectively ensured throughout the design and layout of multiple developments.</p>			

Sustainability Objective	Sustainability Criteria	'GCs'	'New Towns'	'Traditional Approaches'
6. To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	Will development have a potential impact on a national, international or European (Natura 2000) designated site (SPA, SAC, Ramsar, SSSI)?	?	?	-
	Will it maintain and enhance sites otherwise designated for their nature conservation interest?	+	+	-
	Will it conserve and enhance natural/semi natural habitats?	+	+	-
	Will it conserve and enhance species diversity, and in particular avoid harm to indigenous BAP priority species?	+	+	?
Commentary	<p>For the purposes of comparison, more positive impacts have been highlighted for Garden Communities and New Towns due to their scale and scope to incorporate significant areas of recreational land to offset any recreational impacts on designated sites; the AA adds that Recreation Avoidance and Mitigation Strategy (RAMS) is required for the strategic area, which may include increased recreational land at Garden Communities / New Towns. More traditional approaches to strategic growth, in particular a possibly large number of comparably smaller extensions to existing settlements (increasing exponentially over the plan period to meet trend-based future growth needs), are unlikely to be able to factor in such recreational land requirements on site in all instances and to the scale required without significantly affecting the scale of developable areas. Similarly are such approaches unlikely to offer a significant contribution to mitigate impacts on more local designations for nature conservation. Garden Communities and New Towns have been assessed, once more due to their scale, as having the capability to expand and enhance such designations, and integrate a network of green and blue infrastructure. This is primarily linked to the ability to not only mitigate negative impacts, but ensure enhancement due to their scale.</p>			
7. To achieve more sustainable travel behaviour, reduce the need to travel	Will it increase and/or improve the availability and usability of sustainable transport modes?	+	?	?
	Will it seek to encourage people to use alternative modes of transportation other than private vehicle?	+	+	?

Sustainability Objective	Sustainability Criteria	'GCs'	'New Towns'	'Traditional Approaches'
and reduce congestion	Will it lead to the integration of transport modes?	+	?	-
	Will it improve rural public transport?	?	?	?
	Will it increase the uptake or viability of walking and cycling as methods of transportation, through new infrastructure or integration?	+	+	-
Commentary	<p>A key principle of Garden Communities is ensuring the integration and enhancement of public transport networks. This not only ensures significant positive impacts for the new communities, maximising the potential for modal shift, but also offers wider benefits. This is considered less likely to be the case for New Towns, where broad locations may not be identified with this specifically in mind. The implications of scale and possibilities in focusing the level of growth required to a few strategic locations ensures that jobs, services and facilities are integrated into the communities as appropriate. In the case for Garden Communities and New Towns, this similarly ensures that sustainable transport, walking and cycling become more viable for a large number of everyday needs through the provision of such needs on site. In contrast, more traditional approaches are unlikely to have the scale to make this viable; however benefits exist in the form of existing public transport infrastructure in close proximity. Likely issues exist however in the integration of new and existing developments, and a need for a joined up approach particularly regarding safe and secure walking and cycling routes.</p>			
8. To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development	Will it contribute positively to reduce social exclusion by ensuring access to jobs, shopping, services and leisure facilities for all?	+	+	?
	Will it concentrate development and facilities where access via sustainable travel is greatest?	+	?	?
	Will it minimise congestion at key destinations / areas that witness a large amount of vehicle movements at peak times?	+	+	-
	Would the scale of development require significant supporting transport	-	-	?



Sustainability Objective	Sustainability Criteria	‘GCs’	‘New Towns’	‘Traditional Approaches’
	infrastructure in an area of identified need?			
	Will it ensure adequate school places (through expansion / new facilities) and early years provision to support growth?	+	+	-
	Will it ensure the required improvements to utilities infrastructure?	?	?	?
	Will it ensure the required improvements in capacity to GP services?	?	?	-
	Will it provide a suitable amount of sports, recreational, leisure and open space facilities?	+	+	-
Commentary	<p>Traditional approaches to strategic level growth are likely to lead to development becoming more and more distanced from centres, with a deteriorating level of accessibility over time. With this in mind, it is important to reflect the timescales relevant to the Section One for Local Plans, with solutions to growth needs being sought beyond the plan period and to meet future growth requirements. Nonetheless, traditional approaches would still be required to have strategic road access to be suitable and appropriate, with an intention towards significant modal shift in to more sustainable transport methods. For this reason, impacts are largely uncertain in the context of this high level appraisal, reflecting a broad level of existing sustainability but discounting broad or specific locations for the expansion of existing settlements. Despite this, such a focus on existing settlements, particularly that of Colchester, can be expected to increase traffic through AQMAs. Garden Communities and New Towns can be assessed in a slightly different way, in so far as they require a level of self-sustainability and the integration of new job opportunities with additional new services, facilities and infrastructure. This is only possible at the scales required of focusing the growth requirements to a number of single areas. For this reason, positive impacts have been highlighted for Garden Communities regarding accessibility and infrastructure, with uncertain impacts highlighted for New Towns that may not be specifically identified with existing transport infrastructure in mind. Negative implications are highlighted for both Garden Communities and New Towns regarding the need for significant supporting transport infrastructure. These impacts are not however reflective of the deliverability of Garden Communities or New Towns in the strategic area, or whether these requirements are a barrier to the principle of development (or indeed insurmountable), but reflective of the scale of what is needed to support the level of growth.</p>			



Sustainability Objective	Sustainability Criteria	‘GCs’	‘New Towns’	‘Traditional Approaches’
9. To conserve and enhance historic and cultural heritage and assets and townscape character?	Will it protect and enhance designations, features and areas of historical, archaeological and cultural value in both urban and rural areas?	?	?	-
	Will it have a negative impact on the significance of a designated historic environment asset or its setting?	?	?	?
	Will it enhance the range and quality of the public realm and open spaces?	+	+	-
	Will it reduce the amount of derelict, degraded and underused land?	N	N	N
	Does it encourage the use of high quality design principles to respect local character?	+	+	?
	Will / can any perceived adverse impacts be reduced through adequate mitigation?	+	+	-
Commentary	<p>Impacts on the historic environment are largely relevant on a site by site basis only, however it can be expected that Garden Communities and New Towns will have a greater possibility of impacting on a larger number of assets due to their scale. Despite this, at the scale of growth required traditional approaches can also be seen as having potential negative impacts associated with their relationship with existing developments, some of which are likely to have some level of historic importance due to the prevalence of historic settlements in the strategic area. Historic settlements as assets in themselves can also be expected to have negative impacts associated with any ribbon development and aspirations to maintain settlement shape and form. In a broader context, impacts can be perceived as commensurate to the scope for mitigation between the options, with positive impacts highlighted for Garden Communities and New Towns commensurate to their scale, and more negative implications surrounding traditional approaches. It should be noted however that should impacts be significant and mitigation unacceptable, then planning permission is unlikely to be granted for either option or proposals in need of revision. The scale of Garden Communities and New Towns and the ability to plan for integrated sustainable outcomes from the outset of the process ensures that an attractive and effective public realm can be ensured throughout; this is likely to be comparably difficult for smaller traditional development schemes regarding integration with existing areas and open space requirements having implications on the size of developable areas. Garden Community, New Town and more traditional approaches to strategic growth can be expected to have negative impacts on the use of brownfield land, however</p>			

Sustainability Objective	Sustainability Criteria	'GCs'	'New Towns'	'Traditional Approaches'
	it should be acknowledged that all options are only being explored due to the absence of available brownfield land and its allocation for development purposes in the earlier stages of the plan period in all scenarios (including allowances made for windfall sites in the Section Twos of the LPA's Local Plans).			
10. To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.	Will it reduce emissions of greenhouse gases by reducing energy consumption?	?	?	?
	Will it lead to an increased generation of energy from renewable sources?	?	?	?
	Will it encourage greater energy efficiency?	+	+	+
	Will it improve the efficient use of natural resources, minimising waste and promoting recycling?	+	+	+
Commentary	The principle of Garden Communities, New Towns and more traditional approaches to delivering strategic level growth can be expected to be energy efficient and minimise waste and promote recycling. Uncertain impacts have been highlighted for reducing energy consumption and renewable energy where this detail is more relevant to individual schemes.			
11. To improve water quality and address water scarcity and sewerage capacity	Will it lead to no deterioration on the quality of water bodies?	0	0	0
	Will water resources and sewerage capacity be able to accommodate growth?	?	?	?
Commentary	Associated with the level of growth required, Garden Communities, New Towns and more traditional approaches to delivering strategic growth can be expected to have uncertain implications on water quality. This is informed by the HRA Screening Assessment and Appropriate Assessment (AA) completed for the Plan. The AA concludes that, 'whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice. Therefore, in conclusion, the measures provided in the Section 2 Local Plans will also provide sufficient			



Sustainability Objective	Sustainability Criteria	‘GCs’	‘New Towns’	‘Traditional Approaches’
	certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.’ Regarding water resource and sewerage capacity, all option scan be expected to be similar in terms of impacts, where infrastructure capacities and improvements are related to the level of growth in the Strategic Area.			
12. To reduce the risk of fluvial, coastal and surface water flooding	Will it include Sustainable Drainage Systems (SuDS) in new developments and will their integration be viable?	+	+	+
	Will it avoid development in areas at risk of flooding (fluvial, coastal, surface water)?	+	+	+
	Will it avoid increasing flood risk (fluvial, surface water, groundwater) in areas away from initial development?	+	+	+
Commentary	Garden Communities, New Towns and traditional approaches to delivering strategic growth can be expected to incorporate SuDS as required. Similarly developable areas would have to avoid those areas at risk of flooding as a prerequisite of any successful planning application.			
13. To improve air quality	Will it improve, or not detrimentally affect air quality along the A12 or A120?	?	?	?
	Will it direct growth away from AQMAs?	+	+	-
	Will it seek to improve or avoid increasing traffic flows generally?	+	+	+
Commentary	The sustainability of Garden Communities and New Towns is largely dependent on accessibility to the strategic road network in the strategic area; as a result access to one of the A120 or A12 is likely to be required of such schemes. With this in mind, uncertain impacts have been highlighted for the resultant air quality impacts along these roads associated with strategic scale development. This also takes into consideration the requirement for significant public transport network improvements to sustain and serve each Garden Community in kind, as required by Garden City principles. Whereas an assumption is made that these principles are not used to shape the development of New Towns in this assessment, similarly will these be required to ensure that development is sustainable and suitable. In contrast, traditional approaches to growth can be			



Sustainability Objective	Sustainability Criteria	‘GCs’	‘New Towns’	‘Traditional Approaches’
	<p>expected to be more numerous and individually smaller in scale; this will ensure a similar degree of uncertainty at this stage, where access to the A12 or A120 would still be required (albeit not necessarily directly), and the cumulative impacts could be significant without any single scheme being of a scale to ensure additional junctions or significant improvements. The focus of development to existing settlements, in particular Colchester as the principle settlement in the strategic area (and proportionately that which can be expected to experience the most growth) will also have negative implications surrounding traffic movements through AQMAs. Despite this, both options can be expected to seek to improve or avoid increasing traffic flows generally.</p>			
<p>14. To conserve and enhance the quality of landscapes</p>	<p>Will landscapes sensitive to development be protected?</p>	-	-	-
	<p>Will it lead to rural expansion or development outside development boundaries/limits that increases coalescence with neighbouring settlements?</p>	?	?	?
	<p>Is the scale / density of development in keeping with important and valued features of the local landscape?</p>	?	?	?
<p>Commentary</p>	<p>A broad assessment of landscape implications for the principle of Garden Communities, New Towns and traditional approaches highlights that all options will have negative landscape implications, pending more detailed assessment of specific sites. The impacts identified here reflect the scale of growth required at the plan level. Garden Communities and New Towns represent large scale greenfield development, where a more piecemeal approach of a larger number of smaller extensions to existing settlements will also see the loss of greenfield land, with additional possible implications surrounding the lack of available land to successfully mitigate impacts, and the reality that these impacts would be realised for a larger number of existing communities. It should be reiterated at this point however that the principle of extensions to existing settlements is not in itself unsustainable regarding landscape impacts, but impacts raised are more indicative of the amount of extensions required to meet the levels of growth within the plan period and beyond. Issues surrounding coalescence are similar, however it should be noted that impacts can be mitigated at the Garden Community scale in the incorporation of required measures and safeguarded land to prevent sprawl. More traditional approaches to strategic growth are unlikely to be acceptable in principle should coalescence be a concern and similarly unlikely to be granted planning permission. The secondary effects of this diminish the likelihood of this being a suitable option at the scales of growth required, or else would lead to increases in density on acceptable areas of land. Garden Communities in principle would not lead to unacceptable densities on the overall site and this can also be expected to be the case for New</p>			

Sustainability Objective	Sustainability Criteria	'GCs'	'New Towns'	'Traditional Approaches'
	Towns; however careful consideration should be given to the suitability of densities on developable areas in reflection of the wide range of other land uses required by Garden City principles.			
15. To safeguard and enhance the quality of soil and mineral deposits?	Will it avoid the loss of high quality agricultural land?	-	-	-
	Will it avoid the sterilisation of mineral deposits / is the site within a Minerals Safeguarding Area (MSA)?	N	N	N
	Will it support or lead to the remediation of contaminated land, avoiding environmental pollution or exposure of occupiers or neighbouring land uses to unacceptable health risk?	N	N	N
Commentary	Garden Communities, New Towns and more traditional approaches to strategic growth can be expected to have negative impacts associated with the loss of agricultural land. Impacts related to mineral deposits and contaminated land have not been identified at this broad level and can only be assessed on a specific site by site basis.			

The Identification of Reasonable Garden Community Options

The North Essex Authorities allocate three Garden Communities at this stage of the plan-making process: 'Tending / Colchester Borders', 'Colchester / Braintree Borders' and 'West of Braintree'. Alternatives have been identified through the three authorities' respective Local Plan call-for-sites processes. Some were rejected outright due to scale, and explored within the context of Section Two allocations. The North Essex Authorities also explored alternative locations in the formulation of the Issues and Options stages of the Plans, but these were rejected early on in the process due to deliverability considerations including the availability of sites, and an overall evaluation of the combination of allocations and policies that would produce the most sustainable pattern of growth.

Garden Community options have been validated throughout the Sustainability Appraisal process (see Annex C) and have been subject to public consultation throughout the plan-making process. Public views have been taken into account throughout the SA process, resulting in the content and findings of this report. These views, coupled with updates to the Section One plan evidence base, have resulted in the re-assessment of all options at this stage, and these are presented within this report.

The threshold for the identification of what constituted a reasonable Garden Community option is 5,000 dwellings. This is broadly based on that of the threshold for the required provision of a new secondary school from a mixed-use development in the ECC Developer's Guide to Infrastructure Contributions - Revised Edition 2016, and otherwise identified as representing a sufficient scale of development to meet the majority of day to day needs of new residents. This will ensure self-sustainability in providing sufficient new homes, fostering economic development, providing new and improved infrastructure, addressing education and healthcare needs and ensuring high quality outcomes.

The following represent all of the Garden Community options that were proposed by developers / landowners within the Strategic Area (please note that the indicative yields presented are for each option in its entirety and beyond those which can be delivered in the Plan period):

Table 26: The Garden Community Options

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
Tending / Colchester Borders	Option 1: Southern Land Focus	GCEC1	- 6,611 homes - 7 ha mixed use - 5 ha employment land	The Tending / Colchester Borders Garden Community has more opportunities for sustainable travel links into Colchester than other options, a major regional centre. The Garden Community is also in close proximity to the University
	Option 2: A133 to Colchester - Ipswich rail line	GCEC2	- 8,834 homes - 10 ha mixed use - 5 ha employment land	

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
	Option 3: North to South wrap	GCEC3	<ul style="list-style-type: none"> - 11,409 homes - 13 ha mixed use - 7 ha employment land 	<p>and high quality employment opportunities. As one of the major centres in the region, Colchester offers a full range of facilities including a hospital and is a major shopping and cultural destination. This would provide high order services not on the garden community within a closer proximity with the opportunities for public transport, walking and cycling links.</p> <p>Colchester is also a major employer in the region and provides a good level and mix of employment opportunities. There is the opportunity to access these opportunities via public transport, walking and cycling.</p>
North Colchester	Option 1: East of Langham Lane focus	GCNC1	<ul style="list-style-type: none"> - 6,606 homes - 7 ha mixed use - 7 ha employment land 	<p>The discounting of the North Colchester site for a Garden Community was based on the negative environmental impacts of a large Garden Community on an area of significant landscape and environmental value.</p>
	Option 2: Maximum Land Take	GCNC2	<ul style="list-style-type: none"> - 10,132 homes - 10 ha mixed use - 10 ha employment land 	<p>Additionally, the deliverability and sustainability of Garden Communities was considered to be best served by their location in two distinct areas of the Borough as opposed to adjacent communities such as North Colchester.</p>
Colchester / Braintree	Option 1: North and South of A12 / Rail	GCWC1	<ul style="list-style-type: none"> - 16,861 homes - 9 ha mixed use 	<p>The Colchester Braintree borders site is in closer proximity to the mainline railway station at</p>

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
Borders	Corridor Focus		- 10 ha employment land	<p>Marks Tey, which with upgraded facilities would give regular train links to London, Colchester and beyond within walking, cycling or bus rapid transport system to the station. There are also more opportunities for sustainable travel links into Colchester, a major regional centre of facilities and employment.</p> <p>The Colchester Braintree borders site is in closer proximity to Colchester. As one of the major centres in the region, Colchester offers a full range of facilities including a hospital and is a major shopping and cultural destination. This would provide high order services not on the garden community within a closer proximity with the opportunities for public transport, walking and cycling links.</p> <p>Colchester is also a major employer in the region and provides a good level and mix of employment opportunities. There is the opportunity to access these opportunities via public transport, walking and cycling.</p>
	Option 2: South of A120 and North of Marks Tey Existing Settlement	GCWC2	- 17,182 homes - 9 ha mixed use - 11 ha employment land	
	Option 3: South of A120 Focus	GCWC3	- 13,105 homes - 7 ha mixed use - 9 ha employment land	
	Option 4: Maximum Land Take	GCWC4	- 27,841 homes - 16 ha mixed use - 15 ha employment land	
West of Braintree	Option 1: Braintree DC only	GCWB1	- 9,665 homes - 12 ha mixed use - 10 ha employment land	<p>The West of Braintree garden community is suitable and deliverable. Further work will continue to be undertaken with Uttlesford District Council who will be shortly deciding whether to take forward additional land</p>



Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
	Option 2: Braintree DC and Uttlesford DC Land	GCWB2	<ul style="list-style-type: none"> - 12,949 homes - 16 ha mixed use - 13 ha employment land 	<p>within UDC. If UDC chose to take this option forward, then further evolutions of the proposals will take place, taking into account a wider development area.</p> <p>Officers have balanced the impacts of development, such as the loss of high quality agricultural land and the change in character of the area, with the benefits of the long term delivery of new homes, infrastructure and community facilities and consider that a new standalone garden community is suitable for West of Braintree and are recommending that this is taken forward in the Local Plan.</p>
CAUSE 'Colchester Metro Plan'	N/A - Option 1: Metro Plan submission	GCMP1	<p>6,000 to 8,000 dwellings proposed by CAUSE</p> <p>Note: Further exploration into the option has led to only a cumulative potential of 2,277 dwellings across the four settlements as identified by TDC's call-for-sites submissions within 10 minute walking distance of each rail station and an indicative density of 35 dwellings per hectare.</p>	<p>The CAUSE option has been rejected due its inability to deliver the required growth, linked to deliverability / developability and the availability / lack of promotion of land within the model to the required scales. It is also not considered that a series of smaller developments can successfully combine to meet the requirements of sustainability / Garden City principles.</p>
Monks	N/A - Option 1: Proposal as	GCMW1	<ul style="list-style-type: none"> - Up to 15,000 homes (5,151 homes in plan 	<p>The option at Monks Wood is currently located on the highly</p>

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
Wood	submitted		period) - 245,300m2 of non-residential (mix of commercial / retail / leisure etc.)	trafficked and single carriageway section of the A120. The only other roads in the vicinity are very rural lanes in the vicinity and no opportunity to access a site of this size by other routes. If the A120 project is to go ahead, 1 of the 5 options could see the new A120 run through the site, the other 4 would be distant from the site. Whilst any upgrade option would provide capacity on the existing A120 network, there are no guarantees that the project will go forward. With the exception of option A travel to the strategic highway network would need to be via Marks Tey to the east or Braintree to the west. In addition the project is not due to complete until 2026, so completions would not be able to start until that date. The employment market in Braintree is less strong than Colchester and major new employment areas are proposed on the west side of Braintree which is in close proximity to the West of Braintree garden community.

The Appraisal of Reasonable Garden Community (GC) Options – Creating a Level Playing Field

It should be noted that the appraisal of Garden Community options is not straightforward, in reflection of their delivery extending significantly beyond the plan period. This makes the identification of social, environmental and economic effects difficult to highlight accurately; however this SA does seek to address the strategic consequences and effects of each Garden Community at its full intended or submitted scale.

A lot of the available information and evidence commissioned for the Plan has been progressed in line with the allocated Garden Communities at this stage. In order to create a level playing field for the assessment of both allocated and alternative options, to the same level of detail, a lot of this information has not been considered within this appraisal. This includes the separate evidence base documents of the whole Local Plans of the three authorities as they area as they adopted different methodologies and the findings are localised to each LPA area and inclusive of Section Two content. These include:

- Infrastructure Delivery Plans
- Local Plan Transport Modelling
- Integrated Water Management Plans

The appraisal of the Garden Community Options has been undertaken using all available information that is relevant for use across all options. In order to ensure a fair and even appraisal of all options, the following evidence base documents were commissioned to aid option selection and the SA. These are highlighted below:

- A North Essex Concept Feasibility Study (AECOM) - July 2016. This study explored the feasibility of various Garden Community options at Tendring / Colchester Borders, North Colchester, Colchester / Braintree Borders and West of Braintree.
- Colchester Metro Town Evaluation of Alternatives (AECOM) – April 2017. This study explores the feasibility and deliverability / developability of the 'Metro Plan' option that was proposed by the Campaign Against Urban Sprawl in Essex (CAUSE). This study uses the same level of information as the July 2016 Concept Feasibility Study and concludes with headline considerations on development capacity, infrastructure requirement and overall assessment. This assessment uses a 10 minute walknet around each station as indicated by the CAUSE submission. This walknet utilises GIS to model walking networks around each station of Thorpe-le-Soken, Weeley, Great Bentley and Alresford. The walknet is determined based on data from the Department for Transport and was built up to include all roads (based upon data from the Ordnance Survey), Public Rights of Way and Bridleways (Essex County Council) within 1 km of the station. Any parts of the network deemed inaccessible for walking were removed from the analysis as constraints (for example motorways or primary roads). In addition an assumed walking speed of 3.1 mph was used in creating a Service Area for a 10 minute walking time around each station. An assessment of the total developable land was conducted. An initial review of the Call for Sites within Tendring identified parcels of land actively being promoted by existing landowners within the 10minute walknet, representing those only that are indicatively 'deliverable / developable.'

- Monks Wood, Braintree Evaluation of Alternatives (AECOM) – April 2017. This study explores the feasibility and deliverability / developability of the Monks Wood proposal as submitted for consideration during the Braintree District Council call-for-sites process. This study also uses the same level of information as the July 2016 Concept Feasibility Study and concludes with headline considerations on development capacity, infrastructure requirement and overall assessment.

Other evidence used in the appraisal of Garden Community Options in this SA has been identified only where comparable information can be utilised across all reasonable alternatives. Where the preferred / allocated Garden Community options from the previous Preferred Options stage have been progressed and form part of the focus of plan wide commissioned evidence, assumptions have been made in order to apply certain principles and tests that are applicable for those alternative options that are not the focus of such evidence.

These evidence base documents and assumptions are:

Document / Issue	Assumption
North Essex Garden Communities Movement and Access Study – 1 March 2017	That a large number of transport solutions that adhere to Garden City principles options are feasible for the preferred GCs (all sites and specific GCs), however all require a level of existing infrastructure in place for multiple modes of transport. This principle will be applied equally to those Garden Community options that are not considered within the scope of this study.
Deliverability / Developability	<p>The Garden Communities are predicated on the assumption that infrastructure will be provided and self-funded. Funding and infrastructure costs have not been considered within any other assessment criteria in order to focus on thematic sustainability impacts. The information utilised for the assessment of options regarding developability / deliverability in this SA is considered consistent to all options in terms of level of detail.</p> <p>Impacts regarding commercial viability of the options can be broadly said to be progressively more positive from east to west associated with property values, however such factors have not been considered in detail within this part of the SA for comparison purposes and to ensure more focused differentiation regarding developability considerations.</p>
Emerging Concept Frameworks	The emerging Concept Frameworks for the preferred Garden Communities have not been considered in the appraisal of options at this stage in order to utilise a consistent level of information available for all Garden Community options.
The detailed submissions	To further reflect a consistency of approach, the detailed information



Document / Issue	Assumption
	submitted for each site by the landowners / developers of each option have not been taken into account in those instances where they can be seen to offer different levels of information. As such, only those site boundaries and the quanta of development for each Garden Community have been taken from the respective submissions.

The following table sets out the appraisal of all the Garden Community options in the Strategic Area. In light of the above evidence, consultation responses at the Preferred Options stage, and also in light of the Concept Feasibility also listed above, instances have occurred where a re-assessment of each site has indicated a need to change the previous SA assessment. The previous and revised appraisals of Garden Community Options have been documented and explained in the following table.

Additional options were considered immediately prior to their identification through the Preferred Options consultation. The options were reassessed in line with emerging evidence on a comparable basis as identified above, and also the consultation responses within Annex C. Additionally, the re-assessment focuses more appropriately on a balance of on-site impacts with the possibility of adhering to Garden City principles, with an adapted approach to measuring these to better differentiate between options, particularly in broad areas.

Table 27: Impact on Sustainability Objectives: The Garden Community Options (Allocations & Alternatives)

1. Physical Limitations – Absence of insurmountable problems (e.g. access, ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	?	?	?	-	-	?	?	?	?	+	+	N/A	N/A
Draft Publication Stage	?	?	?	?/-	?/-	?	?	?	?	?/-	?/-	-	?

Headline Impacts:**Tendring / Colchester Borders**

The broad area is well located in terms of existing access and the presence of strategic roads and those that permeate the broad area and those eastern parts of Colchester. There are however some severance issues related to the A120, A137 and the GEML. Flood risk is minimal, with only a concentration of fluvial flood risk associated with the Salary Brook, which would form the required separation between the Garden Community and Colchester / Greenstead. There may however be flood risk impacts in the north western parts of options GCEC2 and GCEC3. No other insurmountable concerns exist at this stage regarding ground conditions, hazardous risks, pollution, and contamination. There may however be some concerns regarding air quality associated with development in the broad location and resultant traffic movements into Colchester town; there are a number of AQMAs that exist at Brook St / Magdalen St, East St / Lower Ipswich Road and also the Harwich Rd / St Andrews Avenue junction. It has been considered that the options will generally have uncertain impacts at this stage in regard to both positive and negative impacts. Regarding water quality, the AA states that, 'the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.'

North Colchester

The broad area is relatively free from physical constraints and limitations with no insurmountable concerns existing at this stage regarding ground conditions, hazardous risks,



pollution, and contamination. The presence of the A12 to the south of the site is beneficial to the sustainability of the broad area. Despite this, issues are prevalent regarding how access to strategic roads can be integrated successfully with the current network in north Colchester. This is also in light of the possible cumulative impacts of development at the scale required with recent (and planned) strategic scale development in north Colchester; there will be a need to restrict unnecessary traffic flows which could increase congestion along this strategically important route. It can be expected that the functionality of any forthcoming development at a Garden Community scale will be dependent upon bridging and facilitating sustainable linkages across the A12 connecting with Colchester to the south. There are also significant implications surrounding the existing 20ha Solar Farm on site which could afflict any scheme from being planned specifically to the requirements of Garden City principles and for this reason negative impacts are highlighted.

Colchester / Braintree Borders

Road infrastructure and junction access and capacity represent the main barriers to development at this broad location, although the presence of strategic roads in this area ensures that the location is broadly sustainable in principle. To some degree negative impacts can be expected to be partially eradicated through the planned highways infrastructure regarding the A12, however much also depends on the finalised route option for the A120 Braintree to the A12 scheme at this stage, and as such impacts are uncertain. Issues surrounding severance exist for all options, with comparably minor impacts highlighted for GCWC3 due to development not being proposed north of the existing A120. This again will largely depend on the re-routing of the A120. There are no other physical limitations relevant to ground conditions, flood risk, hazardous risks, pollution and contamination associated with the site that can not be adequately factored into any development of this scale through effective masterplanning. The re-assessment of the site at this stage concludes that the proposal would have both negative and positive impacts at the current stage. Negative impacts are not insurmountable in practice, however solutions may be less affordable than those at other locations explored as identified in the North Essex Garden Communities Movement and Access Study (2016). Should a compatible proposal be forthcoming regarding the finalised route option for the A120, then the options would have more definite and identifiable impacts regarding this sustainability objective.

West of Braintree

It is likely that a new A120/B1256 western junction and an interim A120/B1256 eastern junction upgrade will be required, however a full upgrade has been identified as not possible until the existing quarry on site is exhausted adjacent to the junction and restored. There are therefore implications regarding the allocated minerals extraction site within the broad location associated with both options, which has some additional issues surrounding intended restoration within the Minerals Local Plan and an accompanying Minerals Site Restoration for Biodiversity SPG. Despite this, the minerals site is temporary in nature and restoration proposals can be reconsidered or relocated in light of the additional wider sustainability benefits of a Garden Community in this location. Access arrangements to strategic roads are not direct, however the close proximity of the broad area to the A120 ensures that sustainable access can be ensured through effective masterplanning. There are no other physical impacts on the site that can not be similarly overcome. Despite this, a re-assessment of the site at the time of writing indicates that, and until the final restoration proposals of the quarry are known in light of the emergence of the area as a Garden Community option, there will now be some uncertain impacts regarding the options. It should be noted however that any successful compromise between the quarry requirements as stated in the Minerals Local Plan and those of Garden City principles will ensure that both options will likely fully meet this sustainability objective / Garden City



principle, as initially assessed at the Preferred Options stage.

The 'Metro Plan'

In summary, growth at each location does not respond well to access to the strategic road network, which is required in consideration of a need for inclusive, flexible choices for transport movements. Access to B-roads will additionally likely require junction improvements, and it is uncertain how successful growth corresponding to the expansion of existing settlements would integrate with existing infrastructure. Each site has a small element of fluvial flood risk (zones 2 and 3), associated with Holland Brook in Thorpe-le-Soken (although flood defences exist); Weeley Brook in Weeley and at the western edge of the broad area; Bentley Brook in Great Bentley; and Sixpenny Brook in Alresford. None of these areas are significant however; taking up a small percentage of the land within those are as explored at each broad location, however mitigation may have a more significant impact on available land for growth. Great Bentley however is almost entirely within a Groundwater Protection Zone (zones 1, 2 and 3). In light of the above, the option has been assessed as being unlikely to meet criteria without significant impacts, associated with inclusive access, groundwater issues at Great Bentley and the ability to avoid / mitigate areas of flood risk at each location.

Monks Wood

Road infrastructure and junction access and capacity represent the main barriers to development at this broad location, with the future of the A120 beneficial to the principle of development in this area, although no significant severance issues exist. Existing access and the road infrastructure currently serving the proposal site would need re-modelling entirely within any detailed proposal. Congestion on the A120 along this single lane stretch of the A120 towards Marks Tey railway station is a current issue, however measures to eradicate this will be forthcoming from the planned A120 dualling and re-routing should the options be selected for the A120 to continue along its current route. Currently only one of the five options for re-routing being explored would support the principle of development at the scale required in this location. If other options for the A120 re-routing were selected, then significant interconnectivity issues would be prevalent in connecting development to the strategic road network. There are no other physical limitations surrounding the site that can not be adequately factored into any development of this scale through effective masterplanning. The assessment of the site at this stage concludes that the proposal would be unlikely to fully meet criteria. And uncertain impacts have been assessed. Should a suitable proposal be forthcoming regarding the finalised route option for the A120 along its current route, then the option would have more definite and identifiable impacts.



2. Impacts – Acceptable impacts on high quality agricultural land, important landscape features, townscape features, sites of nature conservation interest and heritage assets	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	?	?	?	?	?	?	?	?	-	?	?	N/A	N/A
Draft Publication Stage	?	?	?/-	-	-	?/-	?/-	?	-	?/-	?/-	- -	?/-

Headline Impacts:

Tendring / Colchester Borders

Options GCEC1, GCEC2 and GCEC3 all contain Grade 1 Agricultural Land (determined 'excellent' by Natural England) along much of the eastern boundary; however the requirements for a belt of countryside to prevent sprawl has scope for its protection. The existing natural landscape and ecological features within the options such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches, if protected, conserved and enhanced, have the potential to form key landscape structuring components of the Garden Community and related green infrastructure network. Although these features could be considered constraints, such an established network would be considered a considerable benefit to the wellbeing of future communities, and it should be noted that the features enable the option to adhere positively to Garden City Principles. Natural England's National Character Area Profile: Northern Thames Basin, in which this area lies, indicates that the rural urban fringe should be conserved and enhanced through the spatial planning process and through good design in development. This indicates that the principle of development is acceptable. For the purposes of comparison, those options with a larger scope have both the potential for larger constraints and opportunities, although it should be noted that GCEC3 contains a SSSI (Bullock Wood) which is likely to require more sensitive consideration in regard to preservation and enhancement as part of a belt of countryside to prevent coalescence with Colchester. The HRA indicates that the site is within the Essex Estuaries SAC and Colne Estuary SPA / Ramsar zones of influence, and further suggests that there could be recreational pressure on the SAC resulting from the scale of development in this area and visitors to the estuary. The AA concludes that mitigation is possible regarding the loss of off-site habitats. It states that, 'wintering bird surveys will be required for Tendring Colchester Borders Garden Community as part of any project level development proposals and masterplanning, to determine the sites individual importance for golden plover and lapwing and inform mitigation proposals. A commitment to mitigation and phasing of Tendring Colchester Borders Garden Community is required within the Section 1 Strategic Plan dependent on the findings of bird surveys. In the unlikely but possible event that cumulative numbers of SPA birds affected are likely to exceed thresholds of significance (i.e. >1% of the associated European



Site), appropriate mitigation in the form of habitat creation and management in perpetuity, either on-site or through provision of strategic sites for these species elsewhere, will be required. If required, mitigation will need to create and manage suitably located habitat which maximises feeding productivity for these SPA species, and such mitigatory habitat would need to be provided and fully functional prior to development which would affect significant numbers of SPA birds.' All options have a number of Listed Buildings across the options which should be preserved; the topography of the land indicates benefits to the proposals in the form of integrating development into a natural context. Overall, uncertain impacts are relevant for all options, with additional considerations given to the presence of a SSSI in GCEC3.

North Colchester

Both North Colchester options include large areas of land identified as Grade 2 Agricultural Land, classed as 'very good' by Natural England, with GCNC2 having an additional proportion of Grade 1 'excellent' Agricultural Land. The sites both have issues surrounding Listed Buildings and their settings; however there are not considered to be any insurmountable issues regarding development at either scale. Although ecological assets exist throughout, both sites do not contain any wildlife designations, and so have scope to introduce these within proposals in conformity to Garden City principles. The site's relationship to the town of Colchester to the south is critical to the sites accessibility and sustainability, however maintaining this relationship is likely to ensure that any buffer between the two can only be minimal. This would see the site develop as a potential urban extension with a surrounding belt of countryside to the south being difficult to implement without impacts on settlement form. Natural England's National Character Area Profile: Northern Thames Basin, in which this area lies, additionally indicates that the rural urban fringe should be conserved and enhanced through the spatial planning process. Despite there being little in the way of impacts on site, the potential for negative impacts are significant surrounding any future expansion of the Dedham Vale AONB, the National Character Area to the immediate north of the North Colchester option. It would be unlikely that any mitigation or design requirements would be acceptable if the AONB were to be expanded; a proposal that has been explored and supported in recent years. Overall, the site can be considered to have negative impacts on settlement form as an adjacent community to Colchester, the possibility of the site impacting on the landscape significance of the AONB should it be expanded, and the loss of Grade 1 agricultural land in regard to GCNC2.

Colchester / Braintree Borders

Options GCWC1, GCWC2, GCWC3 and GCWC4 all include land that is identified as Grade 2 Agricultural Land; classed as 'very good' by Natural England. Of these options, GCWC3 can be seen to offer a smaller proportion of development on Grade 2 Agricultural Land, with development expected to occur on Grade 3 (a lesser quality). Options GCWC1, GCWC2 and GCWC4 also contain the Marks Tey Brickpit SSSI, however its location at the north east boundary in each instance ensures that this designation can be protected and enhanced through the requirements of a surrounding belt of countryside to prevent sprawl and other mitigation. Option GCWC3 does not have any implications in this regard, although detailed proposals would have to be sensitive to the presence of Domsey Brook. Options GCWC2 and GCWC4 are in close proximity to a Scheduled Monument (a Roman villa 450m south of Warren's Farm to the north) and could affect the setting of this asset, however the specific impacts of the options, and their significance, would have to be subject to specialist assessment once more detailed masterplanning is forthcoming. Option GCWC1 does not extend as far north west in proximity to the Scheduled Monument as Options GCWC2 and GCWC4 as to warrant the same expected level of potential impact; however the same issues would have to be investigated. Option GCWC3 is assessed as unlikely to impact on this designation. All the options contain a small number of Listed Buildings, in reflection of the size of the proposals, and



although impacts on their setting would have to be further investigated, it is believed that at this strategic level, the scope of all proposals ensures that impacts can be avoided. The landscape implications of the proposals vary commensurate to the scale of each proposal, with GCWC4 expected to have more significant impacts than GCWC1 and GCWC2, with GCWC3 expected to have less impact in comparison to all the other options. Natural England's National Character Area Profile for the South Suffolk and North Essex Claylands, within which the options lie, states that the contrasts within the local landscape character, between the plateau and river valleys should be retained, with an enhancement of the balance between the urban and rural landscapes. This is true of options GCWC1, GCWC2 and GCWC4. It adds that the character of the area's settlements should be maintained in the rural areas and urban encroachment kept to a minimum. For this reason, minor negative impacts are possible commensurate to the scale of options. The Landscape Character Assessment (2006) states that the landscape character of the broad area is not particularly sensitive to change, with limited views associated with medium to large field patterns and mature hedgerows, however the northern part of wide area has implications associated with the Blackwater River Valley Landscape Character Area which is more sensitive to views. The impacts expected from each option are indicative of their scale in each regard, and as such a range of impacts have been highlighted in this appraisal. Nevertheless, it should be noted that at the each options' scale, mitigation can be expected to be possible. The AA concludes that the site will not have any specific impacts related to the loss of off-site impacts on Natura 2000 sites. Overall, uncertain to negative impacts are highlighted across these Garden Community options in response to scale, and possible impacts at this stage on SSSIs and a Scheduled Monument as well as wider landscape implications.

West of Braintree

Options GCWB1 and GCWB2 both include land that is identified as Grade 2 Agricultural Land; classed as 'very good' by Natural England. Both options also include land allocated for minerals development within the adopted Minerals Local Plan (MLP). This land, in the south east portion of both options, is also identified as a flagship restoration scheme; as a result, measures already exist to increase biodiversity on the site. Explored in isolation, there are no perceived incompatibilities of this with the requirement of both GCWB1 and GCWB2 to provide a belt of countryside to prevent urban sprawl. It should be noted that a significant Country Park (Great Notley) exists in close proximity to the south of the broad area and this is identified within the ECC Country Parks hierarchy as a 'destination park' with a significant recreational offer. GCWB2 includes the designation of Boxted Wood, a LoWS and Ancient Woodland whereas GCWB1 extends to its eastern extent. Due to its location, and the requirement of the belt of countryside previously mentioned, the location of Boxted Wood is not considered an insurmountable issue to either option, however it is recommended that measures to conserve and enhance are sought through any eventual masterplanning, particularly for GCWB2. The northern boundary of both options also abuts the Conservation Area of Great Saling which contains a range of listed buildings including grade II as well as the Registered Park and Garden of Saling Grove. In addition, 'Pods Lane' is a designated Protected Lane which, as a heritage asset, would likely need to be integrated into any new Garden Community. It is perceived that impacts are unlikely to be insurmountable and that the preservation or even enhancement of the setting of these heritage assets can be ensured through adherence to Garden City Principles. GCWB2, in regard to its inclusion of the Great Saling airfield may also have archaeological implications, however further detail would be required as to the potential future of the airfield in any forthcoming masterplan. The AA concludes that the site will not have any specific impacts related to the loss of off-site impacts on Natura 2000 sites. Overall, uncertain / negative impacts are highlighted for both options in relation to the presence of the Minerals Allocation on site, however it should additionally be noted that should this be overcome, more positive impacts would be prevalent for both options.



The 'Metro Plan'

Agricultural land in the various broad locations ranges from predominantly good / moderate (grade 3) in Thorpe-le-Soken and Weeley and very good (grade 2) in Great Bentley and Alresford. Landscape sensitivity varies within the locations. Natural England's National Character Area Profile: Northern Thames Basin, in which this area lies, includes that the dispersed settlement character should be retained through careful design and location of new development. It is not certain whether the expansion of numerous existing small settlements in the area would be acceptable within the area. Additionally, the TDC Landscape Character Assessment (2001) states that Thorpe-le-Soken (Clacton and Sokens Clay Plateau LCA) is in an area with a need to conserve low density settlement patterns with the retention of strategic gaps between settlements are important to maintain their individual identities. Weeley (Holland Valley System and Clacton and the Sokens Clay Plateau Landscape Character Areas) additionally has protection recommendations in the assessment stating that high density or mass produced housing designs would not be appropriate and that limited building should only be accommodated with care in siting and design. Great Bentley falls within the St Osyth Great Bentley Heaths and the Alresford Valley System Landscape Character Areas, where high density or mass produced housing designs would not be appropriate, and with plateau edges that are particularly sensitive to development due to any built development being highly visible in this large scale open landscape. Alresford is within the Bromley Heaths Landscape Character Area, which has a large scale open landscape with any new development being highly visible over long distances. The Landscape Character Assessment (2001) adds that within this area, the identity of individual villages should be maintained due to the ancient rural settlement pattern. The scale of development at each broad area is in each instance unlikely to be able to factor in effective landscape and design requirements without diminishing developable areas. The area in and around the Thorpe-le-Soken and Weeley proposed locations have a mosaic of habitats including ancient woodland, (the nationally recognised and protected Weelyhall Wood SSSI), and a number of Local Wildlife Sites (LoWS). Although Alresford is predominantly absent of ecological designation, the Great Bentley broad area also contains a number of LoWS. Although not a considered within the scope of the HRA due to it not being a preferred option, the AA indicates that all sites within this option are within the Essex Estuaries SAC and Colne Estuary SPA / Ramsar zones of influence (as evidenced by the fact that this is the case for Tendring / Colchester Borders Garden Community options), and further suggests that there could be issues with the loss of off-site habitats. The mitigation requirements of the Tendring / Colchester Borders can be expected to apply to this option also, however it is considered that any creation of offsetting habitats would be comparatively more difficult to integrate. It is felt that at the scale likely to be required, the developable areas of each growth location would be significantly diminished to accommodate the requisite land to reduce such pressures. Regarding the historic environment, the Thorpe-le-Soken area contains Thorpe Hall, a Grade II listed park and garden which dominates the north-eastern part of the broad location. Additionally, there are several Grade II listed buildings proximate to the area, as is also the case within the Weeley, Alresford and Great Bentley broad locations. Additionally in Great Bentley there is a Grade I listed Church along Plough Road, the setting of which would be difficult to preserve through development of the scale intended. Overall, the dispersed model of growth within numerous settlements will all create negative impacts singularly. The scale of development in each instance ensures that effective mitigation and enhancement is unlikely to be provided on site. For this reason, significant negative impacts are highlighted.

Monks Wood

Natural England's National Character Area Profile for the South Suffolk and North Essex Claylands, within which the options lie, states that the contrasts within the local



landscape character between the plateau and river valleys should be retained, with an enhancement of the balance between the urban and rural landscapes. It adds that the character of the area's settlements should be maintained in the rural areas and urban encroachment kept to a minimum. There can be considered to be a negative impact in the broad area in accompaniment with the site being additionally located within the Blackwater River Valley Landscape Character Area, as identified in the Landscape Character Assessment (2006). The skyline of the valley slopes in this area is visually sensitive, with potential new development being visible to and from adjacent Landscape Character Areas and also within views across and along the valley. There is also a sense of historic integrity, resulting from historic settlements and a dispersed settlement pattern. The quality of agricultural land is predominantly very good (Grade 2). The area around the proposed site includes a mosaic of habitats including ancient woodland, arable fields, semi-improved grassland and the River Blackwater. There are a number of Local Wildlife Sites (LoWS) both in and around the proposed site, largely designated for woodland habitat. Despite this, the scale of the proposal is such that the LoWS can be retained within an effective and suitable proposal, in line with Garden City Principles, with the addition of green linkages between them and to existing habitats located on the periphery of the site. The AA concludes that the site will not have any specific impacts related to the loss of off-site impacts on Natura 2000 sites. Regarding the historic environment, the study area contains 24 Listed Buildings (I, II and II*) within or on the immediate periphery of the site area. The setting of these buildings should be of key consideration with any new development, particularly the open setting which they currently enjoy. There are several areas on the site (including the whole north-western corner adjacent to Pattiswick, the areas around Gatehouse Farmhouse and Vineyard Cottage, and the areas adjacent to Monkswood House and Monkswood Cottage, and adjacent to The Old Rectory and Cradle House) which would be considered to have a significant adverse effect which would be difficult to mitigate (BDC Heritage Impact Assessment 2016); ensuring that that the site would be generally unsuitable to be developed in this area. It can be considered however that the protection of these assets could be possible in line with Garden City Principles. An archaeological assessment of the site (BDC Heritage Impact Assessment 2016) identifies that the site contains surviving historic landscape features, some of which may be medieval in origin. There is potential for prehistoric and later archaeological remains to survive and possible Roman settlement and ritual activity which would be of regional significance. This would have to be subject to further detailed assessment should the proposal be progressed. Overall, the option has been assessed as having uncertain to negative impacts associated predominantly with the landscape implications within this area the Blackwater river valley, and also regarding local wildlife sites and the significance of the historic environment. It is possible that these could be factored into any successful scheme however, and that landscape issues can be minimised through exemplar design requirements.



3. Environment / Amenity – Acceptable relationship with and impact on occupiers of existing properties and neighbouring areas/towns (maintaining adequate separation)	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	++	++	+	-	-	?	?	?	++	++	+	N/A	N/A
Draft Publication Stage	+	+	?/+	?/-	?/-	?/-	?/-	?/-	?/-	?/-	?/-	--	?/-

Headline Impacts:

Tendring / Colchester Borders

Options GCEC1 and GCEC2 will have positive impacts associated with the topography of the area constraining views into and across the sites, which are assessed as reducing the visual impacts of any Garden Community. The existing Local Nature Reserves of Salary Brook and Welsh Wood create the basis of an established and high quality buffer between Colchester and any new Garden Communities to the west, and there are no other existing settlements to the east that would be affected by any of the options at their stated scales. Option GCEC3 has additional considerations to take into account regarding the A137 Harwich Road which bisects the area around Fox Street. Maintaining a clear separation of this settlement may fragment the wider development, in particular that area to the north of the railway line. For that reason, impacts are not highlighted as positively for this option.

North Colchester

Options GCNC1 and GCNC2 have slightly differing impacts, associated with the impact on the existing settlements of Langham to the north (in regard to GCNC1) and also to the linear development to the west (in regard to GCNC2). In consideration of the location and size of the Solar Farm existing at Boxted Airfield, it is uncertain to what extent option GCNC1 could adequately ensure a degree of separation with Langham whilst simultaneously ensuring that wider Garden City Principles are met, where the extent of land available for housing and employment delivery is uncertain at this current time and over the plan period. It is understood that the promoter of the site for development could remove the solar farm upon expiry of its consent, with the land then developed for housing; however in the interests of sustainability, the removal of a renewable energy facility could not be considered positive. Option GCNC2 does not have such significant considerations, however, extends further west.



Colchester / Braintree Borders

Regarding options GCWC1, GCWC2, GCWC3 and GCWC4 there will be varying different implications associated with settlement coalescence; these are largely commensurate to the different scales of the proposals. It should be noted however that coalescence can be prevented in all options with similarly varying degrees of countryside acting as a buffer; a surrounding belt of such being a Garden City Principle to which all options can fully meet. Impacts on the residential amenity of the settlements of Marks Tey and Little Tey however are not as positive with options GCWC1, GCWC2 and GCWC4 possibly assimilating the aforementioned settlements into the Garden Community. A buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities, and it could be considered that the scope for this would be maximised through the larger option GCWC4 with enough available land to have limited knock on effects regarding adhering to other Garden City Principles. Option GCWC3 has been assessed as not having these specific considerations in addition to its required countryside belt protecting any properties to the south. Overall however, the presence of multiple existing settlements within the broad area lead to uncertain to negative impacts being highlighted.

West of Braintree

There are limited numbers of existing residential properties in the area of both options GCWB1 and GCWB2, however the small settlement of Blake End exists to the south west of the site and is located adjacent to a junction corresponding to possible access to the broad area from the B1256. It should be noted that assimilation of Blake End is not assumed, in so far as a required belt of surrounding countryside would act as a buffer, however there may be transport implications and perceived loss of amenity in that regard. To the north, both options extend towards Great Saling, however as previously mentioned this would be buffered with countryside to prevent sprawl, and a Registered Park and Garden exists at the boundary extent; the preservation of the setting of which is likely to ensure that the new Garden Community does not negatively impact residents of the existing settlement further to the north. Specifically in relation to GCWB2, additional considerations would be to the amenity of residents in Stebbing Green and a desire to ensure separation. In isolation this is not considered an insurmountable issue however the presence of Boxted Wood within the area to the immediate east of any required buffer, could limit the suitability of this eastern part of the option. Uncertain to negative impacts are highlighted in this re-assessment in line with a comparable assessment of all Garden Community options.

The 'Metro Plan'

The Metro Plan option adopts a different approach than the other Garden Community options, in so far as it represents a series of expanded settlements at Thorpe-le-Soken, Weeley, Great Bentley and Alresford. To that extent, the impacts on this sustainability objective / Garden City Principle are significantly negative; a focus on the aforementioned settlements' rail stations represents new development that permeates into the existing settlements, significantly increasing their size. The distances between the settlements are relatively short, and strategic gaps will be diminished, with likely negative cumulative impacts associated with landscape holistically and in consideration of the importance of wider historic settlement patterns. The option is therefore unlikely to meet the sustainability objective criteria 'Garden City principle without significant negative impacts.



Monks Wood

The area is in a valley (associated with the river Blackwater), with the valley slopes being visually sensitive, particularly to new development at the scale proposed; this would be visible across and along the valley. There is also a sense of historic integrity, resulting from historic settlements and a dispersed settlement pattern. At present, the site boundary lies within 400m of the built form of Coggeshall at its closest point, however a surrounding belt of countryside, as required of Garden City Principles would ensure impacts can be suitably mitigated. Further to the west, the site boundary extends to that of Pattiswick. In view of this, it can be considered that the proposed site would lead to coalescence with Pattiswick (including the possible subsuming of the dispersed settlement) however at the scale proposed, the Garden Community option can be considered able to ensure adequate separation is factored into the wider scheme whilst simultaneously ensuring that impacts on the rural and historic character of existing settlements in the broad area is minimised. Uncertain / negative impacts are highlighted in response to this, however it should be noted that a smaller scale option at this location that addresses issues of coalescence and reflects historic settlement patterns would benefit from an increased likelihood of mitigation measures being possible.

4. Transport – Incorporation of integrated and accessible sustainable transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW1
Preferred Options Stage	+	+	?	?	?	+	+	+	?	?	?	N/A	N/A
Draft Publication Stage	+	+	+	?/-	?/-	?	?	?	?/-	?/-	?/-	+	-

Headline Impacts:

Tendring / Colchester Borders

For Tendring / Colchester Borders options, the presence of the Great Eastern Mainline and rail links at Hythe exist as a rapid public transport link to Colchester; it would be likely however that additional new infrastructure would be needed, possibly at the University in the south or towards the A120 in the north, with interconnecting public transport links integrated into all parts of both sites. The existing strategic and local bus networks currently set down and pick-up in close proximity to both sites with a bus interchange located



at the University campus. Within the Colchester Borough Council Local Plan, provision is made for a dedicated bus corridor to support development in North Colchester; anticipated to be delivered on the back of the redevelopment of the former Severalls Hospital. Consultants Jacobs have been instructed by ECC to develop options for a rapid transit system linking the site, University and town centre. A Bus Rapid Transit (BRT) would appear a sustainable option in light of other public transport links, utilising a number of possible routes into Colchester town centre and possibly to the Hythe rail station. Option GCEC3 had previously (at the Preferred Options stage) been assessed as only partially meeting the criteria of the sustainability objective / Garden City principle due to the spatial size of the site, however it is now considered more possible that a further level of site wide connectivity will be required in view of the deliverable area of the option not necessarily being any significantly different under this option, with elements of the larger site benefitting from existing public transport infrastructure. The extent of existing public transport infrastructure in and around the site, as well as the site's relatively close proximity to Colchester town, ensure that positive impacts are highlighted in this assessment.

North Colchester

It should be noted that options GCNC1 and GCNC2 do not benefit from an existing rail link. It can be considered that only bus, walking and cycling opportunities appear suitable, and the options could seek to benefit from links to the existing Park and Ride scheme a kilometre from the broad location to the west and strategic road links to the east and south. The options both have a reliance on the road network for public and private transport movements. Should bridging of the A12 be possible, or existing bridges be upgraded, then access to wider public transport initiatives could be present to the Northern Gateway. Despite this however, links to the A12 and the strategic road network are likely to prove private car use attractive and it is uncertain whether there will be any benefits to the town centre through bus links only given the proximity and ease of access to out of town centres. A re-assessment of the North Colchester options at this stage highlight uncertain / negative impacts in light of the absence of existing rail links and the possibility of traffic movements being private. It is considered that this reflects a more accurate assessment of the options in light of other options (and for the benefit of differentiating between them for comparison purposes) and also those assumptions made as a result of the findings of the North Essex Garden Communities Movement and Access Study evidence base document.

Colchester / Braintree Borders

The Colchester / Braintree Borders options all benefit from the presence of the Great Eastern Mainline running through the site, and also the existing rail station at Marks Tey. In addition, the infrastructure commitments regarding the A12 are likely to prove increased bus links suitable and viable options. Despite this, there is a possibility that these infrastructure improvements would warrant sustainable transport means less attractive in favour of private car journeys and issues of severance exist regarding the A12 and the current route of the A120 ensure that walking and cycling infrastructure through the larger site options could prove difficult to integrate. Work will however be required to adequately ensure the interconnectivity of the whole site by sustainable means. The Marks Tey / Little Tey area is already connected by public transport - both bus and rail (Marks Tey rail station) to Colchester, Braintree and other centres, including London. This is an advantage for developing a sustainable transport system for any Garden Community option. The A120 re-routing options, currently out on consultation at the time of writing, may similarly offer enhanced bus services through the site to key centres. There is a need for a public transport network to be high frequency, connecting key nodes, including the railway station, and creating the conditions to achieve greater modal shift away from the car for local and longer distance trips. Specifically for option GCWC4, the scale of the option might lead to the existing Marks Tey rail station to be constrained, and



an additional station more centrally within the site might need to be explored that operates similar to a branch line to the existing station. This leads to general uncertain / negative impacts. As such, impacts are likely to be less positive in line with scale of required improvements. Overall, the possibilities of integrating high quality sustainable transport options exist uniquely at the broad area, however the requirements for new infrastructure are considered of a scale that can only give rise to uncertain impacts at this stage.

West of Braintree

Options GCWB1 and GCWB2 have been highlighted as currently having uncertain / negative impacts. Both options do not benefit from an existing rail link and in addition links to the A120 and the strategic road network are likely to prove private car use attractive. It is therefore more uncertain whether there will be any benefits to the town centre through bus links only given the proximity and ease of access to Chelmsford and out of town centres such as Freeport. Connecting the options with the Flichway could however provide direct links with Braintree and Braintree Railway Station. The establishment of links south of Flichway would connect Skyline 120 for employment and Great Notley Country Park for leisure / recreational activity. Regarding public transport, the direct access of the site to the A120 can be considered advantageous in terms of connecting the site with North Essex inter-urban bus routes, providing connectivity with Stansted Airport and employment centres and the existing settlement. The opportunity to achieve a development of significant scale with population critical mass may rely on a system with greater connectivity and speed such as a form of rapid transit network. Without this inter-urban/ inter-regional public transport system, the risk exists that the majority of journeys external and internal to the site would likely be car based in this area..

The 'Metro Plan'

The Colchester Metro Town proposal is based on the notion of expanding settlements that benefit from an existing railway station, providing direct connectivity to the employment and centres of Colchester and Clacton-on-Sea. In this context, this proposal theoretically responds to the Garden Communities principle of transit-oriented development. It should be noted however that much of the developable land at each location would be residential, with key services, facilities and employment opportunities being provided at existing centres of Clacton and Colchester. This limits the positivity of impacts, in so far as travelling distances will be larger than for other options. This is also likely to be the case for other retail, leisure and recreational uses. The principle of the option responds to development being focussed within a 10 minute walk at each of the four expanded villages' rail stations. The provision of convenient and safe walking and cycling routes to each station is identified as possible to integrate into each development, offering positive benefits to the proposal. CAUSE also support the development of a tram-train service on the Sunshine Coast line with opportunities to link different sites with Colchester at a greater frequency and allowing street running trains to serve Colchester town centre for greater public transport integration. Despite this however, it is likely to be more challenging to achieve such a system as well as a fully integrated and sustainable transport network in line with offering bus links, particularly in relation to existing and new services. It should be noted that none of the villages, and specifically their railway stations, benefit from being in close proximity to A-roads, with access dependent on rural roads only. This may impact on the ability to fully integrate these settlements with other public transport infrastructure / methods, which is likely to be required to compliment the rail service. The option has however been assessed as having positive impacts in line with focussing development within a 10 minute walk of existing rail links, considerations regarding the current (existing) capacity of the rail service along the Sunshine Coast, and the fact that a comparably lower level of infrastructure would be required.

Monks Wood



The absence of an existing rail station to serve the development option hinders the ability of the proposal to improve sustainable movements to main employment areas and in response to a need to reduce the need for private car use. The closest rail station is at Kelvedon, over 5km away to the southeast, which would be unsuitable to rely upon due to the access implications of this station through the villages of Feering and Kelvedon and its current use as the principal station serving settlements within a wide geographic area. It is felt that, in light of these considerations, it would be unsustainable for Kelvedon to additionally act as the principal rail station to serve the needs of any new Garden Community at Monks Wood. This is notwithstanding the public transport aspirations of Garden City principles, which require a significant modal shift from private car use. It is possible that the A120 re-routing scheme, should a relevant option be taken forward that supports growth at Monks Wood, would increase access to Braintree Freeport Station approximately 8km to the west of the site, however significant attractive public transport infrastructure solutions would need to be developed to support public transport links to this location from the Monks Wood proposal. It should also be noted that existing Braintree stations are located on a branch line, with questions regarding whether the existing frequency of services would be suitable for the additional influx of passengers from the Monks Wood proposal in addition to identified growth at Braintree. Marks-Tey station is located approximately 10km to the east of the site, however any integrated public transport links to this station would likely only be feasible should the Colchester / Braintree Borders Garden Community option (principally the public transport solutions that would be viable at this Garden Community) be additionally taken forward; the cumulative impacts of these two Garden Community locations would give rise to significant negative impacts on a range of sustainability criteria in the broader area. The broad Monks Wood area is served by several strategic bus routes operating on the A120 between Ipswich and Stansted, Stansted and Colchester, Colchester and Chelmsford and Witham to Harwich; however these bus services currently stop over 1km from the proposal site and are infrequent. It is considered that public transport options are limited to bus services in this location, which are heavily dependent on the preferred A120 re-routing scheme once identified and commitments made. This considered, at present the proposal is unlikely to meet the sustainability objective criteria / Garden City Principle without significant negative impacts on existing local rail stations; however once the preferred A120 re-routing scheme is known the ability to make more informed judgements regarding overall and alternative public transport options / solutions can be made. Overall, minor negative impacts are highlighted for comparison purposes with other options.



5. Resilience - Positive contribution towards maintaining resilient town centres and identified regeneration and development priority areas and institutions (including Essex University)	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW1
Preferred Options Stage	++	++	++	+	+	+	+	+	?	?	?	N/A	N/A
Draft Publication Stage	++	++	++	+	+	?/+	?/+	?/+	?	?/+	?/+	++	?/-

Headline Impacts:

Tendring / Colchester Borders

Options GCEC1, GCEC2 and GCEC3 have all been assessed as making a significantly positive impact on the town centre of Colchester, due largely to the options' proximity to the town centre of Colchester, the University of Essex and identified regeneration areas in east Colchester. Access to the town centre railway station, from the Hythe station at present and via other public transport, ensures that direct access to the town centre and regeneration areas in the east of the town centre has the potential to be maximised in a sustainable manner. The requirements of the Garden Community to provide services, convenience retail and leisure facilities may lead to some degree of diversion to the town centre; however the proximity of the location to the town centre will likely ensure resilience is maintained and enhanced.

North Colchester

Options GCNC1 and GCNC2 will have positive impacts associated with distances to the town centre, existing vehicular access and also existing access to park and ride services into the town centre. Impacts are not as significant as Tendring / Colchester Borders options due to the lack of rail links and the presence of the Northern Gateway including proposals for this area, which combined with the emergence of an expected district or neighbourhood centre at any Garden Community itself could cumulatively reduce the need for residents to access the town centre for services, convenience retail and leisure facilities. The broad location's accessibility to the strategic road network may divert trips away from the town centre to other out of centre locations.



Colchester / Braintree Borders

Options GCWC1, GCWC2 and GCWC3 have been assessed as having positive impacts on the town centre of Colchester, and benefit from existing rail links at Marks Tey which can be expected to be expanded in line with any Garden Community option. Impacts are limited however due to the possibility of residents using the facilities of Tollgate in the first instance as preferable and closer to any Garden Community than the town centre of Colchester. Option GCWC4 has been assessed as having uncertain impacts partly for this reason, but also commensurate to its scale. The level of services and facilities required within this Garden Community option itself should reasonably be expected to be of a suitably large scale in order to be sustainable, however may reduce the number of expected journeys into Colchester for services, convenience retail and leisure facilities. Overall there will be uncertain / positive impacts.

West of Braintree

Options GCWB1 and GCWB2 have been assessed as having uncertain / positive impacts on the town of Braintree. Significant positive impacts can reasonably be expected due to its close proximity and easy accessibility; however the lack of direct rail links to the centre and the similarly easy access to the strategic road network could see residents travelling to the larger centre of Chelmsford, or to Freeport; to the south of Braintree but physically detached from the town centre.

The 'Metro Plan'

Options GCEC1, GCEC2 and GCEC3 have all been assessed as making a positive impact on the town centre of Colchester, due to the options' accessibility to the to the centre via existing rail links. There will positive impacts associated with proximity and ease of access to the University of Essex. Similarly, there will also be some level of positive impacts associated with proximity and sustainable access to Clacton and associated regeneration areas. The requirements for each location to incorporate some level or convenience retail offer, leisure and recreation have been assessed as not being harmful to the centres of Clacton and Colchester commensurate to the scale of growth at each location within the Metro Plan proposal.

Monks Wood

This option has been assessed as having uncertain / negative impacts on the town of Braintree and Colchester due largely to the current lack of rail links and the expected reliance on private car journeys that may divert trips from centres to out-of-centre retail and leisure offers at Braintree Freeport and Tollgate. Much will depend on the A120 re-routing in regard to future accessibility however the proposal's general location is such that the use of any services, convenience retail and leisure facilities within the Garden Community option itself would likely be maximised, with notions of self-sustainability.



6. Housing – Provision of a mix of tenures, including affordable homes and a range of housing types (including self-build/custom build and gypsy and traveller pitches).	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	++	++	++	++	++	++	++	++	++	++	++	N/A	N/A
Draft Publication Stage	++	++	++	++	++	++	++	++	++	++	++	--	++

Headline Impacts:

Tendring / Colchester Borders

All of the Tendring / Colchester Borders Garden Community Options can be expected to have significantly positive impacts at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding housing supply, type and tenure including gypsy and traveller provision.

North Colchester

All of the North Colchester Garden Community Options can be expected to have significantly positive impacts at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding housing supply, type and tenure including gypsy and traveller provision.

Colchester / Braintree Borders

All of the Colchester / Braintree Borders Garden Community Options can be expected to have significantly positive impacts at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding housing supply, type and tenure including gypsy and traveller provision.

West of Braintree

All of the West of Braintree Garden Community Options can be expected to have significantly positive impacts at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding housing supply, type and tenure including gypsy and traveller provision.

The 'Metro Plan'



The CAUSE submission indicates that the Metro Plan option could deliver between 6,000-8,000 homes. The submission highlights those developable / deliverable areas as those that were submitted as part of the Tendring District Council Local Plan call-for-sites process. Work undertaken to explore the suitability and feasibility of the Metro Plan option (Colchester Metro Town – Evaluation of Alternatives, 2017 (AECOM)) identifies that the current land ‘availability’ as identified through the call-for-sites submissions would only provide less than 3,000 dwellings at a density of 35 dwellings per hectare. This is in consideration of the requirements to make sustainable places, following Garden Community principles, integrating numerous other non-residential development opportunities for the purposes of creating sustainable communities. It can be concluded that a larger amount of individual parcels of land need to be identified. The Metro Plan submission indicates that some level of growth would be required at other Garden Community option locations with the same principle of focussing development within a 10 minute walkable distance radius from existing train stations; namely at the Tendring / Colchester Borders and the Colchester / Braintree Borders. Whereas this principle does seek to address the housing shortfall of the Thorpe-le-Soken to Alresford model of satellite settlements, it should be noted that across all of these locations land was not submitted for consideration with this intention. These individual development proposals should be explored within the context of what represent the most sustainable options at those individual scales. This falls within the remit of the respective ‘Section Two’ Local plans of Braintree, Colchester and Tendring Councils. For this reason, the Metro Plan option has been assessed as being unlikely to meet the criteria of this sustainability objective / Garden City principle without significant negative impacts on the ability of meeting objectively assessed housing needs across the North Essex Authorities area at this stage.

Monks Wood

The Monks Wood Garden Community Option can be expected to have significantly positive impacts at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding housing supply, type and tenure including gypsy and traveller provision.



7. Employment Opportunities – Provision for a wide range of local jobs within easy commuting distance from homes	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	++	++	++	++	++	++	++	++	++	++	++	N/A	N/A
Draft Publication Stage	++	++	++	+	+	+	+	+	+	+/	+/	?	+

Headline Impacts:

Tendring / Colchester Borders

Consistent with the Garden City principle that there should be a variety of employment opportunities within easy commuting distance of homes, a target of creating one new job for each new home should be set. Strategically, and in line with 'Section Two' employment requirements across the three authorities, provision in each Garden Community must complement rather than displace the economic and employment growth ambitions associated with nearby towns. The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) states that, 'All three NEGCs are likely to be associated with significant jobs growth, albeit of varying forms. The presumption is that jobs linked to exogenous growth processes will be physically on site (and appropriate provision will need to be made for them). Those linked to homeworking will be physically associated with the homes of residents and therefore also on site; in relation to these jobs, the design of housing will be crucially important. Those related to the consumption of local services may or may not be on site, but all will be reasonably "local"; provision in relation to this component will need to be planned so as to complement, rather than displace, existing local service provision (e.g. in the town of Braintree). In terms of the Garden City principle aspiration of 'one job per house', all three NEGCs appear to be "within range". Broadly, Tendring / Colchester Borders does best – which is plausible, given its proximity to a growing and ambitious university, and the role universities can play in driving high value economic growth. West of Braintree has the most challenging profile – which again is plausible, given the wider economic dynamics of the sub-area of which it is a part, and its specific locational attributes.' All of the options can be expected to have broadly the same level of impact at this stage, and are all similar in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding a full range employment opportunities within the Garden Community itself or within easy commuting distance of homes. Regarding this latter consideration, the proximity of existing, and suitable integration, of public transport opportunities is explored in the assessment of options against sustainability objective 4. In line with the findings of specific evidence being available to inform the SA (the Employment and Demographics Study).



North Colchester

The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) identified two 'economic areas' for modelling purposes. It can be assumed that the North Colchester options would fall within 'The Central East of North Essex economic area', recognising the close links between the area and Colchester itself which was used as the spatial unit within which scenarios have been quantified. The Central East of North Essex economic area is primarily focused on Colchester as the primary regional centre, with connectivity to Chelmsford and London (and northwards to East Anglia) via the A12 and GEML. Although certain elements of the Study are not relevant to the North Colchester study area, general positive impacts can be assumed related to the town of Colchester's expansion. There will be limited impacts however associated with the University and associated high value economic growth. For this reason, the options are highlighted as having a reasonable prospect of fully meeting the criteria of this sustainability objective / Garden City principle.

Colchester / Braintree Borders

Consistent with the Garden City principle that there should be a variety of employment opportunities within easy commuting distance of homes, the local authorities have set a target of creating one new job for each new home. Strategically, and in line with 'Section Two' employment requirements across the three authorities, provision in each Garden Community must complement rather than displace the economic and employment growth ambitions associated with nearby towns. The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) states that, 'All three NEGCs are likely to be associated with significant jobs growth, albeit of varying forms. The presumption is that jobs linked to exogenous growth processes will be physically on site (and appropriate provision will need to be made for them). Those linked to homeworking will be physically associated with the homes of residents and therefore also on site; in relation to these jobs, the design of housing will be crucially important. Those related to the consumption of local services may or may not be on site, but all will be reasonably "local"; provision in relation to this component will need to be planned so as to complement, rather than displace, existing local service provision (e.g. in the town of Braintree). In terms of the Garden City principle aspiration of 'one job per house', all three NEGCs appear to be "within range". Broadly, Tendring Colchester Borders does best – which is plausible, given its proximity to a growing and ambitious university, and the role universities can play in driving high value economic growth. West of Braintree has the most challenging profile – which again is plausible, given the wider economic dynamics of the sub-area of which it is a part, and its specific locational attributes.' All of the options can be expected to have broadly the same level of impact at this stage, and are all similar in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding a full range employment opportunities within the Garden Community itself or within easy commuting distance of homes. Regarding this latter consideration, the proximity of existing, and suitable integration, of public transport opportunities is explored in the assessment of options against sustainability objective 4. In line with specific evidence being available to inform the SA (the Employment and Demographics Study), all options in the Colchester / Braintree Borders have been re-assessed as having positive impacts.

West of Braintree

Consistent with the Garden City principle that there should be a variety of employment opportunities within easy commuting distance of homes, the local authorities have set a target of creating one new job for each new home. Strategically, and in line with 'Section Two' employment requirements across the three authorities, provision in each Garden



Community must complement rather than displace the economic and employment growth ambitions associated with nearby towns. The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) states that, 'All three NEGCs are likely to be associated with significant jobs growth, albeit of varying forms. The presumption is that jobs linked to exogenous growth processes will be physically on site (and appropriate provision will need to be made for them). Those linked to homeworking will be physically associated with the homes of residents and therefore also on site; in relation to these jobs, the design of housing will be crucially important. Those related to the consumption of local services may or may not be on site, but all will be reasonably "local"; provision in relation to this component will need to be planned so as to complement, rather than displace, existing local service provision (e.g. in the town of Braintree). In terms of the Garden City principle aspiration of 'one job per house', all three NEGCs appear to be "within range". Broadly, Tendring Colchester Borders does best – which is plausible, given its proximity to a growing and ambitious university, and the role universities can play in driving high value economic growth. West of Braintree has the most challenging profile – which again is plausible, given the wider economic dynamics of the sub-area of which it is a part, and its specific locational attributes.' All of the Garden Community Options can be expected to have broadly the same level of impact at this stage, and are all similar in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding a full range employment opportunities within the Garden Community itself or within easy commuting distance of homes. Regarding this latter consideration, the proximity of existing, and suitable integration, of public transport opportunities is explored in the assessment of options against sustainability objective 4. In line with specific evidence being available to inform the SA (the Employment and Demographics Study), all options in the West of Braintree have been re-assessed as having uncertain / positive impacts.

The 'Metro Plan'

The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) identified two 'economic areas' for modelling purposes. It can be assumed that the settlement of Alresford within the Metro Plan option would fall within 'The Central East of North Essex economic area' in its western location of Alresford, associated with close links to the University and associated high value economic growth. Despite this, the North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) identifies relatively weak trend-based employment growth associated with Tendring. The CAUSE submission identifies a principle that the Colchester-Clacton corridor can function as a sub-regional economic and cultural entity, with complementary assets and resources that will promote growth. This acknowledges that the option would benefit from economic development opportunities presented by the Tendring / Colchester Borders Garden Community option with additional employment growth in Clacton. Whilst this is a reasonable proposition for exploration, it can also be assumed at this strategic level that the Metro Plan would have to increase its identified housing supply in order to offset a loss of residential land at the Tendring / Colchester Borders Garden Community option to accommodate the additional required employment floorspace of the Metro Plan. The option can be viewed as not representative of employment needs across the wider North Essex Authorities area, with the Metro Plan existing as a series of predominantly residential schemes that rely on out-commuting; this can also be seen as not representative of Garden City Principles. For this reason, and reflective of the level of uncertainty surrounding the option in regard to employment provision, the option is highlighted as having uncertain impacts.

Monks Wood

The closest main urban centres, providing a variety of established services, existing businesses and employment opportunities, are Braintree (and Braintree Freeport) approximately 5km west, and Colchester approximately 13km east. In addition a linear pattern of retail, leisure and other business types, including formal business parks



(Tollgate Business Park and Westside Centre), is found between Marks Tey and Stanway, within 10km of the Monks Wood site area. The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) identified two 'economic areas' for modelling purposes. It can be assumed that that the Monks Wood option would fall largely centrally between the 'Central East of North Essex economic area', and the 'West of North Essex economic area' recognising the close links between the area and Colchester and Braintree to a lesser extent. It should be noted however that connectivity to Chelmsford and London (and northwards to East Anglia) via the GEML is not forthcoming at this site and although existing rail stations are not significantly distanced to the broad area, the impacts on the settlements that these rail links exist can be considered to be negative at the scale of growth expected at Monks Wood. In addition, without its own railway station, the Monks Wood site would require other forms of connecting public transport to create sustainable first leg journeys. Although large elements of the Study are not relevant to the Monks Wood proposal area, general positive impacts can be assumed related to the town of Colchester's expansion as well as reasonable connections to Stansted. The site has strategic connectivity, although much depends on the preferred A120 re-routing option which could significantly impact on the broad area's suitability as an employment location. Similarly, as a new employment location Monks Wood would face competition from both Braintree and Colchester, together with Witham and Chelmsford, with the latter especially relevant with respect to office based employment. This differs from the preferred Garden Community options which are better placed to utilise and capitalise on existing employment opportunities more locally and in closer proximity. Despite this, the overall conclusion of this high level assessment is that the option has a reasonable prospect of fully meeting the criteria of this sustainability objective / Garden City principle.

8. Mixed-use Opportunities – Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	++	++	++	++	++	++	++	++	++	++	++	N/A	N/A
Draft Publication Stage	++	++	++	++	++	++	++	++	++	++	++	?	++

Headline Impacts:

Tendring / Colchester Borders

All of the Garden Community Options at the Tendring / Colchester Borders can be expected to have significant wider benefits at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding the inclusion of cultural, recreational and shopping facilities in walkable, vibrant,



sociable neighbourhoods.

North Colchester

All of the Garden Community Options at North Colchester can be expected to have significant wider benefits at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding the inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.

Colchester / Braintree Borders

All of the Garden Community Options at Colchester / Braintree can be expected to have significant wider benefits at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding the inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.

West of Braintree

All of the Garden Community Options at the West of Braintree can be expected to have significant wider benefits at this stage; due their scale are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding the inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.

The 'Metro Plan'

The Metro Plan option has a reasonable prospect of partly meeting the criteria of this sustainability objective / Garden City principle with general uncertain impacts. The inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods is unlikely to be wholly possible at each location due to the limited scale of development at each individual settlement and within the 10 minute walking radius from each rail station. Although existing infrastructure and services are likely to exist in close proximity to each settlement focus, this is likely to put pressure on existing infrastructure capacities, such as GPs and schools, without the requisite development (dwelling) thresholds being met for the provision of new infrastructure. In Thorpe-le-Soken, dwelling yields would not trigger the requirement for new primary and secondary educational facilities and would put pressure on the existing local primary schools. Crucially also, no primary schools exist within 1km (Institution of Highways and Transportation acceptable maximum walking distance) of the site identified for possible growth. This is similarly the case for Weeley, Great Bentley and Alresford.

Monks Wood

The Garden Community Option of Monks Wood can be expected to have a strong prospect of significant wider benefits at this stage; due the scale of the option, it offers strong opportunities to adhere to relevant Garden City Principles regarding the inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods. It should be added however that new communities would have to travel to Braintree or Colchester for post-16 education.



9. Environmental Quality & Sustainability – Incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience.	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	++	++	++	++	++	++	++	++	++	++	++	N/A	N/A
Draft Publication Stage	++	++	++	++	++	++	++	++	++	++	++	-	++

Headline Impacts:

Tendring / Colchester Borders

It can be considered that, in specific relation to relevant Garden City Principles, all of the Tendring / Colchester Borders options have a strong prospect of fully meeting the aspirations of this sustainability objective with significant positive impacts. Due to the scale of the proposals, all of the options can adhere to relevant Garden City Principles regarding the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience.

North Colchester

It can be considered that, in specific relation to relevant Garden City Principles, all of the North Colchester options have a reasonable prospect of partially meeting the aspirations of this sustainability objective with significant positive impacts. Due to the scale of the options, both options should be able to incorporate some of the requirements regarding generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience; however it should be noted that the presence of the solar farm within the boundary of both options would likely ensure that the remaining land would be required for built development purposes and correspondingly unavailable for the land uses required in this sustainability objective.

Colchester / Braintree Borders

It can be considered that, in specific relation to relevant Garden City Principles, all of the Colchester / Braintree Borders options have a strong prospect of fully meeting the



aspirations of this sustainability objective with significant positive impacts. Due to the scale of the options, all of the options can adhere to relevant Garden City Principles regarding the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience.

West of Braintree

It can be considered that, in specific relation to relevant Garden City Principles, all of the West Braintree options have a strong prospect of fully meeting the aspirations of this sustainability objective with significant positive impacts. Due to the scale of the options, all of the options can adhere to relevant Garden City Principles regarding the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience.

The 'Metro Plan'

The Metro Plan's principle of a series of satellite developments creates notional issues regarding both achieving a fully integrated and connected green grid at the settlement level and also the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience. The requirements for open space are likely to be a significant requirement due to the option's focus on Tendring, which as a district contains numerous international / European designated sites in coastal and estuarine areas. It can be expected that the Metro Plan option would require some level of habitat creation as stated in the AA for the Tendring / Colchester Borders Garden Community due to its focus on growth in Tendring district. It is therefore of significant importance that the Metro Plan locations are able to offer such a recreational offer, and the incorporation of SuDS on a case by case basis. It is currently uncertain whether the scale of each location can adequately provide the requirements of this sustainability objective / Garden City principle without significantly diminishing the developable areas of each location. To this extent, the option has been identified as unlikely to meet the criteria of this sustainability objective / Garden City Principle with generally negative impacts.

Monks Wood

It can be considered that, in specific relation to relevant Garden City Principles, the Monks Wood option has a strong prospect of fully meeting the aspirations of this sustainability objective with significant positive impacts. Due to the scale of the options, all of the options can adhere to relevant Garden City Principles regarding the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience.



10. Developability / Deliverability - The growth area is available, commercially attractive, and capable of delivering necessary physical / social / green infrastructure and could be viably developed within [6-10] years.	Tendring / Colchester Borders			North Colchester		Colchester / Braintree Borders				West of Braintree		Metro Plan	Monks Wood
	GCEC1	GCEC2	GCEC3	GCNC1	GCNC2	GCWC1	GCWC2	GCWC3	GCWC4	GCWB1	GCWB2	GCMP1	GCMW 1
Preferred Options Stage	++	+	+	?	?	?	?	?	?	+	+	N/A	N/A
Draft Publication Stage	++	+	+	+	?	?	?	?	?	?	?	--	?

Headline Impacts:

Tendring / Colchester Borders

All land in option GCEC1 was put forward for development through the call-for-sites process and that the majority of land is being promoted by a single promoter who has an option to develop the land. With this in mind, it is considered possible that commencement of the development can occur in the emerging plan period to 2033. Options GCEC2 and GCEC3 are assessed as having more uncertainty regarding delivery in the plan period, due to increasing levels of fragmented land ownership associated with larger indicative scales of development; however the principle of these options being able to meet the aspirations of the sustainability objective and related Garden City Principles is not in question.

North Colchester

Option GCNC1 will have a reasonable prospect of meeting the aspiration of the sustainability objective and relevant Garden City Principles. All land in this Option was put forward for development through the Call-for-Sites process, with the majority actively being promoted by a single developer with an option agreement with the landowners to develop. The additional land put forward under option GCNC2 was not included in the Colchester Borough Council Local Plan call-for-sites process, but it is understood that the majority is potentially capable of being brought forward and developed by the same promoter as the land under Option GCNC1. This however would not be all the land under GCNC2, and additional land searches etc. would be required to bring forward GCNC2 in its entirety. There would however be less potential for negative deliverability connotations surrounding the future of the Solar Farm under this option, associated with the larger scale and extent of land..



Colchester / Braintree Borders

Regarding option GCWC1, with the exception of the triangular shaped land located to the north of the A120 and west of Great Tey Road, all land under this option was included within the local plan call-for-sites process and is actively being promoted for development by two main parties. One of these parties is also understood to be able to bring forward the triangular land north of the A120 and west of Great Tey Road if this was identified for the Garden Community. It is believed that development could be commenced within the next 6-10 years, and make use of existing infrastructure to allow development to commence. Despite this, the extent of development will likely be constrained without significant investment. Although the potential exists for option GCWC1 to fully meet the aspirations of the sustainability objective, a 'reasonable prospect' has been highlighted for the purposes of comparison between sites. The same conclusions can be drawn for options GCWC2 and GCWC3, although all land under these options was included within the local plan call-for-sites process. Option GCWC4 will also have similar impacts, with all land included within the Local Plan call-for-sites process with the exception of that located to the north of the existing A120 and west of Great Tey Road. The constraints are also similar, however with the inclusion of possible additional public transport requirements more centrally to the site and the subsequent addition of considerations to the investment decisions of Network Rail. Additionally, much depends on the preferred route option regarding the A120 routing consultation.

West of Braintree

Options GCWB1 and GCWB2 have two-fold considerations that could affect delivery. These are the considerations regarding the mineral quarry, and constraints regarding the needs to invest in utility infrastructure; which consistent with the site's rural location is currently very limited in terms of physical networks and capacity. Option GCWB2 has additionally been highlighted as potentially allowing more flexibility regarding options for providing access from the A120/B1256 into the Garden Community, and commencing development of the new settlement relative to the operation and impact of the proposed quarry.

The 'Metro Plan'

The Metro Plan option has been submitted for consideration with no developer or landowner interest, aside from those parcels of land that lie within each broad location / settlement that were submitted to Tendring District Council as part of their Local Plan call-for-sites process. The desirability of individual landowners to release their land for the garden community is therefore unknown at this time. The degree of landowner fragmentation is also an unknown. These sites can be considered to not correlate well to the notion and principle of the scale of development required at each location to be a genuine Garden Community option, or alternative to strategic level growth. The CAUSE submission states that, 'although the purpose of this report is to examine the issues in principle rather than to prepare a business case it cannot be emphasised too strongly that the Metro concept depends on acceptance of quite large-scale development around the stations.' AECOM concept feasibility work suggests that only 2,777 homes would be forthcoming within the 10-minute walking catchment of the train stations of Thorpe, Weeley, Gt. Bentley and Alresford based on 35dph. Without a large volume of new housing either at the individual settlement level or in aggregate across the four villages, the ability to fund and implement comprehensive and or innovative infrastructure solutions may be more difficult. Because of the rural location of the settlements and their limited scale under this proposal, there may be fewer opportunities to attract private sector development partners, alternative financing or innovative delivery mechanisms, to assist the Councils in achieving their Garden Community ambitions. This may limit the extent of variation in



the types and tenures of the homes provided and who provides them. In this location the market demand is also likely to be less diverse than a location closer to a main urban centre or strategically better connected. The option has been assessed as having significant negative impacts due to the fact that the land is not being actively promoted at this stage.

Monks Wood

The proposal was submitted during the Braintree District Council Preferred Options Local Plan consultation by a single promoter and the land is in single ownership. As greenfield agricultural land with direct access from the existing A120, the proposal indicates that development could be commenced relatively quickly and within 6-10 years, although much depends on the preferred route emanating from the A120 re-routing consultation. The extent of first phase development could be constrained by the need to invest heavily in utility infrastructure, which is consistent with the site's rural location is currently very limited in terms of physical networks and capacity; however for the purposes of a consistent appraisal across all options, impacts are identified as similar to those of other rural locations. Overall, uncertain impacts are highlighted.

Cumulative & Synergistic Impacts of the Allocated Garden Communities

The emerging masterplans for the allocated Garden Communities of Tendring / Colchester Borders, Colchester / Braintree Borders and West of Braintree most closely represent:

- Tendring / Colchester Borders – GCEC3
- Colchester / Braintree Borders – GCWC1
- West of Braintree – GCWB1

The following table summarises the impacts and performance of each allocated Garden Community option, against the sustainability objectives / Garden City principles.

Table 28: The Performance of the Allocated Garden Community (GC) Options

GC Option	Sustainability Objectives (SO)									
	1	2	3	4	5	6	7	8	9	10
GCEC3	?	?/-	?/+	+	++	++	++	++	++	+
GCWC1	?	?/-	?/-	?	?/+	++	+	++	++	?
GCWB1	?/-	?/-	?/-	?/-	?	++	?/+	++	++	?

The cumulative and synergistic impacts of the allocated Garden Community Options have been explored on a 'Sustainability Objective / Garden City Principle' thematic basis. Commentary follows in the following table.

Table 29: The Cumulative & Synergistic Impacts of the Allocated Garden Community (GC) Options

Sustainability Objectives (SO)	Cumulative / Synergistic Impact	Commentary
1. Physical Limitations	No impact	The AA states that, regarding water quality, 'it is concluded that, whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice. Therefore, in conclusion, the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans

Sustainability Objectives (SO)	Cumulative / Synergistic Impact	Commentary
		<p>will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.' It is not considered that there are any cumulative accessibility issues surrounding the preferred sites, due to their general geographic distribution. Although all Garden Communities are located in close proximity to the strategic road network, they can be considered broadly unrelated at this stage and in light of committed A12 and A120 improvements. There may be some cumulative road traffic and associated air quality issues surrounding any of the Garden Communities with close-proximity non-strategic (in the context of this Local Plan Section One) site allocations in the Councils' respective Section Twos, however it should be acknowledged that the Garden Communities will require / utilise new infrastructure that would not be forthcoming until after the commencement of the majority of non-strategic allocations in the earlier stages of Local Plan periods. It is considered that this is more appropriately addressed in the respective Section Two Sustainability Appraisals, from the viewpoint that non-strategic site allocations are less critical to overall growth in the plan period across the North Essex Authorities area, and also in consideration of different timescales.</p>
2. Impacts	No impact	<p>Cumulative impacts are limited regarding natural and historic environmental features due to the geographic dispersal of the Garden Communities. There will be 'no impact' on biodiversity (SO6) as a result of the findings of the Appropriate Assessment (AA) (2017) of the Section One, regarding recreational pressures associated with the significant increase in growth stated within the Policy. The AA concludes that 'providing that the North Essex Authorities continue to collaborate and prepare the necessary Recreation Avoidance and Mitigation Strategies (RAMS) ... in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section 1 and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in-combination with other plans and projects as a result of recreation.' In addition, the AA indicates that the strategic approach and scope of the Section One (including Garden Communities) enables mitigation to be effectively incorporated.</p>
3. Environment /	No impact	There will be no cumulative impacts associated with the effects on

Sustainability Objectives (SO)	Cumulative / Synergistic Impact	Commentary
Amenity		<p>occupiers of existing properties and neighbouring areas/towns resulting from the Garden Communities due to their geographic distribution. Garden City principles would have to be adhered to in regard to a surrounding belt of countryside to avoid sprawl, and this minimises any perceived coalescence and resulting impact on existing settlements. Cumulatively, no one existing settlement would be negatively affected by any combination of Garden Communities. More holistically, similarly will no single Landscape Character Area be affected by a combination of Garden Communities, of which existing historic settlements form an important part of integrity and sensitivity. It can be considered that, in line with Garden City principles ensuring negative impacts on existing settlements do not occur, that benefits will be realised for existing nearby communities regarding an increase in services and local infrastructure in the wider areas beyond the Garden Communities.</p>
4. Transport	Uncertain impacts	<p>Should each Garden Community be able to integrate effective public transport solutions into the scheme and wider network, then there will be significant positive cumulative impacts resulting from the allocated Garden Communities in response to their individual potential to significantly improve public transport links within the North Essex Authorities area. Positive impacts can also be expected to benefit wider local areas in proximity to the Garden Communities. The geographic spread of the Garden Communities similarly ensures that benefits are widespread across all Districts / Boroughs. The notion of Garden Communities will have positive synergistic impacts regarding health outcomes, with the level of growth required in the North Essex Authorities being provided through developments that require walking, cycling and public transport designed to be the most attractive forms of local transport. Despite this, the Garden Communities at this stage require work, through Garden Community specific DPDs, masterplans and other detailed proposals, in order to develop such schemes for wider benefits. This is not a criticism of the Section One's allocations at this stage, which can be seen as an early stage establishing the principle of development at each broad location.</p>
5. Resilience	Positive impacts	<p>There will be positive cumulative impacts resulting from the allocated Garden Communities in response to their individual potential to significantly support and improve the viability of the town centres of Colchester and Braintree within the North Essex Authorities area. Positive impacts can also be expected to benefit wider local areas in proximity to the Garden Communities, with enhanced public transport opportunities to such centres in the locality.</p>

Sustainability Objectives (SO)	Cumulative / Synergistic Impact	Commentary
6. Housing	Significant positive impacts	All of the Garden Communities can be expected to have significantly positive impacts on housing growth. Cumulatively, these impacts become more positive over the plan period and beyond, with the ability to successfully integrate all housing types and tenures, including gypsy and traveller provision.
7. Employment Opportunities	Positive impacts	All of the Garden Communities can be expected to have positive impacts on employment growth. Cumulatively, these impacts can become more positive over the plan period and beyond, with the ability to successfully integrate a wide range of local jobs within easy commuting distance from homes. On a broad strategic level, the provision of employment opportunities within easy commuting distance of homes can be considered larger than the scope of each Garden Community and more reflective of broader economic areas. It should also be acknowledged that the requirements of Garden Communities to benefit from improved access both to public transport modes (including existing rail links) and strategic roads, as all the allocated Garden Communities are, may in practice result in out-commuting beyond each Garden Community and local centres within the North Essex Authorities area. This should not be considered a criticism of the Garden Communities, being more reflective of travel to work flows and commuting patterns within the North Essex Authorities area. The cumulative implications of the Garden Communities capitalises on the existing employment areas of Skyline (in the case of the West of Braintree Garden Community), the University (for the Tendring / Colchester Borders Garden Community) and a range of B-use and retail class opportunities associated with the town of Colchester and Tollgate (for the benefit of the Colchester / Braintree Borders Garden Community).
8. Mixed-use Opportunities	Significant positive impacts	All of the Garden Communities can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.
9. Environmental Quality & Sustainability	Significant positive impacts	All of the Garden Communities can be expected to have a strong prospect of providing the full suite of open space, allotments/food production areas, biodiversity gains and SuDS. This will ensure cumulative benefits across the North Essex Authorities area and wider



Sustainability Objectives (SO)	Cumulative / Synergistic Impact	Commentary
		benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.
10. Developability / Deliverability	No impact	It is not considered that there are any cumulative themes associated from the deliverability / developability of the Garden Communities that would give rise to any sustainability impacts.

Temporal Effects of the Allocated Garden Communities

It can be considered that, in response to the exploration of Garden Communities to meet residual unmet housing needs within the HMA in the latter stages of the three authorities' Local Plan periods and beyond (the 'long term' as defined in this SA report), there are no temporal effects that can be identified at this stage. The SA identifies the impacts of the Garden Communities at their maximum intended scales, beyond plan periods.

Secondary Effects of the Allocated Garden Communities

As specified throughout the above there can be considered numerous secondary benefits resulting from the development of the Garden Communities. These relate to the sustainability effects that can be expected to be realised in the wider localities of each Garden Community, particularly regarding the level of services and infrastructure that can be utilised by existing communities. There can also be expected to be small secondary positive impacts on the environmental quality of the town centres of Colchester and Braintree, associated with enhanced public transport links to these centres. Although it can be viewed that enhanced public transport links to centres would only offset the increased level of growth resulting from the Garden Communities, it can be assumed that links will also result in reduced traffic movements into centres along any established routes, including those peripheral areas of Colchester and Braintree, encouraging a more widespread modal shift.

Proposed Mitigation Measures / Recommendations Regarding the Allocated Garden Communities

The Garden Communities are being carefully developed through effective masterplanning, in order to positively adhere to issues surrounding physical limitations, in particular access arrangements to sites, infrastructure requirements and strategies regarding permeability and interconnectivity within the new settlements.

The following recommendations are made regarding the selection of Garden Community options within the three broad locations of the allocated Garden Communities.

Tendring / Colchester Borders

The SA indicates that option GCEC1 is the most sustainable option, due to its smaller scale and therefore comparatively minimal impacts. Despite this, it is possible that mitigation might be required in the form of habitat creation and management at the Garden Community due to possible impacts on wintering birds, as



identified within the AA. With this in mind, it may be more appropriate for a larger option to be considered in order to address this possible requirement. Option GCE3 will require some level of mitigation in regard to the presence of Bullock Wood SSSI, and it is recommended that this localised area be protected in future masterplans. It is recommended that severance issues surrounding the A137 are also addressed in masterplans and transport interconnectivity.

Colchester / Braintree Borders

Options GCWC1 and GCWC3 represent, broadly, the most sustainable options within the Colchester / Braintree Borders area. Option GCWC1 contains the Marks Tey Brickpit SSSI, however its location at the north east boundary in each instance ensures that this designation can be protected and enhanced through the requirements of a surrounding belt of countryside to prevent sprawl and this is recommended. Issues surrounding the Domsey Brook should also be factored into any development of GCWC3as blue infrastructure. Options GCWC2 and GCWC4 are in close proximity to a Scheduled Monument (a Roman villa 450m south of Warren's Farm to the north) and could affect the setting of this asset, and enhancement of this asset should be sought within the wider detailed masterplan. Impacts on the residential amenity of the settlements of Marks Tey and Little Tey are issues surrounding the options GCWC1, GCWC2 and GCWC4. A buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities and these should be subject to community engagement.

West of Braintree

The smaller option GCWB1is considered the most sustainable option in West of Braintree due an increased likelihood of negative impacts associated with nature conservation and heritage assets to the western boundary of option GCWB2. Both options will need to address the presence of heritage assets throughout the area, particularly in the north associated with the Conservation Area of Great Saling which contains a range of listed buildings including grade II as well as the Registered Park and Garden of Saling Grove, and seek enhancements at the masterplanning stage. It is also recommended that a buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities, specifically in relation to residents in Stebbing Green and Blake End. The masterplans should be subject to community engagement.

The Assessment of Alternative (Cumulative) Garden Community (GC) Option Permutations

Introduction

It is important that within the scope of identifying reasonable options for growth in the North Essex Authorities area, permutations of different Garden Community options are explored. It is possible that some combinations of Garden Community options might yield heightened benefits than those of the preferred Garden Communities through their cumulative analysis and for this reason these need to be assessed within this SA.

Identification of the Alternative Garden Community (GC) Option Permutations

It should be noted that multiple possible alternative permutations of Garden Communities exist, including an alternative exploring whether needs can be met without Garden Communities altogether (please see the

appraisal of those alternatives explored for the Spatial Strategy in Policy SP2 of this report). With that in mind, it is important to define what constitutes a 'reasonable alternative'. The following table represents those permutations that can be considered theoretically 'reasonable' alongside the specific reason behind their identification. The final determination as to whether they are 'reasonable' at this stage will result from each option's appraisal.

Scenario	Sites forming Permutation			Why considered a reasonable alternative?
1.	West of Braintree	Monks Wood	Tendring / Colchester Borders	This scenario has been identified in light of an assumption that A120 re-routing will either benefit (i.e. improve access to) one of Monks Wood or the Colchester / Tendring Borders Garden Community (based on the options currently being consulted upon at the time of writing). This views Monks Wood as a more direct alternative to the Colchester / Tendring Borders Garden Community than other options.
2.	Metro Plan	Tendring / Colchester Borders	North of Colchester	This scenario represents an eastern focus of Garden Communities to address historical undersupply in Tendring (and the lack of an up to date development plan since 2011).
3.	Metro Plan	Tendring / Colchester Borders	Colchester / Braintree Borders	This scenario was identified within the CAUSE 'Metro Plan' submission. It considers that the Metro Plan should be supplemented with a Garden Community at Tendring / Colchester Borders alongside a smaller amount of growth at the Colchester / Braintree Borders at a scale similar to Thorpe-le-Soken, Weeley, Great Bentley and Alresford, with development focused up to a 10minute walking distance from Marks Tey station.
4.	North Colchester	Colchester / Braintree Borders	Tendring / Colchester Borders	This scenario has been identified based on Colchester being the largest, main settlement and 'regional centre' within the North Essex area, and focuses single development Garden Community options (i.e. not a series of expanded settlements as per the Metro Plan option) in this broad area.
5.	West of Braintree	Monks Wood	Colchester / Braintree Borders	This scenario represents a western focus of Garden Communities to address the fact that housing in Braintree is relatively unaffordable.
6.	Monks Wood	West of Braintree	N/A	This scenario also represents a western focus to address the fact that housing in Braintree is relatively unaffordable, however with two Garden Communities only.
7.	West of	Colchester /	Metro Plan	This scenario represents a distribution that best

Scenario	Sites forming Permutation			Why considered a reasonable alternative?
	Braintree	Braintree Borders		responds to the notion of each LPA meeting their own identified needs in their administrative areas with no cross-boundary implications.
8.	Metro Plan	Tendring / Colchester Borders	West of Braintree	This scenario has been identified as it avoids the A120 re-routing uncertainty that exists at the current time. Under this scenario, three Garden Communities have been explored, to maximise the certainty of developability in the plan period.
9.	Tendring / Colchester Borders	West of Braintree	N/A	This scenario has been identified as it avoids the A120 re-routing uncertainty that exists at the current time. Under this scenario, two Garden Communities have been explored.

The Appraisal of the Alternative Garden Community (GC) Option Permutations

The assessment of the above scenarios is contained within the following sub-sections using the methodology for Garden Communities.

Objective 1: Physical Limitations – Absence of insurmountable problems (e.g. access, ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
1. Physical Limitations	0	-	0	-	-	0	0	0	0

Commentary:

Scenario 1: The geographic location of these Garden Community options is such that impacts are unlikely to give rise to any significant cumulative impacts regarding flood risk. It is possible that heightened negative impacts could be experienced at Marks Farm roundabout through the development of both West of Braintree and Monks Wood GC options should certain A120 consultation options become preferred. This could affect issues such as access, congestion and air quality away from the Garden Community options but as a result of an expected increase in traffic movements resulting from them. Despite this, much of these cumulative implications are theoretical and qualitative at this stage, and there will be no impacts highlighted for this option.

Scenario 2: The geographic distribution of these Garden Community options is such that negative impacts can be expected surrounding congestion and air quality in and around the town of Colchester, particularly in the east of the town and those roads permeating the town in this area. This is in view of significant development surrounding the town. In addition, the Metro Plan model of relying on employment needs to largely be met in Colchester and at the University is likely to marginally increase these congestion and air quality impacts; however it should be acknowledged that commuting to this area is intended to be fore mostly via rail links. Nevertheless, negative impacts have been identified for this scenario. Other problems surrounding flood risk and pollution are however not expected to be cumulatively significant.



Scenario 3: The Metro Plan model of relying on employment needs to largely be met in Colchester and at the University is likely to marginally increase congestion and air quality impacts; however it should be acknowledged that commuting to this area is intended to be fore mostly via rail links. Other problems surrounding flood risk and pollution are however not expected to be cumulatively significant. The geographic distribution of the options is such that minimal cumulative impacts can be expected regarding physical limitations, and as such, no impacts have been highlighted for this option.

Scenario 4: The geographic distribution of these Garden Community options is such that negative impacts can be expected surrounding congestion and air quality in and around the town of Colchester, particularly in the east of the town and those roads permeating the town in this area. This is in view of significant development surrounding the town. Other problems surrounding flood risk and pollution are however not expected to be cumulatively significant. Nevertheless, negative impacts have been identified for this scenario.

Scenario 5: The geographic location of these Garden Community options is such that impacts are unlikely to give rise to any significant cumulative impacts regarding flood risk. It is possible that heightened negative impacts could be experienced at Marks Farm roundabout through the development of both West of Braintree and Monks Wood GC options should certain A120 consultation options become preferred. This could affect issues such as access, congestion and air quality away from the Garden Community options but as a result of an expected increase in traffic movements resulting from them. Based on an assumption that the Monks Wood and Colchester / Braintree Borders options would not both be viable / developable from any one A120 re-routing option, the access implications surrounding both would likely have some negative impacts in the broad area. It should be noted that these cumulative implications are theoretical and qualitative at this stage; however for the purposes of a consistent appraisal across all scenarios, negative impacts have been highlighted.

Scenario 6: The geographic location of these Garden Community options is such that impacts are unlikely to give rise to any significant cumulative impacts regarding flood risk. It is possible that heightened negative impacts could be experienced at Marks Farm roundabout through the development of both West of Braintree and Monks Wood GC options should certain A120 consultation options become preferred. This could affect issues such as access, congestion and air quality away from the Garden Community options but as a result of an expected increase in traffic movements resulting from them. Despite this, much of these cumulative implications are theoretical and qualitative at this stage, and there will be no impacts highlighted for this option.

Scenario 7: There are unlikely to be any negative cumulative impacts resulting from this scenario, based on the geographic dispersal of the respective development options.

Scenario 8: The Metro Plan model of relying on employment needs to largely be met in Colchester and at the University is likely to marginally increase congestion and air quality impacts; however it should be acknowledged that commuting to this area is intended to be fore mostly via rail links. Other problems surrounding flood risk and pollution are however not expected to be cumulatively significant. The geographic distribution of the options is such that minimal cumulative impacts can be expected regarding physical limitations, and as such, no impacts have been highlighted for this option

Scenario 9: There are unlikely to be any negative cumulative impacts resulting from this scenario, based on the geographic dispersal of the respective development options.

Objective 2: Impacts – Acceptable impacts on high quality agricultural land, important landscape features, townscape features, sites of nature conservation interest and heritage assets

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
2. Impacts	0	-	-	-	-	0	0	?	0

Commentary:

Scenario 1, 4- 9: The AA indicates that ‘providing the North Essex Authorities continue to collaborate and prepare the necessary RAMS, and in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section a and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in-combination with other plans and projects as a result of recreation.’ Therefore no cumulative impacts are highlighted for the majority of the Garden Community permutations.

Scenarios 2-3: The AA states that wintering bird surveys will be required for Tendring Colchester Borders Garden Community as part of any project level development proposals and masterplanning, to determine the sites individual importance for golden plover and lapwing and inform mitigation proposals. It adds that if required, mitigation will need to create and manage suitably located habitat which maximises feeding productivity for these SPA species, and such mitigatory habitat would need to be provided and fully functional prior to development which would affect significant numbers of SPA birds. This issue, and the requirement for mitigation, can be expected to be exacerbated in those scenarios that allocate the Tendring / Colchester Borders Garden Community with the Metro Plan option due to the increased level of growth in Tendring in accumulation with Tendring’s Section Two allocations.

Landscape impacts can be expected to be more pertinent in those locations where multiple Garden Communities are geographically in close proximity; particularly for scenario 5 (including both the Garden Community options of Monks Wood and Colchester / Braintree Borders), scenario 2 (representing an eastern focus) and scenario 4 (representing a focus on the town of Colchester). Some degree of negative landscape impacts can also be expected from those scenarios that explore development at the Tendring / Colchester Borders and Alresford under the Metro Plan model (scenarios 2, 3 and 8).

No cumulative impacts can be expected of any of the scenarios on the historic environment, aside from those landscape impacts highlighted above where the historic environment is intrinsically linked to the landscape and settlement patterns. This has been highlighted singularly for the Metro Plan in the assessment of this Garden Community option in isolation.

Objective 3: Environment/Amenity – Acceptable relationship with and impact on occupiers of existing properties and neighbouring areas/towns (maintaining adequate separation)

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
3. Environment / Amenity	0	0	0	-	-	0	0	0	0

Commentary:

Scenario 1: There will be no perceived coalescence cumulatively with any of the options that form this scenario.

Scenario 2: There will be no perceived coalescence cumulatively with any of the options that form this scenario. It can be considered that there will be negative relationships between new developments and existing communities at each settlement under the Metro Plan option; however such impacts are not the focus of this cumulative scenario assessment.

Scenario 3: There will be no perceived coalescence cumulatively with any of the options that form this scenario. It can be considered that there will be negative relationships between new developments and existing communities at each settlement under the Metro Plan option; however such impacts are not the focus of this cumulative scenario assessment.

Scenario 4: It can be considered that there will be some degree of negative impact on the existing north and north-eastern communities and estates of the town of Colchester arising from development at the scale of Garden Communities at North Colchester and the Tendring / Colchester Borders.

Scenario 5: There can be considered to be negative social impacts on the surrounding settlements of Coggeshall and Pattiswick holistically, resulting from the development of Garden Communities at Colchester / Braintree Borders and Monks Wood. Although the scale of the developments can be expected to factor in a significant and effective belt of countryside surrounding each Garden Community, to prevent sprawl, it can be considered that this scenario would lead to over development in the broad area.

Scenario 6: There will be no perceived coalescence cumulatively with any of the options that form this scenario.

Scenario 7: There will be no perceived coalescence cumulatively with any of the options that form this scenario. It can be considered that there will be negative relationships between new developments and existing communities at each settlement under the Metro Plan option; however such impacts are not the focus of this cumulative scenario assessment.

Scenario 8: There will be no perceived coalescence cumulatively with any of the options that form this scenario. It can be considered that there will be negative relationships between new developments and existing communities at each settlement under the Metro Plan option; however such impacts are not the focus of this cumulative scenario assessment.

Scenario 9: There will be no perceived coalescence cumulatively with any of the options that form this scenario.

Objective 4: Transport – Incorporation of integrated and accessible sustainable transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
4. Transport	?	+	+	+	?	-	+	+	+

Commentary:

Scenario 1: There will be uncertain cumulative impacts resulting from the Garden Communities responding to this scenario, in response to their individual potential to improve public transport links within the North Essex Authorities area. Whereas West of Braintree and Tendring / Colchester Borders can be expected to integrate varying levels of public transport infrastructure and choice, the Garden Community option of Monks Wood does not benefit from an existing rail station on site or in close proximity to serve the development. This hinders the ability of the proposal to improve sustainable movements to main employment areas and in response to a need to reduce the need for private car use. The notion of Garden Communities will however have positive impacts regarding an ability to provide walking and cycling through developments to serve any public transport interchanges and to access local services / centres.

Scenario 2: Positive impacts can be expected regarding the integration of public transport options across the relevant Garden Community options in accumulation. Impacts are limited however where the Metro Plan does not currently offer any comparable choice to rail links, however there can be considered cumulative positive outcomes across the eastern area of North Essex. It should be noted however that wider benefits across the whole plan area will be limited as a result of such a focus, with no single or cumulative links being of benefit to existing communities in Braintree District.

Scenario 3: Positive impacts can be expected regarding the integration of public transport options across the relevant Garden Community options in accumulation. Impacts are limited however where the Metro Plan does not currently offer any comparable choice to rail links, however there can be considered cumulative positive outcomes across this broad area of North Essex. It should be noted however that wider benefits across the whole plan area will be limited as a result of such a focus, with no single or cumulative links being of benefit to existing communities in the majority of Braintree District.

Scenario 4: Positive impacts can be expected regarding the integration of public transport options across the relevant Garden Community options in accumulation. Impacts are limited however where the North Colchester option does not currently offer any comparable choice to bus links, however there can be considered cumulative positive outcomes across the town of Colchester. It should be noted however that wider benefits across the whole plan area will be limited as a result of such a focus, with no single or cumulative links being of benefit to existing communities in Braintree District.

Scenario 5: There will be uncertain cumulative impacts resulting from the Garden Communities responding to this scenario, in response to their individual potential to improve public transport links within the North Essex Authorities area. Whereas West of Braintree and Colchester / Braintree Borders can be expected to integrate varying levels of public transport infrastructure and choice, the Garden Community option of Monks Wood does not benefit from an existing rail station on site or in close proximity to serve the development. This hinders the ability of the proposal to improve sustainable movements to main employment areas and in response to a need to reduce the need for

private car use. The notion of Garden Communities will however have positive impacts regarding an ability to provide walking and cycling through developments to serve any public transport interchanges and to access local services / centres. It should be noted however that wider benefits across the whole plan area will be limited as a result of such a focus, with no single or cumulative links being of benefit to existing communities in Tendring District.

Scenario 6: There will be negative cumulative impacts resulting from the Garden Communities responding to this scenario, in response to their individual potential to improve public transport links within the North Essex Authorities area. Whereas West of Braintree can be expected to integrate public transport infrastructure and choice, the Garden Community option of Monks Wood does not benefit from an existing rail station on site or in close proximity to serve the development. This hinders the ability of the proposal to improve sustainable movements to main employment areas and in response to a need to reduce the need for private car use. It should be noted in addition that wider benefits across the whole plan area will be limited as a result of such a focus, with no single or cumulative links being of benefit to existing communities in Colchester Borough or Tendring District.

Scenario 7: Positive impacts can be expected regarding the integration of public transport options across the relevant Garden Community options in accumulation. Impacts are limited however where the Metro Plan does not currently offer any comparable choice to rail links, however there can be considered cumulative positive outcomes across the strategic area of North Essex.

Scenario 8: Positive impacts can be expected regarding the integration of public transport options across the relevant Garden Community options in accumulation. Impacts are limited however where the Metro Plan does not currently offer any comparable choice to rail links, however there can be considered cumulative positive outcomes across the broad area of North Essex. There will likely be wider benefits across the whole plan area as a result of such a focus, with single and cumulative links being of benefit to existing communities across the broad strategic area.

Scenario 9: Positive impacts can be expected regarding the integration of public transport options across both Garden Community options in accumulation in so far as they will benefit wider existing communities. Impacts are limited however in consideration of the distance between the two individual Garden Community options, and notions of integration of the two can be considered to not exist.

Objective 5: Resilience - Positive contribution towards maintaining resilient town centres and identified regeneration and development priority areas and institutions (including Essex University)

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
5. Resilience	+	+	++	?	+	?	++	++	+

Commentary:

Scenario 1: There will be positive cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centres of Colchester and Braintree within the North Essex Authorities area. Impacts are limited however in response to the inclusion of Monks Wood and the lack of a choice of existing public transport links to town centres, notably regarding rail.



Scenario 2: There will be positive cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centres of Colchester and Clacton within the North Essex Authorities area. Impacts are limited however in response to the inclusion of North Colchester and a perceived lack of a choice of public transport options to town centres, notably regarding rail.

Scenario 3: There will be significant positive cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centres of Colchester and Clacton, as well as the University, within the North Essex Authorities area.

Scenario 4: There will be uncertain cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centre of Colchester within the North Essex Authorities area. Impacts are limited however in response to the inclusion of North Colchester and a perceived lack of a choice of public transport options to town centres, notably regarding rail and the scope of the Garden Community options only benefitting the town centre of Colchester in this scenario.

Scenario 5: There will be positive cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centres of Colchester and Braintree within the North Essex Authorities area. Impacts are limited however in response to the inclusion of Monks Wood and the lack of a choice of existing public transport links to town centres, notably regarding rail.

Scenario 6: There will be uncertain cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centre of Braintree within the North Essex Authorities area. Impacts are limited in response to the inclusion of Monks Wood and the lack of a choice of existing public transport links to town centres, notably regarding rail, and the scope of the Garden Community options only benefitting the town centre of Braintree in this scenario.

Scenario 7: There will be significant positive cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centres of Colchester, Braintree and Clacton, within the North Essex Authorities area.

Scenario 8: There will be significant positive cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centres of Colchester, Braintree and Clacton, as well as the university, within the North Essex Authorities area.

Scenario 9: There will be positive cumulative impacts resulting from the Garden Community options contained within this scenario. This is in response to their individual potential to support and improve the vitality and viability of the town centres of Colchester and Braintree within the North Essex Authorities area.

Objective 6: Housing – Provision of a mix of tenures, including affordable homes and a range of housing types (including self-build/custom build and gypsy and traveller pitches).

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
6. Housing	+	--	--	-	-	--	-	-	--

Commentary:

Scenario 1: The distribution of growth can be seen to have some minor positive implications in so far as growth will occur within all three LPA areas, albeit predominantly focused around Braintree. This broadly aligns to an aspiration of sustainability within this report; that there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing housing needs across the whole area and on a district / borough level.

Scenario 2: The cumulative impacts of focusing all required Garden Communities in the eastern area of North Essex can be seen to be negative across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing housing needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF. North Colchester can be considered to have implications surrounding development associated with the Solar Farm on site and its lifespan as permitted. In addition, the Metro Plan submission highlights development locations in response to those that were submitted as part of the Tendring District Council Local Plan call-for-sites process. Work undertaken to explore the suitability and feasibility of the Metro Plan option (Colchester Metro Town – Evaluation of Alternatives, 2017 (AECOM)) identifies that the current land 'availability' as identified through the call-for-sites submissions would only provide less than 3,000 dwellings at a density of 35 dwellings per hectare. The implication of this in regard to this scenario is that there would have to be a higher level of growth at the North Colchester and the Tendring / Colchester Borders Garden Community options. Not only would this lead to a worse distribution of growth than intended under the scenario, but there would be significant implications of what could be delivered in the plan period. For this reason, impacts are assessed as significantly negative.

Scenario 3: The distribution of growth can be seen to have some minor positive implications in so far as growth will occur within all three LPA areas, albeit predominantly focused around Colchester and Tendring. The Metro Plan submission highlights development locations in response to those that were submitted as part of the Tendring District Council Local Plan call-for-sites process. Work undertaken to explore the suitability and feasibility of the Metro Plan option (Colchester Metro Town – Evaluation of Alternatives, 2017 (AECOM)) identifies that the current land 'availability' as identified through the call-for-sites submissions would only provide less than 3,000 dwellings at a density of 35 dwellings per hectare. The implication of this in regard to this scenario is that there would have to be a higher level of growth at the Colchester / Braintree Borders Garden Community (contrary to the principle of the scenario) as well as the Tendring / Colchester Borders Garden Community. Not only would this lead to a worse distribution of growth than intended under the scenario, but there would be significant implications of what could be delivered in the plan period. For this reason, impacts are assessed as significantly negative.

Scenario 4: The cumulative impacts of focusing all required Garden Communities around the town of Colchester can be seen to be negative across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address



existing housing needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF. North Colchester can additionally be considered to have implications surrounding development associated with the Solar Farm on site and its lifespan as permitted. For this reason, impacts are assessed as negative.

Scenarios 5 & 6: The cumulative impacts of focusing all required Garden Communities in the western area of North Essex can be seen to be negative across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing housing needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF. There will be additional negative implications associated with two Garden Communities under scenario 6, which has been additionally assessed as having significant negative impacts as a result of not providing enough growth in the plan period and meeting OAN.

Scenario 7: This scenario will have positive impacts in theory, based on the distribution of the Garden Community options that focuses growth in each authority. Nevertheless, the Metro Plan submission highlights development locations in response to those that were submitted as part of the Tendring District Council Local Plan call-for-sites process. Work undertaken to explore the suitability and feasibility of the Metro Plan option (Colchester Metro Town – Evaluation of Alternatives, 2017 (AECOM)) identifies that the current land 'availability' as identified through the call-for-sites submissions would only provide less than 3,000 dwellings at a density of 35 dwellings per hectare. The implication of this in regard to this scenario is that there would have to be a higher level of growth at the West of Braintree and the Tendring / Colchester Borders Garden Communities. Not only would this lead to a worse distribution of growth than intended under the scenario, but there would be significant implications of what could be delivered in the plan period. For this reason, impacts are assessed as negative.

Scenario 8: The distribution of growth can be seen to have some minor positive implications in so far as growth will occur within all three LPA areas, albeit predominantly focused around Colchester and Tendring. The Metro Plan submission highlights development locations in response to those that were submitted as part of the Tendring District Council Local Plan call-for-sites process. Work undertaken to explore the suitability and feasibility of the Metro Plan option (Colchester Metro Town – Evaluation of Alternatives, 2017 (AECOM)) identifies that the current land 'availability' as identified through the call-for-sites submissions would only provide less than 3,000 dwellings at a density of 35 dwellings per hectare. The implication of this in regard to this scenario is that there would have to be a higher level of growth at the West of Braintree Garden Community (extending into Uttlesford and outside the HMA) as well as the Tendring / Colchester Borders Garden Community. Not only would this lead to a worse distribution of growth than intended under the scenario, but there would be significant implications of what could be delivered in the plan period. For this reason, impacts are assessed as negative.

Scenario 9: This scenario will have positive impacts in theory, based on the distribution of the Garden Community options that focuses growth in each authority. There will be additional negative implications associated with two Garden Communities under scenario 6, which has been additionally assessed as having significant negative impacts as a result of not providing enough growth in the plan period and meeting OAN.

Objective 7: Employment Opportunities – Provision for a wide range of local jobs within easy commuting distance from homes

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
7. Employment Opportunities	?	-	?	-	-	--	+	+	?

Commentary:

Scenario 1: There can be expected to be positive impacts on employment growth through the distribution of development within this scenario; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF. The scenario also seeks to locate development in close proximity to the Skyline development in west Braintree, however impacts are limited due to the lack of existing rail links at Monks Wood and for that reason; uncertain impacts are highlighted within this assessment.

Scenario 2: The Metro Plan can be considered reliant to some degree on a Garden Community at Tendring / Colchester Borders in order to capitalise on employment provision in that wider area. This is fundamental to the principle of the option's satellite model extending outward from Colchester town. For that reason, the cumulative impacts of the Metro Town option with the Tendring / Colchester Borders Garden Community can be seen to have positive impacts in combination. The cumulative impacts of focusing all required Garden Communities in the eastern area of North Essex can be seen as negative across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF.

Scenario 3: The Metro Plan can be considered reliant to some degree on a Garden Community at Tendring / Colchester Borders in order to capitalise on employment provision in that wider area. This is fundamental to the principle of the option's satellite model extending outward from Colchester town. For that reason, the cumulative impacts of the Metro Town option with the Tendring / Colchester Borders Garden Community can be seen to have some positive impacts in combination. The cumulative impacts of focusing all required Garden Community options around Colchester can be seen as negative across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF. Overall, there will be uncertain impacts associated with the scenario, based on the above considerations but also reflecting an element of growth in Braintree district; albeit likely beyond the plan period.

Scenario 4: The cumulative impacts of focusing all required Garden Communities in the area of Colchester town can be seen as negative across North Essex; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF.

Scenario 5: The cumulative impacts of focusing all required Garden Communities in the Braintree area of North Essex can be seen as negative across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. This better aligns the



Section One with the requirements of LPAs as iterated in the NPPF. The scenario seeks to locate development in close proximity to the Skyline development in west Braintree, however does not capitalise on the employment benefits associated with the University. Additionally, impacts are further limited due to the lack of existing rail links at Monks Wood and for that reason negative impacts are highlighted within this assessment.

Scenario 6: The cumulative impacts of focusing two Garden Communities in the Braintree area of North Essex can be seen as negative across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. This better aligns the Section One with the requirements of LPAs as iterated in the NPPF. Although the scenario seeks to locate development in close proximity to the Skyline development in west Braintree, impacts are limited further due to the lack of existing rail links at Monks Wood, resulting in a significantly negative impact on this objective.

Scenario 7: The Metro Plan can be considered reliant to some degree on a Garden Community at Tendring / Colchester Borders in order to capitalise on employment provision in that wider area. This is fundamental to the principle of the option's satellite model extending outward from Colchester town. For that reason, the cumulative impacts of the Metro Town option with the Tendring / Colchester Borders Garden Community can be seen to have some positive impacts in combination. The cumulative impacts of distributing the Garden Communities in the Braintree area of North Essex can be seen as positive across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. The scenario also seeks to locate development in close proximity to the Skyline development in west Braintree.

Scenario 8: The Metro Plan can be considered reliant to some degree on a Garden Community at Tendring / Colchester Borders in order to capitalise on employment provision in that wider area. This is fundamental to the principle of the option's satellite model extending outward from Colchester town. For that reason, the cumulative impacts of the Metro Town option with the Tendring / Colchester Borders Garden Community can be seen to have some positive impacts in combination. The cumulative impacts of distributing the Garden Communities in the Braintree area of North Essex can be seen as positive across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. The scenario also seeks to locate development in close proximity to the University and the Skyline development.

Scenario 9: The cumulative impacts of distributing the Garden Communities in the Braintree area of North Essex can be seen as positive across the strategic area; from a sustainability point of view there should be a desire for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing employment needs across the whole area and on a district / borough level. The scenario also seeks to locate development in close proximity to the University and the Skyline development, providing comparatively easy access to established employment growth areas. Despite this, the development of two Garden Communities would not align housing and employment growth to the levels required of the OAN report, and as such, uncertain impacts have been identified for this scenario.

Objective 8: Mixed-use Opportunities – Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
8. Mixed-use Opportunities	++	?	?	++	++	+	?	?	+

Commentary:

Scenario 1: The Garden Communities within this scenario can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.

Scenarios 2, 3, 7 & 8: The majority of the Garden Communities within this scenario can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles. Despite this, regarding the Metro Plan option, the inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods is unlikely to be wholly possible at each location due to the limited scale of development at each individual settlement and within the 10 minute walking radius from each rail station. Although existing infrastructure and services are likely to exist in close proximity to each settlement focus, this is likely to put pressure on existing infrastructure capacities, such as GPs and schools, without the requisite development (dwelling) thresholds being met for the provision of new infrastructure. For this reason, impacts are assessed as uncertain for this scenario.

Scenario 4: The Garden Communities within this scenario can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.

Scenario 5: The Garden Communities within this scenario can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.

Scenario 6: The Garden Communities within this scenario can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles. Impacts are limited however, where the delivery of two Garden Communities within this scenario can be expected to have comparably less wide scoping benefits than other scenarios.

Scenario 9: The Garden Communities within this scenario can be expected to have a strong prospect of providing

the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles. Impacts are limited however, where the delivery of two Garden Communities within this scenario can be expected to have comparably less wide scoping benefits than other scenarios.

Objective 9: Environmental Quality & Sustainability – Incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience.

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
9. Environmental Quality & Sustainability	++	-	-	++	++	++	-	-	++

Commentary:

Scenarios 1, 4, 5, 6 & 9: The Garden Communities within this scenario can be expected to have a strong prospect of providing generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles.

Scenarios 2, 3, 7 & 8: The majority of the Garden Communities within this scenario can be expected to have a strong prospect of providing the full suite of required mixed-use opportunities, including the provision of both primary and secondary schools. This will have significant cumulative benefits across the North Essex Authorities area and wider benefits for existing communities in the broad areas for each Garden Community. There are likely to be additional cumulative benefits associated with wider health outcomes outside the direct scope of the Garden City principles. Despite this, regarding the Metro Plan option, the principle of a series of satellite developments creates notional issues regarding both achieving a fully integrated and connected green grid at the settlement level and also the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience. The requirements for open space are likely to be a significant requirement due to the option's focus on Tendring, which as a district contains numerous international / European designated sites in coastal and estuarine areas. The AA notes the possibility that habitat creation might be needed to mitigate the impacts on wintering birds within the Tendring area. For this reason, negative impacts have been highlighted in relation to these scenarios, however it should be noted that the level of growth submitted is unlikely to be provided as identified in this SA and the Colchester Metro Town – Evaluation of Alternatives, 2017 (AECOM) document.

Objective 10: Developability / Deliverability - The growth area is available, commercially attractive, and capable of delivering necessary physical/social/green infrastructure and could be viably developed within [6-10] years. Satisfactory mechanisms are in place to capture increase in land value to meet infrastructure costs and manage and maintain assets in the long term

Sustainability Objective (SO)	Scenario								
	1	2	3	4	5	6	7	8	9
10. Developability / Deliverability	0	0	0	0	0	0	0	0	0

Commentary:

Scenarios 1 - 9: It is not considered that there are any cumulative themes associated from the deliverability / developability of the Garden Communities that would give rise to any sustainability impacts.

7.5.4 Reasons for Rejecting the Alternative Garden Community (GC) Option Permutations

The preferred / allocated scenario is that contained within the 'Cumulative & Synergistic Impacts of the Allocated Garden Communities' section of this SA, above. The Garden Communities have been selected / allocated due to their ability to meet offer a broad geographic dispersal meeting the individual and combine North Essex growth requirements / needs across all of the participating Section One authorities. The options explored also reflect the best possible spread of wider benefits to existing and new communities, reflecting accessible locations that will have no location-based cumulative impacts. They can also be seen to represent the most sustainable options in reflection of potential benefits and opportunities.

This section outlines the main reasons for rejecting the alternative Garden Community option permutations explored.

Table 30: The Reasons for Rejecting the Alternative Garden Community (GC) Option Permutations

Scenario	Sites forming Permutation			Reason for Rejection
1.	West of Braintree	Monks Wood	Tendring / Colchester Borders	Monks Wood is currently located on the highly trafficked and single carriageway section of the A120. The only other roads in the vicinity are very rural lanes in the vicinity and no opportunity to access a site of this size by other routes. If the A120 project is to go ahead, 1 of the 5 options could see the new A120 run through the site, the other 4 would be distant from the site. Whilst any upgrade option would provide capacity on the existing A120 network, there are no guarantees that the project will go forward. With the exception of option A travel to

Scenario	Sites forming Permutation			Reason for Rejection
				the strategic highway network would need to be via Marks Tey to the east or Braintree to the west. In addition the project is not due to complete until 2026, so completions would not be able to start until that date. The employment market in Braintree is less strong than Colchester and major new employment areas are proposed on the west side of Braintree which is in close proximity to the West of Braintree garden community.
2.	Metro Plan	Tendring / Colchester Borders	North of Colchester	The discounting of the North Colchester site for a Garden Community was based on the negative environmental impacts of a large Garden Community on an area of significant landscape and environmental value. The Metro Plan option has been rejected due its inability to deliver the required growth, linked to deliverability / developability and the availability / lack of promotion of land within the model to the required scales. It is also not considered that a series of smaller developments can successfully combine to meet the requirements of sustainability / Garden City principles. Additionally, the deliverability and sustainability of Garden Communities was considered to be best served by their location in two distinct areas of the Borough as opposed to adjacent communities at both East and North Colchester.
3.	Metro Plan	Tendring / Colchester Borders	Colchester / Braintree Borders	The Metro Plan option has been rejected due its inability to deliver the required growth, linked to deliverability / developability and the availability / lack of promotion of land within the model to the required scales. It is also not considered that a series of smaller developments can successfully combine to meet the requirements of sustainability / Garden City principles.
4.	North Colchester	Colchester / Braintree Borders	Tendring / Colchester Borders	The discounting of the North Colchester site for a Garden Community was based on the negative environmental impacts of a large Garden Community on an area of significant landscape and environmental value. Additionally, the deliverability and sustainability of Garden Communities was considered to be best served by their location in two distinct areas of the Borough as opposed to adjacent communities at both East and North Colchester.
5.	West of Braintree	Monks Wood	Colchester / Braintree	Monks Wood is currently located on the highly trafficked and single carriageway section of the A120. The only

Scenario	Sites forming Permutation			Reason for Rejection
			Borders	<p>other roads in the vicinity are very rural lanes in the vicinity and no opportunity to access a site of this size by other routes. If the A120 project is to go ahead, 1 of the 5 options could see the new A120 run through the site, the other 4 would be distant from the site. Whilst any upgrade option would provide capacity on the existing A120 network, there are no guarantees that the project will go forward. With the exception of option A travel to the strategic highway network would need to be via Marks Tey to the east or Braintree to the west. In addition the project is not due to complete until 2026, so completions would not be able to start until that date. The employment market in Braintree is less strong than Colchester and major new employment areas are proposed on the west side of Braintree which is in close proximity to the West of Braintree garden community. Additionally, the deliverability and sustainability of Garden Communities was considered to be best served by their location in three distinct areas of the strategic area.</p>
6.	Monks Wood	West of Braintree	N/A	<p>Monks Wood is currently located on the highly trafficked and single carriageway section of the A120. The only other roads in the vicinity are very rural lanes in the vicinity and no opportunity to access a site of this size by other routes. If the A120 project is to go ahead, 1 of the 5 options could see the new A120 run through the site, the other 4 would be distant from the site. Whilst any upgrade option would provide capacity on the existing A120 network, there are no guarantees that the project will go forward. With the exception of option A travel to the strategic highway network would need to be via Marks Tey to the east or Braintree to the west. In addition the project is not due to complete until 2026, so completions would not be able to start until that date. The employment market in Braintree is less strong than Colchester and major new employment areas are proposed on the west side of Braintree which is in close proximity to the West of Braintree garden community. The notion of two Garden Communities, based on assumptions made regarding commencement dates and delivery rates, will not provide enough homes to meet OAN in the plan period.</p>
7.	West of	Colchester /	Metro Plan	The Metro Plan option has been rejected due its inability

Scenario	Sites forming Permutation			Reason for Rejection
	Braintree	Braintree Borders		to deliver the required growth, linked to deliverability / developability and the availability / lack of promotion of land within the model to the required scales. It is also not considered that a series of smaller developments can successfully combine to meet the requirements of sustainability / Garden City principles.
8.	Metro Plan	Tendring / Colchester Borders	West of Braintree	The Metro Plan option has been rejected due its inability to deliver the required growth, linked to deliverability / developability and the availability / lack of promotion of land within the model to the required scales. It is also not considered that a series of smaller developments can successfully combine to meet the requirements of sustainability / Garden City principles.
9.	Tendring / Colchester Borders	West of Braintree	N/A	The notion of two Garden Communities, based on assumptions made regarding commencement dates and delivery rates, will not provide enough homes to meet OAN in the plan period.



Place Services

Essex County Council

County Hall, Chelmsford, Essex CM1 1QH

T: +44 (0)333 013 6840

E: enquiries@placeservices.co.uk

www.placeservices.co.uk

June 2017



Essex County Council



North Essex Authorities Strategic Section One for Local Plans: Draft Publication (Regulation 19)

**Draft Sustainability Appraisal (SA): Annex A -
Plans and Programmes - June 2017**







Contents

1.	Introduction	4
1.1	Background	4
1.2	Identifying Other Relevant Policies, Plans and Programmes	4
2.	List of Relevant Plans and Programmes	5
2.1	Relevant Plans and Programmes	5
3.	Review of Plans and Programmes	13
3.1	Review of International Plans and Programmes	13
3.2	Review of National Plans and Programmes	23
3.3	Review of Sub-national Plans and Programmes	40
5.3	Review of Local Plans and Programmes	59



1. Introduction

1.1 Background

Braintree District Council, Colchester Borough Council and Tendring District Council, together forming the 'North Essex Authorities,' in conjunction with Essex County Council as a key partner in its strategic role for infrastructure and service provision, commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for a Strategic Section One for the respective Council's Local Plans.

Place Services are acting as consultants for this work; therefore the content of this SA should not be interpreted or otherwise represented as the formal view of Essex County Council.

This document is Annex A to the Environmental Report of the SA for Section One. It also forms Annex A of the Section Two SAs for Colchester Borough Council and Tendring District Council.

It includes a comprehensive description of relevant plans and programmes relevant to the strategic area, and those local areas of Colchester and Tendring. The content of these plans and programmes can also assist in the identification of any conflicting content of plans and programmes in accumulation.

1.2 Identifying Other Relevant Policies, Plans and Programmes

The SEA Directive requires the production of the following information:

An outline of the plan or programme's "relationship with other relevant plans and programmes." Annex 1(a) and "The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation" Annex I (e)

The Local Plans include policies equating to a range of social, environmental and economic aspirations. The relationship between various policies, plans, programmes and sustainability objectives may influence the Local Plans and this SA. The relationships are analysed to identify any external social, environmental or economic objectives that should be reflected in the SA process; any external factors that may have influenced the preparation of the document; and to determine whether the policies in other plans and programmes might lead to cumulative or synergistic effects when combined with policies.

Engaging in this process enables documents to take advantage of any potential synergies and to attend to any inconsistencies and constraints. The plans and programmes have been categorised by a hierarchy of influence from national to sub-national to local however, it must be noted that no list of plans and programmes can be definitive.



2. List of Relevant Plans and Programmes

The following tables offer a reference to the plans and programmes relevant to the Local Plans and the accompanying SA.

2.1 Relevant Plans and Programmes

International Plans and Programmes
European Commission (EC) (2011) A Resource-Efficient Europe – Flagship Initiative Under the Europe 2020 Strategy, Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee of the Regions.
European Landscape Convention (Florence, 2002)
European Union Water Framework Directive 2000
European Union Nitrates Directive 1991
European Union Noise Directive 2002
European Union Floods Directive 2007
European Union Air Quality Directive 2008 (2008/50/EC) and previous directives (96/62/EC; 99/30/EC; 2000/69/EC & 2002/3/EC)
European Union Directive on the Conservation of Wild Birds 2009
European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992
European Community Biodiversity Strategy to 2020
United Nations Kyoto Protocol
World Commission on Environment and Development 'Our Common Future' 1987
The World Summit on Sustainable Development Johannesburg Summit 2002
Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations).
The Conservation of Habitats and Species Regulations, 2010



Review of the European Sustainable Development Strategy (2009)

Environment 2010: Our Future, Our Choice (2003)

SEA Directive 2001

The Industrial Emissions Directive 2010

Energy Performance of Buildings Directive 2010 on the energy performance of buildings 2010/31/EU

The Drinking Water Directive 1998

The Packaging and Packaging Waste Directive 1994

EU Seventh Environmental Action Plan (2002-2012)

European Spatial Development Perspective (1999)

European Convention on the Protection of the Archaeological Heritage (Valletta, 1992)

Aarhus Convention (1998)

National Plans and Programmes

National Planning Practice Guidance (2014)

The Localism Act 2011

National Planning Policy Framework (March 2012)

The Housing White Paper (February 2017)

The Future of Transport White Paper 2004

Housing Act (2004)

Building a Greener Future: Policy Statement (July 2007)

Community Infrastructure Levy Guidance (April 2013)

Underground, Under Threat - Groundwater protection: policy and practice (GP3)

Model Procedures for the Management of Land Contamination – Contaminated Land Report 11 (September



2004)

Natural Environment and Rural Communities Act 2006

Countryside and Rights of Way Act 2000

Planning and Compulsory Purchase Act 2004

The Education (School Information) (England) (Amendments) Regulations, 2002

Childcare Act, 2006

Flood & Water Management Act 2009

The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)

Safeguarding Our Soils: A Strategy for England (2009)

Natural Environment White Paper: The Natural Choice: Securing the Value of Nature (2011)

The National Adaptation Programme – Making the Country Resilient to a Changing Climate (2013)

Planning Policy for Traveller Sites (2012)

National Planning Policy for Waste (2014)

Adapting to Climate Change: Ensuring Progress in Key Sectors (2013)

DECC National Energy Policy Statement EN1 (2011)

DCLG: An Introduction to Neighbourhood Planning (2012)

JNCC/Defra UK Post-2010 Biodiversity Framework (2012)

Mainstreaming Sustainable Development (2011)

UK Marine Policy Statement, HM Government (2011)

Electricity Market Reform White Paper 2011

DfT (2013) Door to Door: A strategy for improving sustainable transport integration

DCLG (2011) Laying the Foundations: A Housing Strategy for England



DEFRA (2011) Securing the Future: Delivering UK Sustainable Development Strategy

DECC (2011) UK Renewable Energy Roadmap (updates setting out progress and changes to the strategy dated 2013 and 2013)

Community Energy Strategy (DECC, 2014)

The National Flood and Coastal Erosion Risk Management Strategy for England (Environment Agency, 2011)

Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy (HM Government, 2013)

Future Water: The Government's Water Strategy for England (DEFRA, 2008)

Water for People and the Environment: Water Resources Strategy for England and Wales (Environment Agency, 2009)

Safeguarding our Soils: A Strategy for England (DEFRA, 2009)

Sub-national Plans and Programmes

Essex Gypsy and Traveller and Travelling Showpeople Accommodation Assessment – on behalf of EPOA (July 2014)

Looking Back, Moving Forward – Assessing the Housing Needs of Gypsies and Travellers in Essex (2006)

Greater Essex Demographic Forecasts Phases 7 (2015)

Essex Transport Strategy: the Local Transport Plan for Essex (2011)

2011 Essex Biodiversity Action Plan

Commissioning School Places in Essex 2015-2020

Essex County Council Joint Municipal Waste Management Strategy 2007-2032

Anglian River Basin Management Plan (2015)

Essex Wildlife Trust Living Landscape plans

Essex Wildlife Trust Living Landscape Statements

Respecting our Past, Embracing our Future: A Strategy for Rural Essex (2016)



ECC Parking Standards: Design and Good Practice (September 2009)

The Essex Local Area Agreement – ‘Health and Opportunity for the People of Essex’ 2008 – 2011 (2010 Refresh)

ECC Development Management Policies (February 2011)

The Essex Strategy 2008 – 2018

Sustainable Drainage Systems Design and Adoption Guide 2012

Essex Minerals Local Plan (2014)

Essex and Southend Replacement Waste Local Plan (submitted June 2016).

Haven Gateway: Programme of Development: A framework for Growth, 2008 – 2017 (2007)

Haven Gateway: Integrated Development Plan (2008)

South East LEP Investment and Funding (March/April 2014)

Anglian Water Business Plan (2015-2020) (2012)

Draft Water Resource Management Plan (2015-2040) (2014)

Combined Essex Catchment Abstraction Management Plan (2013)

Haven Gateway Water Cycle Study: Stage 1 and 2 Reports (2008)

South East LEP Growth Deal and Strategic Economic Plan (2004)

ECC Developers’ Guide to Infrastructure Contributions (Revised Edition 2016)

Vision for Essex 2013-2017: Where Innovation Brings Prosperity (2013)

Corporate Outcomes Framework 2014-2018 Essex County Council (2014)

Colchester Town Draft Surface Water Management Plan (2014)

A12/A120 Route Based Strategy (2013)

Highway Authority’s Development Management Policies (2011)

Economic Plan for Essex (2014)



Essex Design Guide (2005)

North Essex Catchment Flood Management Plan (2009)

Essex and South Suffolk Shoreline Management Plan (second phase) (2011)

Dedham Vale AONB and Stour Valley Management Plan 2010 – 2015

Local Plans and Programmes

Braintree District Council, Chelmsford City Council, Colchester Borough Council, Tendring District Council, Objectively Assessed Housing Need Study - Peter Brett Associates (July 2015 and updated 2016)

North Essex Concept Feasibility Study (AECOM) - July 2016

Colchester Metro Town Evaluation of Alternatives (AECOM) – April 2017

Monks Wood, Braintree Evaluation of Alternatives (AECOM) – April 2017

HRA Screening Report for North Essex Authorities Strategic Part 1 for Local Plans (LUC) - December 2016

Braintree Local Plan Preferred Option Assessment Highways/Transport Planning -March 2017

Colchester Borough Council, Braintree District Council, Tendring District Council and Essex County Council North Essex Garden Communities Employment & Demographic Studies – February 2017

North Essex Garden Communities Movement and Access Study – March 2017

Colchester Infrastructure Delivery Plan Report - March 2017

Retail and Town Centre Uses Study Colchester Borough Council: Retail Update (2013)

Landscape Character Assessment (Chris Blandford Associates, September 2006)

Habitat Regulations Assessment Survey and Monitoring Programme, Final Report, Colchester Borough Council (December 2013)

Colchester Coastal Protection Belt Review (Chris Blandford's Associates 2016)

CBC Strategic Housing Market Assessment (SHMA) (2014)

Creative Colchester: Developing the Vision Strategy & Action Plan (2012)



Safer Colchester Partnership: Strategic Assessment of Crime and Annual Partnership Plan 2013-2014

CBC Townscape Character Assessment (2006)

CBC Strategic Flood Risk Assessment (2008)

CBC Affordable Housing SPD (2011)

CBC Communities Facilities SPD (updated 2013)

CBC Better Town Centre SPD (2012)

CBC Sustainable Design and Construction SPD (2011)

Colchester Borough Council Housing Strategy (2012)

CBC Local Air Quality Management Progress Report (2013)

2016 Air Quality Annual Status Report (ASR) - July 2016

Colchester Environmental Strategy 2014-2019 draft (2014)

Colchester Borough Council's Comprehensive Climate Risk Assessment (2010)

Colchester Borough Council Landscape Strategy (2013)

Colchester Cycling Strategy SPD (2012)

CBC Core Strategy (2008)

CBC Development Policies DPD (2010)

CBC Site Allocations Policies DPD (2010)

Colchester Borough Green Infrastructure Strategy (2011)

Tendring Economic Development Strategy (2013)

Tendring Strategic Housing Market Assessment (2013)

Braintree District Core Strategy (2011)

Babergh Adopted Core Strategy and Adopted Policies (2011 – 2031) Local Plan Document (2014)



Sustainable Development, Tendring District Council Local Plan Proposed Submission Draft Written Statement 2012 (as amended by the 2014 Focused Changes)

TDC Strategic Flood Risk Assessment (SFRA) (2009)

Tendring Open Space Strategy (October 2009)

Landscape Character Assessment, Vol. 1 & Vol. 2, Land Use Consultants on behalf of Tendring District Council, November 2001

Affordable Housing Viability Study, Tribal Consulting Ltd, October 2010, Viability Testing, Peter Brett, August 2013, reports prepared on behalf of Tendring District Council

Clacton Town Centre Vision, Intend, 2009

Celebrate-on-Sea – 'Putting the fun back into Clacton (2010)

Infrastructure Study, Part 2 (January 2010)

Tendring District Historic Characterisation Project, Essex County Council, 2008

Tendring Geodiversity Characterisation Report, Essex County Council, 2009

Climatic Change Strategy 2010-2016, Tendring District Council

Tendring Economic Strategy (October 2013)

Retail Study Update (September 2010)

Chelmsford City Council – Emerging Local Plan and associated evidence base documents

Uttlesford District Council – Emerging Local Plan and associated evidence base documents



3. Review of Plans and Programmes

3.1 Review of International Plans and Programmes

International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
European Commission (EC) (2011)	<p>The policy aims to enjoy the benefits of a resource-efficient and low-carbon economy, through achieving three conditions:</p> <ul style="list-style-type: none"> • First, to take coordinated action in a wide range of policy areas and this action needs political visibility and support. • Second, act urgently due to long investment lead-times. While some actions will have a positive impact on growth and jobs in the short-term, others require an upfront investment and have long pay-back times, but will bring real economic benefits for the EU economy for decades to come. • Third, to empower consumers to move to resource-efficient consumption, to drive continuous innovation and ensure that efficiency gains are not lost. 	The Local Plans should take regard of these principles in order contribute to the aspirations outlined by the EU.
European Landscape Convention (Florence, 2002)	The convention promotes landscape protection, management and planning.	The Local Plans should adhere to landscape issues. The SA also includes criteria to protect the archaeological heritage.
European Union Water Framework Directive 2000	<p>The framework amalgamates multiple directives into one to provide the operational tool for water treatment, setting the objectives for water protection for the future. Directives included in the framework are:</p> <ul style="list-style-type: none"> • The Urban Waste Water Treatment Directive, providing for secondary (biological) waste water treatment, and even more stringent treatment where necessary. • The Nitrates Directive, addressing water pollution by nitrates from agriculture. 	Treatment and recycling water in this way is a necessity for developments over a population threshold to adhere to the EU directive. The Local Plans should have regard to waste water provisions and considerations.



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • A new Drinking Water Directive, reviewing the quality standards and, where necessary, tightening them (adopted November 1998), • A Directive for Integrated Pollution and Prevention Control (IPPC), adopted in 1996, addressing pollution from large industrial installations. 	
European Union Nitrates Directive 1991	The Nitrates Directive (1991) aims to protect water quality across Europe by preventing nitrates from agricultural sources polluting ground and surface waters and by promoting the use of good farming practices.	The Local Plans should have regard to waste water provision implications and considerations.
European Union Noise Directive 2002	<p>The aim of this Directive shall be to define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. To that end the following actions shall be implemented progressively:</p> <p>(a) the determination of exposure to environmental noise, through noise mapping, by methods of assessment common to the Member States;</p> <p>(b) ensuring that information on environmental noise and its effects is made available to the public;</p> <p>(c) adoption of action plans by the Member States, based upon noise-mapping results, with a view to preventing and reducing environmental noise where necessary and particularly where exposure levels can induce harmful effects on human health and to preserving environmental noise quality where it is good.</p> <p>This Directive shall also aim at providing a basis for developing Community measures to reduce noise emitted by the major sources, in particular road and rail vehicles and infrastructure, aircraft, outdoor and industrial equipment and mobile machinery.</p>	The Local Plans should adopt this strategy to noise pollution when permitting developments across the district. Considerations should be made in the Local Plans for the proximity of developments to significant sources of noise pollution and any mitigating measures which could be employed to minimise the impact on the local population.



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
European Union Floods Directive 2007	<p>The purpose of this Directive is to establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community.</p>	<p>Flood risk considerations in the Local Plans should be informed by the approach within the EU Floods Directive.</p>
European Union Air Quality Directive 2008 including previous versions.	<p>Council Directive 96/62/EC on ambient air quality assessment and management.</p> <p>Council Directive 1999/30/EC relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air.</p> <p>Directive 2000/69/EC of the European Parliament and of the Council relating to limit values for benzene and carbon monoxide in ambient air.</p> <p>Directive 2002/3/EC of the European Parliament and of the Council relating to ozone in ambient air.</p> <p>This new Directive includes the following key elements:</p> <ul style="list-style-type: none"> • That most of existing legislation be merged into a single directive (except for the fourth daughter directive) with no change to existing air quality objectives* • New air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives – exposure concentration obligation and exposure reduction target • The possibility to discount natural sources of pollution when assessing compliance against limit values • Possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. <p>* Framework Directive 96/62/EC, 1-3 daughter Directives 1999/30/EC, 2000/69/EC, 2002/3/EC, and</p>	<p>Air quality management principles relating to the range of pollutant gases outlines within the EU Air Quality Directive are a consideration for the Local Plans and the SA.</p>



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	Decision on Exchange of Information 97/101/EC.	
European Union Directive on the Conservation of Wild Birds 2009	<p>This Directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States to which the Treaty applies. It covers the protection, management and control of these species and lays down rules for their exploitation.</p> <p>It shall apply to birds, their eggs, nests and habitats.</p>	<p>Conservation of bird species must be incorporated in ecological considerations when assessing the viability of a development. The Local Plans should evaluate the impact on bird habitats and include this consideration in the environmental assessment of potential growth.</p>
European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992	<p>The aim of this Directive shall be to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies.</p>	<p>The Local Plans should seek to ensure the conservation of habitats supporting ecological variance. This directive can inform approaches to the protection of ecologically significant sites.</p>
European Union Common Biodiversity Strategy to 2020	<p>This strategy aims to conserve biodiversity within Europe in an attempt to achieve the following target and vision:</p> <p>2020 headline target</p> <ul style="list-style-type: none"> • Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss. <p>2050 vision</p> <ul style="list-style-type: none"> • By 2050, European Union biodiversity and the ecosystem services it provides — its natural capital — are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human wellbeing and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided. 	<p>The Local Plans and SA should have regard the impact of developments on the environment and biodiversity and include this consideration as a factor when evaluating the suitability of a site for development.</p>



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>United Nations Kyoto Protocol</p>	<p>This protocol aims to Implement and/or further elaborate policies and measures for member states in accordance with its national circumstances, such as:</p> <ul style="list-style-type: none"> • Enhancement of energy efficiency in relevant sectors of the national economy; • Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation and reforestation; • Promotion of sustainable forms of agriculture in light of climate change considerations; • Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies; • Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments; • Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol; • Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector; • Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy 	<p>The Local Plans should attempt to create new developments that adhere to the low carbon and low emissions ethos that is within the Kyoto Protocol. Any development that utilises new technologies, techniques or materials should be explored in the Local Plans where possible and appropriate.</p>



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
World Commission on Environment and Development 'Our Common Future' 1987	<p>This report aims were:</p> <p>to propose long-term environmental strategies for achieving sustainable development by the year 2000 and beyond; to recommend ways concern for the environment may be translated into greater co-operation among developing countries and between countries at different stages of economic and social development and lead to the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environment, and development;</p> <ul style="list-style-type: none"> • To consider ways and means by which the international community can deal more effectively with environment concerns; and • To help define shared perceptions of long-term environmental issues and the appropriate efforts needed to deal successfully with the problems of protecting and enhancing the environment, a long term agenda for action during the coming decades, and aspirational goals for the world community. 	The Local Plans should contribute to the co-operative effort to reduce the environmental impacts of development through policy to promote more efficient and carbon neutral techniques and materials in design and construction.
The World Summit on Sustainable Development Johannesburg Summit 2002	<p>The Summit sought to address social, environmental and economic with particular focus on the issues facing some of the most deprived people across the world. It aimed to:</p> <ul style="list-style-type: none"> • Halve the proportion of the world's population that lives on less than \$1 a day; • Halve the number of people living without safe drinking water or basic sanitation; and • Reduce mortality rates for infants and children under five by two thirds, and maternal mortality by three quarters; <p>Other provisions address a comprehensive range of environmental and development issues, such as climate change, energy, agriculture, trade, African development, and small island States. The</p>	Issues surrounding climate change and renewable energy have significant implications for development. The Local Plans should strive to produce developments of low carbon housing and reduce environmental degradation through responsible design and construction practices.



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>Implementation Plan calls for a substantial increase in use of renewable sources of energy "with a sense of urgency". Although it sets no specific targets; implementation of a new global system for classification and labelling of chemicals was discussed in an attempt to restore depleted fish stocks.</p>	
<p>Environmental Assessment of Plans and Programmes Regulations (SEA Regulations)</p>	<p>These regulations transpose the requirements of the SEA Directive (2001/42/EC) into national law.</p> <p>The SEA Directive sets out the requirement for an environmental assessment to be undertaken when preparing certain plans and programmes and also details which types of plans and programmes are likely to be subject to SEA.</p> <p>The regulations also set out procedures for preparing the environmental report and consultation.</p>	<p>The regulations to which this SA must adhere to be legally compliant and pass the test of soundness at the submission stage.</p>
<p>The Conservation of Habitats and Species Regulations</p>	<p>These regulations transpose the Habitats Directive into national law, and updates and consolidates all the amendments to the Regulations since they were first made in 1994.</p> <p>They set out protection and registry of European sites, including SACs and SPAs classified under the Birds Directive. They also make special provisions for the protection of European marine sites and the preservation of protected species.</p>	<p>The Local Plans must ensure the protection of sites of European Significance in relation to their flora and fauna, and enter into the agreement that compensatory measures will be required where damage may occur through development or the carrying out of extraction. This will be ensured through an HRA (and AA if required) of Local Plans.</p>
<p>Review of the European Sustainable Development Strategy, European Commission, 2009</p>	<p>The European Council in December 2009 confirmed that "Sustainable development remains a fundamental objective of the European Union under the Lisbon Treaty. As emphasised in the Presidency's report on the 2009 review of the Union's Sustainable Development Strategy, the strategy will continue to provide a long term vision and constitute the overarching policy framework for all Union policies and strategies. A number of unsustainable trends require</p>	<p>The Local Plans should develop policies that take account of the Directive as well as more detailed policies derived from the Directive at the national level.</p> <p>The Strategy also informs the SA in the development of relevant objectives and criteria</p>



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>urgent action.</p> <p>Significant additional efforts are needed to:</p> <ul style="list-style-type: none"> • curb and adapt to climate change, • to decrease high energy consumption in the transport sector; and • to reverse the current loss of biodiversity and natural resources. 	<p>regarding climate change, energy and biodiversity.</p>
<p>Environment 2010: Our Future, Our Choice (2003)</p>	<p>Tackling Climate Change objectives:</p> <ul style="list-style-type: none"> • in the short to medium term we aim to reduce greenhouse gas emissions by 8% compared with 1990 levels by 2008-12 (as agreed at Kyoto); • in the longer term we need to reduce global emissions even further by approximately 20-40% on 1990 levels by 2020; • for the first time the Programme recognises the need to tackle the long term goal of a 70% reduction in emissions set by the Intergovernmental Panel on Climate Change; • protecting Nature and Wildlife objectives; • protect our most valuable habitats through extending the Community's Natura 2000 programme; • put in place action plans to protect biodiversity; • develop a strategy to protect the marine environment; • extend national and regional programmes to further promote sustainable forest management; • introduce measures to protect and restore landscapes; • develop a strategy for soil protection; • co-ordinate Member States' efforts in handling accidents and natural disasters. 	<p>The Local Plans should develop policies that take account of the Directive as well as more detailed policies derived from the Directive at the national level.</p> <p>The Strategy also informs the SA in the development of relevant objectives and criteria regarding climate change, energy and biodiversity.</p>



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
SEA Directive 2001	<p>The SEA Directive sets out the requirement for an environmental assessment to be undertaken when preparing certain plans and programmes and also details which types of plans and programmes are likely to be subject to SEA.</p>	<p>Local plans are subject to SEA. These regulations will help inform the content of the environmental report. By assessing impacts of any developments on the locality and investigating alternative approaches and sites, the development can meet local needs while also positively impacting on the economy, society and environment where possible.</p>
<p>The Industrial Emissions Directive 2010</p> <p>Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)</p>	<p>Lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.</p> <p>The Directive sets emission limit values for substances that are harmful to air or water.</p>	<p>The Local Plans should consider policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.</p>
<p>Energy Performance of Buildings Directive 2010 on the energy performance of buildings</p> <p>2010/31/EU</p>	<p>The Directive aims to promote the energy performance of buildings and building units.</p> <p>It requests that member states adopt either national or regional methodology for calculating energy performance and minimum requirements for energy performance.</p>	<p>Policies and allocations should take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.</p>
<p>The Drinking Water Directive 1998</p> <p>Directive 98/83/EC on the quality of water intended for human consumption</p>	<p>Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.</p> <p>Member States must set values for water intended for human consumption.</p>	<p>The Local Plans should develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.</p>



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
EU Seventh Environmental Action Plan (2002-2012)	<p>The EU's objectives in implementing the programme are:</p> <ul style="list-style-type: none"> (a) to protect, conserve and enhance the Union's natural capital; (b) to turn the Union into a resource-efficient, green and competitive low-carbon economy; (c) to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing; (d) to maximise the benefits of the Union's environment legislation; (e) to improve the evidence base for environment policy; (f) to secure investment for environment and climate policy and get the prices right; (g) to improve environmental integration and policy coherence; (h) to enhance the sustainability of the Union's cities; (i) to increase the Union's effectiveness in confronting regional and global environmental challenges. 	The Local Plans should develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.
European Spatial Development Perspective (1999)	Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government.	The Local Plans should develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.
European Convention on the Protection of the Archaeological Heritage (Valletta, 1992) Revision of the 1985 Granada	<p>Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater.</p> <p>Creation of archaeological reserves and conservation of excavated sites.</p>	The Local Plans should develop policies and ensure development principles that take account of the Convention.



International Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Convention		
Aarhus Convention (1998)	<p>Established a number of rights of the public with regard to the environment. Local authorities should provide for:</p> <ul style="list-style-type: none"> • The right of everyone to receive environmental information. • The right to participate from an early stage in environmental decision making. • The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general. 	<p>The Local Plans should develop policies that take account of the Convention.</p> <p>The Convention also ensures that the public are involved and consulted at all relevant stages of SA production.</p>

3.2 Review of National Plans and Programmes

National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
National Planning Practice Guidance (2016)	<p>This web-based resource provides guidance to support the National Planning Policy Framework and its application in practice. It is also easy to link easily between the National Planning Policy Framework and relevant planning practice guidance, as well as between different categories of guidance.</p>	<p>Provides guidance on the preparation of Local Plans and accompanying SA.</p>
Localism Act 2011	<p>The Localism Act provides a general power of competence for local authorities in England. It gives these authorities the same power to act that an individual generally has and provides that the power may be used in innovative ways, that is, in doing things that are unlike anything that a local authority – or any other public body – has done before, or may currently do. Where an authority can do something under the power, the starting point is that there are to be no limits as to how the power</p>	<p>The Localism Act gave new powers to local authorities to support a much more localised approach to development than had previously been possible. Following this, the Local Plans can utilise statistics and information relating only to the Districts to inform planning policy and allow the focus to be</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>can be exercised. The power, does not need to be exercised for the benefit of any particular place or group, and can be exercised anywhere and in any way.</p>	<p>primarily concerned with the benefits for the local population.</p>
<p>National Planning Policy Framework (March 2012)</p>	<p>This framework sets out the Government’s planning policies for England and how these are expected to be applied. It replaces all Planning Policy Statements and Planning Policy Guidance.</p> <p>The framework seeks to contribute to the achievement of sustainable development by pursuing economic, environmental and social gains jointly and simultaneously through the planning system. It defines planning as having:</p> <ul style="list-style-type: none"> • an economic role – contributing to building a strong, responsive and competitive economy,; • a social role – supporting strong, vibrant and healthy communities; and • an environmental role – contributing to protecting and enhancing our natural, built and historic environment. <p>The framework sets out 12 core land-use planning principles that local planning authorities should follow and provides guidance on preparing Local and Neighbourhood Plans and on determining planning applications.</p> <p>The framework also describes the role of planning in delivering sustainable development under 14 themes. These are:</p> <ul style="list-style-type: none"> • Building a strong, competitive economy ; • ensuring the vitality of town centres; • supporting a prosperous rural economy; • promoting sustainable transport; • supporting high quality communications infrastructure; • delivering a wide choice of high quality homes; 	<p>The Local Plans must be in conformity with this national planning document in order to ensure development is sustainable. Therefore, the Local Plans should be consistent with the principles and policies set out in this Framework, including the presumption in favour of sustainable development.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • requiring good design; • promoting healthy communities; • protecting Green Belt land; • meeting the challenge of climate change, flooding and coastal change; • conserving and enhancing the natural environment; • conserving and enhancing the historic environment; • facilitating the sustainable use of minerals. <p>A key part of the NPPF is the presumption in favour of sustainable development which is relevant to both plan making and decision making.</p>	
<p>The Housing White Paper (2017)</p>	<p>The White Paper includes a list of relevant proposals:</p> <ul style="list-style-type: none"> • Making sure every part of the country has an up-to-date, sufficiently ambitious plan so that local communities decide where development should go; • Simplifying plan-making and making it more transparent, so it's easier for communities to produce plans and easier for developers to follow them; • Ensuring that plans start from an honest assessment of the need for new homes, and that local authorities work with their neighbours, so that difficult decisions are not ducked; • Clarifying what land is available for new housing, through greater transparency over who owns land and the options held on it; • Making more land available for homes in the right places, by maximising the contribution from brownfield and surplus public land, regenerating estates, releasing more small and medium-sized sites, allowing rural communities to grow and making it easier to build new settlements; 	<p>The White Paper is of significant relevance to the SA in defining national and local housing needs. It also offers possible changes in requirements to the Local Plan process, which is intrinsically aligned to that of SA.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • Maintaining existing strong protections for the Green Belt, and clarifying that Green Belt boundaries should be amended only in exceptional circumstances when local authorities can demonstrate that they have fully examined all other reasonable options for meeting their identified housing requirements; • Giving communities a stronger voice in the design of new housing to drive up the quality and character of new development, building on the success of neighbourhood planning; and • Making better use of land for housing by encouraging higher densities, where appropriate, such as in urban locations where there is high housing demand; and by reviewing space standards. 	
<p>The Future of Transport White Paper</p>	<p>Ensure we can benefit from mobility and access while minimising the impact on other people and the environment, now and in the future.</p> <p>Get the best out of our transport system without damaging our overall quality of life. Develop strategies that recognise that demand for travel will increase in the future.</p> <p>Work towards a transport network that can meet the challenges of a growing economy and the increasing demand for travel but can also achieve the government’s environmental objectives.</p> <p>The key targets are:</p> <p>20% reduction in carbon dioxide emissions by 2010 and 60% reduction by 2050. Transport is currently responsible for about a quarter of total emissions.</p>	<p>Informs the Local Plans in promoting public transport use rather than increasing reliance on the car.</p> <p>Informs the SA to formulate appropriate objectives and criteria to reduce the need to travel and improve choice and use of sustainable transport modes.</p>
<p>Housing Act 2004</p>	<p>Protect the most vulnerable in society and help create a fairer and better housing market.</p> <p>Strengthen the Government’s drive to meet its 2010 decent homes target.</p>	<p>Informs the Local Plans in developing policies that help to create a fairer and better housing market.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Building a Greener Future: Policy Statement (July 2007)	<p>This document sets out the Government's intention for all new homes to be zero carbon by 2016 with a major progressive tightening of the energy efficiency building regulations - by 25 per cent in 2010 and by 44 per cent in 2013 - up to the zero carbon target in 2016. In addition, the government introduced a time-limited stamp duty land tax relief with effect from 1 October 2007 for new homes built to a zero carbon standard.</p>	<p>The Local Plans should have regard to this policy statement and include measures which seek to achieve the targets set. New dwellings should strive to fulfil the aim of zero carbon housing wherever possible.</p>
Community Infrastructure Levy Guidance (April 2013)	<p>The Community Infrastructure Levy (the levy) came into force in April 2010. It allows local authorities in England and Wales to raise funds from developers undertaking new building projects in their area. The money can be used to fund a wide range of infrastructure that is needed as a result of development.</p> <p>The Community Infrastructure Levy charging authorities (charging authorities) in England will be district and metropolitan district councils, London borough councils, unitary authorities, national park authorities, The Broads Authority and the Mayor of London. These bodies all prepare development plans for their areas, which are informed by assessments of the infrastructure needs for which the levy may be collected.</p>	<p>Informs the Local Plans and SA of the infrastructure deliverability of strategic growth proposals.</p>
Underground, Under Threat - Groundwater protection: policy and practice (GP3)	<p>This document sets out the Environment Agency's (EA) aims and objectives for groundwater, their technical approach to its management and protection, the tools they use to do their work and the main policies and approach to the application of legislation. The main aims are:</p> <ul style="list-style-type: none"> • To encourage co-operation between the EA and other bodies with statutory responsibilities for the protection of groundwater; • to promote policies, so that land-users and potential developers may anticipate how the EA are likely to respond to a proposal 	<p>Informs the SA in developing relevant objectives and criteria.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>or activity;</p> <ul style="list-style-type: none"> • to influence the decisions of other organisations on issues the EA are concerned about but which they do not regulate; • to ensure that groundwater protection and management are consistent with EA's Vision for the environment and a sustainable future; and • to provide vital information and background on groundwater protection in England and Wales. 	
<p>Model Procedures for the Management of Land Contamination – Contaminated Land Report 11</p>	<p>The Model Procedures for the Management of Land Contamination provides the technical framework for structured decision making about land contamination. They encourage the formalisation of outputs from the process in the form of written records that contain details of specific project objectives, decisions and assumptions, as well as recommendations and other specific outputs.</p> <p>The Model Procedures have been developed to provide the technical framework for applying a risk management process when dealing with land affected by contamination. The process involves identifying, making decisions on, and taking appropriate action to deal with land contamination in a way that is consistent with government policies and legislation within the UK.</p> <p>The technical approach presented in the Model Procedures is designed to be applicable to a range of non-regulatory and regulatory contexts that includes:</p> <ul style="list-style-type: none"> • Development or redevelopment of land under the planning regime; • regulatory intervention under Part IIA of the Environment Protection Act 1990 or Part III of the Waste & Contaminated Land (Northern Ireland) Order 1997 	<p>Informs the SA in developing relevant objectives and criteria.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • voluntary investigation and remediation; • managing potential liabilities of those responsible for individual sites or a portfolio of sites. 	
Natural Environment and Rural Communities Act	This document relates to nature conservation, biodiversity, SSSIs and Rights of Way amongst others in regards to a duty to protect, and enforce codes of conduct in relation to these designated and non-designated elements of the environment.	The Local Plans can influence the protection of these designations and non-designated elements of the environments through policy and appropriate site requirements.
Countryside and Rights of Way Act 2000	Further information on Rights of Way in relation to nature conservation with wildlife protection, SSSIs and biological diversity amongst other elements of the environment, including regulations to restrict the impacts of vehicles on the environment.	The Local Plans can influence the protection of these designations and non-designated elements of the environments through policy and appropriate site requirements.
Planning and Compulsory Purchase Act 2004	<p>The PCPA requires local authorities to produce a local plan to guide future development and change within its area.</p> <p>The act aims to promote sustainable development by requiring a Sustainability Appraisal to be produced for all Local Plans, encouraging the integration of social, environmental and economic considerations into development documents.</p>	<p>The RPB (in this case the three District Councils) must:</p> <ol style="list-style-type: none"> Carry out an appraisal of the sustainability of the proposals in the draft Prepare a report of the findings of the appraisal <p>This appraisal informs the viability of any developments against economic, social and environmental effects, in order to assess the sustainability of any developments within the locality.</p>
The Education (School Information) (England) (Amendments)	Amended version of the Education Regulations which, among other items of information, requires local authorities to publish their Sustainable Modes	The Local Plans contains sustainable travel objectives and as such, should be



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Regulations, 2002	of Travel Strategy.	informed by the travel methods of school pupils to contribute to the achievement of sustainable travel targets.
Childcare Act 2006	This Act sets out the power and duties of local authorities and other bodies in England in relation to the improvement of the well-being of young children; to make provision about the powers and duties of local authorities in England and Wales in relation to the provision of childcare and the provision of information to parents and other persons; to make provision about the regulation and inspection of childcare provision in England.	This act affects the powers of the local authority available for use in the Local Plans to contribute to the health and social wellbeing of children and young people within the strategic area.
Flood & Water Management Act 2009	<p>This Environment Agency document attempts to achieve the target of developing, maintaining, applying and monitoring a strategy for flood and coastal erosion risk management in England (a “national flood and coastal erosion risk management strategy”).</p> <p>This is to ensure a transparent and consistent level of service when ECC is responding to planning enquires. As part of a National Framework, a Sustainable Drainage Design and Adoption Guide has been produced, working in partnership with other partner local authorities and establishing an officer working group.</p>	Working in a partnership to create county specific flood risk assessments and solutions ensures an appropriate and effective prevention and mitigation measures are identified. The Local Plans should regard this information to identify the risk of flooding for any new developments and evaluate the viability of any site locations.
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, Defra (2007)	<p>Make sure that everyone can enjoy a level of ambient air quality in public spaces, which poses no significant risk to health or quality of life.</p> <p>Render polluting emissions harmless.</p> <p>Sets air quality standards for 13 air pollutants.</p>	At the core of the programme is the notion of pre-emptive action to avoid any severe impacts on the environment. Informs the Local Plans and the SA.



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Safeguarding Our Soils: A Strategy for England (2009)</p>	<p>By 2030, the strategy aims to have all of England’s soils to be managed sustainably and degradation threats tackled successfully. This will improve the quality of England’s soils and safeguard their ability to provide essential services for future generations.</p> <ul style="list-style-type: none"> • Agricultural soils will be better managed and threats to them will be addressed; • soils will play a greater role in the fight against climate change and in helping us to manage its impacts; • soils in urban areas will be valued during development, and construction practices will ensure vital soil functions can be maintained; • pollution of our soils is prevented, and our historic legacy of contaminated land is being dealt with. 	<p>Soil quality has a key role in water quality, climate change issues and the historic legacy and health of the environment. The Local Plans should attempt to retain and protect soil quality through construction techniques. Through aligning with the strategy, development can occur responsibly without causing soil degradation.</p>
<p>Natural Environment White Paper: The Natural Choice: Securing the Value of Nature (2011)</p>	<p>This document strives to safeguard the environment through the promotion of a number of aims:</p> <ul style="list-style-type: none"> • facilitating greater local action to protect and improve nature; • creating a green economy, in which economic growth and the health of our natural resources sustain each other, and markets, business and Government better reflect the value of nature; • strengthening the connections between people and nature to the benefit of both; and • showing leadership in the European Union and internationally, to protect and enhance natural assets globally. 	<p>The Local Plans should regard the protection of natural assets and the advancement of a green economy within the strategic area would assist in improving the economic, social and environmental situation in the area.</p>
<p>The National Adaptation Programme – Making the Country Resilient</p>	<p>The programme seeks to address risks associated with climate change issues through objectives relating to:</p> <ul style="list-style-type: none"> • increasing awareness 	<p>At the core of the programme is the notion of pre-emptive action to avoid any severe impacts on the environment. Informs the</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
to a Changing Climate (2013)	<ul style="list-style-type: none"> • increasing resilience to current extremes • taking timely action for long-lead time measures • addressing major evidence gaps. 	Local Plans and the SA.
Planning Policy for Traveller Sites (2012)	<p>The aims for this policy are:</p> <ul style="list-style-type: none"> • that local planning authorities should make their own assessment of need for the purposes of planning; • to ensure that local planning authorities, working collaboratively, develop fair and effective strategies to meet need through the identification of land for sites; • to encourage local planning authorities to plan for sites over a reasonable timescale; • that plan-making and decision-taking should protect Green Belt from inappropriate development; • to promote more private traveller site provision while recognising that there will always be those travellers who cannot provide their own sites; • that plan-making and decision-taking should aim to reduce the number of unauthorised developments and encampments and make enforcement more effective; • for local planning authorities to ensure that their Local Plan includes fair, realistic and inclusive policies; • to increase the number of traveller sites in appropriate locations with planning permission, to address under provision and maintain an appropriate level of supply; • to reduce tensions between settled and traveller communities in plan-making and planning decisions; • to enable provision of suitable accommodation from which travellers can 	Informs the Local Plans and SA in developing relevant principles, objectives and criteria.



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>access education, health, welfare and employment infrastructure;</p> <ul style="list-style-type: none"> for local planning authorities to have due regard to the protection of local amenity and local environment. 	
<p>National Planning Policy for Waste (2014)</p>	<p>The Waste Management Plan for England sets out the Government’s ambition to work towards a more sustainable and efficient approach to resource use and management. Positive planning plays a pivotal role in delivering this country’s waste ambitions through:</p> <ul style="list-style-type: none"> delivery of sustainable development and resource efficiency, including provision of modern infrastructure, local employment opportunities and wider climate change benefits, by driving waste management up the waste hierarchy; ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport, recognising the positive contribution that waste management can make to the development of sustainable communities; providing a framework in which communities and businesses are engaged with and take more responsibility for their own waste, including by enabling waste to be disposed of or, in the case of mixed municipal waste from households, recovered, in line with the proximity principle; helping to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment; and ensuring the design and layout of new residential and commercial development and other infrastructure (such as safe and reliable transport links) complements sustainable waste management, including 	<p>Informs the SA in developing relevant objectives and criteria.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste.	
Adapting to Climate Change: Ensuring Progress in Key Sectors, Defra, 2013	This strategy highlights how the climate is changing and the impacts are likely to affect almost everyone in some way during our lifetime. The strategy recognises that there have always been natural fluctuations in climate, but the current rates of change are far greater than those experienced in recent history. The strategy suggests that adaptation (or changing behaviour) should be built into planning and risk management; and that all organisations will benefit from considering risks to their operations and consider the actions necessary to adapt to climate change. This strategy confirms that 'bodies with a function of public nature' and 'statutory undertakers' (reporting authorities) must be taking appropriate action to adapt to the future impacts of climate change.	Adaptation (or changing behaviour) should be built into planning and risk management.
DECC National Energy Policy Statement EN1, 2011	This sets out the Government's policy for delivery of major energy infrastructure. It sets out the need for and role of various different types of renewable/ low carbon energy. Potential impacts of renewable energy are listed, along with a summary of how the IPC will make decisions. Legally binding target to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels.	The Local Plans should develop policies that support renewable energy generation and encourage greater energy efficiency. Informs the SA in developing relevant objectives and criteria.
DCLG Neighbourhood Planning, 2012	This document provides a brief summary of neighbourhood planning, including the main stages: defining the neighbourhood plan area, preparing the plan, independent check, community referendum, legal force.	This document does not contain any targets, aims, objectives or priorities. However, it is important that the Local Plans and the SA recognise the key role of neighbourhood planning.
JNCC/Defra UK Post-2010 Biodiversity	In Nagoya, Japan, in Autumn 2010 the 192 parties to the Convention on Biological Diversity renewed	The Local Plans should develop policies that support



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Framework, 2012</p>	<p>their commitment to take action to halt the alarming global declines of biodiversity and to ensure that by 2020 our natural environment is resilient and can continue to provide the ecosystem services that are essential for life.</p> <p>Vision: By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.</p> <p>Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.</p> <p>Goal B: Reduce the direct pressures on biodiversity and promote sustainable use.</p> <p>Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.</p> <p>Goal D: Enhance the benefits to all from biodiversity and ecosystems.</p> <p>Goal E: Enhance implementation through participatory planning, knowledge management and capacity building.</p>	<p>biodiversity.</p> <p>Informs the SA in developing relevant objectives and criteria.</p>
<p>Mainstreaming Sustainable Development – the Government’s vision and what this means in practice, Defra, 2011</p>	<p>This document sets out the coalition government’s vision of sustainable development, which means making the necessary decisions now to realise our vision of stimulating economic growth and tackling the deficit, maximising wellbeing and protecting our environment, without negatively impacting on the ability of future generations to do the same. It builds on the 2005 sustainable development strategy. It recognises that natural capital is an essential part of a productive economy and we need to value appropriately the goods and services it provides.</p>	<p>Sustainability is recognised as a core strategic priority. Informs the SA in developing relevant objectives and criteria.</p>
<p>UK Marine Policy Statement, HM Government, March 2011</p>	<p>This Marine Policy Statement (MPS) is the framework for preparing Marine Plans and taking decisions affecting the marine environment. It will contribute to the achievement of sustainable</p>	<p>Informs the SA in developing relevant objectives and criteria regarding the societal benefits of marine areas, including the</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>development in the United Kingdom marine area. It has been prepared and adopted for the purposes of section 44 of the Marine and Coastal Access Act 2009.</p> <p>The process of marine planning will:</p> <ul style="list-style-type: none"> • achieve integration between different objectives; • recognise that the demand for use of our seas and the resulting pressures on them will continue to increase; • manage competing demands on the marine area, taking an ecosystem-based approach; • enable the co-existence of compatible activities wherever possible; and • integrate with terrestrial planning. 	<p>sustainable use of marine resources to address local social and economic issues.</p>
<p>Electricity Market Reform White Paper 2011, Planning our Electric Future: A White Paper for Secure, Affordable and Low-Carbon Electricity</p>	<p>This White Paper sets out the Government's commitment to transform the UK's electricity system to ensure that our future electricity supply is secure, low-carbon and affordable.</p> <p>The paper features a 15 per cent renewable energy target by 2020 and 80 per cent carbon reduction target by 2050.</p>	<p>The Local Plans should develop policies that support renewable energy generation and encourage greater energy efficiency.</p> <p>Informs the SA in developing relevant objectives and criteria.</p>
<p>DfT (2013) Door to Door: A strategy for improving sustainable transport integration</p>	<p>The strategy's vision is for an inclusive, integrated and innovative transport system that works for everyone, and where making door-to-door journeys by sustainable means is an attractive and convenient option. Four key areas to address are highlighted:</p> <ul style="list-style-type: none"> • improving availability of information; • simplifying ticketing; • making connections between different steps in the journey, and different modes of transport easier; and • providing better interchange facilities. 	<p>The Local Plans should enhance public transport provision and encourage active modes of travel such as walking and cycling. Informs The Local Plans and SA in developing relevant principles, objectives and criteria.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
DCLG (2011) Laying the Foundations: A Housing Strategy for England	Aims to provide support to deliver new homes and improve social mobility.	<p>The Local Plans should develop policies that encourage development of residential properties.</p> <p>Informs the Local Plans and the SA in developing relevant principles, objectives and criteria.</p>
DEFRA (2011) Securing the Future: Delivering UK Sustainable Development Strategy	<p>Enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life for future generations. There are 4 shared priorities:</p> <ul style="list-style-type: none"> • sustainable consumption and production; • climate change and energy; • natural resource protection and environmental enhancement; and • sustainable communities. <p>Sets out indicators to give an overview of sustainable development and priority areas in the UK. They include 20 of the UK Framework indicators and a further 48 indicators related to the priority areas.</p>	<p>The Local Plans should develop policies that meet the aims of the Sustainable Development Strategy.</p> <p>The Local Plans and the SA in developing relevant principles, objectives and criteria.</p>
DECC (2011) UK Renewable Energy Roadmap (updates setting out progress and changes to the strategy dated 2013 and 2013)	<p>Make the UK more energy secure.</p> <p>Help protect consumers from fossil fuel price fluctuations.</p> <p>Help drive investment in new jobs and businesses in the renewable energy sector.</p> <p>Keep the UK on track to meet carbon reduction objectives.</p> <p>The document outlines a target of 15% of UK energy use from renewables by 2020.</p>	<p>The Local Plans and the SA in developing relevant principles, objectives and criteria regarding renewable energy provision including electricity, heat and transport.</p>
Community Energy Strategy (DECC, 2014)	Sets out plans to promote and facilitate the planning and development of decentralised community energy initiatives in four main types of energy activity:	The Local Plans and the SA in developing relevant principles, objectives and criteria regarding renewable energy



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • generating energy (electricity or heat); • reducing energy use (saving energy through energy efficiency and behaviour change); • managing energy (balancing supply and demand); • purchasing energy (collective purchasing or switching to save money on energy). 	<p>provision including electricity, heat and transport.</p>
<p>The National Flood and Coastal Erosion Risk Management Strategy for England (Environment Agency, 2011)</p>	<p>This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities.</p> <p>The strategic aims and objectives of the Strategy are to:</p> <ul style="list-style-type: none"> • “manage the risk to people and their property; • facilitate decision-making and action at the appropriate level – individual, community or local authority, river catchment, coastal cell or national; • achieve environmental, social and economic benefits, consistent with the principles of sustainable development”. 	<p>Development should seek to reduce and manage the risk of all types of flooding.</p> <p>It assists the Local Plans and the SA in developing relevant principles, objectives and criteria.</p>
<p>Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy (HM Government, 2013)</p>	<p>The programme aims to:</p> <ul style="list-style-type: none"> • encourage businesses to contribute to a more sustainable economy by building waste reduction into design, offering alternative business models and delivering new and improved products and services; • encourage a culture of valuing resources by making it easier for people and businesses to find out how to reduce their waste, to use products for longer, repair broken items, and enable reuse of items by others; • help businesses recognise and act upon 	<p>It assists the Local Plans and the SA in developing relevant principles, objectives and criteria.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>potential savings through better resource efficiency and preventing waste, to realise opportunities for growth; and</p> <ul style="list-style-type: none"> • support action by central and local government, businesses and civil society to capitalise on these opportunities. 	
<p>Future Water: The Government’s Water Strategy for England (DEFRA, 2008)</p>	<p>Sets out how the Government want the water sector to look by 2030 and an outline of the steps which need to be taken to get there.</p> <p>The vision for 2030 is one where we, as a country have:</p> <ul style="list-style-type: none"> • “improved the quality of our water environment and the ecology it supports, and continue to maintain high standards of drinking water quality from taps; • sustainably managed risks from flooding and coastal erosion, with greater understanding and more effective management of surface water; • ensure a sustainable use of water resources, and implement fair, affordable and cost-reflective water charges; • cut greenhouse gas emissions; and • embed continuous adaptation to climate change and other pressures across the water industry and water users”. 	<p>The Local Plans and the SA in developing relevant principles, objectives and criteria.</p>
<p>Water for People and the Environment: Water Resources Strategy for England and Wales (Environment Agency, 2009)</p>	<p>The Strategy vision for water resource “is for there to be enough water for people and the environment, meeting legitimate needs”.</p> <p>Its aims include:</p> <ul style="list-style-type: none"> • to manage water resource and protect the water environment from climate change; • restore, protect, improve and value species and habitats that depend on water; • to contribute to sustainable development through good water management; and • to understand how water and the water 	<p>The Local Plans and the SA in developing relevant principles, objectives and criteria.</p>



National Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>environment contribute to their quality of life.</p>	
<p>Safeguarding our Soils: A Strategy for England (DEFRA, 2009)</p>	<p>The vision is “by 2030, all England’s soils will be managed sustainability and degradation threats tackled successfully. This will improve the quality of England’s soils and safeguard their ability to provide essential services for future generations”.</p> <p>The Strategy highlights the areas for priority including:</p> <ul style="list-style-type: none"> • better protection for agricultural soils; • protecting and enhancing stores of soil carbon; • building the resilience of soils to a changing climate; • preventing soil pollution; • effective soil protection during construction and development; • dealing with our legacy of contaminated land; 	<p>The Local Plans should ensure that site allocations and policies will help protect and enhance the quality of soils and seek to sustainably manage their quality for future generations.</p> <p>The Local Plans and the SA in developing relevant principles, objectives and criteria.</p>

3.3 Review of Sub-national Plans and Programmes

Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Essex Gypsy and Traveller and Travelling Showpeople Accommodation Assessment – on behalf of EPOA (July 2014)</p>	<p>This assessment aims to provide more robust evidence on Gypsy and Traveller accommodation need at district level in terms of residential, transit and brick and mortar sites. It quantifies current and future accommodation requirements up to 2021.</p>	<p>Number of additional pitches required should be taken into consideration when devising housing planning policies. The Local Plans should reflect the requirement of provisions for Gypsy and Traveller communities within the local authorities alongside housing developments.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Looking Back, Moving Forward – Assessing the Housing Needs of Gypsies and Travellers in Essex (2006)	Assesses the accommodation needs of gypsies and travellers in Essex and provide reliable evidence base for allocating sites for Gypsy and Travellers in Local Development Documents.	Informs the county evidence base for determining housing planning policy. The Local Plans should draw upon the wider context when evaluating the need within the locality in order to fully inform accommodation provisions for Gypsy and Traveller communities within the local authorities.
Greater Essex Demographic Forecasts Phase 7 (2015)	This report provides the findings of Phase 7 of the demographic forecasts for Greater Essex. It sets out scenarios for development that were tested on each of the local authority districts within the EPOA study area to enable an evaluation of alternative growth trajectories for population and households. These scenarios will provide the new evidence base to both support the preparation of Local Plans and to contribute to other planning activities within each local area.	This report provides development scenarios for the local authorities which will inform the future housing figures, planning policy and strategy. The information will be incorporated into the Local Plans to assist in providing an estimation of the required dwellings for the future.
Essex Transport Strategy: the Local Transport Plan for Essex, Essex County Council, June 2011	<p>The Local Transport Plan sets out the approach for transport in Essex. It sets out aspirations for improving travel in the county, demonstrating the importance of meeting these aspirations to achieving sustainable long-term economic growth in Essex and enriching the lives of our residents.</p> <p>This third Local Transport Plan is wider in scope than previous plans, providing a framework for the effective and efficient delivery of all transport services provided by or on behalf of Essex County Council. It will inform and guide work with other organisations and local communities across Essex, ensuring that transport services are delivered in ways which effectively respond to local needs and offer good value for money to local taxpayers.</p> <p>Vision: A transport system that supports sustainable</p>	Informs the Local Plans and SA in developing relevant principles, objectives and criteria in a local context.



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>economic growth and helps deliver the best quality of life for the residents of Essex.</p> <p>Strategic transport priorities:</p> <ul style="list-style-type: none"> • identifying an agreed and deliverable solution to address congestion at the Thames Crossing and adjacent M25 junction 30/31; • lobbying Government for enhancements to the A12; • lobbying Government for enhancements to the A120 to access Harwich port and between the A12 and Braintree; and • lobbying Government for additional capacity on the Great Eastern Main Line and West Anglia mainline to accommodate growing commuter demand, the provision of competitive journey times for Essex Thameside services, and an enhanced local role in the rail franchise process. <p>Countywide priorities:</p> <ul style="list-style-type: none"> • reducing the number of people killed or seriously injured on Essex roads; • continuing to work with the Essex Casualty and Congestion Board; • working with partners to promote a safe and secure travelling environment; • maintaining the Essex highway network and other transport assets; • keeping the transport network safe and operational; and • managing the impact of planned works on the highway network. <p>Transport priorities for the Haven Gateway:</p> <ul style="list-style-type: none"> • providing the transport improvements needed to accommodate housing and employment growth in a sustainable way; • tackling congestion within Colchester (including the provision of Park & Ride facilities); 	



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • improving the availability, reliability and punctuality of local bus services; • improving the attractiveness of public spaces to support regeneration, particularly within the coastal towns; • improving and promoting cycle networks; and improving the availability of travel choices and awareness of them; and • improving journeys for commuters travelling to London from Colchester and Braintree; particularly by improving access to railway stations and improving facilities for passengers. <p>Improving transport access to Harwich to enable low carbon expansion of the port and wind port.</p>	
<p>2011 Essex Biodiversity Action Plan</p>	<p>The 2011 Plan replaces the first 1999 Biodiversity Action Plan for Essex setting out targets and actions at a district level, where appropriate. Groups are based on habitat types, which will include relevant species and sub-plans for more specific habitats. Habitat groups are:</p> <ul style="list-style-type: none"> • Lowland Farmland • Lakes and Ponds • Rivers • Wetlands • Coastal • Marine • Urban and Brownfield • Woodland 	<p>It will be important that the Local Plans has regard to the habitats and species within the district’s boundaries and supports the targets and action plans adopted. Consequently, any developments in the local authority would have measures in place to reduce impacts on local biodiversity.</p>
<p>Commissioning School Places in Essex 2015-2020</p>	<p>In the County Council’s publication “Commissioning School Places in Essex- 2014-19” schools have been placed into forecast planning groups. These are groups of schools that serve the children residing in particular geographical areas of the district. Some forecast planning groups are under significant pressure and require the provision of additional places to meet the needs of a growing</p>	<p>Provision of education should be taken into account in relation to future population growth and development within the Strategic Area. A localised focus here allows the specific age structure and required school places to be calculated</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>school primary population, whilst others have some capacity to accommodate future growth.</p> <p>The Plan sets out the requirement for places in maintained primary and secondary schools until 2018, and identifies the areas where providers will need to match supply with demand. It provides the context for the future organisation of school places in Essex and sets out the principles that need to be given serious consideration when planning school places.</p>	<p>more accurately compared with being part of a wider county context.</p>
<p>Essex County Council Joint Municipal Waste Management Strategy 2007-2032</p>	<ul style="list-style-type: none"> • Essex Authorities will work hard to reduce the amount of waste produced in the first place and re-use more of the waste that is produced; • Essex will achieve high levels of recycling, with an aspiration to achieve collectively 60% recycling of household waste by 2020. • Essex favours composting technologies such as anaerobic digestion (AD), for source segregated organic wastes. AD is a form of biotreatment and produces a gas which can be used to generate 100% renewable electricity; • Whilst we can work on reducing the amount of waste produced and recycling as much of it as possible, there will always be some waste that still needs to be disposed of. For this we propose to introduce new treatment plants using Mechanical Biological Treatment (MBT). MBT processes any 'black bag' waste and recovers further material for recycling. Part of the remaining material can either be manufactured into a fuel for energy production or can be sent to landfill. 	<p>Planning policy and allocations within the Local Plans should have regard to the aims set out in this strategy. Waste management should be included in the Local Plans to identify areas where significant improvements can be achieved to assist in the realisation of the aims set out in the Essex County Council Joint Municipal Waste Management Strategy.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Anglian River Basin Management Plan, Environment Agency, (draft 2015)</p>	<p>The Anglian River Basin Management Plan is about the pressures facing the water environment in this river basin district, and the actions that will address them. It has been prepared in consultation with a wide range of organisations and individuals and is the first of a series of six year planning cycles.</p> <ul style="list-style-type: none"> • to prevent deterioration of the status of surface waters and groundwater; • to achieve objectives and standards for protected areas; • to aim to achieve good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status; • to reverse any significant and sustained upward trends in pollutant concentrations in groundwater; • the cessation of discharges, emissions and losses of priority hazardous substances into surface waters and • progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants. 	<p>The Local Plans have sufficient scope to affect the water environment through policy and development allocations. These documents raise awareness of a range of issues that can inform the Local Plans and the SA/SEA.</p>
<p>Essex Wildlife Trust Living Landscape plans</p>	<p>Essex Wildlife Trust has mapped 89 Living Landscape areas across Essex covering 7,250 acres of land.</p> <p>The Essex Living Landscape map aims to reconnect habitats and local people in the county, to restore habitats so that wildlife can flourish; restore the involvement of local people with their countryside so they can work for it, take pride in it and gain a better quality of life. In addition, the scheme hopes to reconnect habitats across the county, removing restrictions of travel for wildlife and increasing their chances of survival.</p>	<p>The Local Plans have sufficient scope to link habitats and people through policy and development allocations. This resource raises awareness of wildlife issues that can inform the Local Plans and the SA/SEA and can be easily factored into any prospective developments.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Essex Wildlife Trust Living Landscape Statements</p>	<p>Living Landscapes are large landscape scale areas of the countryside like river valleys, estuaries, forested ridges, and grass and heath mosaics, which are ecologically stable and provide a superb range of habitats for many species of wild plants and animals. There are over 80 living landscapes areas identified and over 20 have statements which set out the areas vision and objectives for protecting and improving the wildlife and area as a whole.</p>	<p>Local Plans policy should have regard to these living landscapes. New developments arising from the Local Plans should have a limited, if any, impact on the natural landscape and decrease negative effects of the constructions on Living landscapes within the local authorities.</p>
<p>Respecting our Past, Embracing our Future: A Strategy for Rural Essex (2016)</p>	<p>This report aims to achieve:</p> <ol style="list-style-type: none"> 1. Prosperity. To build a dynamic and sustainable rural economy, where businesses and communities are mutually supportive, and where all the assets and benefits of rural Essex are actively promoted to encourage investment. 2. Well-being. To enable everyone in Essex to enjoy our rich and diverse environment, and support rural residents to live well and access health services when they need them. 3. Connection. To support the development of rural broadband and rural transport, while championing rural networks and facilities. 4. Innovation. To promote new approaches to service access and delivery for rural communities, with a focus on mobilising community assets. 	<p>The Local Plans should take account of these aims when developing policies and selecting sites in order to contribute towards the four aims set out in the document. Informs the Local Plans and the SA regarding objectives within the Strategic Area.</p>
<p>ECC Parking Standards: Design and Good Practice (September 2009)</p>	<p>Establishes guidance on parking provision for new development and provides parking standards. The purpose of this document is to:</p> <ul style="list-style-type: none"> • Assist the Local Planning Authorities in determining appropriate standards for their areas • Advise members of the public in a readily comprehensible manner • Assist intending developers in preparing plans for the development of land 	<p>New developments resulting from the Local Plans will give consideration to parking provisions and standards in order to appropriately serve the development with vehicle accessibility.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> Expedite the determination of planning applications. 	
The Essex Local Area Agreement – ‘Health and Opportunity for the People of Essex’ 2008 – 2011 (2010 Refresh)	This document sets out agreed performance targets for the most important issues over the next three years, including education, health and access to services and facilities. Outcomes, focuses and ways in which targets can be achieved are set out for each priority.	The Essex-wide priorities held within this document will inform the Local Plan and the SA/SEA, addressing the key issues across the county allowing for the set targets to be met.
ECC Development Management Policies (February 2011)	<p>Sets out transport development management policies for Essex which reflect the balance between the need for new housing and employment opportunities, the regeneration and growth agenda, and protecting the transport network for the safe movement of people and goods.</p> <p>Aims are:</p> <ul style="list-style-type: none"> Protect and maintain a reliable and safe highway infrastructure. Improve access to services in both rural and urban locations. Offer where possible alternative travel options to the private car. Support and enhance public transport provision. Address the impact of commercial vehicles on the highway network and communities. Support the aims and objectives of the County Council as the Highway Authority. 	The Local Plans should align with these principles in order to promote efficient transport infrastructure and services as part of the county wide policy. New developments resulting from the Local Plans need to consider transport provisions to support new housing and employment constructions.
The Essex Strategy 2008 – 2018	<p>This document represents the latest update of the monitored outcomes of Indicators relevant to the Local Area Agreement. The strategy focuses on four broad aims:</p> <ul style="list-style-type: none"> Safety and health Supportive communities Education, work and leisure Protection and enhancement of natural 	The document provides the most up to date statistics for a number of Indicators. Policies and allocations within the Local Plans should be influenced by the aims contained within the strategy, particularly those where the data demonstrates



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	resources for prosperity	that the Local Authority is not meeting monitoring targets.
Sustainable Drainage Systems Design and Adoption Guide 2012	Develop a Design Guide demonstrating how new developments can accommodate SuDS, the standards expected of any new SuDS scheme to be suitable for approval and adoption, provide an overview of the geology and biodiversity of the county and advice on how SuDS will be maintained and how they should be ensured to be maintainable.	Utilised by the Local Plans to ensure a transparent and consistent level of service when ECC is responding to planning enquires, a Sustainable Drainage Design and Adoption Guide has been produced, working in partnership with other partner local authorities and establishing an officer working group.
Essex Minerals Local Plan 2014	<p>The aims of the Minerals Local Plan are to provide a sustainable planning framework allowing for the supply of basic raw materials at least cost to the environment of Essex, provide policies and proposals for non-land won supply and ensure extraction is matched by a high standard of restoration/site clearance.</p> <p>The relevant objectives are taken from national minerals guidance on sustainable development for minerals planning and are as follows:</p> <ul style="list-style-type: none"> • conserve minerals as far as possible whilst ensuring an adequate supply to meet needs; • ensure the environment impacts caused by minerals operations and transport are kept to an acceptable minimum; • minimise the production of waste and encourage efficient use of materials including appropriate use of high quality materials and recycling of waste; • encourage sensitive working, restoration and aftercare to preserve or enhance the overall quality of the environment; and • protect areas of designated landscape or nature conservation value from 	The Essex Minerals Local Plan provides information regarding site allocations that should be considered in the selection and appraisal of options.



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>development.</p> <p>The MLP includes policies that protect operating mineral sites and facilities, newly allocated mineral extraction sites and potentially workable but unallocated mineral deposits from sterilisation as a result of other development proposals.</p> <p>ECC is preparing a Guidance Note regarding the implementation of Policy S8 - Safeguarding mineral resources and mineral reserves. The purpose of the guidance will be to:</p> <ul style="list-style-type: none"> • assist the Mineral Planning Authority (MPA) and LPA in implementing the policies of the adopted Mineral Local Plan (MLP) and National Planning Policy Framework (NPPF) which concern mineral safeguarding. This is particularly relevant for LPAs when assessing future potential for development as part of the Local Plan making process; • to create a shared understanding of the issues and information available to avoid a duplication of tasks between authorities; • to ensure that a direct link is maintained between a Neighbourhood Plan and the NPPF, incorporating both the relevant Local Plan and the Minerals Local Plan, in recognition that they are all form part of the Development Plan. 	
<p>Essex and Southend Replacement Waste Local Plan, Essex County Council, (submitted June 2016)</p>	<p>The Replacement Waste Local Plan provides the strategy and policies for waste planning in Essex and Southend until at least 2031, plus allocations of sites for development and a Policies (previously Proposals) Map. The Plan includes:</p> <ul style="list-style-type: none"> • the Waste Core Strategy, setting out the long term direction for waste development and the plan to deliver this strategy; • development Management Policies for waste planning particularly when considering applications; 	<p>The Essex Waste Local Plan provides information regarding site allocations that should be considered in the selection and appraisal of options.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • Strategic Site Allocations for waste-related development; • Non-Strategic Site Allocations for other preferred sites for waste processing plus any associated safeguarding; • the Policies (previously Proposals) Map. <p>Existing waste management facilities deemed to be strategic have been safeguarded, and a small number of additional facilities have been allocated to meet identified capacity needs. The Preferred Approach does not propose to take any site allocations for landfill forward within the Waste Development Document at this stage. This is because the evidence base signals that there is a substantial shift away from the need for additional landfill capacity, with waste being diverted away from landfill to the network of existing and permitted waste management facilities. This is due to a mixture of reduced amounts of waste arisings, re-assessment of existing capacity within the Plan Area and the diversion of waste away from landfills to the network of existing and permitted waste management facilities.</p>	
<p>Haven Gateway Programme of Development: A Framework for Growth 2008 - 2017, Haven Gateway Partnership, 2007</p>	<p>This joined up framework is a project management tool to guide the local delivery of an increased supply of housing and economic development, is a means of articulating key infrastructure needs to support this growth and forms a basis for bidding for growth funding from government. The objectives of this document should be considered within the Local Plans. These are:</p> <ul style="list-style-type: none"> • to promote the development of the Haven Gateway as a New Growth Point; • to demonstrate how port expansion and other employment growth can be integrated with housing growth within the unique estuarine setting of the Gateway; • to facilitate the delivery of housing and employment growth and infrastructure investment proposed in the EEP and the 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>Regional Economic Strategy;</p> <ul style="list-style-type: none"> to establish a basis for support from central government and other agencies and a mechanism for prioritising bids for investment within the Haven Gateway New Growth Point. <p>To establish a basis for support from central government and other agencies and a mechanism for prioritising bids for investment within the Haven Gateway New Growth Point.</p>	
<p>Haven Gateway Integrated Development Programme, Haven Gateway Partnership, December 2008</p>	<p>This document provides a single delivery plan for capital-led investment which will allow for appropriately phased development in the period to 2021 and, indicatively, beyond.</p>	<p>Informs the Local Plans and SA of relevant issues in the Strategic Area.</p>
<p>South East LEP Investment and Funding (March/April 2014)</p>	<p>The South East Local Enterprise Partnership (LEP) is the business-led, public/private body established to drive economic growth across East Sussex, Essex, Kent, Medway, Southend and Thurrock. Local Enterprise Partnership’s “provide the clear vision and strategic leadership to drive sustainable private sector-led growth and job creation in their area.” They decide what the priorities should be for investment in roads, buildings, and facilities in the area as part of an integrated approach to growth and infrastructure delivery. LEPs represent a major step forward in fostering a strong environment for business growth.</p>	<p>It is a test of legal compliance that Local Plans have regard to the Local Economic Partnership. This paper also informs the Local Plans and SA of relevant issues in the Strategic Area.</p>
<p>Anglian Water Business Plan (2015-2020) (2012)</p>	<p>This document sets out Anglian Water’s business plan for the next five years. The plan explains that customers expect a safe, clean water supply and a reliable wastewater service; fair and affordable bills; reduced leakage; and security of future water supplies to meet the challenge of population growth and changing, more extreme weather patterns. Over the plan period Anglian Water will spend a total of £4,647m to look after</p>	<p>Informs the Local Plans and SA of relevant issues in the Strategic Area.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>customers' water supply, protect the environment and prepare the region for future challenges such as population growth and climate change. This is achieved while holding increases in the average household bills to 1.8% p.a. below inflation.</p>	
<p>Draft Water Resource Management Plan (2015-2040) (2014)</p>	<p>This plan shows how Anglian Water are going to maintain the balance between supply and demand over the next 25 years, as well as deal with the longer term challenge of population increase, climate change and growing environmental needs. Over the next 25 years, Anglian Water's supply-demand balance is at risk from growth, climate change and the reductions in deployable output that they will make to restore abstraction to sustainable levels. In the worst case, the impact could approach 567 MI/d, equivalent to approximately 50% of the water we put into supply in 2012/13. We also have to manage risks from drought, deteriorating raw water quality and the impact of cold, dry weather on our distribution system and customer supply pipes.</p> <p>The plan forecasts that under dry year annual average conditions and without investment to maintain the supply-demand balance, Colchester will be in deficit by 2039-40. Six feasible option to maintain Colchester's supply-demand balance have been developed as follows:</p> <p>SE1 is to treat effluent from Colchester Water Recycling Centre to an extremely high (near potable) standard and discharge to the River Colne to supplement river flows and permit increased abstraction. A new pipeline and pumping station would be required to convey the water to the water treatment works, which would require additional treatment capacity.</p> <p>SE2 transfer of 12MI/d of water from Ipswich in the East Suffolk RZ to Colchester via a new 22km long pipeline.</p> <p>SE4 Amendment to Ardleigh agreement, which is</p>	<p>Informs the Local Plans and SA of relevant issues in the Strategic Area</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>shared with Affinity Water.</p> <p>SE6 utilise an existing licenced borehole in the Colchester area. New treatment facilities would be required.</p> <p>SE7 An extension to an existing reservoir utilising disused mineral abstraction pits to provide additional storage. Additional treatment capacity and transfer pipelines would also be required.</p> <p>SE8 East Suffolk WRZ transfer (2MI/d) – This option is similar to option SE2 but requires a smaller pipeline.</p>	
<p>Combined Essex Catchment Abstraction Management Plan (2013)</p>	<p>Objectives:</p> <ul style="list-style-type: none"> • A site appraisal is required for all sites. • Any residential development larger than 500 dwellings must provide an element of mixed use development. • Sustainability issues must be addressed. • The layout and structure of development must be legible and permeable. • In densities over 20 dph there is a need for continuity of built frontages. • Schemes must be designed with crime prevention in mind. • Access for the disabled must be provided in certain situations. • Car free development should be promoted. 	<p>Informs the Local Plans and SA of relevant issues in the Strategic Area.</p>
<p>Haven Gateway Water Cycle Study: Stage 1 and 2 Reports (2008)</p>	<p>Objectives:</p> <ul style="list-style-type: none"> • Ensure that adequate water supply and waste water infrastructure is in place to support housing and employment growth planned for HGSR to 2021 in the emerging East of England Plan and the HG Programme of Development Framework for Growth; • any additional infrastructure is provided in accordance with a strategic rather than a 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>piecemeal approach;</p> <ul style="list-style-type: none"> • there is a strategic approach to the management and use of water; • the environment has sufficient capacity to receive increased waste water discharges; • the potential for grey water reuse and implementation of Sustainable Drainage Systems (SuDS) is fully realised. 	
<p>South East LEP Growth Deal and Strategic Economic Plan (2004)</p>	<p>This plan outlines the LEPs ambition to spearhead with Government a massive £10 billion investment programme into East Sussex, Essex, Kent, Medway, Southend and Thurrock over the next 6 years to generate 200,000 private sector jobs and finance 100,000 new homes.</p> <p>By 2021, the aim is to:</p> <ul style="list-style-type: none"> • generate 200,000 private sector jobs, an average of 20,000 a year or an increase of 11.4% since 2011; • complete 100,000 new homes, increasing the annual rate of completions by over 50% compared to recent years; and • lever investment totalling £10 billion, to accelerate growth, jobs and homebuilding. 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area</p>
<p>The Essex County Council Developers' Guide to Infrastructure Contributions (Revised Edition 2016)</p>	<p>This document is the third edition of the Essex County Council Developers' Guide to Infrastructure Contributions, which replaces the edition of February 2010 (DS092154). As with previous editions, it details the scope and range of contributions towards infrastructure which Essex County Council may seek from developers and land owners in order to make development acceptable in planning terms.</p>	<p>The Local Plans should consider the implications of this guide regarding infrastructure requirements and stimulation.</p>
<p>Vision for Essex 2013-2017: Where Innovation Brings Prosperity (2013)</p>	<p>Vision: We want Essex to be a county where innovation brings prosperity. The challenges ahead strengthens our resolve to:</p> <ul style="list-style-type: none"> • increase educational achievement and 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>enhance skills;</p> <ul style="list-style-type: none"> • develop and maintain the infrastructure that enables our residents to travel and our businesses to grow; • support employment and entrepreneurship across our economy; • improve public health and wellbeing across Essex; • safeguard vulnerable people of all ages; • keep our communities safe and build community resilience; and • respect Essex’s environment. 	
<p>Corporate Outcomes Framework 2014 - 2018 Essex County Council, February 2014</p>	<p>Essex County Council has set out a clear Vision for Essex – we want to be a county where innovation brings prosperity.</p> <p>7 outcomes:</p> <ul style="list-style-type: none"> • Children in Essex get the best start in life; • people in Essex enjoy good health and wellbeing; • people have aspirations and achieve their ambitions through education, training and lifelong learning; • people in Essex live in safe communities and are protected from harm; • sustainable economic growth for Essex communities and businesses; • people in Essex experience a high quality and sustainable environment; and • people in Essex can live independently and exercise control over their lives. 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Colchester Town Draft Surface Water Management Plan (2014)</p>	<p>The objectives of the SWMP are to:</p> <ul style="list-style-type: none"> • Develop a thorough understanding of surface water flood risk in and around the study area, taking into account the implications of climate change, population and demographic change and increasing 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>urbanisation in and around Colchester town;</p> <ul style="list-style-type: none"> • identify, define and prioritise Critical Drainage Areas, including further definition of existing local flood risk zones and mapping new areas of potential flood risk; • make recommendations for holistic and integrated management of surface water management which improve emergency and land use planning, and support better flood risk and drainage infrastructure investments; • establish and consolidate partnerships between key stakeholders to facilitate a collaborative culture, promoting openness and sharing of data, skills, resource and learning, and encouraging improved coordination and collaborative working; • engage with stakeholders to raise awareness of surface water flooding, identify flood risks and assets, and agree mitigation measures and actions; and • deliver outputs to enable practical improvements or change where partners and stakeholders take ownership of their flood risk and commit to delivering and maintaining the recommended measures and actions. 	
<p>A12/ A120 Route based strategy, Highway Agency, March 2013</p>	<p>In order to reduce the number of incidents and improve journey reliability, the strategy has identified the following key areas in the short term to improve:</p> <ul style="list-style-type: none"> • improved management of the route; • improved technology along the route; • improvements to lay-by and road user facilities; • collision reduction and incident management maintenance; • junction improvements; and 	<p>The Local Plans should consider the impact of the A12/ A120 Route based strategy. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • development of an investment strategy for the route. <p>Longer term priorities:</p> <ul style="list-style-type: none"> • develop and deliver a junction optimisation Strategy; • direct accesses to the route; • modal shifts; • improvements to local roads; and • investigate a major upgrade to the A120 between Braintree and Marks Tey. 	
<p>Highways Development Management Policies, Essex County Council, February 2011</p>	<p>Aims:</p> <ul style="list-style-type: none"> • Protect and maintain a reliable and safe highway infrastructure; • improve access to services in both rural and urban locations; • offer where possible alternative travel options to the private car; • support and enhance public transport provision; • address the impact of commercial vehicles on the highway network and communities; and • support the aims and objectives of the County Council as the Highway Authority. 	<p>The Local Plans should consider the impact of the Essex Highways Development Management Policies. Policies within the Plans should be in line with the Development Management policies for Essex.</p>
<p>Economic Plan for Essex (2014)</p>	<p>This plan sets out the County Council’s commitment to do more, with support from HM Government, to stimulate economic growth in three important ways:</p> <ul style="list-style-type: none"> • ECC will invest more on our own account, and encourage private investment in worthwhile projects that will deliver economic growth. Their ambition is to deliver £1bn of investment between now and 2021; • with this investment, and by working together, public and private partners will help to deliver a major series of enabling 	<p>This Plan informs the Local Plans and the SA on the detail of partners’ proposals to improve skills across the Essex workforce; deliver growth-enabling infrastructure in Essex’s key growth corridors (Growth locations); and enhance support for enterprise and innovation and key growth sectors within Essex (Productivity). It is a highly relevant Plan in context of</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>projects described in the plan that ECC have identified as key to our future economic prosperity; and</p> <ul style="list-style-type: none"> introduce a new and more proactive approach to economic development. ECC will not simply deliver these projects and hope for the expected investment to follow, but will actively market our investment opportunities, encouraging new businesses and investors and seeking out development partners where appropriate. 	<p>shared goals between the Plan and the Colchester, Braintree and Tendring Local Plans.</p>
<p>Essex Design Guide, Essex Planning Officers Association, 2005</p>	<p>Objectives:</p> <ul style="list-style-type: none"> A site appraisal is required for all sites; any residential development larger than 500 dwellings must provide an element of mixed use development; sustainability issues must be addressed; the layout and structure of development must be legible and permeable; in densities over 20 dph there is a need for continuity of built frontages. - Schemes must be designed with crime prevention in mind; access for the disabled must be provided in certain situations; and car free development should be promoted. 	<p>Informs the SA of relevant broad design issues in the Strategic Area.</p>
<p>North Essex Catchment Flood Management Plan, Environment Agency, 2009</p>	<p>The Water Framework Directive’s main objectives are to protect and enhance the water environment and ensure the sustainable use of water resources for economic and social development.</p>	<p>The Local Plans should consider the impact of the North Essex Catchment Flood Management Plan. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Essex and South Suffolk Shoreline Management Plan (second phase),</p>	<p>A Shoreline Management Plan is a high-level policy document that aims to identify the most appropriate ways to manage flood and erosion risk to people and the developed, historic and natural</p>	<p>The Local Plans should consider the impact of the Essex and South Suffolk Shoreline Management Plan.</p>



Sub-national Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Environment Agency, 2011	<p>environment over the next 100 years up to 2105.</p> <p>Key aims:</p> <ul style="list-style-type: none"> • set out the risks from flooding and erosion to people and the developed, historic and natural environment; • identify a management policy for the shoreline that achieves the best possible and achievable balance of all the different interests around the shoreline, over the next 100 years, and meet international and national nature conservation obligations. 	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
Dedham Vale AONB and Stour Valley Management Plan 2010 – 2015, Dedham Vale AONB & Stour Valley Project	It is the aim of this plan that by 2025 the Dedham Vale AONB and Stour Valley is recognised as a distinctive working landscape, (one that maintains a viable agricultural production as its core function), and retains its special character. This character should be understood and appreciated by those that choose to live in, work and visit the area.	The Local Plans should consider the impact of the Dedham Vale AONB and Stour Valley Management Plan. This is particularly relevant due to the discussions regarding the expansion of the AONB into Braintree.

5.3 Review of Local Plans and Programmes

Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Braintree District Council, Chelmsford City Council, Colchester Borough Council, Tendring District Council, Objectively Assessed Housing Need Study - Peter Brett Associates (July 2015 and updated 2016)	<p>This study provides an objective assessment of housing need ('OAN') for the housing market area comprising Braintree, Chelmsford, Colchester and Tendring, over the plan period 2013-37. It updates the OAN study produced by Peter Brett Associates (PBA)</p> <p>The objectively assessed housing need is:</p> <ul style="list-style-type: none"> • Braintree 716 dpa • Chelmsford 805 dpa • Colchester 920 dpa • Tendring 550 dpa 	This report provides the quantitative data for the volume of housing required in the Strategic Area. Allocations in the Local Plans and the North Essex Garden Communities must plan for this quantum of housing to meet need within the Strategic Area.



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> Total 2,991 	
<p>North Essex Concept Feasibility Study (AECOM) - July 2016</p>	<p>The four councils cooperating on the Section One for Local Plans are in agreement that the Town and Country Planning Association’s (TCPA) Garden City Principles provide a valuable initial framework for achieving new settlements that are inclusive and provide genuinely affordable, well designed homes, local jobs and schools, integrated transport systems, high standards of green infrastructure and promotion of health within and beyond the emerging local plan period for each authority of 2032/2033.</p> <p>As part of the investigation into this Garden Communities opportunity and its application and suitability to North Essex, the Councils commissioned AECOM to undertake a ‘Garden Communities Concept Feasibility Study’. The outcome of this study is presented in four volumes:</p> <ol style="list-style-type: none"> 1. Baseline Compendium 2. Opportunities and Constraints 3. Options and Evaluation 4. Garden Communities Charter 	<p>Informs the Local Plans and SA regarding the suitability of Garden Communities within the Strategic Area. It presents information and analysis regarding potential development options within the Local Plan areas.</p>
<p>Colchester Metro Town Evaluation of Alternatives (AECOM) – April 2017</p>	<p>This report assesses Colchester Metro Town, which is an alternative approach to a single site new Garden Community suggested by CAUSE (Campaign Against Urban Sprawl in Essex). It is based on the principle of using the Colchester Clacton electrified railway corridor to create a sustainable and integrated chain of settlements.</p> <p>This assessment has determined that, based on a 10 minute walknet using existing networks as the principal structuring infrastructure from which new development would be planned, there is a potential for a cumulative 2,277 dwellings based on a density of 35 dwellings per hectare (dph) across the four settlements. However, developing at such a density, although still only modest, would</p>	<p>This report is particularly relevant to the Section One Local Plan and provides analysis of the sustainability of the Colchester Metro alternative garden community raised by CAUSE. It assists in the selection of allocations in Local Plans and is assessed within the SA.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>significantly alter the existing character of each village, in which a more conservative density of 16dph (as identified in most of the Call for Sites) would produce 1,318 dwellings.</p> <p>At a cumulative yield of only 2,277 dwellings across the four locations, Metro Town does not provide a comparable level of housing to the Garden Community options currently being considered by the North Essex councils (i.e. West of Braintree, Marks Tey and West of Tending/East Colchester). In addition because the development is spread across four villages and across multiple sites and potential landholdings, deliverability maybe more protracted.</p>	
<p>Monks Wood, Braintree Evaluation of Alternatives (AECOM) – April 2017</p>	<p>Since the submission of the Garden Communities Concept Feasibility Study, promoters of an additional site (herein referred to as ‘Monks Wood’) have provided background evidence for consideration. As a consequence this report provided baseline analysis to the same level of detail as that considered for other search areas and concludes with headline considerations on development capacity, infrastructure requirement and overall assessment.</p>	<p>This report is particularly relevant to the Section One Local Plan and provides analysis of the sustainability of the Monks Wood alternative garden community raised by CAUSE. It assists in the selection of allocations in Local Plans and is assessed within the SA.</p>
<p>HRA Screening Report for North Essex Authorities Strategic Part 1 for Local Plans (LUC) - December 2016</p>	<p>The purpose of this HRA Screening is to determine whether Part 1 is likely to result in significant effects to any European site, either alone or in-combination with other plans and projects. If likely significant effects cannot be ruled out, recommendations will be made on how these may be avoided or mitigated as the plan making process progresses.</p> <p>The HRA Screening of the Part 1 has identified several impacts to European Sites which were predicted, or could not be ruled out, and therefore require further consideration at the Appropriate Assessment stage to determine whether they will result in adverse effects on site integrity, and identification of mitigation measures which would ensure adverse effects on integrity are avoided and</p>	<p>The recommendations made in this report should be incorporated in the Local Plans in order to mitigate negative impacts where possible on European designated sites in the Strategic Area. Informs the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>enable adoption of the Plan. The Likely Significant Impacts identified are summarised below:</p> <ul style="list-style-type: none"> • Essex Estuaries SAC – Water quantity/quality and impacts of recreation. • Hamford Water SPA and Ramsar site – Loss of offsite habitat and impacts of recreation • Stour and Orwell Estuaries SPA and Ramsar site - Water quantity/quality, loss of offsite habitat, and impacts of recreation. • Colne Estuary SPA and Ramsar site - Water quantity/quality, loss of offsite habitat, and impacts of recreation. • Abberton Reservoir SPA and Ramsar site - Loss of offsite habitat. • Blackwater Estuary SPA and Ramsar site - Loss of offsite habitat, and impacts of recreation. 	
<p>Braintree Local Plan Preferred Option Assessment Highways/Transport Planning -March 2017</p>	<p>Braintree District Council (BDC) asked Essex County Council (ECC) for traffic modelling support in relation to the development of their Local Plan proposals. The brief was specifically to explore and sift various development scenarios based on their estimated vehicle trip generation and impact on the road network as input to the development of a preferred development scenario.</p> <p>It was found that three scenarios (3, 8 & 11) had a lower impact on the local junctions and one of these, Scenario 8 also had a relatively low impact on the strategic network.</p>	<p>The Section One and Section Two of the Local Plans, particularly Braintree's, should have regard for the findings of this report and the impact of it on development within the Strategic Area. Informs the SA on issues within the Plan areas.</p>
<p>Colchester Borough Council, Braintree District Council, Tendring District Council and Essex County Council North Essex Garden Communities</p>	<p>This demographics study builds on the work carried out by AECOM, David Lock Associates and Cambridge Econometrics to determine the likely demographic profile of each Garden Community to inform future service provision planning, and to develop quantified scenarios for future employment growth.</p> <p>This document sets out both our approach to the</p>	<p>The report provides a detailed analysis of the most likely population size and mix resulting from the garden communities allocated in the Section One of Local Plans. This information should be incorporated into the Local</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Employment & Demographic Studies – February 2017</p>	<p>technical aspects of this study and the findings that have been generated.</p> <p>Under the ‘most likely’ demographic scenario for each settlement (2,500 dwellings by the end of the plan period (2033), with construction continuing at similar annual rates thereafter until completion of each settlement; and assumptions for in- and out-migration based on those for similar new settlements), population is estimated to peak at: just over 32,000 inhabitants by 2056 in ‘West of Braintree’; just over 43,000 by 2071 in Colchester Braintree Borders, and; just over 20,000 by 2051 in Tendring Colchester Borders.</p>	<p>Plans to inform decision making for both policies and site allocations. Informs the SA of relevant issues in the Strategic Area.</p>
<p>North Essex Garden Communities Movement and Access Study – March 2017</p>	<p>The Key Objectives of the Study are as follows:</p> <p>Review and understand high level performance (congestion and service provision) of existing transport network (highways, bus, rail, cycling) in vicinity of the proposed Garden Communities and emerging issues from current local plan work</p> <p>Review constructively the high level transport proposals in AECOM (June 2016): North Essex Garden Communities – Feasibility Study associated with the following sites and emerging work from the Concept Framework Consultants, AECOM, David Lock Associates and Peter Bretts Associates:</p> <ul style="list-style-type: none"> • West Tendring / Colchester Borders (mainly Tendring DC) – up to 11400 homes by 2047. • West Tey / Braintree Borders (mainly Colchester BC) – up to 27800 homes by 2047. • West Braintree / Uttlesford Borders (mainly Braintree DC) – up to 13000 homes by 2047. <p>Carry out an evidence based review of AM peak (0800-0900) trip rates, internalisation of trips and mode shares and comment on the infrastructure and behavioural measures required to support</p>	<p>This report contributes to the evidence base of the Local Plans and garden communities work and assists in decision making. Informs the SA of relevant issues within the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>these assumptions.</p> <p>Review at a high level likely destinations of AM peak trips, external to/from the Garden Communities with cognisance of existing sub-regional travel patterns (including use of A12, A120 and A131) and local plan allocations.</p> <p>Provide a high level review of the key corridors of movement to link the Garden Communities with the surrounding network.</p> <p>Investigate what PT measures to/from the garden communities and principal trip attractors will be required to accommodate 30% of all trips (50% of external trips) by public transport.</p> <p>Carry out a high level review of access arrangements and which junctions and links should be improved and which junctions and links can be improved as a consequence of the Garden Communities.</p> <p>Provide a summary of the phasing of mitigation measures over the plan period.</p> <p>Provide high level indicative costing of schemes identified.</p> <p>Provide a high level summary report to tie in with Local Plan timescales.</p>	
<p>Colchester Infrastructure Delivery Plan Report - March 2017</p>	<p>The IDP is a supporting document for the emerging Local Plan. The IDP covers the plan period up until 2033 although its content will be annually monitored and periodically reviewed. The document will also form an important part of the evidence base for any CIL Charging Schedule that the Council may publish.</p> <p>The document includes details of the infrastructure identified by the Council and other service providers as being needed to support the delivery of the emerging Local Plan. It explains the approach the Council has taken to identifying this infrastructure, how it will be delivered, and an assessment of the potential risks associated with</p>	<p>Regard should be given for this report in the Local Plans to inform decision making with infrastructure in mind. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	doing so.	
<p>Retail and Town Centre Uses Study Colchester Borough Council: Retail Update 2013, Nathaniel Litchfield Partners on behalf of Colchester</p>	<p>Recommended phasing of food store development in Colchester urban area is as follows:</p> <ul style="list-style-type: none"> • up to 2016 – implementation of commitments plus one further large food store; • 2016 to 2021 – implementation of one further large food store; • 2021 to 2026 – implementation of one further large food store. <p>The recommended phasing of comparison goods retail development in Colchester urban area is:</p> <ul style="list-style-type: none"> • up to 2016 – implementation of commitments/town centre proposals and the reoccupation of vacant units; • 2016 to 2021 – implementation of up to 13,000 sq m gross of comparison retail floorspace; • 2021 to 2026 – implementation of up to a further 19,000 sq m gross comparison retail floorspace. 	<p>The Local Plans should consider the impact of the Retail and Town Centre Uses Study. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Landscape Character Assessment (Chris Blandford Associates, September 2006)</p>	<p>This document is a study of Landscape Character Areas and types. The study includes all the rural area up to and including the urban edge and, where they exist, river valleys and other green corridors extending into urban areas. The key objectives are:</p> <ul style="list-style-type: none"> • Provide a baseline inventory and description of landscape character by Type and Area at a scale of 1:25,000; • Identify key issues, sensitivities to change and management strategy objectives/guidelines for each Character Area; • Ensure that Landscape Character Areas and Types join up seamlessly across administrative boundaries, including with existing character assessment studies 	<p>The assessments provide a baseline data set to evaluate any proposed sites for development within the Strategic Area. The Local Plans should consult with the character assessments of the rural areas to inform the decision making process of selecting a development site. The assessments will deliver information on the vulnerability and susceptibility of a site to environmental damage and allow developments to be constructed in the most preferable location.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>carried out by neighbouring authorities outside of the Study Area; and</p> <ul style="list-style-type: none"> To liaise with and understand the issues and concerns of the key stakeholder organisations in relation to the landscape characterisation process. 	
Colchester Coastal Protection Belt Review (Chris Blandford's Associates 2016)	This document is a review of the Coastal Protection Belt to inform the development of the emerging CBC Local Plan.	The document provides evidence on the landscape implications of various associated waterbodies which need to be considered in the appraisal of sites to determine their suitability for allocation; without which could see inappropriate development in such areas.
CBC Strategic Housing Market Assessment (SHMA) (2014)	<p>Balancing the Housing Market</p> <ul style="list-style-type: none"> Ensure that future new development provides a mix of housing types and sizes to meet the needs of all households. Focus new delivery in market housing to address the impact of future demographic and household formation change, meeting the continuing need for small units, mainly 1 bedroom, to improve the quality of the housing offer. Develop policies for market housing so that new stock meets local demand not addressed by existing stock turnover to provide a more balanced housing stock. Delivery strategy should be closely linked to meeting the growth in older people and enabling a better flow of the existing stock. <p>Overall Housing Targets</p> <ul style="list-style-type: none"> The population projection analysis carried out by Edge Analytics suggests that the dwellings projection figure for Colchester is 1,244 per annum over the Plan period. 	The CBC SHMA provides an evidence base to identify local housing need within the borough. The Local Plans must utilise this evidence when allocating sites for development to ensure that local needs are met. Informs the SA on objectives within the Strategic Area.



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • The SHMA stock flow analysis suggests a range of 1,225 to 1,065 dwellings per annum over 5 year and 20 year periods respectively. <p>Market Housing Targets</p> <ul style="list-style-type: none"> • The 2013 housing needs survey identified a shortfall of 721 market units per annum, based on market demand and supply data. Further details can be found in section 11.6. <p>Affordable Housing Targets</p> <ul style="list-style-type: none"> • The 2013 Affordable Housing Assessment Model identified a shortfall of 344 units a year. The CIL Viability assessment suggests that the CIL impact may reduce the affordable target from 35% to 20%. <p>Affordable Tenure Mix Targets</p> <ul style="list-style-type: none"> • The overall affordable tenure target balance set at 80% for social rent (including affordable rents) and 20% intermediate housing supports the level of demand for intermediate housing. • The Housing Need and Demand Assessment data will remain valid until 2018 at which stage it will need to be fully updated as required in Practice Guidance. The assessment should be monitored and updated annually. <p>Property Size Targets</p> <ul style="list-style-type: none"> • Consider social rented housing property size targets of 80% for small units (45% - 1 bedroom and 35% two bedrooms) to meet the needs of single, couple and small family households. • 20% of social rented units should be three and four bedroom houses to address the needs of larger families. • Intermediate market housing should be 60% one bedroom and 40% three bedroom units. 	



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • Developers are expected to bring forward proposals which reflect demand in order to sustain mixed communities. It would be reasonable to consider providing policy guidance for future delivery in the market sector of 60% one and two bedroom properties to meet the needs of single, couple and small family households. • 40% of market units should be three and four bedroom houses to address the needs of larger families and to provide a balanced market sector stock. <p>Housing Strategy</p> <ul style="list-style-type: none"> • Meeting the affordable accommodation requirements of families and those with priority needs should be as important as the larger scale numerical need for smaller units for single and couple households. • To address the under-occupation of around 800 social housing units across the Borough, continue to develop housing strategies to make best use of the existing stock by providing positive incentives to improve the turnover of houses to address the needs of over-crowded and waiting list families. • New social sector delivery should be closely linked to the needs of older tenants and in resolving the under-occupation of family sized properties. <p>Older Persons' Housing Needs</p> <ul style="list-style-type: none"> • There is an inextricable link between ageing and frailty and the forecast rise in the retired population means that the housing and support needs of older and disabled households is important to consider at a strategic level. • In line with the strategic priorities already established, resources should focus on the provision of home-based support services and adaptations for older people living at 	



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>home in both social rented, private rented and owner occupied housing.</p> <ul style="list-style-type: none"> Although a high proportion of older people may have their own resources to meet their accommodation and care needs some may need financial support to enable them to access housing support services. 	
<p>Creative Colchester: Developing the Vision, Tom Fleming Creative Consultancy on behalf of Colchester Borough Council, 2012</p>	<p>In five years Colchester will:</p> <ul style="list-style-type: none"> Continue to have a strong, resilient cultural infrastructure based on a set of core cultural and heritage institutions; be recognised locally and more widely as a town where culture is valued and appreciated for the range of benefits it brings to everyone; place culture at the heart of helping to tackle the core social and economic challenges faced by the borough; continually grow the market for culture through a strategic approach to engaging new and existing audiences through new technology and new types of engagement; have cultural activity happening in every community, with a special focus on those areas with the greatest needs; be a destination town, attracting visitors to its strong and connected leisure, shopping and cultural programme; be a great place to develop a creative career or business, with schools, further and higher education, cultural organisations and private businesses working together in the development of progression routes and programmes of support; and have a vibrant, buzzy cultural quarter feeding off and into the success of firstsite. 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Safer Colchester Partnership Annual Partnership Plan 2013-14, Colchester Borough Council</p>	<p>Objectives:</p> <ul style="list-style-type: none"> • Support the work of the Women’s Safety Worker within the Integrated Domestic Abuse Programme; • raise awareness and support victims of Domestic Abuse; • increase awareness of Domestic Abuse reporting mechanisms amongst those living in CBH homes; • reduce adult re-offending rates by working more effectively in partnership; • reduce crime & offending caused by alcohol misuse. Reduce all crime in Colchester; and • local residents in the Borough have the opportunity to report concerns to their. <p>Neighbourhood Action Panels.</p> <ul style="list-style-type: none"> • Engage local residents & agencies in 3 Community Days of Action and Safer Colchester projects; • delivery of ‘Night of Action’ in the Town Centre; and • engage with Young People on issues of community safety. 	<p>The Local Plans should consider the aims and objectives of the Safer Colchester Partnership Annual Partnership Plan. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>CBC Townscape Character Assessment, Chris Blandford Associates on behalf of Colchester Borough Council, June 2006</p>	<p>The key objectives of the Study are to:</p> <ul style="list-style-type: none"> • Provide a factual description of the location of each settlement, its regional context and its population; • analyse the historical development of each settlement and identify surviving landscape features; • undertake a visual analysis of each settlement according to plan form and skyline; • define broad generic Townscape Character Types and particular character areas, and identify any unusual features of the 	<p>The Local Plans should consider the Townscape Character Assessment when exploring options. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	settlement; <ul style="list-style-type: none"> • identify broad principles for integrating new development within different areas of townscape character and at the urban fringe; and • develop a framework to enable the yearly monitoring of the impact of new development on the townscape within each settlement. 	
CBC Strategic Flood Risk Assessment (SFRA), Scott Wilson on behalf of Colchester Borough Council, 2007	The SFRA enables the Council to identify sites away from vulnerable flood risk areas. Sites surrounding the urban area have been appraised for their risk of different types of flooding. The SFRA considers the situation in 100 years' time, with the effects of climate change, and models what would happen in the event of breaches in key areas. The key objective of an SFRA is to avoid developing in areas at risk of flooding.	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
CBC Affordable Housing SPD, Colchester Borough Council, August 2011	35% affordable housing target, however this has been superseded by the Focussed Review affordable housing target of 20%.	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
CBC Community Facilities SPD, Colchester Borough Council, September 2009 & updated July 2013	The purpose of this Supplementary Planning Document (SPD) is to: <ul style="list-style-type: none"> • highlight the importance of community facilities to the well-being of residents and as a mechanism for building community cohesion; and • ensure adequate provision of community facilities to satisfy the needs of local communities and the borough as a whole. The following contributions towards community facilities are sought: <ul style="list-style-type: none"> • Studios & 1 bedroom dwelling £466.09 • 2 bedroom dwelling £932.18 	Informs the Local Plans and the SA of relevant issues in the Strategic Area.



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • 3 bedroom dwelling £1398.27 • 4 bedroom dwelling £1864.36 • 5 bedroom dwelling £2330.45 • 6 bedroom dwelling £2796.54 <p>Informs developers and other interested parties about what the Council will expect regarding contributions to community facilities within the Borough of Colchester.</p>	
<p>CBC Better Town Centre Colchester, Colchester Borough Council, December 2012</p>	<p>Objectives:</p> <p>Sustainability – Promoting sustainability in its widest sense, including prioritising reductions in the town centre’s carbon footprint, enhancing the resiliency of Town Centre commercial and social businesses, and promoting social inclusion.</p> <p>Innovation – Ensuring that development in Colchester Town Centre promotes and secures innovation in new techniques for enabling sustainable growth, including encouraging the local business community to implement them.</p> <p>Activity – Supporting uses for a lively 21st century town centre;</p> <p>Diversity – Ensuring a healthy mix of retail, leisure/culture, business and residential uses.</p> <p>Retail: Retail is the key driver of the town centre economy, and maintaining an appropriate balance between different types of successful retail uses (including national chains, independent retailers and market traders) and between other activities in the main Town Centre shopping areas will be critical to securing its future vitality. Leisure/Culture: Expansion of leisure and cultural offerings appropriate to different areas of the Town Centre (ie arts-related activities in St. Botolph’s Quarter, entertainment/restaurants in the Shopping Core) outdoor spaces offering multi-functional areas for informal recreation and relaxation, and use of social media to publicise and promote these attractions.</p> <p>Offices and Residential: Supporting the provision of</p>	<p>Informs Section One and Two of the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>office and living space based on the Town Centre’s high quality environment, accessibility, and state-of-the-art digital connectivity. Creating welcoming spaces and events through the day and into the evening –Providing a wide range of facilities and spaces for events and activities that bring people into the town centre throughout the day and year. Developing the evening economy so that the town feels safe and inviting after dark.</p> <p>Heritage and Design – Enhancing the old, creating tomorrow’s heritage;</p> <p>Identity and Unique Character – Reinforcing, interpreting and safeguarding the distinctive character and identity of Colchester and its rich heritage, including its Roman core street grid, unique views, changes in elevation, historic buildings, green spaces, and street scenes.</p> <p>Enriching the existing environment using a creative and dynamic approach to new spaces and buildings. Amenity – Providing a safe, attractive and accessible town centre that is well maintained.</p> <p>Quality – Providing a set of design principles for all new development within the town centre to promote a continuous and consistent high quality well-maintained environment.</p> <p>Movement – Creating a safe and accessible town centre;</p> <p>Shared spaces – Managing interaction between pedestrians; cycles; wheelchair/mobility scooters; and vehicles to prioritise pedestrian provision in the heart of the town centre while accommodating reduced vehicular access to support the vision for the Town Centre.</p> <p>Interchanges - Enhancing public transport and facilitating transitions between modes to improve access to and from the town centre</p> <p>Connectivity – Promoting vitality in the town centre by providing well-designed, lively, and accessible links between town centre buildings and activities.</p>	



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>CBC Sustainable Design & Construction SPD, Colchester Borough Council, June 2011</p>	<p>Code for Sustainable Homes expectations: Level 3 from 2010, level 4 from 2013 & level 6 from 2016.</p> <p>BREEAM expectations:</p> <p>Major development encouraged to achieve 'very good' from 2010, all development encouraged to achieve 'very good' from 2013 & all development encouraged to achieve 'excellent' from 2016.</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Colchester Housing Strategy, Colchester Borough Council, 2012/13</p>	<p>Vision for Housing in Colchester Borough:</p> <p>To make Colchester a place where people choose to live in a decent, safe home which meets their needs at a price they can afford and in locations and neighbourhoods that are sustainable and desirable. To balance the housing market so that supply of housing meets market demand and housing need.</p> <p>Priorities:</p> <ul style="list-style-type: none"> • Clearly set out what kind of housing is needed in terms of size and quality of properties and associated facilities to ensure the housing delivered in the market is attractive and meets the needs of Borough residents, creating neighbourhoods and communities which are sustainable. • Develop a balanced housing market in the Borough of Colchester where supply meets demand at a price that is affordable to residents of the Borough • Develop new initiatives and housing products, which meet housing need and demand between affordable rented and outright home ownership, to enable a fully functioning housing ladder where demand meets supply at a price that is affordable to households on below average incomes • Implement Colchester's Local Development Framework to seek 35% of all new homes to be affordable on sites 	<p>Informs the Local Plans and SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>with 3 or more homes in rural areas and 10 or more in urban areas</p> <ul style="list-style-type: none"> • Use private rented housing to meet need and offer more housing choice to households in the Borough • Make best use of the existing housing stock by returning as many long term empty properties to use in the private sector through a combination of advice, grants, enforcement and loans • Use regulation to improve standards and improve the desirability of private rented accommodation by setting up and managing a private rented accreditation scheme for local landlords • Reduce and prevent homelessness • Ensure investment including Housing Related Support directed investment meets the strategic priorities of CBC based on a robust understanding of our residents needs and is an effective use of resources. 	
<p>CBC Local Air Quality Management Progress Report, Chelmsford City Council on behalf of Colchester Borough Council, July 2013</p>	<p>The Air Quality Objectives applicable to Local Air Quality Management (LAQM) in England are set out in the Air Quality (England) Regulations 2000 (SI 928) and the Air Quality (England) (Amendment) Regulations 2002 (SI 3043).</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>2016 Air Quality Annual Status Report (ASR) - July 2016</p>	<p>The 2016 Annual Status Report is designed to provide the public with information relating to local air quality in Colchester, to fulfil Colchester Borough Council’s statutory duty to review and assess air quality within its area, and to determine whether or not the air quality objectives are likely to be achieved.</p> <p>The main source of air pollution in the Borough is road traffic emissions from major roads, notably the A12, A133, A134, A1232, Brook Street and Mersea</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>Road.</p> <p>As the oldest Roman town in Britain, Colchester has many narrow roads within the town centre and surrounding areas buildings flank to form a canyon like environment. Street canyons act to reduce dispersal of pollutants which can result in poor air quality. Significant traffic congestion can occur during peak times within Colchester directly affecting local air quality.</p> <p>Colchester Borough Council has declared four Air Quality Management Areas (AQMAs). These are due to emissions from road traffic.</p>	
<p>Colchester Environmental Strategy 2014-2019 draft (2014)</p>	<p>This document aims to achieve:</p> <ul style="list-style-type: none"> • Strong performance in tackling climate change • Resource efficiency Environmental protection and enhancement (of both natural and built environments) • Sustainable transport • Quality of life for all, whilst respecting its special qualities and capacity for growth <p>In order to achieve this, 2 strategic priorities were outlined:</p> <ul style="list-style-type: none"> • Strategic Priority 1: Community Leadership. To achieve this, Colchester Borough Council will reduce the environmental impact of Colchester Borough Council’s Buildings, Services and Operations • Strategic Priority 2: Building resilient communities. To achieve this Colchester Borough Council will work with Colchester’s residents, businesses and third sector organisations 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Colchester Borough Council's Comprehensive</p>	<p>The short term climate change risks for Colchester are:</p> <ul style="list-style-type: none"> • Milder, wetter winters (central estimate 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Climate Risk Assessment, Colchester Borough Council, March 2010</p>	<p>shows an increase in mean winter temperature of 1.3°C and 6% increase in winter precipitation);</p> <ul style="list-style-type: none"> • Hotter, drier summers (central estimate shows an increase in mean summer temperature of 1.3°C and 7% decrease in summer precipitation); • More frequent extreme high temperatures (central estimate shows an increase in the mean temperature of the warmest day of 0.9°C); • More frequent downpours of rain (central estimate shows an increase of 5% precipitation on the wettest day); • Significant decrease in soil moisture content in summer; • Sea level rise and increases in storm surge height (central estimate for sea level rise in the East of England shows a 9.7cm increase under the medium emissions scenario and a 11.5cm increase under the high emissions scenario); and • Possible higher wind speeds. 	
<p>CBC Landscape Strategy, Developing a Landscape for the Future: A Strategy for Landscape Planning of Development Sites within Colchester Borough, Colchester Borough Council, September 2013</p>	<p>The Vision is for the Borough to be recognised as having the optimal policy framework and service delivery strategy for successful landscape development planning, design and delivery within the East of England and that this planning fully embraces the spirit of localism through the ideals of leadership of place and its advocacy of integrated community involvement.</p> <p>The following objectives have been identified as crucial to the implementation of our Vision:</p> <p>1. To incorporate this strategic landscape planning approach both within and beyond the Council's targeted regeneration areas, including any future urban fringe land adopted as an offset against development, in order to help manage the expansion of Colchester in such a way as to</p>	<p>The Local Plans should consider the vision of the Developing a Landscape for the Future: A Strategy for Landscape. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>achieve a high quality, well designed, sustainable, naturally bio-diverse and productive environment.</p> <p>2. To ensure the landscape elements of new development seamlessly weave together identified social & economic considerations with existing and perceived environmental factors. We will ensure that through this process development respects existing or underlying historic landscape character; both within the site and its wider landscape context.</p> <p>3. To encourage a clearer understanding of best landscape planning practice and design with stakeholder groups through discussion, promotion and education. The development process will thus promote both local aspirations and professional best practice in landscape planning and design.</p> <p>4. To secure a high standard of landscape design, implementation and management within all development. Thereby facilitating a high quality and attractive landscape, the professional implementation and monitoring of landscape schemes and the influencing of good practice in landscape management within new development and where possible the wider landscape.</p>	
<p>Colchester Cycling Delivery Strategy, Colchester Borough Council, January 2012</p>	<p>The purpose of this SPD is to:</p> <ul style="list-style-type: none"> • support sustainable growth in line with the adopted Core Strategy; • promote the importance of cycling facilities, training and promotional activities; • ensure the provision of cycle facilities, training and promotion; • inform developers what can be expected regarding contributions for cycling; • protect and improve existing cycling facilities; and • attract investment from other sources. 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Colchester’s Core Strategy, Colchester</p>	<p>Objectives:</p> <ul style="list-style-type: none"> • Focus new development at sustainable 	<p>Informs the Local Plans and the SA of relevant issues in the</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Borough Council, 2008	<p>locations to support existing communities, local businesses, and sustainable transport and promote urban regeneration to protect greenfield land.</p> <ul style="list-style-type: none"> • Provide the necessary community facilities and infrastructure to support new and existing communities. • Provide excellent and accessible health, education, culture and leisure facilities to meet the needs of Colchester's growing community. • Promote active and healthy lifestyles and strive for excellence in education and culture. • Reduce the Borough's carbon footprint and respond to the effects of climate change. • Create a prestigious regional centre and a vibrant network of district and local centres that stimulate economic activity and provide residents' needs at accessible locations. • Provide for a balance of new homes and jobs to support economic prosperity of our growing community and reduce the need to travel outside the Borough for employment. • Provide decent and affordable housing at accessible locations to accommodate our growing community. • Provide a range of housing options to meet the diverse needs of the whole community. • Revitalise rundown areas and create inclusive and sustainable new communities. • Promote high quality design and sustain Colchester's historic character, found in its buildings, townscape and archaeology. • Improve streetscapes, open spaces and green links to provide attractive and accessible spaces for residents to live, work and play. 	Strategic Area.



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<ul style="list-style-type: none"> • Focus development at accessible locations which support public transport, walking and cycling, and reduce the need to travel. • Develop Colchester as a Regional Transport Node, improving transport connections and gateways within the Borough and to the wider region. • Provide excellent public transportation, walking and cycling connections between centres, communities and their needs. • Improve the strategic road network and manage traffic and parking demand. • Protect and enhance Colchester’s natural environment, countryside and coastline. • Support appropriate local employment and housing development in villages and rural communities. • Encourage renewable energy and the efficient use of scarce resources. • Reduce, reuse and recycle waste. 	
<p>CBC Development Policies, Colchester Borough Council, 2010</p>	<p>This document provides further detail to the Core Strategy and so the Core Strategy objectives are relevant.</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Colchester’s Site Allocations, Colchester Borough Council, 2010</p>	<p>This document was produced in conjunction with the other documents in Colchester’s Local Development Framework (LDF). The Site Allocations sets out the criteria for the boundaries and provides area specific allocations. Each site has been evaluated and the document then outlines the policy that has informed the Site Allocations and new policies that are proposed for each area.</p> <p>The objectives of the Site Allocations DPD are to:</p> <ul style="list-style-type: none"> • set out the criteria for the boundaries shown on the Proposals Map ; and • provide area specific allocations in line with 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>the overall strategy set by the Core Strategy.</p>	
<p>Colchester Borough Green Infrastructure Strategy, Land Use Consultants on behalf of Colchester Borough Council, October 2011</p>	<p>The following projects have been identified:</p> <ul style="list-style-type: none"> • Dedham gateway enhancement • A12 greening • Woodland enhancement zone • Urban Colne valley project • Colne estuary • Communal greening • Enhancing gateways into Colchester • North Colchester growth area • Woodland necklace within the Rowan river valley • Mersea Island green chain <p>Considerable detail about each project is included in the GI strategy.</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Tendring Economic Strategy, Regeneris Consulting Ltd on behalf of Tendring District Council, October 2013</p>	<p>The focus of the document is long term systematic change, with the aim of ensuring that economic growth is sustained beyond the 10 year lifespan of this document. This means setting strong foundations and adopting new approaches to embed long-term change.</p> <p>Objective 1: Supporting Tendring's Growth Locations - outlines the vision for target locations over the next 10 years. Based on the evidence available and consultation with stakeholders, initial target locations are Harwich, Clacton and the West of Tendring.</p> <p>Objective 2: Targeting Growth Sectors – outlines the approach to supporting growth in target sectors in the district. The two key target growth sectors for Tendring are Offshore Energy and Care & Assisted Living.</p> <p>Objective 3: Ensure Residents Have the Skills and Information to participate - outlines the need to support residents so that they have the skills and</p>	<p>The Local Plans should take account of the Economic Strategy for Tendring. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>aspiration to participate in the opportunities promoted within this strategy. This includes recommendations on education, skills provision and employment.</p> <p>Objective 4: Support Modernisation, Diversification and Growth within the Business Base – outlines the approach to creating a more dynamic, diverse and future facing business base in Tendring. Improvements in business liaison, innovation and inward investment are the focus of this objective.</p> <p>Objective 5: Facilitate population growth where this supports economic objectives – recognises the link between population and economic growth in Tendring and outlines how some housing development could stimulate economic growth in the future.</p>	
<p>Tendring Strategic Housing Market Assessment update, Planning & Development on behalf of Tendring District Council, May 2013</p>	<p>To obtain an accurate and realistic figure for the objectively assessed need in Tendring the consultants have derived a population and household projections using components of the pre-existing nationally published projections to best reflect the situation in Tendring. This approach has produced an objectively assessed need 685 homes per year in Tendring (between 2013 and 2029).</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Braintree District Core Strategy, September 2011</p>	<p>The vision for the Braintree District is that by 2026 a more sustainable future will have been secured for all the people and places in Braintree District. The three towns will be thriving with regenerated town centres and new growth delivered. The key service villages will have provided local housing, jobs and services, with regeneration taking place on identified sites. All development in the District will have been built to the highest design and energy efficiency standards, which will have enhanced historic towns and villages and minimised the impact on the local and global environment. The aims of the Core Strategy reflect those in the Sustainable Community Strategy. In order to deliver these, the strategy identifies twelve key objectives</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>which reflect and underpin the vision and aims for Braintree District.</p> <p>These objectives form the basis for the policies set out in this Core Strategy.</p>	
<p>Babergh Adopted Core Strategy and Adopted Policies (2011 – 2031) Local Plan Document (2014)</p>	<p>Vision:</p> <p>Babergh will continue to be an attractive, high quality place in which to live and work, and to visit. The local character and distinctiveness of South Suffolk will be further enhanced by a strong economy and healthier environment providing the framework for a well-connected network of places that is made up of mixed and balanced communities.</p>	<p>Informs the Local Plans and the SA of relevant issues in the wider area.</p>
<p>Sustainable Development, Tendring District Council Local Plan Proposed Submission Draft Written Statement 2012 (as amended by the 2014 Focussed Changes)</p>	<p>The widely recognised European definition of sustainable development is: 'Development that meets the needs of the present without compromising the ability for future generations to meet their own needs'. The National Planning Policy Framework (NPPF) takes this definition a stage further by setting out three areas the planning system must address in order to achieve sustainable development; an economic role, a social role, an environmental role.</p> <p>Whilst the NPPF provides a broad definition of sustainable development, every area has its own unique characteristics and the degree to which national definition of sustainable development can be achieved will vary from place to place. Therefore, in the sustainability section of this document, the Council has set out its own local definition of Sustainable Development which reflects the Council's vision for Tendring's future.</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>TDC Strategic Flood Risk Assessment (SFRA), JBA Consulting, on behalf of Tendring District</p>	<p>The key objective of the SFRA is to provide an overall understanding of the risks of flooding from all potential sources, enabling the Council to select and develop sustainable site allocations away from vulnerable flood risk areas.</p>	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Council, 2009		
Tendring Open Space Strategy, The Landscape Partnership, on behalf of Tendring District Council, October 2009	<p>The vision for Tendring open spaces is: A dynamic network at the heart of the community that is safe, well maintained, accessible to all, good for wildlife and fun for all ages, whilst conserving peace and tranquillity wherever possible.</p> <p>The key objectives for providing this vision are:</p> <ul style="list-style-type: none"> • To provide a robust assessment of the demand for open space and recreational facilities throughout the district identifying issues of quality, quantity and availability. • Provide an analysis of identified surpluses or deficiencies and other issues of provision across the district. • Identify enhancement and accessibility needs of existing sites. <p>Provide clear recommendations for locally derived quantitative and qualitative standards for open space, sport and recreational facilities.</p>	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
Landscape Character Assessment, Vol. 1 & Vol. 2, Land Use Consultants on behalf of Tendring District Council, November 2001	<p>Principal objectives:</p> <ul style="list-style-type: none"> • to inform policy formulation in the current Local Plan Review; • to inform decision making in the development management process; • to guide landscape management decisions; and • to promote public awareness of landscape character in the Tendring District. <p>To provide the basis for adoption as Supplementary Planning Guidance.</p>	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
Affordable Housing Viability Study, Tribal Consulting Ltd, October 2010, Viability Testing, Peter	Planning policy for affordable housing enables the Council to ask developers to provide affordable housing on site or contribute towards the provision of affordable housing. Affordable housing planning policy aims to achieve the highest level of	Informs the Local Plans and the SA of relevant issues in the Strategic Area.



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Brett, August 2013, reports prepared on behalf of Tendring District Council	<p>affordable housing possible whilst not discouraging the development of private market housing. The affordable Housing Viability Study provides a detailed assessment of the viability of the Council's proposed affordable housing planning policy. The Viability testing report is a supporting document for the potential of the introduction of a Community Infrastructure Levy (CIL) charge.</p> <p>The main aim is a 30% affordable housing target which has been updated by the Viability Testing affordable housing target of 25%.</p>	
Clacton Town Centre Vision, Intend, 2009	<p>This vision and strategic plan takes an integrated approach to regeneration by identifying and tackling physical design, planning and regeneration, transport, tourism and socioeconomic issues affecting the study area.</p> <p>The plans and recommendations will provide a framework to guide the development and enhancement of the town centre and seafront area. Further work on developing the plans and implementing feasible solutions will be coordinated by INTend. Seven opportunity sites have been identified, their potential for development investigated and overall design guidance for enhancing the built environment and public realm provided. The wider economic role and function of Clacton is also considered as a key part of the context for development as this has an important impact on land use proposals and deliverability.</p> <p>The vision and strategic plan for Clacton town centre will form a key component of the evidence base for Tendring District Council's Area Action Plan (AAP) which is due to be adopted in January 2011. It is also considered that the report will form a material consideration in determining planning applications prior to the adoption of the LDF.</p>	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
Celebrate-on-Sea – 'Putting the fun back	<p>Key Objectives:</p> <ul style="list-style-type: none"> • create a distinctive destination and a 	Informs the Local Plans and the SA of relevant issues in the



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
into Clacton'. Intend, 2010	unique Clacton Brand; <ul style="list-style-type: none"> • encourage investment in new development and improvements to the seafront; • create new business and tourism opportunities; • improve pedestrian links between the station, town centre and the seafront; • enrich the existing character of the seafront and the town's cultural heritage; • phase proposals to make best use of available funding and investment; and • promote a new image for the town. 	Strategic Area.
Infrastructure Study, Part 2, Roger Tym & Partners with Peter Brett Associates, January 2010	Objectives: To create an infrastructure plan, led by the production of a funding model, to show: <ul style="list-style-type: none"> • what is required and how it will be provided (e.g. location, etc.); • who is to provide it; • how it will be funded; • when it can be provided; and • sites for assessment. 	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
Tendring District Historic Characterisation Project, Essex County Council, 2008	Aims: <ul style="list-style-type: none"> • provide the opportunity to safeguard and enhance the historic environment as an integrated part of development within Tendring District; • provide guidance to Planners at the early stages of development proposals; and • provide a means for local communities to engage with their historic environment. 	Informs the Local Plans and the SA of relevant issues in the Strategic Area.
Tendring Geodiversity Characterisation Report, Essex County	Aims: <ul style="list-style-type: none"> • provide guidance to planners at the early stages of development proposals; 	Informs the Local Plans and the SA of relevant issues in the Strategic Area.



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
Council, 2009	<ul style="list-style-type: none"> • provide the opportunity to deliver conservation of locally characterised geodiversity in the wider landscape; and • provide a basis for communities to engage with their local geodiversity. 	
Habitat Regulations Assessment Survey and Monitoring, Year 3 Interim Report, Colchester Borough Council, November 2012	<p>The objectives of the study are to:</p> <ol style="list-style-type: none"> 1. Establish baseline data on visitors to Natura 2000 sites in Colchester Borough and Tendring District. 2. Investigate visitor trends to Natura 2000 sites in Colchester Borough and Tendring District. 3. Identify whether there is a link between site conditions and housing completions. 4. Identify management measures needed to mitigate and manage the impacts of increased visitor numbers. <p>Key findings:</p> <ul style="list-style-type: none"> • During the survey period (2010-2012) there has been an increase of 143% in visiting groups across the Natura 2000 sites. • Abberton Reservoir has seen a steady increase in visitor numbers, most likely due to the opening of the new Visitor Centre. • Just under two thirds of visitors said they visited alternative sites regularly. • The most popular alternative sites to visit were Tendring coastal sites. • The majority of visitors travelled to the sites by car. • Close to home, liking the area and attractive scenery were the most popular reasons for visiting a site. • Most common purpose for visiting the sites was dog walking. • Weather and conditions under foot affect 	<p>The Local Plans should consider the objectives and findings of the Habitat Regulations Assessment Survey and Monitoring. Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>the number of visitors.</p> <ul style="list-style-type: none"> • The presence of rare visiting birds significantly increases visitors to a site. • Greater numbers of larger groups visit sites at weekends than during the week. 	
<p>Climatic Change Strategy 2010-2016, Tendring District Council</p>	<p>Priorities: Protect and enhance our environment, countryside and coast.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • reduce carbon dioxide emissions; • prepare for a changing climate; and • reduce reliance on fossil fuels. 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Tendring Economic Strategy (October 2013)</p>	<p>The focus of the document is long term systematic change, with the aim of ensuring that economic growth is sustained beyond the 10 year lifespan of this document. This means setting strong foundations and adopting new approaches to embed long-term change.</p> <ul style="list-style-type: none"> • Objective 1: Supporting Tendring's Growth Locations - outlines the vision for target locations over the next 10 years. Based on the evidence available and consultation with stakeholders, initial target locations are Harwich, Clacton and the West of Tendring. • Objective 2: Targeting Growth Sectors – outlines the approach to supporting growth in target sectors in the district. The two key target growth sectors for Tendring are Offshore Energy and Care & Assisted Living. • Objective 3: Ensure Residents Have the Skills and Information to participate - outlines the need to support residents so that they have the skills and aspiration to participate in the opportunities promoted 	<p>The Common Strategic Part 1 should take account of the Informs the Local Plans and SA of relevant issues in the Strategic Area.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
	<p>within this strategy. This includes recommendations on education, skills provision and employment.</p> <ul style="list-style-type: none"> Objective 4: Support Modernisation, Diversification and Growth within the Business Base – outlines the approach to creating a more dynamic, diverse and future facing business base in Tendring. Improvements in business liaison, innovation and inward investment are the focus of this objective. Objective 5: Facilitate population growth where this supports economic objectives – recognises the link between population and economic growth in Tendring and outlines how some housing development could stimulate economic growth in the future. 	
<p>Retail Study Update, GVA Grimley Ltd, on behalf of Tendring District Council, September 2010</p>	<p>Findings:</p> <p>Comparison goods floorspace – future capacity:</p> <ul style="list-style-type: none"> 2020 – 9,559 sqm net 2025 – 18,452 sqm net <p>Capacity for convenience goods floorspace to 2025 will only arise in the Clacton area. This can be largely attributed to the strong performance of out-of-centre food stores.</p> <p>Clacton area:</p> <ul style="list-style-type: none"> 2020 – 820 sqm net 2025 – 1,490 sqm net 	<p>Informs the Local Plans and the SA of relevant issues in the Strategic Area.</p>
<p>Chelmsford City Council – Emerging Local Plan and associated evidence base documents</p>	<p>The emerging Local Plan seeks to allocated land to meet housing needs of 10,875 homes over the plan period to 2036. This includes the allocation of development to North East Chelmsford (for 3,000) dwellings. Chelmsford City Council, as a Local Planning Authority, is included within the same Housing Market Area as Braintree, Colchester and Tendring.</p>	<p>The Chelmsford Local Plan and emerging evidence base documents are important to consider for the purposes of identifying any cross-boundary impacts or incompatibilities arising from the Section One and Two Local Plans.</p>



Local Plans and Programmes	Purpose / Main Aims and Objectives	Relevance to Local Plans / SA
<p>Uttlesford District Council – Emerging Local Plan and associated evidence base documents</p>	<p>Uttlesford District Council is in the process of preparing a Preferred Options Local Plan for consultation in summer 2017. The Local Plan is faced with significantly higher housing requirements (OAN) than were included in the previous adopted development plan. The Council is exploring the allocation of strategic growth options including land to the West of Braintree. Uttlesford District Council, as a Local Planning Authority, is not included within the same Housing Market Area as Braintree, Colchester and Tendring.</p>	<p>The Uttlesford Local Plan and emerging evidence base documents are important to consider for the purposes of identifying any cross-boundary impacts or incompatibilities arising from the Section One and Two Local Plans.</p>



Place Services

Essex County Council

County Hall, Chelmsford, Essex CM1 1QH

T: +44 (0)333 013 6840

E: enquiries@placeservices.co.uk

www.placeservices.co.uk

June 2017



Essex County Council



North Essex Authorities Strategic Section One for Local Plans: Draft Publication (Regulation 19)

Draft Sustainability Appraisal (SA): Annex B - Baseline Information - June 2017







Contents

1.	Introduction	5
1.1	Background	5
1.2	Identifying Other Relevant Policies, Plans and Programmes	5
2.	Economy and Employment	7
2.1	Economy	7
2.2	Employment	11
2.3	North Essex Garden Communities Employment & Demographic Studies	20
3.	Housing	23
3.1	Housing Supply	25
3.2	Existing Housing Stock	28
3.3	Housing need – Strategic Housing Market Assessment (SHMA)	29
3.4	Homelessness	31
3.5	Gypsy and Traveller Accommodation	34
4.	Population and Society	37
4.1	Population	37
4.2	Education	40
4.3	Quality of Life	45
5.	Health	47
5.1	Life Expectancy and Health	47
5.2	Physical Activity and Open Space	50
6.	Transport	52
6.1	Modes and Flows of Travel	54
6.2	North Essex Garden Communities Movement and Access Study (2017)	61
7.	Cultural Heritage	69
7.1	Recorded Archaeological Sites and Finds in Tendring, Braintree and Colchester	70
7.2	Listed Buildings	71
7.3	Scheduled Monuments	73
7.4	Historic Parks and Gardens	73
7.5	Conservation Areas	75
8.	Biodiversity and Nature Conservation	78
8.1	Biodiversity Action Plan	81



8.2	Designated Sites	81
8.3	HRA Screening Report for North Essex Authorities Strategic Part 1 for Local Plans (2016) - LUC86	
9.	Landscapes	91
9.1	Landscape Features	91
9.2	Agricultural Land Classification	92
10.	Water Environment	94
10.1	Water Courses	94
10.2	Water Quality	94
10.3	Flood Risk	95
11.	Climate and Energy	110
11.1	Energy Consumption and Emissions	111
11.2	Climate Change	115
12.	Air	117
12.1	Air Quality	117
13.	Waste	125
13.1	Local Authority Collected Waste	125
13.2	Transfer Facilities	126
13.3	The Replacement Waste Local Plan for Essex and Southend-on-Sea (submitted June 2016)	127
13.4	Waste Miles	128
13.5	Commercial and Industrial Waste (CD&I)	128
13.6	Construction, Demolition and Evacuation Waste (CD&E)	128
14.	Minerals	130
14.1	Links to the Adopted Minerals Local Plan 2014	130
14.2	Sand Gravel	130
14.3	Chalk	131



1. Introduction

1.1 Background

Braintree District Council, Colchester Borough Council and Tendring District Council, together forming the 'North Essex Authorities,' in conjunction with Essex County Council as a key partner in its strategic role for infrastructure and service provision, commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for a Strategic Section One for the respective Council's Local Plans.

Place Services are acting as consultants for this work; therefore the content of this SA should not be interpreted or otherwise represented as the formal view of Essex County Council.

This document is Annex B to the Environmental Report of the SA for Section One. It also forms Annex B of the Section Two SAs for Colchester Borough Council and Tendring District Council.

1.2 Identifying Other Relevant Policies, Plans and Programmes

The SEA Directive requires the production of the following information:

“the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;” Annex 1(b);

“the environmental characteristics of areas likely to be significantly affected;” Annex 1(c); and

“any existing problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance such as areas designated pursuant to Directives 79/409/EEC and 92/43/ECC” Annex 1(d).

The baseline information identifies current sustainability issues and problems in the Strategic Area which should be addressed and provides a basis for predicting and monitoring the effects of implementing the document.

To ensure the data collected was relevant and captured the full range of sustainability issues it was categorised under 13 thematic topics. They cover all the topics referred to in Annex 1(f) of the SEA Directive and follow the order of:

- economy and employment;
- housing;
- population and society;
- health;
- transport;
- cultural heritage;



- biodiversity and nature conservation;
- landscapes;
- water environment ;
- climate and energy;
- air;
- waste; and
- minerals.

The summaries of each topic have been included within the main Environmental Report document while this annex contains the detailed baseline information.



2. Economy and Employment

2.1 Economy

The area covered by Section One comprises a large part of the Haven Gateway, an established partnership area which is identified in a range of existing strategy and investment documents. The Haven Gateway includes the Essex administrative areas of Braintree, Colchester, Maldon and Tendring Councils and extends northwards into parts of Suffolk.

Braintree and Colchester are the major centres of employment within the strategic area. While there are high levels of commuting to London, many residents work and live within the area with significant commuting across borough and district boundaries, reflecting a functional economic geography.

The area has a mixed economy focused on the service sector, including wholesale and retail, business services, tourism, health and education, alongside manufacturing, logistics and construction. Due to the extensive rural area outside urban settlements, agriculture and its related industries play an important part in the overall economy.

The Cultural, Visitor and Tourism sector, which encompasses a range of activities including visitor attractions, leisure facilities, food and accommodation, plays an important role in Tendring District's economy. This sector is worth more than £276 million per annum to the economy and is estimated to provide 3,000 jobs and around 350 businesses across Tendring. The majority of jobs (approx. 8%) and businesses (approx. 10%) in this sector are located in and around Clacton which is a similar concentration to the national average. In most of the rest of the towns in Tendring businesses operating within this sector are slightly more concentrated than the national average.

Table 1: Economic activity

	Tendring	Braintree	Colchester	East of England	Great Britain
Number of economically active	53,900	77,700	94,400		
Percentage of the population economically active	68.6%	78.8%	78.9%	79.9%	77.8%

Source: NOMIS Labour Supply (Jan 2016-Dec 2016)

**Table 2: Job density**

	Tendring	Braintree	Colchester	East of England	Great Britain
Job Count	43,000	62,000	98,000		
Job Density	0.57	0.67	0.83	0.81	0.83

Source: NOMIS Labour Supply (2015)

Tendring District has the lowest rate of economic activity at 68.6% compared to Braintree and Colchester District, as well as the region and country. Job density is again lower in Tendring than the other Districts, although Braintree is also lower than Colchester, the region and the country at 0.67.

Table 3: Business registration and de-registration rate

	Tendring	Braintree	Colchester	Essex	East of England	Great Britain
Birth	465	745	905	8,575	33,715	360,425
Death	350	460	570	5,230	20,905	218,670
All active enterprises	3,875	5,885	6,575	59,485	237,155	2,359,055

Source: ONS Business Demography 2015 (released November 2016)

There has been a slight increase in the number of active businesses in Tendring due to a higher rate of registrations than de-registrations. Compared to sub-national and national figures the district has experienced a lower start up rate and a lower de-registration rate indicating a slightly less robust local economy. Braintree and Colchester are more in line with the county and national business registration and de-registration rates.

**Table 4: Local business stock and employment size**

	Tendring	Braintree	Colchester	Essex	East of England	Great Britain
Business Entities	4,230	6,440	6,620	59,570	242,975	2,382,365
Micro (0 to 9)	87.5%	89.6%	87.9%	89.4%	89.1%	88.7%
Small (10 to 49)	10.8%	8.8%	10.0%	8.9%	8.9%	9.3%
Medium (50 to 249)	1.5%	1.3%	1.6%	1.3%	1.5%	1.6%
Large (250+)	0.2%	0.3%	0.5%	0.3%	0.4%	0.4%

Source: Inter Departmental Business Register, ONS (2015)

Nearly 90% of all local businesses within the three authorities employ 9 or less people and approximately 1.5% employ 50 or more people. These figures are similar to the county, region and country but with some slight variation. Tendring has a lower percentage of micro businesses than the region and the country and Colchester has a slightly higher proportion of large businesses.

Table 5: Location of businesses

	Tendring	Braintree	Colchester	Essex	East of England	Great Britain
Urban based businesses	53.9%	50.0%	62.2%	63.4%	63.1%	74.7%
Rural based businesses	46.1%	50.0%	37.8%	36.6%	36.9%	25.3%

Source: Defra (updated March 2014)

Tendring District is predominantly rural in nature; however the majority of businesses are located in an urban location. This is in contrast with Braintree which despite being predominantly rural has an equal split of businesses in rural and urban locations. There is no a small difference between the proportion of urban and rural businesses within Tendring District and no difference in Braintree, however the majority of businesses in Colchester are in urban areas. This difference is in line with county and national business compositions which recorded highest proportions within urban areas, but the contrast is in the difference between the proportions of urban and rural businesses within the three authorities.

Table 6: Proportion of businesses by industry type

Industry	Tendring	Braintree	Colchester	Essex	East of England	Great Britain
Agriculture, Forestry & Fishing	6.4%	6.3%	3.7%	3.7%	4.9%	5.4%
Production	7.0%	7.5%	5.8%	6.5%	6.0%	5.8%
Construction	16.7%	17.2%	15.3%	17.4%	14.2%	11.6%
Motor Trades	4.5%	3.5%	3.3%	3.3%	3.3%	2.9%
Wholesale	3.5%	5.2%	4.2%	4.7%	4.5%	4.2%
Retail	9.2%	5.6%	7.7%	6.8%	7.1%	7.8%
Transport & Storage (Including Postal)	4.4%	3.6%	2.6%	3.7%	3.7%	3.4%
Accommodation & Food Services	8.0%	4.5%	5.2%	4.7%	5.1%	6.0%
Information & Communication	4.5%	6.4%	7.8%	7.4%	8.2%	8.0%
Finance & Insurance	0.9%	1.0%	2.1%	1.8%	1.7%	2.0%
Property	2.8%	3.0%	3.7%	3.4%	3.4%	3.6%
Professional, Scientific & Technical	11.0%	16.1%	16.7%	16.6%	17.2%	18.1%
Business Administration & Support Services	7.1%	7.8%	8.1%	8.1%	7.9%	8.1%
Public Administration & Defence	0.6%	0.8%	0.4%	0.4%	0.5%	0.3%
Education	1.9%	1.7%	2.0%	1.7%	1.8%	1.7%
Health	5.1%	3.3%	5.1%	3.8%	4.0%	4.3%



Industry	Tendring	Braintree	Colchester	Essex	East of England	Great Britain
Arts, Entertainment, Recreation and Other Services	6.4%	6.6%	6.1%	6.0%	6.3%	6.8%

Source: ONS, 2015 data

There are comparatively more businesses in the industries of agriculture, forestry and fishing, production, motor trades, retail, transport and storage, accommodation and food services, health and arts, entertainment, recreation and other services within Tendring District than the county but noticeable fewer businesses within professional, scientific and technical. Other industries with proportionately lower business numbers than the county levels are construction, wholesale, information and communication, finance and insurance, property and business administration and support services. Braintree has more businesses in agriculture, forestry and fishing, production, motor trades, wholesale and arts, entertainment, recreation and other services than the Essex average, and a lower proportion of the remaining industries. Colchester is closer to the Essex average, with similar proportions for multiple industries and only slight variances in others. The most significant differences are in the construction, production, retail, health and transport and storage.

2.2 Employment

Tendring District is home to the Harwich International Port which has developed into a highly efficient, multi-purpose freight and passenger port handling bulk and container ships as well as roll-on, roll-off ferries and cruise ships. Harwich is one of the major UK ports for ferry and cruise tourism, with passenger figures for 2012-2013 showing an increase of 18% from 671,000 to 795,000. During 2014 a total of 43 port calls were made by cruise ships at the port. Harwich is also one of the leading UK freight ports for bulk and container ships. The figures for 2012-2013 showed an increase of 14% in tonnage of freight which passed through the port from 3,189 to 3,638 thousand tonnes. The port also supports the off-shore renewables industry providing an installation base for the Gunfleet Sands wind farm and support facilities for the installations at Foreness Point, Kent and Greater Gabbard off the coast in Suffolk.

In 2013 permission was granted for the expansion of Bathside Bay to create the new Harwich International Container Terminal, a small boat harbour with sheltered moorings and public amenity space. The new terminal is expected to include 1,400 metres of quayside, a 14.5 metre deep approach channel able to accommodate increasingly large container ships, 50 plus gantry cranes, a container storage yard and rail terminal. Bathside Bay also has the potential to be a multi-functional site for the manufacture and assembly of wind turbines. The expansion of Bathside Bay, with the provision of amenity and commercial space as well as port expansion will provide jobs at the port and in supporting industries both during construction and once in operation.

Internet shopping has become a major competitor to town centre shopping within Tendring District. In 2014 74% of all adults in the UK bought goods or services on-line, an increase of 21% from 2008. Increases in on-line shopping choice will mean traditional retailers and service providers will need to



compete not only in price and range but also in service and expertise. Town centres will need to provide an attractive, mixed-use shopping experience to retain and increase their share of consumer spending.

The industry class employing the most people in Colchester according to the 2011 Census was the 'wholesale and retail, repair of motor vehicles and motorcycles' class which accounted for 16.0% of jobs. The next three largest industry classes were 'human health and social work' which accounted for 13.5% of employment, followed by 'education' at 11.4%; and 'construction' at 8.3%. The largest employers in Colchester by approximate number of employees are Colchester District General Hospital with 3,000 employees; University of Essex with 2,000 employees; Colchester Borough Council with 1,500 employees; and Colchester Institute with 900 employees. The largest private sector employer is Mothkind Clean Ltd, an industrial cleaning company, which employs approximately 800 people.

The average gross household income is lower than the Essex and the East of England averages but higher than the national average. In Colchester average gross household income was £27,592 in 2012, it was £30,193 in Essex, £27,980 in the East of England and £27,302 in England. There are variations in prosperity and there are pockets of deprivation in parts of both the towns and rural areas.

Tourism plays an important part in the local economy. Tourism was worth £244 million to the economy of Colchester Borough in 2012, which is a rise of 5% from the previous year. The value of tourism to Colchester has risen in real terms by 158% from £63.1 million in 1993. Tourism supports more than 5,600 actual jobs in the Borough, this has risen by 109% since 1993 (5632 in 2011, 2685 in 1993).

Colchester attracted just over 5 million visitor trips in 2012. This is approximately 78% higher than the 1993 figure of 2.8 million visitor trips. This can be broken down as follows:

- 62,000 staying trips taken by overseas staying visitors;
- 216,000 staying trips taken by domestic staying visitors; and
- 4.7 million day trippers.

Colchester has 1,300 creative businesses providing employment to over 5,600 employees. Creative industries are a priority growth area for the town. This accounts for 18.3% of all businesses in the Borough, and includes advertising, design, film, arts and crafts, performing arts and publishing. Nationally, creative industries account for approximately 7% of the economy as a whole. This shows that Colchester is a well-performing town in terms of its creative economy but that there is considerable room for growth.

**Table 7: Employment and unemployment**

	Tendring	Braintree	Colchester	East of England	Great Britain
In employment	51,700 (65.8%)	75,100 (78.8%)	90,800 (75.8%)	76.8%	74.0%
Unemployed	3,500 (6.4%)	3,000 (3.8%)	3,800 (4.0%)	6.4%	4.8%

Source: NOMIS, Jan 2016-Dec 2016 data

A percentage of 65.8 of the working population in Tendring District are in employment which is lower than sub-national and national employment levels. Contrastingly, Braintree is above the regional and national percentages and Colchester is below the regional and above the national average for residents in employment. The proportion of the District's working population who are economically active but unemployed is 6.4% which is above Braintree and Colchester, in line with the sub-national and above national unemployment figures.

Unemployment within Tendring District had risen at a faster rate than that of regional and national levels but has since been in decline from 2013. During July 2007 and June 2008 around 6.1% of the working age population was unemployed in Tendring but following an increase to a high of 10.2% in April 2012-March 2013, unemployment had decreased to 5.4% during January 2015 and December 2015.

Unemployment in the District has declined in recent years and has not returned to below 2006 levels.

In Colchester, unemployment was high at 7.2% in April 2009 – March 2010 and steadily reduced to 6.2% in April 2011 – March 2012. Between July 2011 and September 2012, the unemployment rates rose sharply to 7.4% representing a peak in unemployment rates in Colchester since January 2004. This is in line with the economic downturn experienced across England at this time. Since then, the unemployment rate has decreased every monitoring period to the rate of 3.7% in January 2015 - December 2015 with the exception of 4.0% in January 2016 - December 2016.

Braintree has experienced similar trends, with the peak unemployment rate in the District of 6.9% evident in April 2012 – March 2013 as expected from the downturn in the English economy. Following this, the unemployment rate has consistently fallen to the 3.8% registered in January 2016 – December 2016.

February 2013 saw the proportion of jobseeker's allowance claimants hit a peak of 4.7% of the population aged 16-64 in Tendring, which was a higher proportion than national and regional figures. Since this peak, the proportion of claimants has decreased with the most recent figure for April 2016 of 2.7% being recorded for Tendring. However, despite the percentage of claimants decreasing consistently, the figures for Tendring remain higher than that of the region and nationwide.

A similar trend was apparent in Braintree and Colchester. In Braintree, the peak of February 2013 registered at 2.9% and has decreased consistently to 0.9% in November 2015. In Colchester, the peak was in February 2012 where the rate was 3.1% and has fallen to 0.9% in November 2015.

**Table 8: Working patterns**

	Tendring	Braintree	Colchester	East of England	Great Britain
Full time	60.1%	66.2%	59.9%	63.4%	67.6%
Part time	39.9%	33.8%	40.1%	36.6%	32.4%

Source: ONS business register and employment survey (2013 revised – released September 2015)

As of 2013, 60.1% of jobs within Tendring, 66.2% of jobs within Braintree and 59.9% of jobs within Colchester were classed as full-time. Tendring and Colchester are lower than the trends in working patterns found in Essex, but Braintree is higher than the county. Tendring, Braintree and Colchester all have a lower percentage of full-time jobs than Great Britain as a whole.

Table 9: Employment by industry

Group	Tendring	Braintree	Colchester	East of England	Great Britain
Soc 2010 major group 1-3	32.2%	35.3%	39.2%	44.2%	44.4%
1 Managers, directors and senior officials	#	5.8%	11.9%	10.3%	10.4%
2 Professional occupations	11.3%	13.4%	14.0%	19.0%	19.8%
3 Associate professional & technical	12.3%	16.1%	13.3%	14.7%	14.1%
Soc 2010 major group 4-5	21.7%	28.3%	25.6%	22.5%	21.4%
4 Administrative & secretarial	10.4%	12.6%	13.8%	11.0%	10.7%
5 Skilled trades occupations	11.3%	15.7%	11.9%	11.4%	10.6%
Soc 2010 major group 6-7	28.4%	17.5%	20.0%	16.1%	16.9%
6 Caring, leisure and Other Service occupations	18.9%	7.5%	13.4%	9.0%	9.2%
7 Sales and customer service occs	9.4%	10.0%	6.6%	7.1%	7.7%



Group	Tendring	Braintree	Colchester	East of England	Great Britain
Soc 2010 major group 8-9	17.8%	18.9%	15.1%	17.2%	17.2%
8 Process plant & machine operatives	#	9.7%	5.3%	6.5%	6.3%
9 Elementary occupations	9.7%	9.3%	9.8%	10.7%	10.8%

Source: NOMIS, Jan 2015 – Dec 2015 data

Note: # Sample size too small for reliable estimate

Numbers and % are for those of 16+

% is a proportion of all persons in employment

The majority of jobs within Tendring and across all areas are major group 1-3. For Tendring this accounts for 32.2% of all employee jobs, in Braintree it is 35.3% and Colchester is 39.2%. Despite this, the proportion of people in these employment groups for all areas is lower than the regional and national figures. The other industry in the district which provides a higher proportion of employee jobs compared to the sub-national and national equivalent is major group 6-7, consisting of services industries and sales and accounting for 28.4% of employees in Tendring. Braintree has higher levels of employees in major group 4-5 than the regional and national averages and Colchester also has slightly higher levels of employees in this major group.

Table 10: Gross weekly pay by residence and workplace

	Tendring	Braintree	Colchester	East of England	Great Britain
Gross weekly pay by residence					
Full time workers	£493.50	£592.10	£531.60	£551.00	£529.60
Male full time workers	£513.70	£653.20	£597.20	£595.60	£570.40
Female full time workers	£464.60	£517.70	£481.30	£481.30	£471.60
Gross weekly pay by workplace					
Full time workers	£461.20	£513.60	£479.10	£517.50	£529.00



	Tendring	Braintree	Colchester	East of England	Great Britain
Male full time workers	£494.10	£546.60	£534.30	£557.10	£569.90
Female full time workers	£422.90	£404.20	£426.90	£453.70	£471.50

Source: NOMIS, 2015 data

Residents of Tendring in full-time employment on average earn a weekly salary by residence of £493.50 which is lower than the average for Braintree (£592.10) and Colchester (£531.60), as well as the region and Great Britain. A breakdown of salaries shows that male residents earn considerably more (£513.70) than their female counterpart (£464.60) but both genders earn below the respective Great Britain averages. The difference between male and female worker weekly salaries is lowest in Tendring (£49.10), followed by Colchester (£115.90) and Braintree (£135.50).

Weekly salaries for those working in full-time employment by workplace within Tendring are lower than the other areas at £461.20, which is again lower than regional and national figures. Businesses within the East of England region in general pay lower salaries than Great Britain as a whole.

Table 11: Class A1 floorspace projections in Colchester

Location	Sales floorspace sqm net		
	Convenience	Comparison	Total
Up to 2016			
Commitments/town centre proposals	1,450	12,800	14,250
Colchester urban area	2,255	803	3,058
Tiptree	-	21	21
West Mersea	-	18	18
Other Colchester Borough	522	-	522
Total up to 2016	4,227	13,642	17,869
2016-2021			
Colchester urban area	2,610	9,079	11,689



Location	Sales floorspace sqm net		
	Convenience	Comparison	Total
Tiptree	-	48	48
West Mersea	-	33	33
Other Colchester Borough	174	-	174
Total 2016-2021	2,784	9,160	11,944
2021-2026			
Colchester urban area	3,101	13,805	16,906
Tiptree	-	74	74
West Mersea	-	49	49
Other Colchester Borough	209	-	209
Total 2021-2026	3,310	13,928	17,238
Total period 2012-2026			
Colchester urban area	9,416	36,487	45,903
Tiptree	-	143	143
West Mersea	-	100	100
Other Colchester Borough	904	-	904
Grand total	10,321	36,730	47,050

Source: Colchester Borough Council (2014)

The convenience goods projections in the (Colchester BC) Retail Study indicate there is scope for one large food store in Colchester urban area in the short term (up to 2016). It is unlikely that this food store can be accommodated within the Town Centre Core. In the medium to long term (2016 to 2021) there is a requirement for 1-2 new large food stores, which could be provided in a new district/neighbourhood centres anchored by a large food store, expansion of one of the five urban district centres and/or the provision of a freestanding out-of- centre food store.



In terms of the spatial distribution of food superstores in Colchester urban area, the Retail Study concluded that the priorities appear to be the south of Colchester urban area in order to serve existing and future residents and to the northwest to serve new residential areas. The proposed neighbourhood centre within the Colchester Northern Growth Area or the Northern Gateway site could serve proposed residential development within the northwest of the urban area.

The Retail Study concluded that vacant shop premises and planned investment within Colchester town centre should be sufficient to accommodate comparison expenditure growth and operator demand for small to medium sized premises up to and beyond 2016. If longer term growth (2016 to 2026), where development cannot be accommodated within the town centre, the Council should consider the potential to expand urban district centres or the provision of new shopping destinations in the urban area. There is insufficient available expenditure to support all of the current comparison retail proposals between 2016 and 2021. The Retail Study concluded that retail development should not be permitted outside the Town Centre Core unless it can clearly be demonstrated that the proposed development cannot be accommodated in the Town Centre Core, and the proposals will not harm the vitality and viability of designated centres and planned investment.

Creative Colchester recognises culture and creativity as a driver of job creation, economic growth and sustainable community development to raise the profile of the town overall. A vision document has been created, in which the main opportunities are set out for the development of the creative industries over the next five years.

Colchester Borough Council is leading regeneration programmes in East Colchester, North Colchester, the Town Centre and the Garrison. In East Colchester a new waterside community is emerging at the Hythe, the town's former port. The £13 million regeneration programme will create a mixed-use development alongside the River Colne with 100,000 sq ft of commercial space, 2000 new homes and improved transport links. The transformation of the area is already underway with new housing, employment areas, community centre, nursery and student accommodation for the University of Essex at University Quays. The University Knowledge Gateway will bring new business opportunities, hotels and leisure facilities.

To the North of the town, alongside the A12, lies a 100 hectare development site. Plans for the area will see the creation of 1500 new homes and new employment areas to create up to 3500 new jobs. Opened in 2008, the site is already home to the Weston Homes Community Stadium. As well as being Colchester United Football Club's new home, the venue also offers space for concerts, events, community space for Colchester United Community Sports Trust to develop its programme of activities and conference facilities for up to 400 people. As part of the regeneration programme for North Colchester a Master Plan has been prepared for North Station, which is a key gateway into the town.

A £1.5billion development of a new modern Garrison in the town has shown a further 35 years commitment to Colchester by the MoD. As well as creating improved accommodation and facilities for service personnel, land released by the MoD as a result of the new development is being used to create a sustainable mixed use urban village close to the Town Centre.

Improvements in the Town Centre have previously been focused on the St. Botolph's Quarter, with ongoing plans to develop a new cultural quarter, large retail scheme, Magistrate's Court, residential development and multi-storey car park. However, plans to improve the wider town centre are now underway with proposals being developed to reduce traffic and create a better pedestrian experience



with more public spaces for events and activities and better links for cyclists ensuring that Colchester continues to be a vibrant place during the day and in the evening.

The quantitative projection for new retail floorspace in the Tendring district to 2025, as identified in the Retail Study Update 2010, indicates that the major requirement for capacity will be in the Clacton urban area and identifies that 1,490 sqm of convenience and 14,410 sqm of comparison retail floorspace will be required. The study indicates that creating the additional floorspace in the centre of Clacton, rather than the expansion of out-of-centre stores, would present an opportunity to strengthen and protect the vitality of the Town Centre and to encourage and support sustainable shopping patterns across the District.

The Study also identifies that no convenience floorspace is required in the towns of Frinton-on-Sea, Walton-on-the-Naze, Dovercourt, Harwich, Manningtree and Brightlingsea, but that there is a total comparison retail floorspace requirement of 7,961 sqm in these areas. The Study indicates that location of additional floorspace in the town centres would improve market share, sustain vitality and viability and attract visitors, with the provision that any expansion should be in keeping with their unique and historic environments.

Clacton the Council's own study found that comparison retail floorspace was set to increase within the plan period. Should this be directed to the centre of Clacton rather than an out of town location, it will assist in the reduction of the use of the private car. Within other towns in Tendring District it was found that convenience retail floorspace will be required throughout the Plan period. This will increase the vibrancy and vitality of these smaller towns and also increase tourism within the plan period. It is apparent that the level of internet shopping will increase during the Plan period. This is likely to have a significant impact on the traditional forms of retail and make-up of town centres.

Braintree is the main market town in the District and provides employment, town centre retailing and community services. In addition, on the edge of the town, the Freeport Factory Outlet Centre and adjacent retail park provide retail and leisure facilities, which serve an area that extends outside of the District.

Witham and Halstead are smaller market towns which provide employment, retail and community services. All three of the settlements contain town centres with some areas in need of regeneration. There are also two large areas in need of regeneration at former factory sites in Silver End (between Braintree and Witham) and Sible Hedingham (north west of Halstead). Witham is situated on the main London to Norwich railway line, as are the adjoining villages of Hatfield Peverel and Kelvedon, and there are significant levels of commuting from these stations, particularly to London and Chelmsford. The towns of Haverhill and Sudbury adjoin the District and provide services for residents in the northern, more isolated, rural areas of the District.

In Braintree, Factories and warehouses accounted for the majority of industrial and commercial floorspace. Factory floorspace accounted for a higher proportion in the District than the average for the region and for England, whereas retail and offices accounted for a lower proportion in Braintree District than the regional and national averages.



2.3 North Essex Garden Communities Employment & Demographic Studies

Under the 'most likely' demographic scenario for each settlement (2,500 dwellings by the end of the plan period (2033), with construction continuing at similar annual rates thereafter until completion of each settlement; and assumptions for in- and out-migration based on those for similar new settlements), population is estimated to peak at: just over 32,000 inhabitants by 2056 in 'West of Braintree'; just over 43,000 by 2071 in Colchester Braintree Borders, and; just over 20,000 by 2051 in Tendring Colchester Borders.

Total population in each settlement is then expected to decline, due to ageing of the population (as older people form smaller households), and under the assumption of no new houses being built.

A faster, more ambitious, build-out rate would lead to a slightly higher peak population (which would be reached sooner), due to the larger numbers of young population and children moving into the settlements. During the earlier phases of the development, there is likely to be faster growth in children of primary and secondary school age under an accelerated build-out rate, as younger adults moving in are more likely to bring children with them or form families shortly after moving in, increasing demand for schools. Once the settlement is completed and the population starts to age, the number of children of primary and secondary school age will decline more steeply in an accelerated build-out rate scenario, resulting in a much lower requirement for local schools.

The number of people aged 70 and over would grow at a faster rate under an accelerated build-out rate, as more people move in during the early phases of the development and the existing population starts to age. As a result, at its peak (around 40 years after building is completed in each scenario), the elderly population is slightly larger in an accelerated build-out rate scenario, increasing the need for elderly care services.

Table 12: Summary of expected growth from the North Essex Garden Communities

	By 2033	By 2050
West of north Essex – jobs created under transformational scenario (scenario 3a) in excess of BAU baseline	5,400	8,300
NEGC1:		
<ul style="list-style-type: none"> West of Braintree – jobs created (excl construction jobs) 	2,551	6,508
NEGC jobs (excl construction jobs) as % of total increment	47%	78%
<ul style="list-style-type: none"> West of Braintree – jobs (excl construction jobs) per house 	1.02	0.70



	By 2033	By 2050
Central East of North Essex - jobs created under transformational scenario (Scenario 3b) in excess of BAU baseline	10,400	23,700
NEGC 2:		
<ul style="list-style-type: none"> Colchester Braintree Borders – jobs created (excl construction jobs) 	2,572	7,629
NEGC jobs (excl construction jobs) as % of total increment	25%	32%
<ul style="list-style-type: none"> Colchester Braintree Borders – jobs (excl construction jobs) per house 	1.03	0.82
NEGC 3:		
<ul style="list-style-type: none"> Tendring Colchester Borders – jobs created (excl construction jobs) 	3,572	8,885
NEGC jobs (excl construction jobs) as % of total increment	34%	37%
<ul style="list-style-type: none"> Tendring Colchester Borders – jobs created (excl construction jobs) per house 	1.43	1.17

Source: North Essex Garden Communities Employment & Demographic Studies (2017)

The table shows that:

- The NEGCs account for a significant component of the additional employment growth which is linked to the alternative scenarios (albeit through different processes). These are not the only component but they are associated with up to about 80% of the increment linked to Scenario 3a and up to about 40% of the increment linked to Scenario 3b.
- All three NEGCs are likely to be associated with significant jobs growth, albeit of varying forms. The presumption is that jobs linked to exogenous growth processes will be physically on site (and appropriate provision will need to be made for them). Those linked to homeworking will be physically associated with the homes of residents and therefore also on site; in relation to these jobs, the design of housing will be crucially important. Those related to the consumption of local services may or may not be on site, but all will be reasonably “local”; provision in relation to this component will need to be planned so as to complement, rather than displace, existing local service provision (e.g. in the town of Braintree)



- In terms of the TCPA aspiration of “one job per house”, all three NEGCs appear to be “within range”. Broadly, Tendring Colchester Borders does best – which is plausible, given its proximity to a growing and ambitious university, and the role universities can play in driving high value economic growth. West of Braintree has the most challenging profile – which again is plausible, given the wider economic dynamics of the sub-area of which it is a part, and its specific locational attributes.

In principle, then, the data in the table implies that all three NEGCs could potentially contribute to the delivery of aspirational growth scenarios across North Essex.



3. Housing

The reform of the planning system by the new Government has led to significant changes in the way housing targets are devised which will impact on future housing supply. The revocation of Regional Strategies (including the East of England Plan) has given local planning authorities the responsibility of setting their own housing targets based on housing land supply, need and robust supporting evidence.

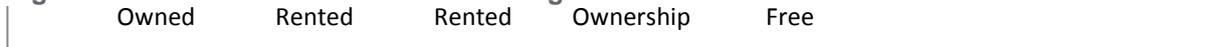
Based on figures taken from the 2011 Census, there were 62,105 households in the Tendring District, 10% were 1 bedroom, 38% were 2 bedrooms, 36% were 3 bedrooms, 12% were 4 bedrooms and 4% were 5 bedrooms or more. Of these, 73.7% were privately owned, 16.2% privately rented, 8.4% socially rented, 0.4% in shared ownership and 1.3% living rent-free. County wide 71.4% of homes were privately owned. Average household size in the district was 2.2 people, slightly lower than the national, regional and county, averages of 2.4 people. The average number of rooms was 5.4, according to the 2011 Census.

Figure 1: Bedrooms per household in Tendring District



Source: ONS 2011 Census data

Figure 2: Tenure of Households in Tendring District



Source: ONS 2011 Census data

A net of 209 dwellings were completed between 31 March 2013 and 1 April 2014, of which 3 were affordable housing units. A net of 1221 dwellings were completed over the past 5 years (2009/10 – 2013/14), which averages 244 dwellings per annum. The net number of completions in Essex for 2013/14 was 2860 and neighbouring Colchester and Babergh districts net dwellings built in the period 2013/14 were 725 and 291 and their 5 year averages (2009/10 – 2013/14) were 709 and 234 respectively.

There are 64 Residential Care Homes in Tendring the highest number in any district in Essex and the care sector is the second highest employer in the District. With the population of over 65s projected to rise by 39% during the period (2016-31) consideration will need to be given to the needs of an ageing population to encourage independent living and provide assisted living for those who require it. Development will need to assure that accommodation for our ageing population is integrated into communities to ensure that older people do not become isolated.

The provision of housing to meet local needs is a major issue in Tendring District. Identifying the objectively assessed housing need is also an important issue. Meeting the demand for affordable housing, including allocation of sites for gypsies and travellers, will also need to be considered and met within the Plan period. It will be increasingly important to match the population growth with economic growth within the District.

There are predicted to be 8,000 (13.1%) more households in Braintree District in 2021 than in 2011, driven by population growth (see Population and Social Issues topic above) and a reduction in average household size from 2.42 persons per household in 2011 to 2.36 in 2021. The population projection



analysis carried out by Edge Analytics suggests that the dwellings projection figure for Braintree District is that there will be a need for 824 additional dwellings per annum from 2009 to 2026. The SHMA 'stock flow analysis' suggests a need range of 761 to 883 additional dwellings per annum to 2026. The 2013 housing needs survey identified a shortfall of 362 market units per annum, based on market demand and supply data. The 2013 Affordable Housing Assessment Model identified a shortfall of 399 units a year. The Council has agreed that work on the new Local Plan will proceed on the basis of an objectively assessed housing need figure for the District in the period 2014-2033 in the range of 750-950 dwellings per year.

Evidence suggests that an overall affordable housing target of 40% can be justified to be negotiated from all suitable sites within Braintree District, subject to viability. The overall affordable tenure target balance could be set at 65% for social rent (including affordable rents) and 35% intermediate housing. The SHMA also provides guidance on appropriate property size targets as follows:

Table 13: Braintree SHMA guidance on property size targets

	1 to 2 bedrooms	3 to 4 bedrooms
Social rented	70%	30%
Intermediate market housing	65%	35%
Market housing	70%	30%

In relation to meeting the housing needs of older people, the SHMA also recommends that the Council considers:

- The type and quality of existing sheltered stock in meeting today's housing standards and preferences and the scale of need and demand for 648 units by 2018.
- The large future on-going requirement for 'extra care' accommodation to meet the significant growth in the number of people over 85.

Flats are considered to be the entry level stock in the District and the price for a one bedroom flat starts at £73,000. This would require an income of £19,800 and 61.4% of newly forming households earn below this amount. The need for a significant deposit has been a major factor in preventing access to the market for new forming households since 2008. 93.8% had less than £10,000 in savings and unless significant family financial support is available, these households will find it very difficult to access the local market and will be limited to the rental or intermediate market. Access to the private rented housing market is also restricted by cost.

According to the 2011 Census there were 71,634 households in Colchester. 10% were 1 bed, 27% were 2 bedrooms, 39% of households were 3 bedrooms, 17% were 4 bedrooms and just under 5% were 5 bedrooms or more. Of these, 66.3% were privately owned; 13.5% socially rented; 18.7% privately rented; 0.5% in shared ownership; and 1% living rent-free. County wide 71.4% of homes were privately owned in 2011. Average household size was 2.3 people in 2011, which is slightly less than the county, regional and national averages of 2.4 people. The average number of rooms was 5.5 according to the 2011 Census.



3.1 Housing Supply

The current trajectory for Tendring District shows that by 2033 there will be 6,115 completions (since 2015). Annual completion rates will fall significantly from 2020 below the 430 annual average rate of provision as set out in the East of England Plan (2008) which at time of writing is still a statutory planning document. As stated in Housing Trajectory and Statement of 5-Year Land Supply (2011) this reflects the fact that the sites identified in the Adopted Local Plan have been completed.

The SHLAA identifies a potential supply of 6,326 dwellings on deliverable and developable sites and 4,935 dwellings on land subject to constraints which may be overcome. A further 2,500 to 6,000 dwellings could be provided on six sites for new settlements which have been considered in the SHLAA. It will be the role of the Local Plan to identify strategic development areas for housing and the allocation of specific sites which bring forward housing supply.

In relation to potential supply, 1,061 homes have been built in 2011/12 and 2012/13. As at April 2013 1,970 homes had been granted Planning Permission on larger sites i.e 6 units or more. A further 243 are considered deliverable but do not have planning permission - these sites are phases of larger developments which were allocated in the previous Local Plan but have not yet been built. Historical evidence shows that windfall sites make a contribution to the number of annual completions, and it is forecast that in the light of available sites and planning policy, windfall sites will continue to be permitted and built in the future at a rate of 50 dwellings per year. Taking this into account this plan needs to deliver 6,286 homes on new sites. Since April 2013 a number of sites have been granted planning permission which will contribute to meeting this need.

Of the 543 new gross dwellings built during 2011/12, 254 were built on previously developed land (PDL). This was a comparatively larger number of dwellings built on PDL than recent years – the period from 2008 to 2011 had seen a decline in the proportion of new dwellings being built on PDL.

Data from Braintree District's 2013 Housing Needs Survey shows that 5,272 existing households are planning on moving to market housing in the District during the next five years, with the most popular destinations being Braintree, Bocking and Great Notley. 2,188 existing households are planning on moving to affordable housing in the District with the most popular location choices being Bumpstead, Upper Colne, Yeldham, Stour Valley North, Hedingham and Maplestead, Gosfield and Greenstead Green, Stour Valley South, and Three Colnes, followed by Braintree, Bocking and Great Notley.

In 2012/2013 there were 178 net additional dwellings (taking into account losses/demolitions) within the District. As at April 2013 the Managed Delivery Target for the District is 169 additional dwelling per annum to meet their minimum total housing requirement of 9,625 dwellings between 2001 and 2026, as set out in the Core Strategy.

The trajectory in Braintree shows that by 2026 there will be 9,625 completions across the plan period (since 2001). Projected annual completion figures will be generally lower than the completion rates reported between 2001 and 2011 but Braintree District will still exceed its minimum housing requirement by 816 dwellings or 108% for the whole plan period. This is due to supply up to 2012 substantially exceeding the annual average required to meet the overall housing requirement. Current national policy requires local planning authorities to provide a five year land supply of deliverable sites which excludes the current reporting year.

A total of 1,584 dwellings have been identified on deliverable sites over the next five years starting from



2013/14. This figure increases to 1,755 when the current year is also included. This equates to an average annual completion rate of 292 which is above the current published target of 247.

Of the 322 new gross dwellings built during 2011/12, 206 were built on previously developed land (PDL). Proportionately this is the smallest number of dwellings built on PDL since 2009/10. PDL figures no longer include dwellings built on gardens of existing dwellings following a change of definition by the Government in June 2010. The previous figures for PDL are therefore not comparable with the adjusted figures from 2009/10.

In 2011/12 this accounted for 63.98% of the total dwelling provision while the previous year dwelling completed on PDL represented 71.25% of the total provision. Under the old definition this would have been 75.78% and 77.29% respectively.

Under current policies an average of 830 dwellings are expected to be built in Colchester Borough each year. A net of 617 homes were built between 1 April 2012 and 31 March 2013. A net of 3,870 dwellings were built over the past five years (2008/9 – 2012/13), which averages 774 per annum. This is higher than any other local authority in Essex. Neighbouring Tendring and Braintree districts had an average of 278 and 339 completions per annum respectively over the previous five years. The net number of completions in Essex over the previous five years was 20,291, which averages at 4,058 per annum.

Table 14: Affordable housing supply in Tendring District (net)

Year	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Net Completed Dwellings	610	370	-	320	210	380	240	240	260
Affordable Completed Housing	20	70	30	140	20	160	70	10	10
Percentage Affordable Housing Completed	3.3%	18.9%	-	43.8%	9.5%	42.1%	29.2%	4.2%	3.8%

**Table 15: Affordable housing supply in Braintree District (net)**

Year	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Net Completed Dwellings	590	580	370	330	420	240	160	160	230
Affordable Completed Housing	240	110	140	140	150	70	100	100	170
Percentage Affordable Housing Completed	40.7%	19.0%	37.8%	42.4%	35.7%	29.2%	62.5%	62.5%	73.9%

Table 16: Affordable housing in Colchester Borough (net)

Year	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Net Completed Dwellings	1,290	1,490	780	690	700	860	650	740	650
Affordable Completed Housing	160	290	140	260	190	380	130	70	260
Percentage Affordable Housing Completed	12.4%	19.5%	17.9%	37.7%	27.1%	44.2%	20.0%	9.5%	40%

Note: - is where no data was available

Source: DCLG Live tables on house building (updated February 2016)

In 2014/15, 3.8% of the net dwelling completions, which accounts for 10 dwellings, were affordable within Tendring, as opposed to 73.9% in Braintree and 40.0% in Colchester. To date, the highest proportion of affordable housing achieved within the District was in 2009/10 at 43.8% which accounted for 140 of the total number of dwellings completed. In Braintree the highest percentage was in the years 2012/2013 and 2013/2014, of which 62.5% of new completed dwellings were affordable. Colchester saw its peak affordable housing completions of 44.2% in the year 2011/2012.

3.2 Existing Housing Stock

Table 17: Dwelling stock by tenure

Year	Local Authority (incl. owned by other LAs)	Private Registered Provider	Other public sector	Private sector	Total
Tendring	4.7%	3.9%	0.0%	91.3%	67,880
Braintree	0.0%	16.4%	0.0%	83.6%	63,770
Colchester	7.8%	6.3%	1.2%	84.7%	77,670
Essex	7.0%	7.5%	0.2%	85.3%	618,780
England	7.0%	10.4%	0.2%	82.4%	23,543,000

Source: DCLG Table 100 Dwelling Stock (2015)

The composition of dwelling stock for Tendring, Braintree and Colchester is similar to that of Essex and England with the majority of dwellings being in the private sector. However, Tendring District reported the highest proportion of stock within the private sector at 91.3% as well as a smaller proportion of Local Authority owned dwellings compared with Colchester, Essex and England at 4.7%. This is a higher difference between those figures than in Essex and England. In contrast there were proportionately fewer dwellings owned by Private Registered Providers in Tendring than any other area. Braintree has 0.0% local authority owned dwellings in the District.

Table 18: Mean dwelling prices (£)

Administrative area	Average dwelling price
Tendring	£168,829
Braintree	£215,851
Colchester	£202,625
Essex	£246,369
England	£246,746

Source: 2013 Land Registry Data, DCLG (updated April 2014)

The average dwelling price within Tendring District is £168,829. This is significantly lower than the county



and national averages. The average dwelling prices for Essex is similar to the national average, but Tendring District is much lower. Braintree has a higher average dwelling price than Tendring and Colchester at £215,851, but is still lower than the county and national average.

Dwelling prices within Tendring District have increased by 17% since 2003, despite fluctuating between 2009 and 2013. Average house prices in Braintree and Colchester increased by higher percentages over the same time period, at 23.2% and 23.4% respectively. The average dwelling prices within Tendring, Braintree and Colchester have continuously been lower than the sub-national and national averages and the price gap has widened in recent years between the Districts average and the national average. In 2003 the average dwelling price in Tendring was £143,750 which was £46,387 less than the Essex average of £190,137 and £23,034 less than the national average of £166,784. In 2013 the difference was £77,540 and £77,917 compared with Essex and England respectively. For Braintree, the difference compared with Essex in 2003 was £15,536 and in 2013 it was £30,518. Colchester registered a larger change than Braintree, where the difference compared to Essex in 2003 was £26,048 and in 2013 was £43,744.

3.3 Housing need – Strategic Housing Market Assessment (SHMA)

The SHMA Update observed that, due to the requirement for significant deposit to access a mortgage, few households aspiring to home ownership would have access to sufficient funds to purchase a home in the District. The Update identifies a notable increase in the proportion of households in the private rented sector and a decrease in all other tenure groups with owner-occupiers with a mortgage recording the biggest fall.

Table 19: Size mix of housing requirement (per annum)

Housing type	Count	Percentage
Market housing		
1 bedroom	38	8.8%
2 bedroom	121	27.9%
3 bedroom	176	40.6%
4 + bedroom	99	22.8%
Sub-total	434	100.0%
Shared ownership		
1 bedroom	6	100.0%
2 bedroom	0	0.0%



Housing type	Count	Percentage
Market housing		
3 bedroom	0	0.0%
4 + bedroom	0	0.0%
Sub-total	6	100.0%
Affordable rented / social rented housing		
1 bedroom	11	7.0%
2 bedroom	75	47.8%
3 bedroom	48	30.6%
4 + bedroom	23	14.6%
Sub-total	157	100.0%
All housing		
1 bedroom	55	9.2%
2 bedroom	196	32.8%
3 bedroom	224	37.5%
4 + bedroom	122	20.4%
Total	597	100.0%

Source: Braintree, Colchester, Chelmsford and Tendring District Councils SHMA update (Dec 2015)

The updated SHMA for Braintree, Colchester, Chelmsford and Tendring Councils indicates that the majority of market housing and affordable housing should be 2 and 3 bedroom properties. This trend is replicated when assessing all housing, with 70.3% of housing need across the Districts and Boroughs is 2 and 3 bedroom dwellings.



Year		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
	Acceptances	3	3	3										9

Source: Braintree District Council Homelessness Strategy Statistical Update Q1 2015/16 (June 2015)

The number of homeless people accepted in Braintree District in 2014/15 was 140. This is the third lowest figure across the study period with the lowest being the three previous years (2010/11 and 2011/12) at 104 and 137 homeless acceptances. Homelessness acceptances decreased from the previous year by 26, and early statistics from the first quarter of 2015/16 indicate there is likely to be a further reduction when the statistics for this year are completed.

**Table 21: Housing options service statistics in Tendring District**

Year	Number of Approaches	Housing Advice	Homelessness Prevention	Homelessness Applications	Homelessness Acceptances
2009/10	2099	1306	593	200	67
2010/11	2110	1461	485	164	75
2011/12	1862	1302	408	152	70
2012/13	1702	1255	337	110	45
2013/14	1774	1231	456	87	24

Source: Tendring Homelessness Strategy 2009-2014 statistical update

Following an increase in homeless acceptances in 2010/11, numbers have begun to fall steadily within Tendring District, with 2013/14 seeing the lowest number in the last 6 years of 24 acceptances. This is in contrast with national increases in homelessness acceptances.

During the 2013/14 financial year, there was a 23% decrease in the number of homelessness applications to the council. This follows the national trend as 111,960 applications were made to local authorities during 2013/14 which is a decrease of 1% from 113,520 in 2012/13.

In 2014/15 the number of applications in Colchester increased by 23% to 342 (the same total as 2012/13). Between 1 January and 31 March 2015, local housing authorities in England received 27,640 applications; this is 2 per cent higher than in the corresponding quarter in 2014.

The number of acceptances has also decreased by 22% in 2013/14 from the previous year. This is also in line with the national trend as during the 2013/14 financial year, 52,270 households were accepted by local authorities as being owed the main homelessness duty. This is a decrease of 3 per cent from 53,770 in 2012/13.

The 28% increase in acceptances in the last financial year 2014/15, almost mirrors the number of acceptances in 2012/13. In England there were 54,430 acceptances in financial year 2014-15, up 4 per cent from 52,290 in 2013-14.

Over the last 3 years there has been a significant reduction in the number of 16/17 year olds being accepted as homeless. Early intervention and prevention options have been developed for young people at risk of becoming homeless in the Borough.

(Source: Colchester Borough Council Homelessness Strategy Evidence Base update 2015)



3.5 Gypsy and Traveller Accommodation

Table 22: Gypsy and Traveller Count for Tendring District

Tendring		Authorised sites (with planning permission)				Unauthorised sites (without planning permission)				Total all caravans
Year	Month	Socially rented caravans	Private caravans			Number of caravans on own land	Number of caravans on land not owned by Travellers			
			Temporary planning permission	Permanent planning permission	All private caravans		“Tolerated”	“Not tolerated”	“Tolerated”	
2014	Jan	0	0	26	26	1	1	0	0	28
	Jul	0	0	26	26	0	2	0	14	42
2015	Jan	0	0	26	26	1	1	0	0	28
	Jul	0	0	26	26	0	2	0	0	28
2016	Jan	0	0	26	26	1	1	0	0	28

Source: DCLG Gypsy and Traveller Caravan Count (Jan 2016) Note: some figures include imputation. This is due to one of the following reasons: Local Authority non-response / Incomplete returns / Unable to carry out count due to not being able to access site



Table 23: Gypsy and Traveller Count for Braintree District

Braintree		Authorised sites (with planning permission)				Unauthorised sites (without planning permission)				Total all caravans
		Private caravans				Number of caravans on own land	Number of caravans on land not owned by Travellers			
Year	Month	Socially rented caravans	Temporary planning permission	Permanent planning permission	All private caravans	“Tolerated”	“Not tolerated”	“Tolerated”	“Not tolerated”	
2014	Jan	40	0	26	26	0	29	0	0	95
	Jul	40	0	39	39	21	0	0	0	100
2015	Jan	40	0	25	25	29	0	0	0	94
	Jul	40	0	65	65	0	0	0	15	120
2016	Jan	44	0	67	67	0	0	0	0	111

Source: DCLG Gypsy and Traveller Caravan Count (Jan 2016) Note: some figures include imputation. This is due to one of the following reasons: Local Authority non-response / Incomplete returns / Unable to carry out count due to not being able to access site



Table 24: Gypsy and Traveller Count for Colchester Borough

Braintree		Authorised sites (with planning permission)				Unauthorised sites (without planning permission)				Total all caravans
		Private caravans				Number of caravans on own land	Number of caravans on land not owned by Travellers			
Year	Month	Socially rented caravans	Temporary planning permission	Permanent planning permission	All private caravans		“Tolerated”	“Not tolerated”	“Tolerated”	
2014	Jan	0	0	38	38	2	0	0	0	40
	Jul	0	0	33	33	2	0	0	8	43
2015	Jan	0	0	36	36	1	7	0	0	44
	Jul	0	0	50	50	7	0	0	0	57
2016	Jan	0	0	49	49	6	0	0	0	55

Source: DCLG Gypsy and Traveller Caravan Count (Jan 2016) Note: some figures include imputation. This is due to one of the following reasons: Local Authority non-response / Incomplete returns / Unable to carry out count due to not being able to access site



4. Population and Society

4.1 Population

5,803 households migrated into Braintree District from outside the area over the last three years. The highest proportion had moved from Chelmsford (9.6%), followed by 9.0% who had moved from elsewhere in the UK and 7.4% from elsewhere in Essex; only 1.4% had migrated in from abroad. Out-migration from the District was mainly to elsewhere in the UK; the main reasons for leaving the District were family reasons and employment / access to work. In terms of migration patterns from Census 2001 and ONS 2011 data, the main in and out migration to and from the District was in Chelmsford, Colchester, Uttlesford and Greater London.

The predominant ethnic group in Tendring is White British with 97.6% of the population describing themselves as such. The ethnic minority population was 2.4% which in terms of numbers equates to a population of approximately 3,358 people. This is lower than both the estimates for both the East of England and Essex.

The increase in population within Tendring is the catalyst for a number of other sustainability issues within the District within the Plan period. These include additional pressure on public services such as education, health and transport. The additional housing will also promote environmental and climate change pressures.

As well as an overall increase in population over the Plan period, we can also expect to see an ageing population within Tendring District. This will also increase pressure on health provision and the care industry.

The predominant ethnic group in Colchester is White British with 87.5% of the population describing themselves as such. The ethnic minority population was 12.5% which is lower than the national average of 20.2% but higher than the Essex average of 9.2%.

Table 25: Population

	2001	2014	% change
Tendring	138,800	139,900	0.79%
Braintree	132,500	150,000	11.67%
Colchester	156,000	180,400	13.53%
East of England	5,400,500	6,018,400	10.27%
Great Britain	57,424,200	62,756,300	8.50%

Source: Based on 2014 mid-year population estimates from ONS

Tendring District has an estimated population of 139,900. Since 2001 the population has grown at a significantly lower rate than that of the region and the country. At 0.79% it is considerably below the



national population growth rate of 8.50%. Braintree and Colchester have populations that are growing at much faster rates. At 11.67% and 13.53% respectively, they are significantly higher than the average for Great Britain and are above the average for the region as well.

Table 26: Population age structure

	Tendring	Braintree	Colchester	Essex	UK
Persons aged 0-4	5.10%	6.07%	6.37%	6.00%	6.29%
Persons aged 5-14	10.02%	10.76%	11.15%	11.44%	11.48%
Persons aged 15-19	5.62%	5.80%	5.97%	5.89%	5.96%
Persons aged 20-44	23.21%	30.13%	35.14%	30.37%	33.25%
Persons aged 45-64	26.95%	27.18%	24.24%	26.41%	25.34%

Source: Based on 2014 mid-year population estimates from ONS

The majority of Tendring District's population are adults above the age of 65 years. The age bracket 45-64 is in line with the county and national averages as well as the percentages for people aged 15-19. However, the district has a much higher proportion of people aged between 20-44 and 45-64 years than children and teenagers. Similar trends are apparent in Braintree and Colchester, where the number of young children and teenagers is lower than adults. However, in Braintree the largest proportion of the population are in the 20-44 age bracket. The proportion of people in this bracket for Colchester is by far the highest, with a much smaller population aged 65 and over compared with the other Districts.

Table 27: Population projections

	2015	2017	2027	2039	Percentage change (2015 – 2039)
Tendring	140,000	142,000	152,000	166,000	15.66%
Braintree	151,000	153,000	164,000	176,000	14.20%
Colchester	183,000	187,000	205,000	222,000	17.57%
Essex	1,443,000	1,465,000	1,587,000	1,719,000	16.06%
England	54,780,000	55,640,000	59,493,000	63,282,000	13.44%

Source: ONS Population Projections (May 2016)

The population of Tendring District is projected to increase to 166,000 by 2039 which represents a 15.66% growth on the 2015 population figures. This percentage change is in line with than sub regional



growth figures but above national figures. Braintree has a growth rate of below the national average, with the population growing from 151,000 to 176,000 at a rate of 14.20%. Colchester has the highest growth rate, above that of the other districts and the county and national average. It is projected to increase from 183,000 to 222,000 at a rate of 17.57%.

Table 28: Population projections for Tendring based on broad age groups

Broad Age Groups	2015	2017	2027	2039
Children	21,000	22,000	23,000	25,000
Working Age	78,000	78,000	79,000	80,000
Older people	41,000	42,000	50,000	62,000

Table 29: Population projections for Braintree based on broad age groups

Broad Age Groups	2015	2017	2027	2039
Children	28,000	28,000	28,000	29,000
Working Age	97,000	95,000	98,000	97,000
Older people	31,000	31,000	41,000	51,000

Table 30: Population projections for Colchester Borough based on broad age groups

Broad Age Groups	2015	2017	2027	2039
Children	33,000	33,000	39,000	38,000
Working Age	119,000	122,000	128,000	136,000
Older people	32,000	34,000	40,000	49,000

Note: Children (0-14), Working age (15-64), Older people (65 and over)

Source: ONS Population Projections (May 2016)

The population within Tendring is projected to increase overall, but with a higher increase in the population of older people. Categorised as aged 65 years and over, there is projected to be 62,000 older people by 2039. Braintree District is also expected to see a much higher increase in population aged over 65 than the other age brackets. By 2039 the projected number of children in Tendring is 25,000 and Braintree is 29,000 compared with 62,000 and 51,000 aged 65 and over respectively, meaning that the



population will be an aging one and will likely result in changing requirements of the District's residents. Colchester however, has a strong majority of people of working age, and growth in all age brackets is expected at similar rates to result in the most stable population structure of the three Districts.

Table 31: Household projections

	2012	2017	2022	2027	2032	2037	Percentage change (2012-2037)
Tendring	62,311	64,596	67,646	71,163	74,814	78,349	20.5%
Essex	588,272	617,169	647,933	678,445	708,556	737,634	20.2%
England	22,304,760	23,396,215	24,505,101	25,578,405	26,604,790	27,548,270	19.0%

Source: ONS (Projections are based on revised 2012), updated December 2015

Household projections are 2012 based and are linked to the 2012 based population projections. In 2012 there were estimated to be 62,311 households within Tendring and by 2037 this is projected to increase by 20.5% to 78,349. This proportional increase is marginally above the county projected increase of 20.2% and more substantially above the national increase of 19.0%.

4.2 Education

There are 47 maintained schools in Tendring District, 40 primary schools and 7 secondary schools. There are 2 adult education centres offering a range of courses from beauty therapy and arts and crafts to training courses aimed at the business community.

Essex County Council has a statutory responsibility to ensure there are sufficient school places available every year, that there is diversity across the school system and parental preference is maximised. Commissioning School Places in Essex 2015-2020 sets out the requirement, supply and demand for places in maintained primary and secondary schools to 2020 and is updated annually to ensure projections of demand and capacity are as accurate as possible.

In 2015 there were 9,893 primary school pupils and 8,328 secondary school pupils. In 2013, the 6 schools providing sixth form education had 1,307 pupils over the age of 16.

Based on 2013 numbers, overall pupil numbers in secondary schools in Clacton are predicted to decline in the period 2013/18 to 8,000 (7.1% decrease) with housing 8,395 (2.5% decrease). However, demand for year 7 places in Clacton is forecast to increase from 2017/2018 onwards once pupils from anticipated new housing are included in the forecast. Pupil numbers in secondary schools/academies in the rest of the District are forecast to remain stable. The impact of any new housing in the locality of these schools will be closely monitored to ensure there are sufficient school places to meet any increase in demand.

Essex County Council Education Authority state that the numbers of primary and secondary pupils will increase up to 2018. These increases are significant and will have knock-on impacts in terms of sustainability. These impacts include increased vehicle movements which increase carbon dioxide



emissions, further pressure on health and the implicit pressure on the education system.

In Colchester, there are 79 maintained schools: 64 primaries, 11 secondaries and 4 special schools. There are 2 higher education colleges, Colchester Sixth Form College and the Colchester Institute, plus the University of Essex, making the Borough a major educational base with visiting students significantly adding to the diversity of the population. The provision of day care, nursery education and out-of-school care remains an issue for the Borough, with there being more demand than formal supply.

In the Stanway area there should be sufficient capacity overall to meet demand in the next three years. However, as the new housing developments planned progress there is likely to be pressure on school places and plans will be developed with the local schools to increase provision in the locality. ECC will have access to a new school site on commencement of phase three of the Lakelands development, if required. A consultation has commenced on proposals to increase provision at Monkwick Infant and Junior Schools, Montgomery Infant and Junior Schools and a further expansion of St John's Green Primary School. St George's New Town Junior School will increase its intake to 90 from 2014. In the Tiptree planning group there were 22% surplus places with two of the schools having more than 50% surplus places in school year 2012/13. Funding has been secured for a new 2 form entry school in Braiswick from 2015 and Essex County Council are currently seeking sponsors for a 420 pupil school on the Severalls development.

Year 7 intakes in Colchester are forecast to rise significantly from September 2017 onwards and two options will be explored to provide the additional places required: to expand an existing and high performing and popular school/ academy through the use of the Alderman Blaxill site, or to develop new provision such as a Free School or Academy on this site.

Table 32: Number attending and capacity of schools in Tendring District

	Net capacity 2015/16	Number on roll (2016)	Surplus/deficit 2015/16	Forecast number on roll 2020/21	Forecast surplus/deficit 2020/21 including adjustment for new housing
Primary School	10,242	10,111	131	10,214	-480
Secondary School	9,156	8,306	850	8,886	-407
Special School	-	351	6	-	-

**Table 33: Number attending and capacity of schools in Braintree District**

	Net capacity 2015/16	Number on roll (2016)	Surplus/deficit 2015/16	Forecast number on roll 2020/21	Forecast surplus/deficit 2020/21 including adjustment for new housing
Primary School	13,131	11,917	1,214	11,801	985
Secondary School	8,958	7,450	1,508	7,772	901
Special School	-	223	2	-	-

Table 34: Number attending and capacity of schools in Colchester Borough

	Net capacity 2015/16	Number on roll (2016)	Surplus/deficit 2015/16	Forecast number on roll 2020/21	Forecast surplus/deficit 2020/21 including adjustment for new housing
Primary School	15,884	14,691	1,193	15,909	643
Secondary School	10,946	10,039	907	11,825	-700
Special School	-	333*	10*	-	-

*Ramsden Hall Annexe, Langham, closed on 31 March 2015. Langham Oaks School opened on the same site on 1 April 2015.

Note: some datasets for Special Schools are missing from the Commissioning School Places in Essex report.

Source: Commissioning School Places in Essex 2015-2020 (Data Supplements).

School age population numbers are projected to grow relatively slowly and school capacity within Tendring is expected to be insufficient to accommodate children in the District. Primary schools are predicted to have a deficit of 480 places for the 2020/21 academic year. Secondary schools are predicted to have a deficit of 407 for the same time period including adjustments made to take account of the numbers of primary and secondary pupils it is anticipated will be produced by new housing.

Braintree has a surplus of places available for primary and secondary school level education and the



forecast figures suggest that the trend will continue including adjusting for new housing in the District. Colchester is in contrast with this. The forecasts including adjustments for new housing indicate there will be a deficit of places within the Borough in secondary schools despite adequate provision to accommodate the projected demand in primary school places.

All districts and boroughs registered a surplus of places in special schools, although this surplus was marginal in every case. Tendring has a surplus of 6 places in special schools, whereas Braintree registered a surplus of 2 and Colchester has a surplus of 10.

Table 35: Key Stage 4 – GCSE or equivalent

	All Pupils at the end of KS4 achieving 5+ A* - C	All Pupils at the end of KS4 achieving 5+ A* - G	All Pupils at the end of KS4 achieving 5+ A* - C including English and Mathematics	All Pupils at the end of KS4 achieving 5+ A*-G including English and Mathematics
Tendring	58.0%	91.5%	46.6%	89.2%
Braintree	62.8%	95.5%	51.7%	90.2%
Colchester	71.5%	95.6%	64.6%	93.7%
Essex	67.0%	94.3%	58.4%	92.0%
East of England	66.7%	94.7%	58.2%	92.5%
England	66.5%	94.3%	57.3%	91.7%

Source: Department for Education, (2014/15)

At 58.0% a lower proportion of pupils within Tendring attained five or more A*-C grades at key stage 4 (KS4) than the county, regional and national equivalent. Braintree and Colchester both registered higher than Tendring for this statistic, and Colchester is higher than the county, region and nation for the percentage of pupils achieving 5+ a*-C grades.

46.6% of pupils who gained five or more A*-C grades did so including English and Mathematics in Tendring, which is considerably less the national proportion of 57.3%. Again, Braintree and Colchester had higher percentages of people achieving 5+ * - C grades including Mathematics and English than Tendring, at 51.7% and 64.6% respectively. The proportion of pupils attaining five or more A*-G grades was also below the national figure for Tendring, however Braintree and Colchester had a higher percentage than the county, regional and national figures.



Table 36: Adult qualifications

	NVQ4 and above	NVQ3 and above	NVQ2 and above	NVQ1 and above	Other qualifications
Tendring	13,800	33,100	48,300	63,100	3,400
	18.2%	43.7%	63.9%	83.5%	4.5%
Braintree	26,700	46,900	66,600	79,800	6,100
	28.8%	50.5%	71.7%	86.0%	6.5%
Colchester	43,300	67,700	88,900	99,500	6,900
	37.8%	59.2%	77.7%	87.0%	6.1%
East of England	34.8%	53.5%	72.4%	85.9%	6.6%
Great Britain	38.2%	56.9%	74.3%	85.3%	6.6%

Note: N/A where the sample size is too small to provide a reliable estimate

Source: NOMIS, Jan 2016-Dec 2016

The population of Tendring District has in general fewer qualifications than the overall sub-national and national populations. 83.5% of the working age population of Tendring District which accounts for 63,100 people are qualified to at least level 1 or higher compared to 85.3% across Great Britain. Braintree is lower than Colchester at 86.0% and Tendring is the lowest of the three Districts. Both Braintree and Colchester are above the regional and national average for the percentage of the population with qualifications at NVQ1 or higher. Level 1 represents foundation GNVQ, NVQ 1 or up to 5 GCSEs at grades A*-C.

The most significant difference is that Tendring has comparatively lower proportions of the population qualified at Level 3 and above than the regional and national averages, with 43.7% of the population having attained at least 2 or more A levels, advanced GNVQ, NVQ 3 or equivalent (level 3) and 18.2% achieving a higher national diploma, degree and higher degree level or equivalent (level 4). Similarly, Braintree is lower than the region and nation for the same education levels, with 50.5% at NVQ3 or above and 28.8% at NVQ4 or above. Colchester however, is higher than the East of England and Great Britain at 59.2% with NVQ3 or above and 37.8% with NVQ4 or above.



4.3 Quality of Life

The overall count of instances of crime in Braintree District has increased between December 2015 and December 2016, increasing by 593 which is an 8.9% increase. The largest increase is in miscellaneous crimes against society which has increased by 41.6%. Tendring registered an increase of 1,536 which is a 16.4% increase. Colchester registered a smaller increase of 362 additional crimes in the borough representing a 3.0% rise in crime levels. Instances of crime across Essex increased by 9,734 which represents a 9.0% increase, significantly below that of Tendring, in line with Braintree and above Colchester.

According to ONS figures crime in Tendring District has risen in recent years by over 16%. With an increasing population, it may be that this figure will continue to rise. Planning can play a big part in kerbing this increase through developments that design out crime.

Increases in crime were apparent across all crime types with the exception of all theft offences barring bicycle theft, fraud offences, homicide and theft from the person. In Colchester, increases in crime were avoided in bicycle theft, criminal damage and arson, domestic burglary, drug offences, fraud offences, non-domestic burglary, shoplifting and theft from the person where counts either decreased or stagnated. In Braintree, decreases or plateaus were registered for bicycle theft and all other theft offences, drug offences, fraud offences, homicide, non-domestic burglary, sexual offences and theft from the person.

The community has access to a wide range of Council-run services including three leisure centres with swimming pools, sports centres, recreation grounds, country parks and the Princes Theatre, with an 820 seat auditorium which hosts local events as well as attracting national and international entertainers.

In Colchester, the community has access to a wide range of Council-run services and facilities, including those owned by the 31 Parish Councils in the Borough. Facilities include country parks at Cudmore Grove in East Mersea and High Woods in Colchester, a leisure centre including swimming pools and four multi-activity centres, and a 10,000 seat capacity football stadium.

Table 37: Indices of Multiple Deprivation 2015

Essex rank	Extent	Local concentration	Average score	Average rank
1	Tendring 70	Tendring 40	Tendring 50	Tendring 49
2	Southend 79	Southend 63	Southend 90	Harlow 71
3	Basildon 81	Basildon 83	Basildon 98	Southend 105
4	Thurrock 144	Thurrock 146	Harlow 101	Thurrock 111
5	Harlow 148	Colchester 161	Thurrock 125	Basildon 113
6	Colchester 167	Castle Point 170	Colchester 182	Colchester 185



Essex rank	Extent	Local concentration	Average score	Average rank
7	Castle Point 185	Harlow 176	Castle Point 187	Castle Point 187
8	Chelmsford 217	Chelmsford 211	Braintree 202	Braintree 197
9	Braintree 229	Braintree 229	Epping Forest 205	Epping Forest 199
10	Epping Forest 231	Epping Forest 231	Maldon 216	Maldon 204
11	Maldon 249	Maldon 239	Chelmsford 256	Chelmsford 261
12	Rochford 251	Rochford 254	Rochford 281	Rochford 285
13	Brentwood 299	Brentwood 283	Brentwood 297	Brentwood 294
14	Uttlesford 302	Uttlesford 321	Uttlesford 300	Uttlesford 297

Note: The number alongside each authority's name is that authority's national rank for that measure. The smaller the rank the more deprived the local authority.

Source: DCLG, September 2015

Tendring has the highest level of deprivation for a local authority within Greater Essex. Of the 326 local authorities within England, Tendring ranks within the top 25% for extent and the top 16% for the remaining three measures –local concentration, average score and average rank. Braintree and Colchester are less deprived, with Colchester ranking 6th in Essex on average and Braintree less deprived ranking 8th in Essex on average.

Deprivation is measured on a small scale with local authorities divided in small areas known as Lower Super Output Areas (LSOAs) which have an average of 1,500 people, a minimum of 1,000 and are sub-divisions of wards. There are 32,482 LSOAs in England. Extent is the proportion of a local authority district's population living in the most deprived Local Super Output Areas (LSOAs) in the country. Local concentration refers to 'hot spots' of deprivation by reference to a percentage of the local authority districts population. Average Score is the population weighted average of the combined scores for the LSOAs in a local authority district and average Rank is the population weighted average of the combined ranks for the LSOAs in a local authority district.

St Anne's Estate in St Anne's ward and Magnolia in St Andrew's ward were the small areas with the highest levels of deprivation in Colchester according to the Colchester Local Plan Sustainability Appraisal Scoping Report (2014). The least deprived small area in Colchester was Bergholt in West Bergholt and Eight Ash Green ward, followed by Wivenhoe Park in Wivenhoe Cross ward. 29 of the 104 small areas in Colchester were ranked in the 20% least deprived in England. In both 2007 and 2010 income domain, there were 28 small areas in Colchester which fell into the top 40% most deprived nationally. In both years, St Anne's Estate in St Anne's ward was the only small area ranked in the top 10% most income deprived nationally..



5. Health

The health of the population in Braintree District is generally better than the England average, but is significantly worse than the England average in respect of road injuries and deaths and hip fractures in the over 65s.

Braintree Council provides Careline, a subscription based service, which provides support to elderly, infirm or disabled clients, or people of any age living alone, who want to live independently in their own homes. Through a system of alarm buttons and sensors clients have access to 24/7 support, advice and assistance. The Council and the Careline Service have signed a service agreement with the Essex County Fire and Rescue Service to support the residents of the District. During Careline assessment appointments residents will be asked if they want a home visit from the Fire Service and, during Home Safety Visits, the Fire Service will enquire whether residents wish to be referred to Careline.

In 2015 there were 2,242 live births in Colchester. Only Basildon District had a higher number of births than Colchester (2,457). Braintree and Tendring registered fewer live births with 1,607 and 1,340 respectively. The total number of births in Essex in 2015 was 16,335.

5.1 Life Expectancy and Health

Table 38: Life expectancy

Area	2012-2014	
	Males	Females
Tendring	78.7	82.0
Braintree	80.1	83.4
Colchester	80.0	83.5
East of England	80.4	83.8
England	79.5	83.2

Source: DCLG, 2015

Life expectancy of residents within Tendring is lower than the national averages. Braintree and Colchester have higher life expectancies for men and women than the national figures, but are both below the regional figures. In general, life expectancy is increasing within the Districts and nationwide. Colchester has the highest life expectancies of the three Districts for women, at 83.5 and Braintree has the highest for men at 80.1. The implications of this will mean that as people live longer there will be increased pressure on services for the elderly.

**Table 39: Incapacity benefit and severe disablement allowance claimants**

	Tendring		Colchester		Braintree		East of England	Great Britain
Total population	139,900	N/A	180,400	N/A	150,000	N/A	6,018,400	62,756,300
Total claiming out-of-work benefits	2,070	2.7%	1,490	0.8%	1,040	0.7%	1.2%	1.8%
Total receiving severe disability allowance / incapacity benefit	530	0.4%	390	0.2%	370	0.3%	0.2%	0.3%
Males claiming benefits	240	45.3%	180	46.2%	160	43.2%	43.1%	44.7%
Females claiming benefits	290	54.7%	210	53.8%	220	59.5%	57.0%	55.3%
Claimants aged 18-24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1%
Claimants aged 25-49	120	22.6%	110	28.2%	140	37.8%	35.4%	35.2%
Claimants aged 50+	410	77.4%	270	69.2%	290	78.4%	64.7%	64.8%

Note: N/A is when the sample size is too small for a reliable estimate. Percentages may not equal 100% in total due to rounding.

Source: Department for Work and Pensions, November 2015 and ONS 2016



A percentage of 0.4% of the total population of Tendring District claim either incapacity benefit or severe disability allowance. This is double the percentage of the population in the region claiming the same benefits and 50% more than the national figure. Colchester is in line with the regional average and below the national at 0.2% and Braintree is above the regional and in line with the national figures at 0.3%.

In general, a higher proportion of women claim benefits than men. This is more apparent at the national level where 55% of claimants are women and 45% are women, in line with the trends for Tendring District, Braintree District and Colchester Borough. With regards to age, the highest proportion of claimants in Tendring is aged 50+, followed by those within the age group 25-49 at 77.4% and 22.6% respectively. In Braintree, people aged 50+ and 25-49 accounted for 78.4% and 37.8% of claimants respectively and in Colchester, 69.2% of claimants were aged 50 or over and 28.2% were aged 25-49. Tendring, Braintree and Colchester were above the regional and national averages for claimants aged 50+, but Tendring and Colchester had a smaller percentage of claimants aged 25-49 than Braintree, the region and the country

Table 40: Estimated prevalence of excess weight in children

	Children (aged4-5)
Tendring	21.2%
Braintree	21.1%
Colchester	18.8%
Essex	20.9%
East of England	20.9%
England	22.1%

Source: NHS Digital, National Child Measurement Programme, Public Health England (2015/16 data).

Child obesity within Tendring District is considered by the National Centre for Health Outcomes Development to be worse than the corresponding county and regional averages. The prevalence of excess weight in children within the District is 21.2% which is higher than the county average of 20.9% but below the national average of 22.1%. Braintree also has a higher prevalence of excess weight in children than the Essex and regional average but is below the national level. Colchester has a lower prevalence compared with all other levels at 18.8%.



5.2 Physical Activity and Open Space

Table 41: Adult participation in sport at least once a week

	Active people survey 7 – Oct 2013	Active people survey 8 – Oct 2014	Active people survey 9 – Oct 2015
Tendring	29.4%	29.4%	26.7%
Braintree	34.4%	32.7%	33.0%
Colchester	35.2%	36.9%	36.8%
Essex	36.8%	35.7%	34.8%
East of England	35.9%	35.6%	35.6%
England	36.6%	36.1%	35.8%

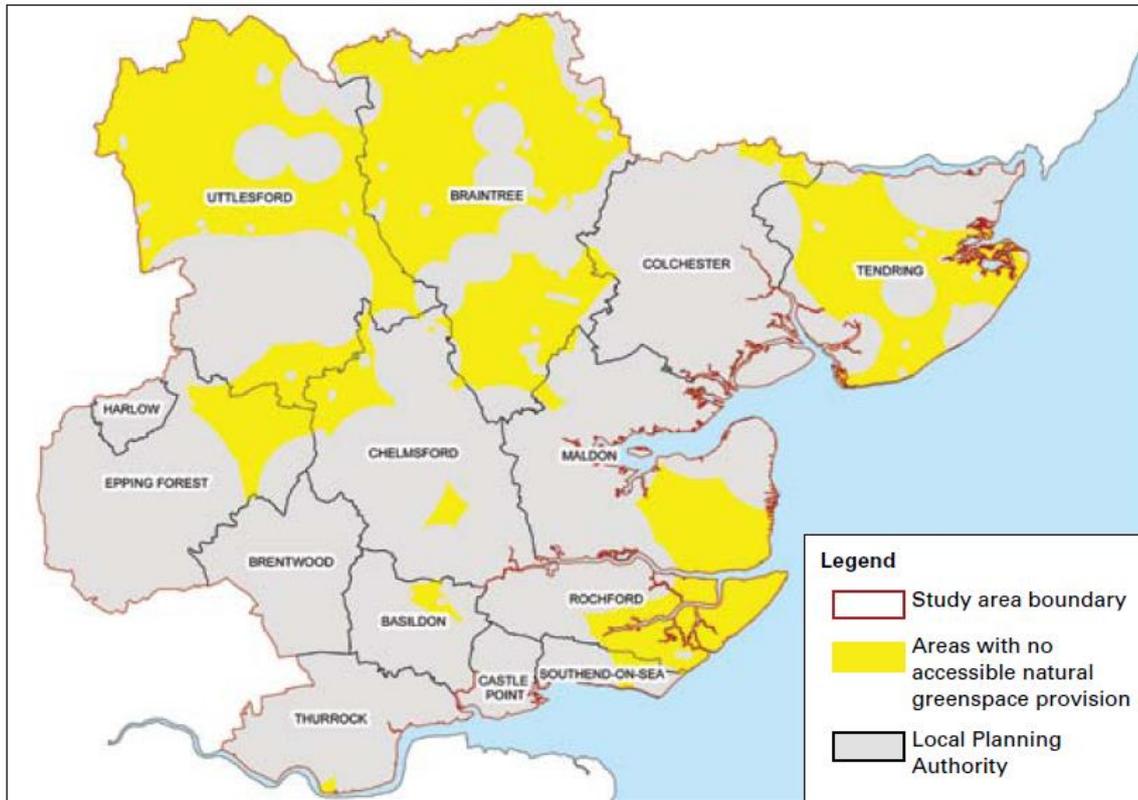
Source: Sport England Active People Survey 7, 8 and 9 (October 2015)

The proportion of adults participating in sport at least once a week has decreased in the most recent survey at the county and national levels. In Tendring District, this trend is also apparent with 26.7% of those in the survey active in sport between October 2014 and October 2015, a 2.7% reduction on the previous year. Colchester registered a 0.1% reduction on the previous year and participation in Braintree increased by 0.3%, although the most recent figure is 1.4% lower than APS7 in October 2012-October 2013.

Accessible Natural Greenspace Standard (ANGSt) created by Natural England sets out the minimum amount of accessible natural greenspace that any household should be within reach of. Analysis of Accessible Natural Greenspace Provision for Essex (2009) showed that only 7% of Essex households met all the ANGSt requirements while 14% didn't meet any. According to the report, "the areas that fare the worst according to the ANGSt criteria are the more rural parts of the county; although there may be greenspace surrounding rural inhabitants, there is often limited official public access beyond the footpath network".



Figure 3: Accessible Natural Greenspace in Essex



Source: Diagram taken from Analysis of Accessible Natural Greenspace Provision for Essex (2009)



6. Transport

Accessibility by public transport or walking to key services and educational facilities is improved considerably within and in close proximity to the three main towns of Braintree, Halstead and Witham. Just over half of residents live in these three main urban areas, leaving a substantial proportion living in rural areas where the private car is often the main means of transport. As such the private car is the most common means of getting to work and levels of private vehicle ownership are high.

Public transport networks in the towns are adequate during the day on weekdays but during the evening and in rural areas, the availability of public transport can be limited. This can make it difficult for those without access to a car to access key services and facilities, including the less well-off and the District's growing elderly population. Cycle networks are fragmented and mainly available in Witham and Braintree towns.

The major road routes in the District are the A120 and A12. Rail services between Braintree town and London are infrequent, being constrained by its location on a single track branch line.

Stansted Airport is located within Uttlesford District but it is a major employer of Braintree District residents and it is therefore a major cause of out-commuting, with potential negative effects on road congestion and road traffic-related air pollution and greenhouse gas emissions. The airport plans to address these issues by improving the attractiveness of public transport to the airport for both staff and passengers, for example offering discounted travel opportunities and working with bus, coach and rail operators to provide scheduled services that match working patterns where possible.

Tendring District is connected to a network of major roads via the A120, A133 and A137, which provide routes to Chelmsford, London, the M25, Stansted Airport and the Port of Felixstowe.

Transportation provision in the District includes 14 railway stations with connections to Colchester, Chelmsford, Ipswich, Norwich, Stratford and London. The average journey time between Clacton-on-Sea and London Liverpool Street is 1 hour 26 minutes. During 2014-2015 Abellio Greater Anglia invested £1.5 million to improve performance and service consistency across the network, £10,000 for customer-focussed service improvements and £300,000 to repair and upgrade rolling stock. A £170 million line upgrade programme was expected to be completed in 2015.

There are numerous bus routes throughout the District including frequent inter-urban routes linking villages to the larger urban areas of the District and the large town of Colchester in the adjoining borough. The dispersed geography of the District means that these services are stretched and causes a reliance on the use of private cars. One of the challenges to future development in Tendring is to minimise the dominance of the car as a main mode of travel.

Whilst rail services have received significant upgrades in the recent years, the same cannot be said for the District's bus network. With an increase in population, many of whom will be older people who may choose not to drive; the pressure on public transport (especially buses) will only increase. Moreover, with the relatively low number of people who work from home and the relatively high number of people who drive, the District is clearly a car-centric place to work. There is scope therefore for more sustainable modes of transport within the District. This can be helped by the planning system that can incentivise working from home, public transport and development located close to transport interchanges.



Colchester is connected to a comprehensive network of major roads via the A12 and A120, which provide routes to London, the M25, Harlow and Cambridge. Four sections of the A12 around Colchester fall into the top ten busiest sections on the A12 route. The Borough also lies in close proximity to the major seaports of Harwich (20 miles) and Stansted airport (30 miles). This strategic position has meant the area has been a magnet for growth resulting in a healthy and vibrant economy.

Transportation provision in the Borough includes six railway stations; bus routes operated by ten bus companies; and several cycle trails. One of the biggest challenges to Colchester's future development is traffic growth and the dominance of the car as the main mode of travel.

The results of the Colchester Travel Diary survey (July 2007) found that the largest proportion of trips (55%) in the AM peak (0600-0900) are journeys to the workplace, followed by journeys to school (11%), the remainder of journeys are to shops / local services, leisure services and for business. Analysis of survey results also determined that 67% of these journeys to workplace in the AM peak originate from homes in urban areas and accordingly, could potentially be undertaken via public transport, walking or cycling instead. The findings from the workplace travel plan surveys from organisations along the A134 (as show in the table below) confirm the view that workplace journeys are likely to be a significant contributor to congestion along this corridor.

Table 42: Workplace Travel Plan survey findings

	Colchester Council (2012)	Colchester Hospital (2012)	Colchester Institute (2013)	Culver Square (2010)
Drive (alone)	47%	64%	61%	64%
Car share	11%	9%	12%	0%
Get dropped off	3%	2%	N/A	N/A
Walk	13%	11%	10%	22%
Cycle	6%	4%	5%	7%
Bus	11%	5%	4%	0%
Train	6%	2%	2%	0%
Motorcycle	1%	0%	2%	7%
Taxi	1%	0%	N/A	0%
Work from home	2%	1%	1%	N/A
Other	0%	2%	3%	N/A

Source: Colchester Workplace Travel Plan Survey



Whilst significant progress has been made by these organisations, these results indicate that there is scope and opportunity for encouraging more modal shift for the journey to work, as car use is still high and many of these are relatively short journeys that could be undertaken by walking, cycling, bus or car sharing. The distances that staff travel to work is highlighted in the Travel Plan for Culver Square and reveal that 72% of staff live less than 4 miles (or a 30 minute cycle ride) from the Shopping Centre.

The travel survey results for North Colchester businesses have also been examined to identify barriers to travelling by more sustainable modes. Many of these are commonly cited barriers such as childcare responsibilities, having too much to carry, the cost and frequency of buses, difficulty finding suitable car sharers and feeling unsafe when cycling. Two local reasons that are regularly given and are to be addressed in conjunction with bus operators is the cleanliness and poor level of customer service on the bus.

6.1 Modes and Flows of Travel

Table 43: Private vehicle ownership

	No car or van	1 car or van	2 cars or vans	3 cars or vans	4 or more cars or vans	Total cars or vans
Tendring	14,502 (23.4%)	28,147 (45.3%)	14,436 (23.2%)	3,624 (5.8%)	1,396 (2.2%)	74,212
Braintree	9,866 (16.2%)	24,586 (40.3%)	19,605 (32.1%)	4,898 (8.0%)	2,088 (3.4%)	87,944
Colchester	14,741 (20.6%)	31,386 (43.8%)	19,607 (27.4%)	4,277 (6.0%)	1,623 (2.3%)	90,741
East of England	449,358 (17.7%)	1,039,677 (41.1%)	703,968 (27.8%)	166,426 (6.6%)	63,606 (2.5%)	3,231,763
England	5,691,251 (25.8%)	9,301,776 (42.2%)	5,441,593 (24.7%)	1,203,865 (5.5%)	424,883 (1.9%)	25,696,833

Source: 2011 Census, ONS

Proportionately more households own 1 car or van within Tendring District at 45.3%, which is slightly higher than national and regional statistics. Colchester is also higher than the regional and national figures at 43.8% and Braintree has the lowest proportion of households owning 1 or more car at 40.3%.



Table 44: Travel to work methods for the residential population of Tendring District, Braintree District and Colchester Borough

	Tendring		Colchester		Braintree		East of England		Great Britain	
	Count	%	Count	%	Count	%	Count	%	Count	%
All People	97,050	100.00%	106,718	100.00%	128,562	100.00%	4,245,544	100.00%	38,881,374	100.00%
Works mainly at or from home	6,231	6.42%	8,511	7.98%	8,617	6.70%	161,428	3.80%	1,349,568	3.47%
Underground, metro, light rail or tram	104	0.11%	196	0.18%	174	0.14%	33,110	0.78%	1,027,625	2.64%
Train	2,726	2.81%	6,120	5.73%	6,424	5.00%	205,077	4.83%	1,343,684	3.46%
Bus, minibus or coach	1,250	1.29%	1,619	1.52%	4,824	3.75%	106,303	2.50%	1,886,539	4.85%
Taxi or minicab	284	0.29%	229	0.21%	260	0.20%	13,227	0.31%	131,465	0.34%
Driving a car or van	33,483	34.50%	45,715	42.84%	46,907	36.49%	1,757,121	41.39%	14,345,882	36.90%
Passenger in a car or van	2,915	3.00%	3,540	3.32%	4,123	3.21%	143,749	3.39%	1,264,553	3.25%



	Tendring		Colchester		Braintree		East of England		Great Britain	
	Count	%	Count	%	Count	%	Count	%	Count	%
Motorcycle, scooter or moped	416	0.43%	446	0.42%	683	0.53%	22,475	0.53%	206,550	0.53%
Bicycle	1,683	1.73%	1,070	1.00%	3,310	2.57%	100,651	2.37%	742,675	1.91%
On foot	5,483	5.65%	6,468	6.06%	9,898	7.70%	288,663	6.80%	2,701,453	6.95%
Other	282	0.29%	286	0.27%	367	0.29%	17,708	0.42%	162,727	0.42%
Not currently working	42,193	43.48%	32,518	30.47%	42,975	33.43%	1,396,032	32.88%	13,718,653	35.28%

Source: Census data 2011 from ONS (updated Jan 2013)



Tendring District has a lower proportion of residents driving to work by either car or van (34.50%) when compared to regional and national levels, although this is only slightly lower than the national statistics. This could be lower as a result of a much higher number of people not currently working in the District. There is also a lower usage of trains as a mode of transport within the District compared to the national trend as well as fewer residents cycling or traveling by underground or on a bus, minibus or coach. The proportion of residents who walk to work is comparatively similar to the regional and national levels.

By contrast, Braintree District has a higher proportion of residents travelling to work by car or van than the regional and national average (at 42.84%). However, there are a similarly higher proportion of commuters using trains to travel to work than the region and the nation. Fewer people cycle to work in Braintree than in Tendring, Colchester, the region and the nation, but more people walk than in Tendring.

A much lower proportion of the population of Colchester drive to work in a car or van than in Braintree and the region. This could be due to the fact that there are more employment opportunities within the Borough and so the distance necessary to travel for work is smaller. More people travel by train than in the region and the nation and more people use buses, minicabs or coaches than in the East of England. Sustainable transport methods are more common in Colchester than in Tendring, Braintree, the East of England or England as a whole, with 2.57% of residents cycling to work and 7.70% walking to work.

The baseline evidence suggests that the proportion of Tendring District's population with one car or van is higher than the national and county average and those residents that use rail for commuting is lower than average. The evidence also suggests that the proportion of residents that use other sustainable modes such as walking and cycling is lower than the national average. Whilst it is considered that the rural nature of the district may have a key role to play in encouraging this, it is important that with the evolution of the plan further consideration is given to how future growth may be delivered to facilitate uplift in sustainable travel.

Table 45: Travel to work flows in Tendring District

Local Authority (LA)	Travel in to Tendring from LA for work	Travel out of Tendring to LA for work	Net flow
Colchester	3,784	8,737	-4,953
Babergh	670	632	38
Ipswich	406	1,071	-665
Braintree	391	811	-420
Suffolk Coastal	178	445	-267
Uttlesford	153	254	-101
Chelmsford	116	672	-556
Mid Suffolk	109	193	-84



Local Authority (LA)	Travel in to Tendring from LA for work	Travel out of Tendring to LA for work	Net flow
Maldon	82	161	-79
St Edmundsbury	31	97	-66
Westminster, City of London	0	869	-869
Tower Hamlets	21	244	-223
Total	6,788	17,412	-10,624

Note: Total net flow does not equal net flow exactly due to only the major commuting locations being included.

Source: NOMIS, census data 2011

The District of Tendring was recorded in the 2011 National Census as having 6,788 workers travelling in for employment within the District, and 17,412 travelling outside of the District for work. The job count within the district is lower than the working age population, resulting in people travelling out of the District to work. It can be seen that only 67.6% (36,388) of Tendring residents in employment worked in the area, meaning that almost a quarter of all residents travelled to work outside the District. This also indicates that just under a quarter of all the jobs in the area are taken by people living elsewhere, and travelling in.

The major employment destination of Tendring residents outside the District was the Colchester, with 8,737 (50.2%) of Tendring District outflows travelling to that destination for work. The next most popular destinations for employment were the neighbouring areas of Ipswich with 1,071 commuters (6.2%) and Westminster, City of London with 869 (5.0%).

The largest flows of people travelling to the District to work come from Colchester (55.7% or 3,784), Babergh (9.9% or 670) and Ipswich (6.0% or 406).

Table 46: Travel to work flows in Braintree District

Local Authority (LA)	Travel in to Tendring from LA for work	Travel out of Tendring to LA for work	Net flow
Colchester	3,617	3,665	-48
Chelmsford	2,634	6,854	-4,220
Maldon	1,339	1,363	-24
Babergh	1,142	1,211	-69
Uttlesford	886	3,830	-2,944



Local Authority (LA)	Travel in to Tendring from LA for work	Travel out of Tendring to LA for work	Net flow
Tendring	811	391	420
St Edmundsbury	620	878	-258
Ipswich	447	249	198
Basildon	320	867	-547
Southend-on-Sea	221	204	17
Westminster, City of London	5	2,889	-2,884
Tower Hamlets	33	887	-854
Brentwood	170	596	-426
Total	15,240	31,765	-16,525

Note: Total net flow does not equal net flow exactly due to only the major commuting locations being included.

Source: NOMIS, census data 2011

The District of Braintree was recorded in the 2011 National Census as having 15,240 workers travelling in for employment within the District, and 31,765 travelling outside of the District for work. The job count within the district is lower than the working age population, resulting in people travelling out of the District to work. It can be seen that only 59.9% (47,535) of Braintree residents in employment worked in the area, meaning that over a third of all residents travelled to work outside the District. This also indicates that just under a fifth of all the jobs in the area are taken by people living elsewhere, and travelling in.

The major employment destination of Braintree residents outside the District was Chelmsford, with 6,854 (21.6%) of Braintree District outflows travelling to that destination for work. The next most popular destinations for employment were Uttlesford with 3,830 commuters (12.1%) and Colchester with 3,665 (11.5%).

The largest flows of people travelling to the District to work come from Colchester (23.7% or 3,617), Chelmsford (17.3% or 2,634) and Maldon (8.8% or 1,339).

**Table 47: Travel to work flows in Colchester Borough**

Local Authority (LA)	Travel in to Tendring from LA for work	Travel out of Tendring to LA for work	Net flow
Tendring	8,737	3,784	4,953
Braintree	3,665	3,617	48
Babergh	2,440	1,266	1,174
Ipswich	1,315	1,434	-119
Maldon	1,137	1,384	-247
Chelmsford	949	2,525	-1,576
Suffolk Coastal	538	437	101
Mid Suffolk	420	245	175
Uttlesford	235	483	-248
Basildon	203	468	-265
Westminster, City of London	6	2,724	-2,718
Tower Hamlets	32	759	-727
TOTAL	23,036	24,850	-1,814

Note: Total net flow does not equal net flow exactly due to only the major commuting locations being included.

Source: NOMIS, census data 2011

The Borough of Colchester was recorded in the 2011 National Census as having 23,036 workers travelling in for employment within the District, and 24,850 travelling outside of the Borough for work. The job count within the Borough is lower than the working age population, resulting in people travelling out of the Borough to work. It can be seen that 73.7% (24,850) of Colchester residents in employment worked in the area, meaning that just over a quarter of all residents travelled to work outside the Borough. This also indicates that just over a quarter of all the jobs in the area are taken by people living elsewhere, and travelling in.

The major employment destination of Colchester residents outside the Borough was Tendring, with 3,784 (15.2%) of Colchester Borough outflows travelling to that destination for work. The next most popular destinations for employment were Braintree with 3,617 commuters (14.6%) and Westminster, City of London with 2,724 (11.0%).



The largest flows of people travelling to the Borough to work come from Tendring (37.9% or 8,737), Braintree (15.9% or 3,665) and Babergh (10.6% or 2,440).

6.2 North Essex Garden Communities Movement and Access Study (2017)

This document evaluates the current infrastructure capability within the Section One Strategic Area and identifies where there is likely to be issues with the quantum of development proposed in the garden communities. The report focuses on three garden communities, namely West Tendring / Colchester Borders (up to 11,400 homes by 2047), West Tey / Braintree borders (up to 27,800 homes by 2047) and West Braintree / Uttlesford borders (up to 13,000 homes by 2047). The key findings and recommendations are outlined below.

West Braintree / Uttlesford Borders – Initial Phases

Active Modes

- Rayne Road and Flitch Way Do Minimum Cycle Improvements.
- Capture funding opportunities from Tarmac Quarry S106 for the Rayne area.

Public Transport

- Revenue support for strengthened bus services to primary and secondary schools (Great Dunmow, Rayne and Braintree), key economic nodes and rail stations is essential. A strengthened 133 bus service route in terms of frequency and capacity (including an express variant) to Braintree and Stansted with revenue support from the developer is recommended. It is important to recognise that Stansted is a major employer with other nearby emerging developments such as the Tri-Sail Business Park.
- Development of a modular transit hub that is well located in the south of the site to enable its use by regional coach services, where time diverted off the strategic road network is at a premium. This necessitates the provision of new slip roads early to provide all movements in the vicinity.
 - Consideration be given to an interim Park and Ride service to Stansted making use of car parking that could be shared at a later date with employment / retail / leisure land uses to boost demand for the public transport service and enhanced frequency. The intention would be to still provide that park and ride function in the future (although not necessarily in the exact same location).
- New A120/B1256 western junction with westbound on-slip limited to rapid transit and HGVs (for construction and quarry traffic) to provide a head start for public transport and provide a viable diversion for regional coach and express services to call at the site.

Highways

- New A120/B1256 western junction with eastbound off slips for all vehicles. The westbound on slip will be constructed with passive provision for all vehicle lanes to be provided at a defined trigger in the post Plan Period (or as an alternative to the delivery of the Interim A120/B1256 Eastern Junction improvement).



- Quarry Planning Application – potential to future proof its junction access and its potential re-use post excavation and restoration?
- Improvements to B1256 / Blake End Junction (roundabout).

West Braintree / Uttlesford Borders – Local Plan Period

Local Plan Period (up to 2500 Homes)

- Travel demand demonstrates both the importance of achieving the ambitious mode share and also successfully internalising trips into the development, by providing as many services that people need locally (e.g. education, health).
- 700 two way trips at the south of the site by car with ambitious mode share achieved vs 1,275 two-way trips as per travel behaviours akin to the 2011 Census.

Active Modes

- ‘Flagship’ cycle routes following busway infrastructure throughout the site supported by a network of ‘quietways’ to cater for all journey types and confidence levels. • Quietways along Queenborough Lane and Shalford Road.
- Further expansion of greenway links and targeted conversion of public rights of way (PROW) to routes for all active modes.

Public Transport

- Proactive delivery of new express services to Chelmsford and Colchester and regional services to Cambridge.
- Busway infrastructure incrementally built out within the site to provide a coherent and operable network, with dedicated rapid transit/cycle only link to connect with new development in NW Braintree at Springwood Drive and Panfield Lane.
- Build on opportunities presented by the A120 Braintree-A12 improvement through express limited stop services on old A120 to West Tey and Colchester and also examine opportunities associated with tie-in of the new road to the existing A120 in the vicinity of Braintree Freeport and the resulting connections to Freeport station or a repurposed Braintree-Witham line for guided bus.
- Services running on to a Braintree – Witham Guided Bus Link at Freeport would provide residents and businesses with choice of services to London via Witham and Stansted (subject to business case and other funding streams).
- If the rail service is retained with enhanced frequency then both Freeport and Stansted will provide the opportunity for interchange to rail services as well as other journey purposes.

Highways

- Interim A120/B1256 eastern junction upgrade and provision of rapid transit lanes and priority measures on the B1256.



West Braintree / Uttlesford Borders – Post Plan Period

Public Transport & Highways

- The vehicular travel demand (1,600 two way trips in the peak hour at the south of the site) associated even with the ambitious mode share and internalisation of trips requires significant highway infrastructure for 8000 homes. In such scenarios measures to spread the traffic for east and west trips on to the A120 will be effective with two junctions for vehicular traffic.
- Delivery of full A120/B1256 Eastern junction scheme with Eastern Access Boulevard with dedicated rapid transit lanes and all vehicles lanes. It is assumed that this full upgrade is not possible until the quarry is exhausted adjacent to the junction and provided for restoration. It is recommended that the rapid transit lanes are provided at the outset for the Eastern Boulevard with the additional vehicle lanes provided at a defined trigger point to be monitored. This will help to reinforce the use of public transport services for external journeys.

West Tey / Braintree Borders - Initial Phases and Local Plan Period

Initial early phases

- One option that should be considered is whether a western distributor road, referred to in David Lock Associates' December 2016 Concept Framework as a single carriageway 'Parkway' could be delivered alongside the A12 widening to link the old A12 (if an off line option is chosen) or a new local road alignment (if an online option is chosen) to the A120 east of Coggeshall to provide an interim relief of Marks Tey. Crucially this would need to be designed to fulfil its future Parkway function with the full understanding that a final A120 scheme will be delivered in the near term. Its purpose is to provide the opportunity to unlock housing a few years earlier in the Local Plan Period than would otherwise be the case.
- It is recommended that a second lane in each direction is grassed over and provided upon reaching a defined trigger point following the Local Plan Period.

Strategic Highways and opportunities – Local Plan Period

- A12 widening, the provision of a Parkway distributor road and then the full A120 Braintree to A12 scheme will help to unlock the potential of the development. The task is to capitalise on the capacity unlocked to encourage the use of active modes and public transport before it is otherwise swallowed up by local vehicular traffic.
- An offline A12 option provides the opportunity should be taken to convert the existing A12 alignment to a boulevard function through the Garden Community with one carriageway repurposed for rapid transit and active modes.
- Should an online A12 option be pursued then a similar local distributor route function should be provided. The intention is that the Parkway connects to either the old A12 alignment or the new local road, with onward connections to a new all movements junction with the A12 at a location to be defined in conjunction with Highways England. This could include a location to the south of Marks Tey to also meet development aspirations in the Kelvedon area.



West Tey / Braintree Borders - Local Plan Period

Public Realm, Active Modes and Public Transport

- Marks Tey station will still be the main station for the Garden Community in the majority of if not all of the Local Plan Period. Hence improved connections by active modes to Church Lane and London Road from the existing Marks Tey community and development in this area will help unlock access to the station.
- Repurposing the existing Marks Tey Interchange with improved public realm and connectivity by active modes and public transport is integral to this goal. At the same time the opportunity should be taken to reconfigure slip roads for rapid transit / local traffic only.
- Active support and encouragement of use of enhanced train services from Marks Tey in collaboration with Network Rail and Greater Anglia including the Gainsborough Line and its extension to Colchester and potentially to Tendring will help to make rail an attractive option for journeys to Colchester as well as longer distance locations.
- Express rapid transit services to Colchester via the A12 and Cymbeline Way; and via Stanway and the B1022 Shrub End Road will help to provide a strong basis for public transport to/from major origins and destinations in Colchester. These services will use bus/cycle only roads within the Garden Community which can be built out in a phased pattern. The provision of car parking at a defined stop could provide additional park and ride (to the Garden Community) demand to anchor the service.
- Provision of improved active mode links to the rural hinterland and Stanway / Colchester will be desirable from an early stage.

Local Highways

- Regardless of the future A120 alignment (which will be a strategic road for strategic journey purposes), a Parkway link helps remove traffic from the core of the site and provide the opportunity for it to be reconfigured for active and sustainable modes.
- Use of less direct distributor roads through the site so that Stane Street is preserved for use of direct public transport services.
- Peak period access control points enforced by Automatic Number Plate Recognition (ANPR) technology on Stane Street close to Marks Tey station for defined time periods to provide bus priority and remove traffic.

West Tey / Braintree Borders – Post Plan Period

Post Plan Period at a defined trigger (up to approximately 25500 homes)

- New West Tey Town Centre railway station delivered with at least a train every 15 minutes to/from London and Colchester.
- Full build out of the rapid transit network with links through to the West Tendring / Colchester Borders Garden Community. The precise mode (guided bus or tram-train) and routeing is to be determined through further work on the separate rapid transit commission.
- It is clear that further highway improvements would still be required as even with an ambitious mode share and a high degree of internalisation achieved a Parkway link from Stane Street to



the A12 would still receive 1,750 two way vehicle trips in the typical AM peak (0800-0900) at full build out in 2047. As suggested the Parkway should be constructed as a single carriageway link with additional all vehicle lanes grassed over. These would be converted to vehicular use upon the meeting of a defined trigger point.

- Clear that the volume of vehicle traffic generated in a business as usual format would be highly unsustainable and will undo all the good work associated with the proposed Highways England schemes (6,500 vehicle trips would look to leave the Garden Community in an AM peak hour for full build out in 2047). In reality it could not be affordably accommodated and the scale of house building would reach a natural equilibrium long before.

West Tendring / Colchester Borders – Recommendations to date

Main Garden Community - Early Phases

- A120-A133 Link Road (initially provided as single carriageway but with additional carriageway grassed over outside of the junctions) to cater for construction traffic and to provide some relief of the A133 into Colchester.
- A133 Boulevard and cycle route build out linked to the provision of development in this area to provide a transformative public realm and environment for active modes and public transport prioritisation.
- Early phases of rapid transit priority measures, such as links between Elmstead Road and Greenstead Road for rapid transit
- Enhanced cycle links to Central Colchester.
- Potential provision of an eastern Park and Ride from an interim location by building a car park that can be repurposed for a future use as the town centre is built out and the Park and Ride relocated or another provided in the NE of the site. This could help to anchor demand for a high quality frequent rapid transit service from the early days of the new development.

Local Plan Period (By 2500 Homes)

- Gradual Build out of rapid transit network infrastructure within the site and into Central Colchester.
- Delivery of Salary Brook Trail Upgrade and connections to Welshwood Park for access to schools and leisure in North Colchester.

Garden Village

- Link from Bromley Road to the A120-A133 Link Road junction (south of the A120) to remove internal car movements from within the site. Again a focus is on the 'long way round' for cars, while providing more suitable construction traffic access.
- Consideration of access control point for peak periods to limit access to Bromley Road for travel into Central Colchester from the Garden Community / Garden Village thereby supporting a 'monitor and manage' approach prior to potential upgrade of the A137 / Bromley Road junction.
- Providing a variation of the rapid transit service from Colchester via the University that terminates at the Garden Village, supplementing services that currently use Bromley Road to Tendring and Colchester.



Urban Extension

- There is a need for careful tie-ins to the highway network given presence of schools on St Johns Road, residential areas around Plains Farm Close.
- Our suggestion is a three segment development that has no through car route between all three (at peak periods at least through ANPR access control points), but with rapid transit and cycle accessibility at all times. This would help to spread the load on to the highway network, minimise expenditure on junction capacity enhancements and supports sustainable / active modes as the default mode of choice.
- Provision of a rapid transit loop service up either Ipswich Road (or even Harwich Road) to serve the site and the neighbouring Betts Factory development site.
- Upgrades to existing PROW and greenway opportunities provides the opportunity for a continuous largely off road link between the Ipswich Road (connecting with existing and planned cycle routes), the University via Salary Brook, Garden Village and Garden Community.

Source: North Essex Garden Communities Movement and Access Study (2017)

North Essex Garden Communities Trip Generation

The North Essex Garden Communities provides projections for the likely volume of trips generated by the garden communities proposed development during peak travel times. This information is summarised in the below tables.

Table 48: External vehicle trips per site (AM peak: 0800-0900)

Development Site	Scenario	AM peak departures	PM peak arrivals*
West Braintree / Uttlesford Borders	Local Plan – 2,500 homes (Ambitious), 2032	481	294
	Local Plan – 2,500 homes (Census), 2032	854	532
	Full – 8,000 homes (Ambitious), 2047	1145	700
	Full – 8,000 homes (Census), 2047	2026	1263
Development Site	Scenario	AM peak departures	PM peak arrivals*
West Tey / Braintree Borders	Local Plan – 2,500 homes (Ambitious), 2032	417	145
	Local Plan – 2,500 homes (Census), 2032	756	265
	Full – 25,500 homes (Ambitious), 2047	3616	1436



Development Site	Scenario	AM peak departures	PM peak arrivals*
	Full – 25,500 homes (Census), 2047	6494	2630
Development Site	Scenario	AM peak departures	PM peak arrivals*
West Tendring / Colchester Borders	Local Plan – 2,500 homes (Ambitious), 2032	397	175
	Local Plan – 2,500 homes (Census), 2032	635	293
	Full – 10,700 homes (Ambitious), 2047	1444	605
	Full – 10,700 homes (Census), 2047	2261	996

* Excludes external demand (arrivals) for mixed use and education (to be determined during masterplanning).

Source: North Essex Garden Communities – Movement and Access Study (March 2017)

Table 49: External vehicle trips per site (PM peak: 1700-1800)

Development Site	Scenario	AM peak departures	PM peak arrivals*
West Braintree / Uttlesford Borders	Local Plan – 2,500 homes (Ambitious), 2032	330	318
	Local Plan – 2,500 homes (Census), 2032	582	576
	Full – 8,000 homes (Ambitious), 2047	843	864
	Full – 8,000 homes (Census), 2047	1490	1556
Development Site	Scenario	AM peak departures	PM peak arrivals*
West Tey / Braintree Borders	Local Plan – 2,500 homes (Ambitious), 2032	199	300
	Local Plan – 2,500 homes (Census), 2032	356	536
	Full – 25,500 homes (Ambitious), 2047	1696	2637



Development Site	Scenario	AM peak departures	PM peak arrivals*
	Full – 25,500 homes (Census), 2047	3027	4704
Development Site	Scenario	AM peak departures	PM peak arrivals*
West Tendring / Colchester Borders	Local Plan – 2,500 homes (Ambitious), 2032	198	263
	Local Plan – 2,500 homes (Census), 2032	349	465
	Full – 10,700 homes (Ambitious), 2047	698	973
	Full – 10,700 homes (Census), 2047	1233	1721

* Excludes external demand (arrivals) for mixed use and education (to be determined during masterplanning).

Source: North Essex Garden Communities – Movement and Access Study (March 2017)



7. Cultural Heritage

Braintree District is an area of undulating countryside, bordered by the River Stour valley to the north. The area is also drained by the upper reaches of the River Colne and the River Pant/Blackwater, as well as many smaller streams and tributaries creating a landscape of gentle slopes and small valleys. The historic features of this landscape and of the urban areas described below are potentially sensitive to development.

The urban areas of the District comprise Braintree, Witham, Kelvedon, Coggeshall and Halstead, all of which were medieval market towns, some having their origins in Roman times. The rural settlement pattern was historically very dispersed, comprising church/hall complexes, manors, farms, moated sites and small hamlets strung out along extensive network of linear and triangular greens, the latter located at road junctions. Post-1950s boundary loss varies widely.

The River Stour and River Colne valley bottoms are characterised by extensive meadows or meadow pasture. The higher ground between them is characterised by a complex mix of pre-18th century irregular fields of probable medieval origin or older and common arable fields enclosed by agreement largely before the mid-19th century. The Upper Pant/Blackwater valley, and the area to the southwest of Braintree town, are characterised by pre-18th century irregular fields. The Coggeshall area is complex, comprising a mix of pre-18th century irregular fields and pre-18th century co-axial fields. The southern part of the District has a more complex fieldscape with a mixture of irregular and regular fields, including some co-axial fields, and enclosed heathlands and commons. The area around Gosfield is notable for its Ancient Woodland and a number of large landscaped parks, some of which are medieval in origin, including Gosfield Hall, Gosfield Place and Marks Hall Park.

Tendring contains 9 Protected Lanes, preserved for their historic indication of ancient road patterns in the District.

The historic centres of Harwich, Manningtree, Mistley and St Osyth contain many impressive and unique historic buildings and monuments examples of which include the St Osyth Priory Gatehouse (Scheduled Monument, Grade 1 Listed building) an important example of a monastic building of the Augustinian order whose façade is one of the best preserved examples of knapped flint and stone flushwork to be found in East Anglia. The impressive 18th Century Mistley Towers (Scheduled Monument Grade 1 Listed building), the remains of a church designed by Robert Adam and The Harwich Redoubt (Scheduled Monument Grade II* Listed building) a circular fort which supported 10 gun embrasures, completed in 1810 to defend the harbour against invasion during the Napoleonic War. These are just a few examples of the heritage assets within the District. Within these historic centres there is a greater likelihood of archaeological remains due to their complex history and development of their communities over many centuries. These centres are sensitive to development in much the same way as is the ecology of an environmentally important area.

The Council realises the importance of the conservation, management and enhancement of the historic environment and its integration into development within Tendring District for the enjoyment of future generations.

Colchester has a rich and diverse heritage. As Camulodonum, it was the first capital of England and it is also Britain's oldest recorded town; recorded by Pliny the Elder in AD77. The Borough has a rich archaeological and cultural heritage, dating back to at least 4000BC.



7.1 Recorded Archaeological Sites and Finds in Tendring, Braintree and Colchester

The Essex Historic Environment Record (EHER) contains approximately 3,459 archaeological records relating to Braintree District out of a total of 24,699 for the County. There is evidence for prehistoric activity in and around Braintree, including a Late Iron Age ditched enclosure containing roundhouses on the site of the later Roman town. A second bank and ditch is known to have run along the southern side of the Coggeshall and Cressing Roads. It has been suggested that this feature is an Iron Age oppidum enclosing an area of about 50 ha on the northern slope of the Brain valley (Drury, 1976), however this has not been proven.

The Roman Small Town appears to have been confined within a triangular area between the main Roman roads of Stane Street (Rayne Road) and the Sudbury-Chelmsford route (London Road). Within the area of the Roman town there appears to have been two phases of development. The first century town was concentrated in the area of the modern Pierrefitte Way, and there is some suggestion of deliberate planning in the initial layout of the town with the minor roads and major boundary ditches running at right-angles to London Road, forming blocks approximately 145 m apart. In the second and third centuries the town expanded into the Rayne Road and George Yard area, and there appear to have been a second phase of road building, which cut across the original layout. The cemetery was located on the western edge of the built-up area.

There is evidence that there was a Saxon settlement in Braintree, but there is nothing to suggest that it was ever urban in nature. Occupation remains have been recovered from the area to the south-west of St Michael's Church, and the church itself may have had a Saxon predecessor. In the later Saxon period the Braintree area formed part of the estates of a Saxon thegn, Aetheric, who willed his Braintree lands to the Bishops of London in 991. The Bishops of London's estate at Braintree was probably administered from Chapel Hill, where their manor house was certainly sited in the medieval period.

The early settlement focus for Braintree was probably located in the area of St Michael's Church, with a second focus around the Bishop's manor house and St John's Chapel at Chapel Hill. It has been postulated that St John's Chapel was the original parish church for Braintree, and St Michael's was a subsidiary chapel, the roles being reversed at the beginning of the thirteenth century when the 'new town' was created. In 1199 a grant was made to the Bishop of London of a weekly market and annual fair. As a consequence of this grant he founded a 'new town' at Braintree on Episcopal estate land, on the eastern side of the main road junction. In the fourteenth and fifteenth centuries Braintree became an important cloth centre.

Braintree was still an important cloth town at the beginning of the post-medieval period, specialising in the manufacture of bays and says. However, the woollen cloth industry went into terminal decline in the eighteenth century, and the nineteenth century saw the rise of the silk industry, the principal firms of which were Courtauld and Walters. The importance of the market and the retail trade also continued to grow. In addition the first half of the twentieth century was dominated by the growth of metal manufacturing firms, notably Crittalls. In 1939 the parishes of Bocking and Braintree were united to form a single Urban District.

Archaeological deposits across Tendring, Braintree and Colchester range in date from the Palaeolithic, through to structures related to the Cold War. However, it should also be remembered that the EHER records represent only the known deposits with many new sites being identified each year.



Archaeological sites (and their setting) constitute a finite, non-renewable resource which is vulnerable to damage. There is a need for updated Historic Characterisation Studies within the Districts and Borough to provide a more accurate description of the archaeological deposits in order to better understand the vulnerability of the historic environment.

7.2 Listed Buildings

Table 50: Listed Buildings

Types of Listed Building	Tendring	Braintree	Colchester
Grade I	19	67	41
Grade II*	45	185	103
Grade II	905	2,945	1,419
Total	996	3,237	1,608

Source: Historic England 2016

There are 996 designated listed buildings within Tendring District and the majority of them are grade II listed. This means they are nationally important and of special interest. 1.9% of all the listed buildings are considered to be of exceptional interest and internationally important (grade I) and 4.5% are classed as particularly important buildings of more than special interest (grade II*).

Braintree has the highest number of listed buildings of the 3 Districts, with 3,237. The large majority of these listed buildings are grade II. This means they are nationally important and of special interest. 2.1% of all the listed buildings are considered to be of exceptional interest and internationally important (grade I) and 5.7% are classed as particularly important buildings of more than special interest (grade II*).

Colchester has a total number of 1,608 listed buildings. The large majority of these listed buildings are grade II. This means they are nationally important and of special interest. 2.5% of all the listed buildings are considered to be of exceptional interest and internationally important (grade I) and 6.4% are classed as particularly important buildings of more than special interest (grade II*).

According to the Heritage at Risk Register (2016), there are 15 assets listed as being at risk in Tendring. This consists of 7 scheduled monuments, 4 listed buildings and 4 conservation areas. Of the 4 listed buildings, Naze Tower is currently progressing through a repair scheme, Spring Valley Mill is in slow decay with no solution agreed and the Church of St George and the Church of St Michael are in very bad and poor conditions respectively. Both churches are at immediate risk of further rapid deterioration or loss of fabric with no solution agreed.

The 7 scheduled monuments are:

- Crop mark site south of Ardleigh, Ardleigh (archaeology)
- Beacon Hill Fort: a late 19th and 20th century coastal; artillery fortification, Harwich (archaeology)



- Martello Tower “K”, Kirby Road, Walton on the Naze, Frinton and Walton.
- Martello Tower “D”, 450 metres south-south-west of Clubhouse, Clacton Golf Course, Clacton on Sea
- Martello Tower “E”, 300 metres south west of junction of Marine Parade West and Wash Lane, Clacton on Sea
- Beacon Hill Fort, Harwich
- St Osyth's Priory, St. Osyth

The 4 listed buildings at immediate risk or vulnerable of becoming so are:

- Church of St Michael, The Street, Frinton and Walton
- Church of St George, Badley Hall Road, Great Bromley
- Spring Valley Mill, Spring Valley Lane, Ardleigh
- Naze Tower, the Naze, Frinton and Walton

The 4 Conservation Areas at risk are:

- Clacton Seafront, Clacton-on-Sea
- Dovercourt, Harwich
- St Osyth, St. Osyth
- Thorpe-le-Soken Station and Maltings, Thorpe-le-Soken

There are 7 assets listed as being at risk in Braintree. This consists of 3 scheduled monuments, 2 listed places of worship and 2 conservation areas. The 2 listed places of worship, Parish Church of All Saints, The Street and Parish Church, Hall Road are currently both progressing through a repair scheme after being categorised as in very bad condition.

The 3 scheduled monuments are:

- Long mortuary enclosure and round barrow 160m south west of Frame Farm
- Roman villa 480m south east of Hill Farm
- Circular cropmark at Ferriers Farm, 190m south-west of Hill Farm

The 2 listed places of worship at immediate risk or vulnerable of becoming so are:

- Parish Church of All Saints, the Street
- Parish Church (Dedication Unknown), Hall Road

The 2 conservation areas at immediate risk or vulnerable of becoming so are:

- Sible Hedingham South (Swan Street)
- Silver End

There are 10 assets listed as being at risk in Colchester. This consists of 4 scheduled monuments, 2 listed places of worship, 1 listed building and 3 conservation areas. The 2 listed places of worship, Church of St Botolph, St Botolph's Street and Church of St Peter, north Hill are currently both categorised as in poor condition and are in slow decay with no solution agreed. The listed building, Municipal Water Tower (Jumbo), Balkerne Passage, is also in poor condition and in slow decay with no



solution agreed.

The 4 scheduled monuments are:

- Small multivallate hillfort known as Pitchbury Ramparts
- Remains of St Mary the Virgin's Church
- Roman villa 450m south of Warren's Farm
- Remains of St Mary's Church

The 2 listed places of worship at immediate risk or vulnerable of becoming so are:

- Church of St Botolph, St Botolph's Street
- Church of St Peter, north Hill

The listed building at immediate risk or vulnerable of becoming so are:

- Municipal Water Tower (Jumbo), Balkerne Passage

Source: Historic England 2016

7.3 Scheduled Monuments

Colchester Borough boasts 52 Scheduled Monuments, which is the highest number when compared with Braintree and Tendring. Braintree District contains 40 Scheduled Monuments and Tendring District benefits from 27 Scheduled Monuments which include above and below ground features.

7.4 Historic Parks and Gardens

There are 3 registered parks and gardens within Tendring District which have each been designated by English Heritage as being "a park or garden of special historic interest". They are:

- St Osyth's Priory (Grade II) - Late-C19/early-C20 gardens, laid out within C16 garden walls beside medieval buildings, set within a park which retains possible monastic fish ponds, developed as a whole in the C18, with C19 reworking. The c.76ha site is bounded by a farm track and agricultural land to the north, by the main road from Colchester to the east, and by the road known as The Bury and the village green to the south.
- Thorpe Hall (Grade II) - Early C20 shrub and water gardens developed by the owner, Lady Byng, from 1913 onwards. Thorpe Hall lies on the south side of the village of Thorpe-le-Soken which is situated c 16km to the east of Colchester and c 5km to the west of the Essex coast at Walton-on-the-Naze. The c 12ha site is bounded to the west by Station Road, to the south by a public footpath bordering arable land, to the east by farmland and Hall Lane, and to the north by the gardens of houses running along Abbey Street. The relatively flat land is set on the edge of the village in a busy rural part of the county.
- Clacton Seafront Garden (Grade II) - Seafront gardens laid out to a design by the County Surveyor, Daniel Bowe, in 1921. The Seafront Gardens at Clacton are located in the centre of the resort, on the south-west side of the Pier, with fine views out to sea. The long, thin, c 0.5ha level site is bounded to the north-west by Marine Parade West, to the north-east by Pier Gap (a



short drive linking Marine Parade to the Pier), and to the south-east by a narrow band of cliffs leading down to Kings Parade, a pedestrian promenade running along the beach. At the south-west end of the gardens, the land between Kings Parade and Marine Parade West is laid to grass banks, partially planted in a naturalistic fashion.

There are 8 registered parks and gardens within Braintree District which have each been designated by English Heritage as being “a park or garden of special historic interest”. They are:

- Hatfield Priory
- Spains Hall
- Gosfield Hall
- Faulkbourne Hall
- Saling Hall
- Belchamp Hall
- Saling Grove
- Terling Place

There are 4 registered parks and gardens within Colchester Borough which have each been designated by English Heritage as being “a park or garden of special historic interest”. They are:

- Layer Marney Tower
- Colchester Castle Park
- Wivenhoe Park
- Severalls Hospital

Source: Historic England 2016

7.5 Conservation Areas

Braintree has the most conservation areas compared with the 3 Districts with 39. Both Tendring and Colchester have 22 conservation areas which are defined as historical settlements and buildings having 'special architectural or historical interest, the character of which is desirable to preserve or enhance'. The objective of the Conservation Area designation is to ensure that the character of the defined area is protected from developments which do not preserve or enhance its character. The names of all the conservation areas are listed in the table below.

Table 51: Conservation Areas

	Tendring	Braintree	Colchester
1	Ardleigh	Ashen	Birch
2	Bradfield	Belchamp Otten	Boxted
3	Brightlingsea	Belchamp St. Paul	Chappel
4	Brightlingsea Hall and All Saints Church	Belchamp Walter	Colchester – Abbey Field
5	Clacton Sea Front	Birdbrook	Colchester – Distillery Pond
6	Dovercourt	Braintree Town Centre and Bradford Street (2)	Colchester – Hythe
7	Frinton-on-Sea	Bocking Church Street	Colchester – Lexden Road, The Avenue
8	Frinton Park	Bulmer	Colchester – Lexden Village
9	Great Bentley	Bures Hamlet	Colchester – North Hill, East Hill, St Johns Green
10	Great Clacton	Castle Hedingham	Colchester New Town
11	Great Holland	Coggeshall	Copford Green
12	Great Oakley	Cressing	Dedham



	Tendring	Braintree	Colchester
13	Harwich	Earls Colne	Fingringhoe
14	Kirby-le-Soken	Feering	Fordstreet
15	Lawford	Finchingfield	Great Tey
16	Manningtree and Mistley	Foxearth	Little Horkesley
17	Ramsey	Gosfield	Messing
18	St Osyth (replaced)	Great Bardfield	Rowhedge
19	Tendring Village	Great Saling	Stratford St Mary
20	Thorpe-le-Soken	Great Yeldham	West Mersea
21	Thorpe-le-Soken Station and Maltings	Halstead Town Centre	Wivenhoe
22	Walton	Helions Bumpstead	Wormingford
23		Kelvedon	
24		Pebmarsh	
25		Rayne	
26		Ridgewell	
27		Sible Hedingham	
28		Silver End	
29		Steeple Bumpstead	
30		Stisted	
31		Terling	



	Tendring	Braintree	Colchester
32		Toppesfield	
33		Wethersfield	
34		White Colne	
35		White Notley	
36		Witham Town Centre	
37		Chelmer & Blackwater	

Source: Historic England 2016



8. Biodiversity and Nature Conservation

Tendring District has large areas of unspoilt open countryside and a wealth of attractive natural and historic landscapes including areas of importance to nature conservation, particularly around its coast and estuaries. It also contains many buildings of historic and architectural importance, many of which are found in Conservation Areas. These assets are key to the District's attractiveness and its tourist economy but, at the same time, are sensitive to the development pressures stemming from new jobs and homes needed to meet local demands and address the social and economic issues facing the district.

The Naze at Walton, the most easterly peninsular in Essex, is a stunning and increasingly rare example of natural and wild coastline of geological and biological importance which benefits both visitors and wildlife alike. It is an important site for migrating and nesting birds including many rarities and the perfect place for an introduction to marine wildlife with harbour porpoises out to sea, grey seals in the backwaters and a whole host of species to be found on the beaches and in the mud pools. The 70 foot high cliffs, an internationally important Site of Special Scientific Interest, made up of London Clay, Red Crag and Thames sands contain many fossils, such as shark's teeth, shells and wood, which can frequently be found on the beaches. The Naze is rich in history and is dominated by the iconic Naze Tower, built in 1720 by Trinity House to mark the premonitory to shipping approaching Harwich Harbour. The Tower is now open to the public during the summer months and provides a gallery for the display of works by local artists and craftspeople and boasts a 360 degree view of the surrounding land and seascapes from its viewing platform.

Tendring District Council, in partnership with Essex Wildlife Trust, The Naze Protection Society and The Naze Tower, has set up a £1.2 million Naze Heritage Project to protect and help secure the future of the Naze. In 2011 the first phase of the Naze Heritage Project 'the Crag Walk', a 110 metre long viewing platform, was completed. This provides protection from coastal erosion and a stable educational and public access viewing platform from which the public can view the geology of the cliffs. The second phase of the Project, the Naze Education and Visitor Centre, will provide facilities for education, understanding of the natural environment and the ecological and historic importance of the Naze.

The countryside in Tendring District is one of its key assets both in terms of tourism and the living environment for our residents. The Council, working with the Essex Wildlife Trust, has identified over 100 Local Wildlife Sites (LoWS) in the Tendring District including meadowland, grasslands, churchyards and ancient woodlands. LoWS are areas of land with significant wildlife value which provide important wildlife refuges and a green infrastructure network and, although these sites are not protected by law, they are worthy of nature conservation and are protected by planning policy. During the Local Plan period, the Council will work with developers, the Essex Wildlife Trust and other partners to protect LoWS and to create new wildlife habitats as an integral part of new development and as stand-alone projects such as the recent tree planting scheme north of Elmstead Market.

In the north west of the District is the Dedham Vale Area of Outstanding Natural Beauty (AONB), designated for conservation due to its significant landscape value. Made famous by the paintings of Constable and Gainsborough, its traditional grasslands, wildflower meadows and hedgerows provide an opportunity for both residents and visitors to enjoy the peace and beauty of what are among some of England's most precious and vulnerable landscapes. Tendring is also home to the Stour, Orwell and Colne Estuaries and Hamford Water, SPA and RAMSAR sites, designated for the conservation and protection of the habitats of migratory and endangered birds, scarce plants and invertebrates and for the conservation of wetlands and are sites of national and international importance. The Council will work in



partnership with adjoining authorities to ensure the management of these sites and their protection from development which would harm or otherwise fail to protect their sensitive character and natural beauty.

Maintaining and enhancing the natural environment of the District is very important to the residents and communities of Tendring. All future developments will need to take account of current natural assets as well as continuing to protect and enhance them. One key consideration will be the preservation of countryside areas and strategic green gaps between settlements.

Whilst many of the ecologically important sites have protection under national and international law, the same cannot be said for the locally designated sites. It will be an important issue for the Council to consider how significant new development will be on these sensitive sites throughout the Plan period.

There are no international biodiversity designations (Special Areas of Conservation, Special Protection Areas or Ramsar sites) or Nature Improvement Areas (NIAs) in Braintree District. A HRA will be undertaken during the plan preparation process and its results used to inform the Braintree District SA.

There are four Sites of Special Scientific Interest (SSSIs) in Braintree District at Belcher's and Broadfield Woods; Bovingdon Hall Woods; Chalkney Wood; and Glemsford Pits. The condition of these SSSIs is generally favourable, with Belcher's and Broadfield Woods, Chalkney Wood, and Glemsford Pits assessed as 100% favourable and Bovingdon Hall Woods as 93.3% favourable. The 6.7% of Bovingdon Hall Woods assessed as being in 'unfavourable – no change' condition is due to inappropriate deer grazing/browsing rather than development pressure.

There are seven National Nature Reserves (NNRs) located in Essex; none of these are in Braintree District. Braintree District has a total of seven Local Nature Reserves (LNRs) at: Bocking Blackwater; Brickfields / Long Meadow, Earls Colne; Brockwell Meadows, Kelvedon; Colne Valley (dismantled Railway); Cuckoo Wood, Great Notley; Sandpits, Gosfield; Whetmead, Witham. There are three further LNRs located on the border between Essex and Suffolk; Rodbridge Picnic Site, Borley; The Railway Walks from Sudbury to Long Melford where the former railway crosses through Borley parish and the Haverhill Railway Walks on the border of Sturmer parish. All three are part of the Suffolk County Council LNR.

There are 251 Local Wildlife Sites (LWSs) scattered throughout Braintree District, with many concentrated in the centre of the District. There are no SSSIs designated for their geological diversity or any Local Geological Sites in the District.

The Dedham Vale AONB is partially within Colchester Borough, and covers the lower part of the Stour Valley on the Essex/Suffolk border. At its heart is an area known as Constable Country centred on the villages of East Bergholt, Flatford and Dedham which Constable painted two centuries ago. His scenes of a working landscape strongly influenced the designation of the area that has come to represent the epitome of lowland English countryside.

The AONB stands apart from other lowland river valleys because of its association with Constable and the assemblage of features he painted that can still be seen today. These features include a meandering river and its tributaries; gentle valley slopes with scattered woodlands; grazing and water meadows; sunken rural lanes; historic villages with imposing church towers and historic timber framed buildings; small fields enclosed by ancient hedgerows and a wealth of evidence of human settlement over millennia. Despite intrusions of human activity in the twentieth and twenty first centuries, the area retains a sense of tranquillity in terms of minimal noise, light and development intrusion.

Colchester has a rich biodiversity with many sites designated for their nature conservation interest. Much of the coastline is designated under international and European notifications including the Mid-Essex



Estuaries Special Area of Conservation, the Mid-Essex Special Protection Area, the Blackwater Estuary Special Protection Area and Abberton Reservoir Special Protection Area. The Special Area of Conservation and Special Protection Areas are notified under the Habitats Directive (92/43/EEC) and Birds Directive (79/409/ECC) respectively. They are also notified as Ramsar sites under the Ramsar Convention.

Abberton Reservoir is a large, shallow, freshwater storage reservoir approximately 6 miles south-west of Colchester. It is built in a long, shallow valley and is the largest freshwater body in Essex. It is one of the most important reservoirs in Britain for wintering wildfowl, with a key role as a roost for wildfowl and waders feeding in adjacent estuarine areas. The site is also important for winter feeding and autumn moulting of waterbirds. The margins of parts of the reservoir have well developed plant communities that provide important opportunities for feeding, nesting and shelter. Abberton Reservoir is important especially as an autumn arrival area for waterbirds that subsequently spend the winter elsewhere. Abberton Reservoir is a public water supply reservoir. Reduced water availability, and increased demand, in recent years has led to generally low water levels; greater numbers of waders therefore use the site, and as a result no decrease in wildfowl has been attributed to low water levels. Water entering the site has elevated nitrate levels, leading in most summers to algal blooms, but there is no evidence of impacts on wildlife. The Water Company has a consultative committee which addresses conservation issues at all its sites, and the Abberton Reservoir Committee (involving Essex Wildlife Trust and Natural England) addresses local issues.

The Blackwater Estuary is the largest estuary in Essex and is one of the largest estuarine complexes in East Anglia. Its mud-flats are fringed by saltmarsh on the upper shores, with shingle, shell banks and offshore islands a feature of the tidal flats. The surrounding terrestrial habitats; the sea wall, ancient grazing marsh and its associated fleet and ditch systems, plus semi improved grassland, are of high conservation interest. The diversity of estuarine habitats results in the sites being of importance for a wide range of overwintering waterbirds, including raptors, geese, ducks and waders. The site is also important in summer for breeding terns. Water based recreation and in particular jet skis are identified as one of the site's sensitivities. The main threat to the site is erosion of intertidal habitats due to a combination of sea level rise and isostatic forces operating on the land mass of Great Britain. The situation is worsened with increasing winter storm events, whilst the hard sea walls along this coastline are preventing the saltmarsh and intertidal areas from migrating inland. This situation is starting to be addressed by alternative flood defence techniques. A shoreline management plan has been prepared for the Essex coast which seeks to provide a blueprint for managing the coastline sustainably.

The Colne Estuary is located in the southern end of Colchester's coastal area. It is a comparatively short and branching estuary, with five tidal arms that flow into the main channel of the River Colne. The Colne Estuary encompasses a diversity of soft coastal habitats, dependent upon natural coastal processes. The vulnerability of these habitats is linked to changes in the physical environment: the intertidal zone is threatened by coastal squeeze and changes to the sediment budget, especially up drift of the site. Limited beach feeding is under way to alleviate the sediment problem. The site is vulnerable to recreational pressures which can lead to habitat damage (saltmarsh and sand dunes) and to disturbance of feeding and roosting waterfowl. Pressures for increased use and development of recreational facilities are being addressed through the planning system and under the provisions of the Habitat Regulations. Jet and water-skiing are largely contained by the Harbour Authorities. Most grazing marshes are managed under ESA/

Countryside Stewardship Agreements, but low water levels are of great concern, and low freshwater flows into the estuary, may be affecting bird numbers and/or distribution. This is being addressed through reviews of consents under the Habitats Regulations. Unregulated samphire harvesting is being



addressed by notifying all pickers of the legal implications of uprooting plants without the consent of landowners. To secure protection of the site, an Estuarine Management Plan is in preparation, which will work alongside the Essex Shoreline Management Plan and the emerging Marine Scheme of Management. The Environment Agency aim to reduce the nutrient enrichment arising from sewage and fertiliser run-off.

Following a review in 2008, 168 Local Wildlife sites have been designated in the Borough along with 10 local nature reserves. These are non-statutory nature conservation sites which along with the statutory sites play a key role in helping conserve the Borough's biodiversity.

8.1 Biodiversity Action Plan

The Essex Biodiversity Action Plan (EBAP) 2011 comprises of initiatives relating to 11 habitat types. These are:

- Arable Field Margins
- Hedgerows
- Traditional Orchards
- Lowland Dry Acid Grassland
- Lowland Meadows
- Lowland Heathland
- Ponds
- Floodplain and Coastal Grazing Marsh
- Lowland Raised Bog
- Reedbeds
- Coastal Salt Marsh

In addition to the above, wet woodlands are BAP habitats and will be taken into consideration alongside the listed BAP species and habitats in the SA/SEA of relevant policies and sites in the District's Local Plan.

Source: Essex Biodiversity Action Plan (EBAP) 2011

8.2 Designated Sites

There are 3 international designations in Tendring, with the Colne Estuary, Stour and Orwell Estuary and Hamford Water designated as Ramsar, Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Nationally designated sites include 1 National Nature Reserve (NNR) and 15 Sites of Special Scientific Interest (SSSIs). There are also 125 locally important nature conservation areas which are designated as Local Wildlife Sites (LoWSs). The largest LoWSs within the District are St. Osyth covering 91.3 ha and Lower Farm Marshes covering 61.2 ha.

There are no Ramsar sites, Special Protection Areas (SPAs) Special Areas of Conservation (SACs), or candidate Special Areas of Conservation (cSACs), in Braintree District.



In Colchester, the Blackwater Estuary, Colne Estuary and Abberton Reservoir are designated as Ramsar sites and Special Protection Areas (SPAs) with international protection.

The only NNR within Tendring District is the Colne Estuary, which is also a SSSI. Colne Estuary NNR is a 2,915.2 ha site, the main habitat of which is wetland. Situated within Colchester and Tendring Districts, the Colne Estuary is comparatively short and branching, with five tidal arms which flow into the main river channel. The estuary is of international importance for wintering Brent Geese and Black-tailed Godwit and of national importance for breeding Little Terns and five other species of wintering waders and wildfowl. The variety of habitats which include mudflat, saltmarsh, grazing marsh, sand and shingle spits, disused gravel pits and reed beds, support outstanding assemblages of invertebrates and plants. Two areas of foreshore at East Mersea are of geological importance. Colne Point and St. Osyth Marsh are of geomorphological interest. In Colchester, the Blackwater Estuary and Colne Estuary are designated as NNRs as well as SSSIs. Braintree District does not contain any NNRs.

In Tendring there are 15 SSSIs are:

- Ardleigh Gravel Pit
- Cattawade Marshes
- Clacton Cliffs & Foreshore
- Colne Estuary
- Hamford Water
- Harwich Foreshore
- Holland Haven Marshes
- Holland-On-Sea Cliff
- Little Oakley Channel Deposit
- Riddles Wood
- St. Osyth Pit
- Stour and Copperas Woods, Ramsey
- Stour Estuary
- The Naze
- Weeleyhall Wood

In Braintree there are 4 SSSIs:

- Belcher's & Broadfield Woods SSSI
- Bovingdon Hall Woods SSSI
- Chalkney Wood SSSI
- Glemsford Pits SSSI

In Colchester there are 8 SSSIs:

- Abberton Reservoir SSSI
- Blackwater Estuary SSSI



- Bullock Wood SSSI
- Colne Estuary SSSI
- Marks Tey Brickpit SSSI
- Roman River SSSI
- Tiptree Heath SSSI
- Upper Colne Marshes SSSI
- Wivenhoe Gravel Pit SSSI



Table 52: Condition of Sites of Special Scientific

Tendring SSSI	% Area meeting PSA target of favourable or unfavourable condition	Braintree SSSI	% Area meeting PSA target of favourable or unfavourable condition	Colchester SSSI	% Area meeting PSA target of favourable or unfavourable condition
Ardleigh Gravel Pit	100.00%	Belcher's and Broadfield Woods	100.00%	Abberton Reservoir	100.00%
Cattawade Marshes	100.00%	Bovingdon Hall Woods	93.30%	Blackwater Estuary	98.44%
Clacton Cliffs & Foreshore	100.00%	Chalkney Wood	100.00%	Bullock Wood	100.00%
Colne Estuary	99.82%	Glemsford Pits	100.00%	Colne Estuary	99.82%
Hamford Water	100.00%			Marks Tey Brickpit	100.00%
Harwich Foreshore	100.00%			Roman River	100.00%
Holland Haven Marshes	100.00%			Tiptree Heath	100.00%
Holland-On-Sea Cliff	100.00%			Upper Colne Marshes	100.00%
Little Oakley Channel Deposit	100.00%			Wivenhoe Gravel Pit	100.00%
Riddles Wood	100.00%				



Tendring SSSI	% Area meeting PSA target of favourable or unfavourable condition	Braintree SSSI	% Area meeting PSA target of favourable or unfavourable condition	Colchester SSSI	% Area meeting PSA target of favourable or unfavourable condition
St. Osyth Pit	100.00%				
Stour and Copperas Woods, Ramsey	100.00%				
Stour Estuary	98.01%				

Source: Data taken from Natural England, 2016



There is a Public Service Agreement (PSA) target of at least 95% of all nationally important wildlife sites being brought into favourable condition. All 15 SSSI sites in Tendring and all 8 sites in Colchester are meeting this target. 3 of the 4 SSSIs in Braintree are meeting the target, but Bovingdon Hall Woods is at 93.30% favourable or unfavourable recovering. The table above shows the breakdown of each SSSIs condition as of June 2016. Colne Estuary in Tendring and Colchester, Stour Estuary in Tendring, Bovingdon Hall in Braintree and Blackwater Estuary in Colchester are the only SSSIs and not meeting the PSA target for 100% of their area, however the area not in a favourable or favourable recovering condition is small.

In addition to designated sites, consideration should also be given to non-designated value in regards to ecology on a site-by-site basis in order to protect and enhance species and habitats, including those that are protected. This could include Greenfield sites and areas of habitat considered to enrich appreciably the habitat resource within the context of local areas, such as species-rich hedgerows, municipal parklands or individual veteran trees.

8.3 HRA Screening Report for North Essex Authorities Strategic Part 1 for Local Plans (2016) - LUC

The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010 and again in 2012. Therefore, when preparing the Local Plan, the North Essex Authorities (NEA) are required by law to carry out a Habitats Regulations Assessment, undertaken in this case by LUC on their behalf.

Summary of Braintree Section Two Local Plan HRA Screening Report

The Braintree Part 2 HRA Screening concluded that because there are no European sites within Braintree District it is not possible for the Braintree District Draft Local Plan to result in direct likely significant effects on European sites. However, it is possible for the Draft Local Plan to give rise to likely significant effects on European sites beyond the District boundary.

The HRA Screening considered all European sites within 20km of the District boundary, plus European sites beyond this boundary where a pathway for likely significant effects could exist. As a result, 15 European sites were included in the HRA Screening.

The HRA Screening focused on Part 2 of the Braintree District Draft Local Plan (i.e. it did not include an HRA of Part 1 North Essex Authorities Shared Strategic Plan, which is common to Braintree District, Colchester Borough, and Tendring District).

The HRA Screening found that the Braintree District Draft Local Plan Part 2 alone will not give to rise to likely significant effects on any European sites alone.

However, the HRA Screening found that there is the potential for likely significant effects in combination with the Part 1 North Essex Authorities Shared Strategic Plan, with respect to human disturbance of the network of Essex Estuarine Maritime Sites, comprising:

- Blackwater Estuary (Mid-Essex Coast Phase 4) SPA and Ramsar.
- Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar site.
- Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA and Ramsar site.



- Dengie (Mid-Essex Coast Phase 1) SPA and Ramsar site.
- Essex Estuaries SAC.

The key recommendation of the HRA Screening was to undertake an HRA Screening assessment of Part 1 North Essex Authorities Shared Strategic Plan, to consider the potential for likely significant effects on European sites, particularly the Essex Estuarine Maritime sites, either alone or in-combination with the Part 2 Local Plans for each of the three local authorities. The HRA

Screening recommended that an assessment of in-combination effects may need to extend to include other nearby local authorities, particularly Chelmsford City and Maldon District, but it may also need to be further extended to include Babergh District in Suffolk with respect to Hamford Water SPA and Ramsar site, and the Stour and Orwell Estuaries SPA and Ramsar site. Although likely significant effects with respect to these European sites from the Braintree District Draft Local Plan have been ruled out, the Part 1 North Essex Authorities Shared Strategic Plan includes Colchester Borough and Tendring District within which several European sites are located.

The Braintree HRA Screening has been reviewed by Natural England which provided comments regarding the methodology and also confirmed that they '*do not generally dispute the conclusions reached*'.

Summary of Colchester Section Two Local Plan HRA Screening Report

The Colchester Part 2 HRA Screening matrices conclude that the policies within the Part 2 Local Plan may result in likely significant effects on the Stour and Orwell Estuary SPA and Ramsar, the Colne Estuary SPA and Ramsar, Essex Estuaries SAC, and Blackwater Estuary SPA and Ramsar. Impacts which could not be ruled out were in respect of water quality and recreational disturbance. A summary of the likely significant effects is provided for each of the European sites below:

- Stour and Orwell Estuaries SPA and Ramsar – water quality issues associated with proposed dwellings at Dedham and Langham.
- Colne Estuary SPA and Ramsar – recreational pressures associated with proposed housing at Mersea Island, Mersea Caravan Park, and Wivenhoe.
- Essex Estuaries SAC – recreational pressures associated with proposed housing at Mersea Island, Mersea Caravan Park, and Wivenhoe.
- Blackwater Estuary SPA and Ramsar - recreational pressures associated with proposed housing at Mersea Island.

The HRA Screening is currently being reviewed by Natural England. It is understood that further discussions are taking place between NE and Colchester Borough Council regarding the distances used in applying Zones of Influence to European sites. In particular, visitor monitoring undertaken by Colchester Borough Council, on behalf of the NEAs has identified discrepancies relating to the distance travelled by visitors to the Stour and Orwell Estuaries SPA and Ramsar. This is discussed in more detail in the Screening Assessment in Chapter 4.

Summary of Tendring Section Two Local Plan HRA Screening Report

The Tendring Part 2 HRA Screening highlighted that a number of European sites lay within and surrounding the District. It concluded that it is possible for the Local Plan to give rise to likely significant



effects on European sites within and beyond the District boundary. The HRA considered all European sites within a 20km of the District boundary.

The HRA Screening found that the Tendring District Local Plan Part 2 has the potential to give rise to likely significant effects in relation to the loss of offsite functional habitat in respect of SPA birds, recreational pressures on the coastal sites, and water quantity and quality for the following European sites:

- Essex Estuaries SAC (water quality/quantity, recreation);
- Hamford Water SPA and Ramsar (recreation, loss of offsite habitat);
- Stour and Orwell Estuaries SPA and Ramsar (recreation, loss of offsite habitat);
- Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar (water quality/quantity, recreation, loss of offsite habitat);
- Abberton Reservoir SPA and Ramsar (loss of offsite habitat).

It was recommended that further assessment be undertaken at the Appropriate Assessment stage to determine whether the Part 2 Local Plan would result in adverse effects on the integrity of the European sites.

In addition to this, it was recommended that an HRA Screening assessment of Part 1 North Essex Authorities Shared Strategic Plan be undertaken, to consider the potential for likely significant effects on European sites either alone or in-combination with the Part 2 Local Plans for each of the three local authorities. The HRA Screening concluded that the assessment of in-combination effects may need to extend to include other nearby local authorities.

The Tendring Part 2 HRA Screening has been finalised and reached the conclusions summarised above, but is yet to be issued to, or reviewed by Natural England.

Appropriate Assessment (2017) - LUC

Loss of Offsite Habitat

The HRA's of the Braintree and Colchester Section 2 Local Plans concluded that their Plans would not result in the adverse effects on European Sites as a result of the loss of offsite habitat. The Tendring Section 2 Local Plan identified likely significant effects as a result of loss of offsite land for Abberton Reservoir SPA/Ramsar; Blackwater Estuary SPA/Ramsar; Hamford Water SPA/Ramsar; Stour and Orwell Estuaries SPA/Ramsar; and Colne Estuaries SPA and Ramsar.

The HRA of the Tendring Section 2 Local Plan included a detailed desk-based assessment of the site allocations which identified that the majority of site allocations were considered to have low or negligible potential to support significant numbers of SPA/Ramsar qualifying bird species, either alone or cumulatively with other allocations, and were therefore discounted from further consideration in terms of offsite functional land. However, the Tendring Colchester Borders Garden Community was identified as a strategic site allocation with potential to support lapwing and golden plover associated with the above European sites.

This allocation has factors which are likely to limit its potential importance for golden plover and lapwing, such as flight lines interrupted by urban settlements, distance from European sites, and the presence of edge features. As a result, the HRA of the Tendring Section 2 Local Plan indicated that no single allocation is, on its own, likely to be important in maintaining the integrity of the bird populations at the



Stour and Orwell SPA/Ramsar, Hamford Water SPA/Ramsar, Colne Estuary SPA/Ramsar, Blackwater Estuary SPA/Ramsar, and Abberton Reservoir SPA/Ramsar.

The HRA of the Tendring Section 2 Local Plan concluded that whilst the Tendring Colchester Borders Garden Community provides suitable offsite foraging habitat for golden plover and lapwing in the form of arable fields and short grazed pasture, in isolation the importance of such sites for these species is likely to be low when compared with the extensive areas of habitat of increased suitability both within the NEA's and the wider land areas surrounding these European sites, particularly given the influence of the limiting factors described above. As a result, the potential for the loss of offsite habitat to adversely affect these species related primarily to the cumulative effect of reducing the extent of feeding areas. The likelihood of this occurring was considered low given the quality of the habitat affected and the small amount of habitat affected as a proportion of that available around each of the European sites.

Nevertheless, despite the above, uncertainty remains under the precautionary principle as to whether the loss of the Tendring Colchester Borders Garden Community will, cumulatively with the loss of smaller non-strategic allocations adversely affect the integrity of the SPA/Ramsar sites in relation to golden plover and lapwing. Given the dependency of these species on offsite arable fields and grasslands, inclusion and implementation of appropriate safeguards and mitigation will be required in the Strategic Section 1 Local Plan to provide certainty that there will be no adverse effect on the integrity of the Stour and Orwell SPA/Ramsar, Hamford Water SPA/Ramsar, Colne Estuary SPA/Ramsar, Blackwater Estuary SPA/Ramsar, and Abberton Reservoir SPA/Ramsar. Mitigation requirements are described below.

In order to provide certainty that the loss of offsite functional habitat will not adversely affect the integrity of the above sites, the following safeguards are required for incorporation within the Section 1 Strategic Plan:

- Wintering bird surveys will be required for Tendring Colchester Borders Garden Community as part of any project level development proposals and masterplanning, to determine the sites individual importance for golden plover and lapwing and inform mitigation proposals.
- A commitment to mitigation and phasing of Tendring Colchester Borders Garden Community is required within the Section 1 Strategic Plan dependent on the findings of bird surveys. This will need to take into account the cumulative numbers of SPA birds affected as parcels of land come forward for development. In the unlikely but possible event that cumulative numbers of SPA birds affected are likely to exceed thresholds of significance (i.e. >1% of the associated European Site), appropriate mitigation in the form of habitat creation and management in perpetuity, either on-site or through provision of strategic sites for these species elsewhere, will be required. If required, mitigation will need to create and manage suitably located habitat which maximises feeding productivity for these SPA species, and such mitigatory habitat would need to be provided and fully functional prior to development which would affect significant numbers of SPA birds.

Recreation

Detailed and site specific management measures will be provided in the RAMS and would be specifically informed via the workshops and consultation described above. It is likely that key aspects of any RAMS will include, but is not limited to the following:

- Provision of physical barriers to movement (fencing, screening, planting and bird hides)
- Provision of wardening, whether part-time, permanent or seasonal.
- Provision of educational resources including promoting self-regulation.



- Education initiatives such as provision of interpretation boards and signage, leaflets, posters, and liaison with local schools and leisure operators.
- Provision of infrastructure to encourage activities to focus on specific areas. E.g. via path upgrades, provision of benches and signage etc.
- Clear route signage.
- Closure and rerouting of paths during sensitive periods.
- Promoting a code of conduct aimed at providers and participants of water based recreational.
- Habitat management and enhancement to provide locations for birds away from disturbance sources (e.g. high tide roosts).

As described above, to ensure that the RAMS continue to be based upon up-to-date information, regular monitoring will be required, with visitor and bird monitoring being required no less frequently than every 5 years. Bird surveys are regularly undertaken at each of the European sites as part of the BTO's WeBS Core Counts and Low Tide Counts and it is therefore predicted that such information will be available, but to ensure certainty, a commitment will be required by the Council that in the event that suitably up to date bird survey data is not available during each 5 year period, albeit unlikely, they will undertake equivalent survey work to inform the RAMS.

In summary, the implementation of recreation strategies is now a widely advocated means of mitigating impacts associated with recreation at European sites. As a result, there is a high degree of confidence in the appropriateness and likely effectiveness of such a measure. The production and implementation of RAMS which include a commitment to regular monitoring, and which have the flexibility to adapt to findings and pre-empt impacts before they affect integrity is considered likely to provide an effective form of mitigation and avoidance for recreational pressures arising from the Strategic Section 1 for Local Plans. As a result, providing that the North Essex Authorities continue to collaborate and prepare the necessary RAMS in line with the broad principles outlined above, and in close consultation with Natural England, and the RAMS are ready for implementation prior to adoption of the Section a and Section 2 Local Plans, the Strategic Section 1 Local Plans is not predicted to result in adverse effects on the integrity of the Stour and Orwell Estuaries SPA/Ramsar, Hamford Water SPA/Ramsar, Essex Estuaries SAC, Colne Estuary SPA/Ramsar, or Blackwater Estuary SPA/Ramsar, either alone or in-combination with other plans and projects as a result of recreation.

Water Quality & Quantity

In light of the findings of the Section 2 HRAs, it is concluded that, whilst there are currently issues regarding capacity of water recycling centres in both Colchester Borough and Tendring District, with subsequent risks to European sites associated with changes in water quality, the safeguards which will be included within the Section 2 Local Plans for each, will ensure that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water and Environment Agency advice. Therefore, in conclusion, the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.

Source: HRA Report for North Essex Authorities Strategic Section 1 for Local Plans Prepared by LUC (May 2017)



9. Landscapes

The rurality of the Strategic Area also means that there are large areas of open countryside, including protected natural and historic landscapes. Areas of importance for nature conservation are to be found particularly along the coast and river estuaries, while the villages and towns include many built heritage assets.

The District has large areas of unspoilt open countryside and a wealth of attractive natural and historic landscapes including areas of importance to nature conservation, particularly around its coast and estuaries.

In the north west of the District is the Dedham Vale Area of Outstanding Natural Beauty (AONB), designated for conservation due to its significant landscape value. Made famous by the paintings of Constable and Gainsborough, its traditional grasslands, wildflower meadows and hedgerows provide an opportunity for both residents and visitors to enjoy the peace and beauty of what are among some of England's most precious and vulnerable landscapes.

There is no Area of Outstanding Natural Beauty (AONB) in Braintree District but proposals are under consideration to extend Dedham Vale AONB westwards towards Sudbury, crossing over into the north east part of the District. This is being proposed by the Stour Valley Partnership and is supported by Essex County Council, Braintree and Colchester local authorities.

Braintree District is the subject of two Landscape Character Assessments; the Essex Landscape Character Assessment (2003) and the Combined Landscape Character Assessment (2006). The information contained within these can be used to determine the sensitivity of certain landscape areas to development.

The rural landscape of the Borough has a rich ecological character influenced by geology and landform. Habitats include woodland, grassland, heath, estuary, saltmarsh, mudflat and freshwater as well as open water habitats. Many sites are recognised for their value by international and national notifications, including the coastal and estuary areas in the south east and the Dedham Vale Area of Outstanding Natural Beauty in the north of the Borough.

9.1 Landscape Features

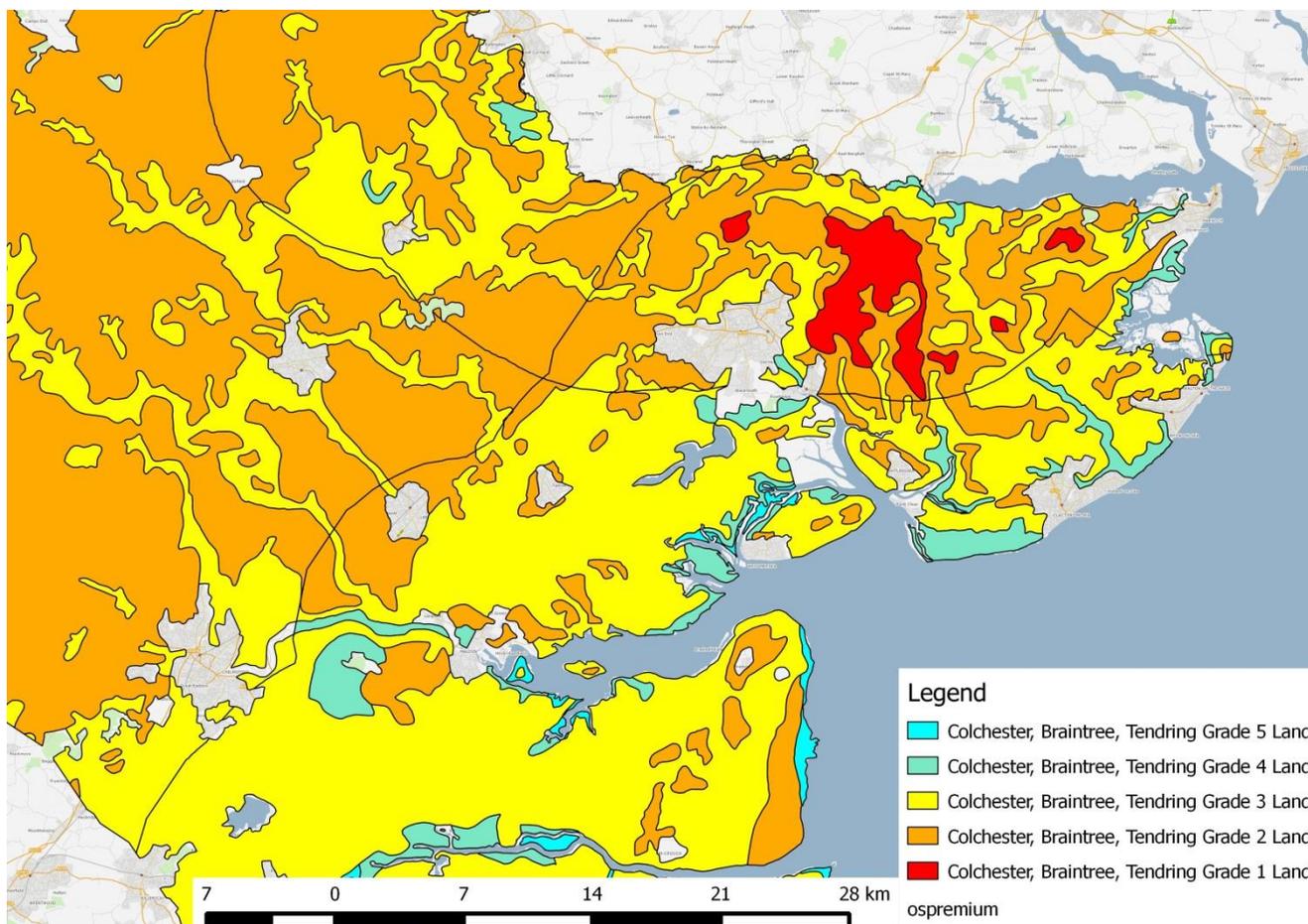
The Landscape Character Assessment for Tendring District identified 30 separate landscape character area types. There is a need for an updated Landscape Character Assessment. Braintree District is categorised into 22 landscape character area types according to the Landscape Character Assessment (2006). Colchester Borough Landscape Character Assessment identified 32 landscape character areas within the Borough.

Ancient Woodland

Tendring District is noted for its ancient broad-leaf woodland that occurs across a central belt within the District. Three of these woodlands are of national importance, and Stour and Copperas Woods SSSI together form, at 77ha, the largest area of broad leaf ancient woodland in north-east Essex.

9.2 Agricultural Land Classification

Figure 4: Agricultural Land Classification in Colchester, Braintree and Tendring District



Source: Place Services, (2016)

Brickearth is the basis of the rich agricultural land of Tendring District giving rise to the Tendring and Wix Soil Series, which are coterminous with the brickearth across the area and are the most extensive soil types in the District. The plateau is classified as Grade 1 or Grade 2 Agricultural Land due to its soils richness and fertility.

Much of soil on the plateau is of the Tendring Soil Series. The soil is usually deep and stoneless and drains reasonably well, although it can also contain sufficient water to avoid drought in most years. The land is agricultural grade 2 and 3.

The Tendring Soil Series is characterised by usually deep and stoneless loams which drain reasonably well, although it can also contain sufficient water to avoid drought in most years. The agricultural land is of the highest grade.

At the headwaters of the Holland brook the Windsor Soil Series are mapped. These are characterised by deep clayey soils mostly with brown subsoils formed upon London Clay. Their high clay content makes them difficult to work and prone to seasonal waterlogging and compaction under arable cropping and poaching under grassland. They are often woodland soils. These soils are often of poorer quality



agricultural land.

The majority of agricultural land in Braintree District is classified as Grade 2 or 3, with 65.8% (40,243 hectares) of agricultural land classified as Grade 2 and 29.9% (18,304 hectares) as Grade 3. Grade 1, 2 and 3a agricultural land is considered to represent the best and most versatile agricultural land (note the national agricultural land classification maps do not distinguish between grade 3a and 3b agricultural land, which can only be established through more detailed survey work).

The existence of large historical manufacturing industries in the Braintree District, has led to some degree of contamination of sites through associated industrial processes, or activities which are now defunct. Contamination of land can have adverse impacts on health and well-being as well as damaging wildlife and contributing to pollution of water bodies.

Tendring has a significant concentration of grade 1 and 2 agricultural land to the north west of the District on the border with Colchester Borough. The majority of the central party of the District is grade 3 land, with small areas of grade 2 running from south west to north east through the centre of Tendring. Coastal areas have lower quality land, with grade 4 land to the south around Colne Point and Holland-on-Sea and grade 4 and 5 land around Harwich and Dovercourt.

Grade 1 and 2 agricultural land is predominantly in the north east of Colchester Borough, with some areas of grade 2 land to the west and north west. Land to the south of the borough is lower quality, the majority of which is grade 3 with some areas of grade 4 and 5 along the banks of the river Colne and Abberton reservoir.

Braintree predominantly features grade 2 agricultural land across the majority of the District, with areas of grade 3 land throughout. Some more concentrations of grade 3 land are notable towards the north of the District. There is an area of poor quality grade 5 land to the east of Stisted and Braintree town.



10. Water Environment

10.1 Water Courses

The main water courses running through Braintree District are the Rivers Blackwater, Colne, Brain, Pant, Stour and Ter. Braintree District contains Source Protection Zones and major aquifers within the northern half of the District, together with scattered minor aquifers in the south of the District.

Following a national review of Catchment Abstraction Management Strategies (CAMS) boundaries, water resources in the South Essex CAMS (excluding the Mardyke catchment) are now incorporated with the North Essex CAMS into the Combined Essex CAMS. The Combined Essex CAMS document sets out the issues for the whole of Essex. The document splits the County into Water Resource Management Units (WRMU), of which two relate to areas which include watercourses within Braintree District. These are WRMU1 and WRMU2.

The integrated WRMU status for WRMU 1 was 'over-abstracted' and for WRMU 2 it was 'no water available' at February 2007. The Combined Essex CAMs Annual Update (March 2008) noted that the availability of water within the Roman River / Layer Brook catchment had changed, however the water availability and restrictions for the remainder of WRMU 1 had not changed since the publication of the CAMS in February 2007.

Essex falls within the Anglian River Basin District. The Anglian River Basin District is subdivided into catchment areas and the Essex Rivers catchment area lies within the counties of Essex and Suffolk, as well as a small part of Cambridgeshire. The Combined Essex catchment area is further subdivided into water body catchment areas. The water bodies which are associated with Braintree District are: R1, Doomsey Brook; R4, Ter; R16, River Chelmer; R23, Blackwater Pant; R91, Brain; R102, Boreham Tributary; and R115, River Blackwater. The majority of water bodies within Braintree District are given a 'moderate' current overall potential Water Framework Directive (WFD) status. However the River Blackwater and the River Chelmer are both given a 'poor' current WFD status.

The open character, nature conservation importance and recreational importance of the floodplains of the River Stour, Colne, Brain, Pent, Blackwater, Ter Valley and their tributaries and the Chelmer and Blackwater Navigation are potentially sensitive to inappropriate development close to these watercourses.

10.2 Water Quality

Tendring's potable drinking water comes from Ardleigh Reservoir. The reservoir covers 120 acres and, as well as providing the District drinking water, is also used for recreational activities including sailing and fishing and is home to the University of Essex Rowing Club. National daily domestic per capita water consumption, according to the WWF, is 150 litres. Nationally, we are expected to reduce the per capita consumption of water to 130 litres (or less) by 2030. In 2010 amendments to the Building Regulations required that new dwellings do not exceed a per capita consumption of water of more than 125 litres per day.

Climate change is leading to more frequent droughts with consequent reduced water availability which,



added to the relatively high amount of water consumed by residents within the District, could lead to water shortages. In terms of greenhouse gas emissions, the Council has, in the past few years, reduced its carbon dioxide emissions. However, the per capita emissions in the District have increased slightly in the same period.

All of the watercourses in Braintree District which could potentially receive an increase in discharge from the WwTW (Waste water Treatment Works) (the Rivers Brain, Colne and Pant/Blackwater) are classified as being Heavily Modified under the WFD (Water Framework Directive). This categorisation of Heavily Modified Water Body (HMWB) means that the channel has undergone significant morphological changes. In the District the majority of these historical changes were for flood protection and navigation. The WFD requirement for HMWBs is to reach good ecological potential (GEP) as opposed to 'good status', however the water quality standards required are consistent, regardless of the designation as HMWB.

Colchester's potable drinking water comes from Ardleigh Reservoir. National daily domestic water use (per capita consumption) according to the WWF is 150 litres. Nationally we are expected to reduce per capita consumption of water to an average of 130 litres per person per day by 2030. Amendments to building regulations in 2010 require per capita consumption of water to be limited to 125 litres.

Colchester Borough is primarily served by Anglian Water Services, although a small area around Dedham and one around Wivenhoe fall within the area supplied by Tendring Hundred Water.

Both Anglian Water and Tendring Hundred Water are confident that they can supply demand within the Region to at least 2035 (the end of their draft Water Resource Management Plans).

However, AWS recognise that there are potential supply deficits either against dry year averages or critical peak period forecasts and have proposed a range of activities to address these deficits over the next 27 years.

Colchester Borough is serviced by fifteen sewage treatment works of which two (Dedham and Tiptree) also receive discharges from adjacent Local Authority areas.

10.3 Flood Risk

The risk of flooding posed to properties within the District arises from a number of different sources including river flooding, sewer and surface water flooding.

The Mid Essex Strategic Flood Risk Assessment (SFRA), which includes Braintree District, was published in October 2007, with an Appendix relating to Braintree District in July 2008. Flood risk issues and flood management strategies identified in this document are outlined below but the SFRA provides a detailed analysis of flood risk associated with individual sites identified as potential locations for development at that time. This analysis, together with the planned addendum to the SFRA to analyse new sites, will be referenced in the SA of site allocations.

With over 60 Kilometres of coastline, the District contains a number of areas at high risk from tidal flooding and coastal erosion. The Essex and South Suffolk Shoreline Management Plan (SMP), prepared in partnership between the Environment Agency, Essex County Council and District Councils, is a strategy for managing flooding and coastal erosion over the next 100 years, in three time periods of 0-20 years, 20-50 years and 50-100 years. The main aims of the SMP are to protect all dwellings and key infrastructure against flooding and erosion, to sustain the quality of the natural and historic environment and to allow natural shoreline evolution where possible to take place. The SMP sets out four strategies to



support these aims:

- Hold the Line (HtL) – hold the existing line of defences by maintaining or increasing the standards of defences,
- Advance the Line (AtL) – Build new defences seaward of the existing defences,
- Managed Realignment (MR) – allowing or enabling the shoreline to move with associated management to control or limit the effect on land use and the environment, and;
- No Active Intervention (NAI) – no investment in coastal defences or operations.

The 'Hold the Line' strategy, maintaining the existing defence line, can be seen in the Coastal Protection Scheme between Clacton and Holland on Sea. In 2014 the Clacton to Holland on Sea Coastal Protection Scheme was implemented to provide protection to more than 3,000 homes and commercial premises which would be at serious risk from erosion by the sea during the next 100 years. The £36 million Scheme, funded by the Environment Agency in partnership with Tendring District Council and Essex County Council, covers an area of 5km of coastline from Clacton Pier to Holland Haven. The Scheme will see the installation of 23 fish-tail groynes to combat the effects of erosion and 950,000 cubic metres of sand and shingle beach recharge to replace the substantial amount of beach frontage lost in this area. The groynes will create 22 attractive new beaches in separate bays which can be enjoyed by both residents and visitors at all states of the tide and will encourage greater use of these beaches. Phase 1 of the Scheme was completed in January 2015 providing seven sandy bays, and Phase 2 is expected to be completed by the end of 2015.

Climate change is increasing the magnitude and frequency of intense rainfall events that cause flooding and the risk of flooding from the River Colne and Stour which are also heightened by increased winter precipitation. There is a risk of flooding from a number of sources: fluvial, tidal and pluvial. Tidal flood risk is concentrated along the coastal frontage including Harwich, Parkeston Jaywick and Brightlingsea, which are all low lying. Tidal flood sources are the most dominant in Tendring and tidal flooding can result from a storm surge, high spring tides or both events combined over defended and undefended land. This being said, the Council in partnership with other key stakeholders is tackling tidal flooding by the insertion of new flood defences between Holland-on-Sea and Clacton. The main pathway of fluvial flooding is from high river flows resulting in out of bank flows. Flood defences and control structures could potentially fail and actually increase flood risk. Pluvial flooding can occur as a result of severe storms, which create run-off volumes that temporarily exceed the natural or urbanised sewer and drainage capacities, creating flash flooding. This is likely to increase as a result of higher intensity rainfall, more frequent winter storms and increased urban development.

Tendring Strategic Flood Risk Assessment (SFRA)

A 2015 SFRA update was produced to accompany the emerging Local Plans. The SFRA is a planning tool that enables the council to select and develop sustainable site allocations away from vulnerable flood risk areas. The SFRA will assist the council to make the spatial planning decisions required to inform the Local Plan and contained the following recommendations:

- When assessing the suitability of land for development the Council will consider both PPS25 and the SFRA and apply the sequential and exception tests.
- The Council should object in principle to new development within Flood Zones 2 and 3 through policy.
- If brownfield floodplain redevelopment is proposed, the Council should push for the removal of buildings and restoration of the natural floodplain. Where this is not practical the site



redevelopment must not exceed, and where possible reduce, the overall building footprint. Additionally the land use of the site should be changed to a land use with a less vulnerable classification. Brownfield redevelopments within the functional floodplain must be fully flood resilient to minimise damage and enable quick recovery from flooding.

- SUDS should be applied where appropriate.
- The Council will require a site specific flood risk assessment to be submitted with all planning applications unless they are for developments <1ha located in Flood Zone 1, where there are no existing drainage issues.
- The Council should review their Emergency Plan with respect to flooding and raise awareness amongst residents on the measures which can be taken to mitigate against future flooding events.
- Development proposals adjoining the main rivers, ordinary watercourses and culverts should be set back.
- Opportunities should be sought to restore/deculvert rivers.

Fluvial Flooding

A hierarchy of flood zones are defined as:

Zone 1 – (Low Probability)

- Encompasses land assessed as having a less than 1 in 1000 annual probability of flooding in any year (<0.1%).

Zone 2 – (Medium Probability)

- Comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%).

Zone 3a – (High Probability)

- Covers land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) in any year.

Zone 3b – (The Functional Floodplain)

- This zone consists of land where water has to flow or be stored in times of flood. It is land which would flood with an annual probability of 1 in 20 (5%) or greater in any year.

The dominant fluvial systems within Braintree District are the River Blackwater, the River Brain and the River Colne. These rivers run close to a number of settlements. The River Brain flows through the towns of Braintree and Witham. The River Blackwater flows through Braintree, Coggeshall, Kelvedon and to the south of Witham. The confluence of the Rivers Brain and Blackwater is situated to the south east of Witham town centre. The River Colne flows through Great Yeldham, Sible Hedingham and Halstead.

Northern areas of Braintree town are within Flood Zones 2 and 3. These and other areas identified by the Mid Essex SFRA are subject to a higher risk from fluvial flooding.



Surface Water Flooding

Surface water flooding can occur from sewers, drains, or groundwater and from runoff from land, small water courses and ditches as a result of heavy rainfall.

The Mid Essex SFRA found no indication that groundwater flooding forms a significant risk within the District. Approximately 70% of the District is underlain by London Clay, including all of the main settlements. This forms an impenetrable barrier to groundwater at depth, limiting the risk from this source.

Typically, a Surface Water Management Plan (SWMP) is prepared to identify the causes and effects of surface water flooding and recommend the most cost effective way of managing surface water flood risk for the long term. A SWMP identifies areas where the surface water flood risk is most severe and designates them as Critical Drainage Areas (CDAs). Essex County Council is currently working on a SWMP and its findings will be reflected in the SA once it becomes available.

The updated Flood Map for Surface Water (uFMfSW) provided as part of the Jaywick Strategic Flood Risk Assessment update (2015) predominantly follows topographical flow paths of existing watercourses or dry valleys with some isolated ponding located in low lying areas. It should be noted that, because of its broad-scale nature, wherever possible these mapped outlines should be used in conjunction with other sources of local flooding information to confirm the presence of a surface water risk. Source: Haven Gateway Water Cycle Study (Nov 2009).

The 2007 Braintree SFRA recommended that runoff rates should be restricted for both greenfield and brownfield developments in Bocking, Braintree, Witham and Coggeshall in particular. This is also likely to be appropriate within other settlements to ease surface water flooding and drainage capacity exceedance.

Infiltration techniques are unlikely to be appropriate where the site is underlain by London Clay, such as in Bocking, Braintree, Witham, Halstead, Coggeshall and Kelvedon. Attenuation techniques should be imposed in these circumstances.



Table 53: Colchester: Summary Timeline of Water Supply, Wastewater, Environment and Flooding

Department Area		2008-2011	2011-2014	2014-2017	2017-2021
North Colchester	Water Supply Resources	Green	Green	Green	Yellow
	Wastewater Treatment	Red	Red	Red	Red
	Flooding	Green	Green	Green	Green
	Environment – Water Quality	Yellow	Yellow	Yellow	Yellow
	Wastewater Infrastructure	Red	Red	Red	Red
	Waste Supply Infrastructure	Grey	Grey	Grey	Grey
Colchester Town Centre and Fringe	Water Supply Resources	Green	Green	Green	Yellow
	Wastewater Treatment	Red	Red	Red	Red
	Flooding	Yellow	Yellow	Yellow	Yellow
	Environment – Water Quality	Yellow	Yellow	Yellow	Yellow
	Wastewater Infrastructure	Red	Red	Red	Red
	Waste Supply Infrastructure	Grey	Grey	Grey	Grey
South Colchester (Garrison)	Water Supply Resources	Green	Green	Green	Yellow
	Wastewater Treatment	Red	Red	Red	Red



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Flooding	Green	Green	Green	Green
	Environment – Water Quality	Yellow	Yellow	Yellow	Yellow
	Wastewater Infrastructure	Red	Red	Red	Red
	Waste Supply Infrastructure	Grey	Grey	Grey	Grey
East Colchester	Water Supply Resources	Green	Green	Green	Yellow
	Wastewater Treatment	Red	Red	Red	Red
	Flooding	Yellow	Yellow	Yellow	Yellow
	Environment – Water Quality	Yellow	Yellow	Yellow	Yellow
	Wastewater Infrastructure	Red	Red	Red	Red
	Waste Supply Infrastructure	Grey	Grey	Grey	Grey
Stanway	Water Supply Resources	Green	Green	Green	Yellow
	Wastewater Treatment	Red	Red	Red	Red
	Flooding	Green	Green	Green	Green
	Environment – Water Quality	Yellow	Yellow	Yellow	Yellow
	Wastewater Infrastructure	Red	Red	Red	Red



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Waste Supply Infrastructure				
Colchester – Other Areas	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Wivenhoe / Roehedge	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Tiptree	Water Supply Resources				
	Wastewater Treatment				



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Flooding	Green	Green	Green	Green
	Environment – Water Quality	Green	Green	Green	Red
	Wastewater Infrastructure	Red	Red	Red	Red
	Waste Supply Infrastructure	Grey	Grey	Grey	Grey
West Mersea	Water Supply Resources	Green	Green	Green	Yellow
	Wastewater Treatment	Green	Green	Green	Green
	Flooding	Green	Green	Green	Green
	Environment – Water Quality	Green	Green	Green	Green
	Wastewater Infrastructure	Red	Red	Red	Red
	Waste Supply Infrastructure	Grey	Grey	Grey	Grey
Marks Tey	Water Supply Resources	Green	Green	Green	Green
	Wastewater Treatment	Red	Red	Red	Red
	Flooding	Green	Green	Green	Green
	Environment – Water Quality	Red	Red	Red	Red
	Wastewater Infrastructure	Green	Green	Green	Green



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Waste Supply Infrastructure				
West Bergholt and Great Horkesley	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure (Horkesley)				
	Wastewater Infrastructure (West Bergholt)				
	Waste Supply Infrastructure				
Other Villages – Eight Ash Green (EAG) and Langenhoe	Water Supply Resources				
	Wastewater Treatment - EAG				
	Wastewater Treatment - Lan				
	Flooding				
	Environment – Water Quality (EAG only)				
	Wastewater				



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Infrastructure				
	Waste Supply Infrastructure				

Source: Haven Gateway Water Cycle Study Stage 2 Report (Nov 2009)

The key activities required to resolve the “red” time periods above are:

- Water Supply - Implementation of proposed transfer of water from Planning Zone 56 - Colchester to Planning Zone 63 - Tiptree
- Wastewater - Implement proposed discharge consent increases and process improvements at Colchester STW and Copford STW. Upgrade/extension of existing sewers or implementation of new sewer
- Water Quality - Implementation of BAT technologies, and therefore significant investment, to keep pollution levels within consent.

Table 54: Tending Summary of Timeline of Water Supply, Environment and Flooding

Department Area		2008-2011	2011-2014	2014-2017	2017-2021
Clacton on Sea	Water Supply Resources	Green	Yellow	Yellow	Yellow
	Wastewater Treatment	Green	Green	Yellow	Yellow
	Flooding	Yellow	Yellow	Yellow	Yellow
	Environment – Water Quality	Green	Green	Green	Green
	Wastewater Infrastructure	Yellow	Yellow	Yellow	Yellow
	Waste Supply Infrastructure				
Jaywick	Water Supply Resources	Green	Yellow	Yellow	Yellow
	Wastewater	Red	Red	Red	Red



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Harwich and Dovercourt	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Frinton-on-Sea Walton-on-the-Naze	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater				



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Infrastructure				
	Waste Supply Infrastructure				
Brightlingsea	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Lawford, Manningtree and Mistley	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Wix	Water Supply Resources				



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Thorpe-le-Soken	Water Supply Resources				
	Wastewater Treatment	(Clacton)	(Clacton)	(Clacton)	(Clacton)
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
St Osyth	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				



Department Area		2008-2011	2011-2014	2014-2017	2017-2021
	Wastewater Infrastructure				
	Waste Supply Infrastructure				
Thorrington	Water Supply Resources				
	Wastewater Treatment				
	Flooding				
	Environment – Water Quality				
	Wastewater Infrastructure				
	Waste Supply Infrastructure				

Source: Haven Gateway Water Cycle Study Stage 2 Report (Nov 2009)

The key activities required to resolve the “red” time periods above are:

- Wastewater - Detailed review of development and discharges to establish the required increase in the consented DWF for Jaywick STW, and apply if necessary.
- Extension and upgrade/capacity increase of current sewer network.

The current BDC Core Strategy housing targets are within the original regional targets. As such, the WCS steering group has confidence that the potable water supply can accommodate the growth in the District, through the appropriate management of both supply and demand. Funding for any significant regional upgrades required is likely to come from AWS/ ESW as part of subsequent Price Review processes.

Individual sites may require upgrades to the local potable water supply network. However, the water companies are confident that the proximity of the proposed sites to existing network assets will allow any capacity constraints to be overcome, using the developer funding provisions set out by the Water Industry Act 1991.

The Stage 2 Detailed WCS has identified the possible reductions in water demand that may be achieved in new dwellings, and the wider benefits this may provide, to allow BDC to make informed policy decisions regarding water efficiency.



The sensitivity of the receiving watercourses in the District has been discussed, and current water quality concerns highlighted. Despite these factors, it has been shown that the WwTW within the District can treat the increased wastewater flows, using economically feasible, conventional methods to the standards required to prevent any deterioration to the water environment. There is however a risk that future tightening of environmental standards may constrain growth, but this is a regional if not national concern.

Where additional WwTW and sewerage network capacity will be required to accommodate the proposed growth, the timing and possible funding of these upgrades has been discussed. The proposed growth may cause some WwTW operational issues prior to 2015; however AWS remain confident that capacity can be provided to accommodate the total growth. Regarding sewerage network capacity, some phasing conflicts remain in the short to medium term for a number of proposed sites in the main towns; it is imperative that these sewerage network constraints are addressed by BDC, AWS and developers by building on the recommendations given in this WCS at the earliest opportunity.

It has been concluded that the impact of the increased WwTW discharges on the flood risk of the receiving watercourses is negligible, although policies must still be in place to ensure the mitigation of flood risk for new and existing properties, as climate change is predicted to increase the frequency and intensity of rainfall events.



11. Climate and Energy

Climate change predictions for the East of England for the 2080s, based on medium (current) emissions scenarios, are for an increase in winter mean temperature of approximately 3.0°C and an increase in summer mean temperature of approximately 3.6°C. The central estimate of change in winter mean precipitation is an increase of 20% whilst the central estimate of change in summer mean precipitation is a reduction of 20%.

Braintree District has a Climate Change Strategy and Action Plan (2009). The Action Plan is reviewed annually to determine progress against its indicators and actions. The Action Plan objectives cover four areas:

- **Reduce the Carbon Footprint** from all council services and operations, and reduce CO₂ emissions across the District.
- **Community Leadership** through sharing best practice with businesses and residents and leading by example.
- **Sustainable Services** to ensure that the Council's assets and operations are able to cope with the impacts of climate change.
- **Using its Regulatory Powers** to influence and ensure future development in the District is sustainable and prepared for climate change.

Tendring Council is committed to tackling climate change by reducing Carbon Dioxide emission both from Council operations and throughout the District. In 2010 the Council produced a Climate Change Strategy which outlined the predicted climate change risks to the District and the actions that can be taken to reduce these risks. The Strategy concentrates on the reduction of Carbon Dioxide emissions as this is the gas released in the largest quantities, has a long term effect in the atmosphere and is the greenhouse gas we have the most control over. The key aim of this Strategy is to engage with partners and the public to cut Carbon Dioxide emissions by reducing energy use, to make more efficient use of energy and to promote non fossil fuel technologies and alternatives to fossil fuels both in Council operations and within local communities. The Council will expect developers to demonstrate measures to be incorporated to maximise sustainability and energy efficiency in all new development.

Increase in development and use of renewable energy has seen the installation of both off and on-shore wind farms in Tendring. The Dong Energy Gunfleet Sands 48 turbine Off-shore Wind Farm has the capacity to provide approximately 100,000 homes with 'clean electricity' in the years to come making a considerable reduction in Carbon Dioxide emissions. The wind farm is maintained and operated from a base in Brightlingsea by locally recruited staff. The 5 turbine on-shore Wind Farm at Earls Hall has the capacity to generate 'clean electricity' for approximately 6,300 homes and will reduce Carbon Dioxide emissions by 15,000 tonnes per year. Approval has also been given for Solar Farms in Wix and Bradfield which together will have the capacity to generate 'clean electricity' for approximately 3,409 homes and reduce Carbon Dioxide emissions by 6,525 tonnes per year. Whilst the Council supports and encourages proposals for renewable energy installations it realises that turbines and solar arrays can be large structures which can potentially cause visual and/or noise impacts and will ensure that such installations are carefully located to mitigate the impact renewable energy infrastructure has on residents.

Large scale renewable energy schemes are an environmental and social issue. Many communities resist large scale renewable energy schemes due to concerns about landscape impact, noise and visual



impact.

11.1 Energy Consumption and Emissions

Braintree District consumes more renewable energy than the other districts and the East of England average. The remaining authorities all consume more energy from non-renewable sources as a percentage of their consumption compared to the East of England as a whole. More than three quarters of Tendring and Braintree District's 1,944.5GWh and 2,303.1GWh respective energy consumption is from petroleum products and natural gas. For Colchester, the percentage is just below 75% for the same energy sources. Colchester and Braintree are closer to the East of England average than Tendring. Registering 39.65% of their consumption deriving from petroleum, Tendring is lower than the percentage for Braintree, Colchester and the East of England. In contrast only 44.1GWh of energy consumed is from renewable bioenergy and waste sources, equating to just 1.72% of energy consumption in Tendring. This is comparatively low when measured against the 1.90% in Braintree and 1.74% achieved across the East of England region, but higher than the 1.41% achieved in Colchester.

**Table 55: Energy consumption**

Resource	Tendring (GWh)	% of Total Energy Consumption	Braintree (GWh)	% of Total Energy Consumption	Colchester (GWh)	% of Total Energy Consumption	East of England (GWh)	% of Total Energy Consumption
Coal	65.4	2.55%	106.7	3.47%	95.9	2.89%	3,045.5	2.35%
Manufactured Fuels	0.6	0.02%	4.7	0.15%	1.5	0.05%	126.2	0.10%
Natural Gas	928.7	36.25%	806.9	26.26%	1,022.6	30.87%	41,698.1	32.17%
Electricity	507.4	19.80%	600.3	19.53%	692.1	20.89%	26,986.2	20.82%
Petroleum Products	1,015.8	39.65%	1,496.2	48.69%	1,454.0	43.89%	55,496.8	42.82%
Bioenergy and Wastes	44.1	1.72%	58.3	1.90%	46.8	1.41%	2,251.8	1.74%
Total	2,562.0	100.00%	3,073.0	100.00%	3,312.9	100.00%	129,604.9	100.00%

Source: DECC 2014, (updated 2016)

**Table 56: Energy consumption from renewable sources**

Local Authority	Percentage of Total Energy Consumption from Renewable Bioenergy and Waste Sources	Local Authority	Percentage of Total Energy Consumption from Renewable Bioenergy and Waste Sources
Basildon	0.11%	Epping Forest	0.12%
Braintree	0.39%	Harlow	0.07%
Brentwood	0.10%	Maldon	0.92%
Castle Point	0.14%	Rochford	0.24%
Chelmsford	0.24%	Tendring	0.39%
Colchester	0.27%	Uttlesford	0.57%

Source: DECC, updated 2014 data

0.39% of Tendring District's total energy consumption comes from renewable sources. Tendring District consumes the 3rd highest proportion of renewables, joint with Braintree at 0.39%, against the other districts with Essex. Colchester is lower than Tendring and Braintree, with just 0.27% of energy provided from renewable bioenergy and waste sources.

Table 57: CO² emissions by source

	Industry and Commercial (kt)	Domestic (kt)	Transport (kt)	Total (kt)
Tendring	214.9 (28.8%)	301.4 (41.6%)	228.4 (30.6%)	746.4
Braintree	270.7 (29.7%)	301.8 (33.1%)	341.0 (37.4%)	912.8
Colchester	317.7 (31.6%)	349.6 (34.8%)	336.3 (33.5%)	1,004.5
Essex	2,523.4 (28.8%)	2,994.7 (34.2%)	3,231.2 (36.9%)	8,757.8
East of England	13,851.4 (34.6%)	12,331.0 (30.8%)	13,246.5 (33.1%)	39,981.5

Source: DECC, updated 2013 data

Industry, domestic and transport each produce roughly 1/3 of the total CO₂ emissions within Colchester, however there is more variation in the statistics for Tendring and Braintree. The industry and commercial sector produces the smallest amount in every District at 28.8% for Tendring, 29.7% in Braintree and 31.6% in Colchester. Transport produces the most in Braintree at 37.4%, whereas domestic emissions



are the highest in Tendring and Colchester at 41.6% and 34.8% respectively. Tendring, Colchester and Braintree all produce less CO² from the industry and commercial sector than the East of England average and they all produce more domestic emissions than the east. Tendring transport emissions are lower than the east and Braintree's are higher, whereas Colchester is in line with the regional statistics.

Table 58: Reduction of CO² emissions per capita

Area	% per capita reduction of CO ² since 2005	Area	% per capita reduction of CO ² since 2005
Basildon	20.9%	Epping Forest	16.5%
Braintree	18.7%	Harlow	25.3%
Brentwood	16.7%	Maldon	21.1%
Castle Point	14.6%	Rochford	18.2%
Chelmsford	11.4%	Tendring	11.5%
Colchester	18.6%	Uttlesford	21.4%
		Essex	17.3%

Source: DECC, 2013 data

Tendring has one of the lowest reductions in CO₂ emissions relative to the 2005 data of all the Districts in Essex at just 11.5%. This is 6.1% below the average reduction per capita for Essex. Braintree and Colchester are higher than the Essex average at 18.7% and 18.6% respectively. Despite this, they are some way off the Harlow District, which registered the highest reduction in emissions of 25.3% between 2005 and 2013.

Table 59: Number of Codes for Sustainable Homes Certificates issued by Local Authority within Essex

Area	Design Stage	Post Construction Stage	Total
Basildon	944	474	1,418
Braintree	813	525	1,338
Brentwood	196	194	390
Castle Point	17	17	34
Chelmsford	1,674	740	2,414



Area	Design Stage	Post Construction Stage	Total
Colchester	1,359	939	2,298
Epping Forest	357	252	609
Harlow	445	157	602
Maldon	224	80	304
Rochford	408	182	590
Tendring	86	253	339
Uttlesford	1,286	776	2,062
Overall Essex Total	7,809	4,589	12,398
Overall Essex Average	651	382	1,033

Source: DCLG (updated Feb 2015)

Up to December 2014 Tendring District had issued 339 certificates, 86 at the design stage and 253 post construction, Braintree had issued 1,338, 813 at the design stage and 525 post construction and Colchester had issued the most at 2,298, 1,359 at the design stage and 939 post construction. Tendring is far below the Essex average of 1,033 certificates issued, but Braintree is above and Colchester is significantly higher than the Essex average.

11.2 Climate Change

Climate Change Scenarios

According to UK Climate Projections under a medium emission scenario the temperature in the East of England has a 67% likelihood of increasing between 1 and 2°C by 2020. By 2050, the temperature is predicted to increase to between 2 and 3°C across the region. Mean summer precipitation has a 67% likelihood of decreasing by up to 10% across the whole region by 2020 and by 2050 the south of the East of England will see decreases by up to 20%. In contrast the mean winter precipitation is predicted to increase by up to 10% across the region by 2020. By 2050 much of the region is expected to see a mean winter precipitation increase of between 10 and 20% apart from a band in the centre of the region which is expected to witness increases of between 20 and 30%.

Source: Met Office UKCP (2014)

Colchester is committed to reducing climate change both within the Borough and through its in-house operations through various schemes. In 2010 the Council prepared a Climate Risk Assessment, which



outlined climate change predictions for Colchester and considered the risks to the Borough from a changing climate. The climate change predictions were derived from Colchester specific data from UKCP09. UKCP09 is the working name for the UK climate projections. It is funded by Defra and uses data from the Met Office Hadley Centre and the UK Climate Impacts Programme (UKCIP) to predict the future climate of the UK under three different emissions scenarios (high, medium and low).

The short term climate change risks for Colchester are:

- Milder, wetter winters (central estimate shows an increase in mean winter temperature of 1.3oC and 6% increase in winter precipitation);
- Hotter, drier summers (central estimate shows an increase in mean summer temperature of 1.3oC and 7% decrease in summer precipitation);
- More frequent extreme high temperatures (central estimate shows an increase in the mean temperature of the warmest day of 0.9oC);
- More frequent downpours of rain (central estimate shows an increase of 5% precipitation on the wettest day);
- Significant decrease in soil moisture content in summer
- Sea level rise and increases in storm surge height (central estimate for sea level rise in the East of England shows a 9.7cm increase under the medium emissions scenario and a 11.5cm increase under the high emissions scenario); and
- Possible higher wind speeds.



12. Air

12.1 Air Quality

Air Quality in Essex is generally good. There are no Air Quality Management Areas (AQMAs) located in Braintree District. The main air quality issues in the District relate to nitrogen dioxide (NO₂) and particulate emissions from vehicles travelling on the A12 and A120.

There are five potentially significant junctions with daily flows of more than 10,000 vehicles in 2004. They are Newland Street, Witham; Crossing road, Witham; Head Street, Halstead; Railway Street, Braintree; and Rayne Road, Braintree.

Of the 12 passive diffusion NO₂ monitoring tubes located in the District, five exceeded the annual mean NO₂ objective concentration of 40 g/m³ but relevant exposure levels did not. Three of these were sited along the A12 at Hatfield Peverel, Rivenhall Hotel, and Foxden in Rivenhall while the other two were sited at Bradwell on the A120 and at Chipping Hill in Witham.

However, there are no AMQAs within Braintree or Tendring District.

Whilst the Borough of Colchester is extensively rural, the majority of the population live in the towns and villages. As a result, it is the built up areas which figure most prominently in many people's lives and the appearance and quality of their urban surroundings is an important factor in their quality of life. There are four Air Quality Management Areas in Colchester, located in the following areas:

- **Area 1** - Central Corridors (including High Street Colchester; Head Street; North Hill; Queen Street; St. Botolph's Street; St. Botolph's Circus; Osborne Street; Magdalen Street; Military Road; Mersea Road; Brook Street; and East Street).
- **Area 2** - East Street and the adjoining lower end of Ipswich Road.
- **Area 3** - Harwich Road/St Andrew's Avenue junction.
- **Area 4** - Lucy Lane North, Stanway; Mersea Road; and Brook Street.

**Table 60: Air Quality Management Areas within Colchester**

Name	Description	Pollutant
Area 1 – Central Corridors	High St Colchester, Head St, North Hill, Queen St, St Botolphs St, St Botolphs Circus, Osbourne St, Magdelen St, Military Rd, Mersey Rd, Brook St, East St and St Johns Street.	NO2
Area 2 – East Street and the adjoining lower end of Ipswich Road	East Street and Ipswich Road	NO2
Area 3 – Harwich Road / St Andrews avenue junction	St Andrews Avenue and Harwich Rd	NO2
Area 4 – Lucy Lane North, Stanway	Lucy Lane North, Stanway	NO2

Notes: NO₂ - Nitrogen Dioxide

Source: Defra, 2015

The main air quality issues Colchester following the first round of air quality assessments were found to be emissions of NO₂ and PM₁₀ from vehicles in the area of Brook Street between (and including) the junctions with Walpole Road and East Hill and the northern end of the B1025 Mersea Road in Colchester. From this, air quality management areas (AQMA) were declared in Colchester to monitor conditions in those areas. These AQMA have since been revoked as of 2012 and replaced with the AQMA described in the above table.

The four AQMA within the District are shown spatially in the Figures below. They are all located within Colchester at busy junctions likely to experience at least some degree of congestion.

Figure 5: Map of AQMAs in Colchester

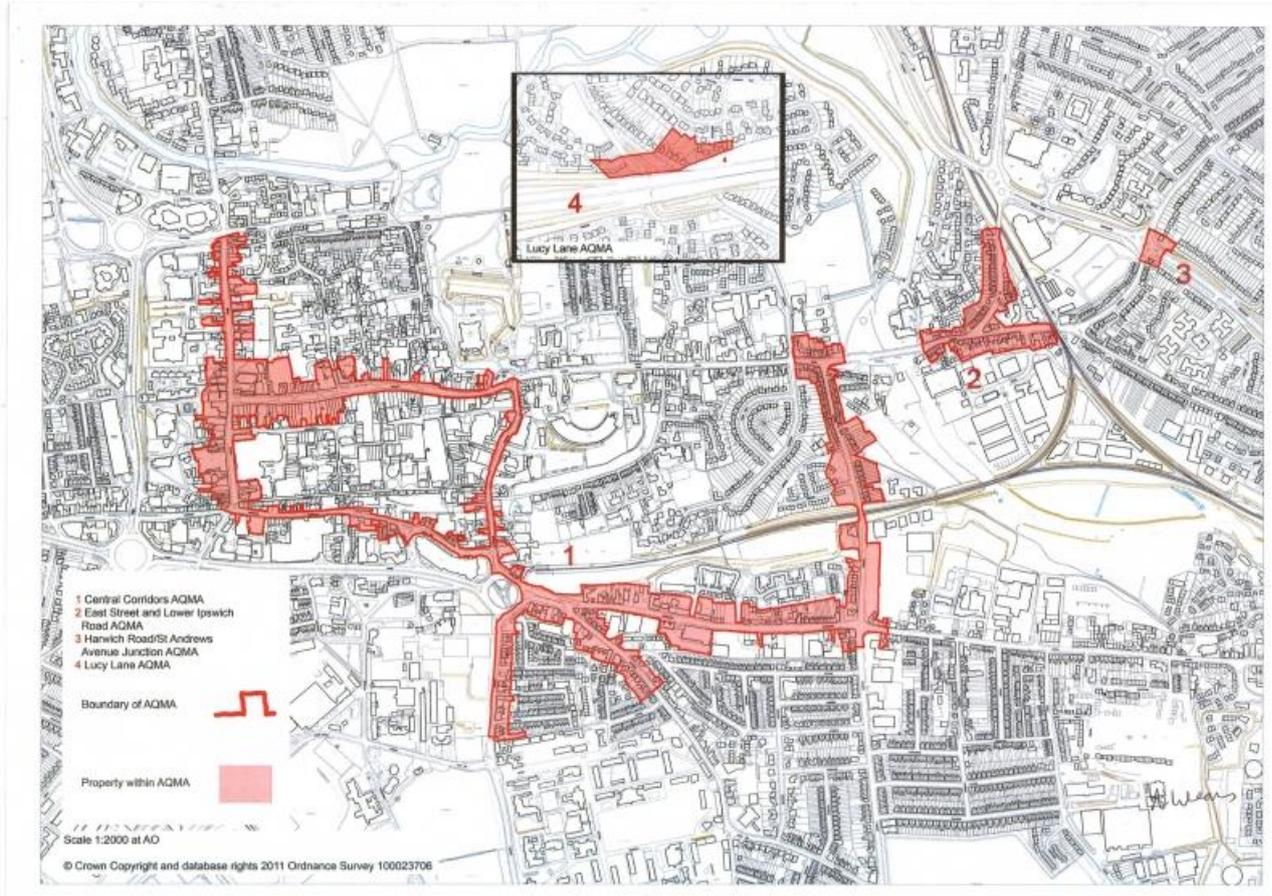


Table 61: Annual Mean Measurements of Nitrogen Dioxide ($\mu\text{g}/\text{m}^3$) across Colchester

Colchester		Annual Mean Concentrations ($\mu\text{g}/\text{m}^3$) adjusted for bias			
Site ID	Site Location	2009	2010	2011	2012
2	Fairfax Road	33.5	33.7	31.4	31.2
3	Mersea Road	67.7	57.2	53.7	60.9
8	Shrub End Road	26.1	26.3	26.0	26.5
17	Hills Crescent	21.3	21.1	19.6	19.3
20	Papillon Road	21.9	23.4	21.0	20.1
21	Head Street	57.9	53.4	51.4	47.5
22	Trinity Street	28.2	26.1	28.2	21.9

Colchester		Annual Mean Concentrations (ug/m ³) adjusted for bias			
Site ID	Site Location	2009	2010	2011	2012
43	Magdalen Street	40.4	40.9	38.3	37.7
45	Brook Street	57.0	54.8	52.3	48.2
46	Guildford Road	20.7	21.3	20.2	18.2
48	Queen Street	52.6	49.3	42.0	40.9
49	High Street	50.5	43.8	47.3	46.7
54	Mersea Road	49.9	49.2	44.3	43.6
58	Lucy Lane South				
59	Monitor	31.2	33.7	28.6	31.3
62	Lucy Lane North	48.2	34.8	37.9	35.7
63	Mersea Road, 9	47.7	44.8	41.9	45.1
65	Mersea Road, 12	56.9	49.6	47.1	49.4
66	Maldon Road, 99	34.3	34.3	30.9	28.3
68	Brook Street, 130	46.0	44.9	46.5	26.8
69	Brook Street, 60	28.5	28.6	28.2	25.0
71	Brook Street, 23	54.7	52.2	47.5	50.6
72	6 Osbourne Street	48.1	46.1	43.0	38.3
76	Ipswich Road	37.9	34.4	38.5	32.7
78	Harwich Road	39.1	38.9	38.4	32.2
82	London Road				
85	Marks Tey	42.5	32.9	37.0	29.0



Colchester		Annual Mean Concentrations (ug/m ³) adjusted for bias			
Site ID	Site Location	2009	2010	2011	2012
86	Dale Close	31.2	28.8	28.6	27.2
88	St Johns Green	24.3	23.9	23.9	22.8
89	Greenstead	21.0	20.3	21.6	17.9
90	Brook Street, 48 (auto monitor)	35.5	34.1	31.0	33.2
91	London Road, 220				
92	Marks Tey	-	33.7	31.9	30.3
93	London Road,170				
94	Marks Tey	-	-	31.2	28.2
95	Blackberry Road, 2	-	-	25.7	25.2
96	Shrub End Road, 38	-	-	20.0	20.0
97	Butt Road, 129	-	-	22.3	21.6
98	Elmstead Road, 6	-	-	28.1	26.7
99	Greenstead House	-	-	32.0	30.0
100	Mill Road, 239	-	-	21.6	21.8
101	Mill Road, 87	-	-	26.7	28.1
102	Cowdray Avenue, 154	-	-	25.6	23.9
103	Ipswich Road, 130	-	-	25.3	24.1
104	Harwich Road, 95	-	-	27.7	29.9
105	Ipswich Road, 50	-	-	38.7	37.0
106	East Street, 72	-	-	45.2	43.2



Colchester		Annual Mean Concentrations (ug/m ³) adjusted for bias			
Site ID	Site Location	2009	2010	2011	2012
107	Brook Street, 74	-	-	29.9	30.2
108	Military Road, 37	-	-	34.2	33.0
109	East Hill, 4A	-	-	39.2	37.1
110	Mersea Road, 30	-	-	36.1	37.9
111	North Hill, 49	-	-	40.7	37.0
112	North Station Road, 49	-	-	30.1	27.9
113	North Hill, Strada	-	-	43.5	39.1
114	Queen Street Showboat	-	-	44.4	37.8
115	St John's Street, Lemon Tree	-	-	42.3	43.2
116	High St George Hotel	-	-	36.0	35.0
117	Harwich Road Orchard Gardens	-	-	33.1	31.0

Table 62: Annual Mean Measurements of Nitrogen Dioxide (µgm-3) across Tendring

Tendring		Annual Mean Concentrations (ug/m ³) Adjusted for Bias		
Site ID	Site Location	2008	2009	2010
9	Harwich Hospital	29.9	22.2	23.8
10	Harwich Train Station	43.6	29.8	24.8
11/12/13	Clacton Town Hall A/B/C	32.9	21.2	21.2
14/15/16	St Osyth, Bypass A133 1/2/3	32.1	21.9	21.5
18	Bathside Bay	20.5	10.2	13.2
19	Wix	29.8	16.8	20.6



Tendring		Annual Mean Concentrations ($\mu\text{g}/\text{m}^3$) Adjusted for Bias		
Site ID	Site Location	2008	2009	2010
20	Hempstalls Farm	-	13.2	15.1

Table 63: Annual Mean Measurements of Nitrogen Dioxide ($\mu\text{g}/\text{m}^3$) across Braintree

Braintree	Annual Mean Concentrations ($\mu\text{g}/\text{m}^3$) Adjusted for Bias			
Site ID	2011	2012	2013	2014
Braintree 1N	34.3	30.1	36.6	34.7
Braintree 5N	25.6	25.5	25.3	23.5
Braintree 4N	21.2	21.0	22.8	19.8
Halstead 1	31.5	30.7	30.0	27.7
Hatfield Peverel A12	49.5	44.7	50.5	47.7
Kelvedon	29.1	32.5	32.8	27.9
Bradwell	41.8	38.6	38.1	37.3
Railway Street	28.8	29.2	29.5	29.2
Stilemans Wood	37.1	33.2	28.1	33.5
Witham	47.1	47.1	45.8	38.8
Rivenhall 1	56.0	53.6	51.3	43.6
Rivenhall 2	53.2	49.8	51.8	52.1

Source: Braintree District Council 2015 Updating and Screening Assessment (June 2015)

There were three recorded exceedances of the annual mean $40 \mu\text{g}/\text{m}^3$ objective in 2014. The highest recorded concentration was $52.1 \mu\text{g}/\text{m}^3$ at monitoring location Rivenhall 2. This monitoring location is at a roadside location, and therefore indicates air quality at the vicinity of busy roads, where concentrations of NO_2 and vehicle derived pollutants are at their highest.

There is no clear trend in data during the period 2011 – 2014. Concentrations at some monitoring locations such as Rivenhall 1 and Braintree 5N decrease across the period, while concentrations at



Rivenhall 2 have increased since 2012.

Analysis of UK continuous NO² monitoring data has shown that it is unlikely that the hourly mean NO² objective, of 18 hourly means over 200 µgm³, would be exceeded where the annual mean objective is below 60 µgm³ (Defra 2009). As there were no recorded exceedances of 60 µgm³ in 2014 at any monitoring location, the NO² 1-hour mean air quality objective is unlikely to be exceeded.

Several of the diffusion tube locations are not representative of the locations of the nearest relevant exposure. As a result, monitored concentrations have been used to estimate the concentrations at the relevant receptor locations (shown in table 2.4 in the Braintree District Council 2015 Updating and Screening Assessment). This has been done using Defra's 'NO² with distance from the roads calculator' and in line with the TG (09) guidance. Full details of the distance correction process are detailed in Appendix B of the Braintree District Council 2015 Updating and Screening Assessment.

When monitoring data is used to predict concentrations at the locations of the nearest residential properties, there are no exceedances of the annual NO² objective level of 40 µgm³. It can therefore be concluded that at relevant receptor locations, there are no exceedances of the NO² annual mean air quality objective.



13. Waste

The waste hierarchy, in accordance with the Revised Waste Framework Directive, specifies the promotion of waste prevention, and material and energy recovery (e.g. direct re-use, recycling and treatment to make new objects) prior to disposal.

The Council has promoted recycling by sending leaflets to households, providing recycling boxes for paper, card, plastic bottles and cans, and food waste caddies. The Council also supports the Tendring Reuse and Employment Enterprise and the Tendring CVS Scheme where surplus household items (furniture, electrical goods) can be donated and reused through the local community sector or supplied to those in need.

13.1 Local Authority Collected Waste

There is a significant amount of waste collected by the Waste Collection Authorities, of which Tendring District Council is one, via direct kerbside collections (household waste), litter and street cleaning. Waste is also directly collected by the Waste Disposal Authority (ECC) through Recycling Centres for Household Waste. In addition, for a fee, local authorities collect some waste from small commercial enterprises. Collectively this is known as Local Authority Collected Waste (LACW).

Table 64: Local Authority Collected Waste

Authority	Total local authority collected waste	Household - total waste	Household - waste sent for recycling / composting / reuse	Non-household - total waste	Non household - waste sent for recycling / composting / reuse
Tendring District Council	46,585	46,585	12,213	0	0
Braintree District Council	61,509	57,244	29,982	4,265	730
Colchester Borough Council	64,780	62,278	29,661	2,502	25
Essex County Council	731,305	681,586	348,623	49,719	11,123

Source: Department for Environment, Food and Rural Affairs (Defra) 2015/16

In Tendring, all of the local authority collected waste was sourced from households within the District. No



waste was collected from non-household origins. This is in contrast with Braintree and Colchester where 93.1% and 96.1% of collected waste originated from households. Braintree and Colchester are more in line with the Essex statistics, where 93.2% of collected waste was from households, than Tendring, however there is still some deviation from county average.

Table 65: Selected Waste indicators 2013/14

Authority	Residual household waste per household (kg/household)	Percentage of household waste sent for reuse, recycling or composting	Percentage of municipal waste sent to landfill	Collected household waste per person (kg)
Tendring District Council	489.5	26.30%	-	324.1
Braintree District Council	415.6	54.30%	-	383.2
Colchester Borough Council	413.3	42.5%	-	314.3
Essex County Council	523.4	51.10%	46.40%	472.1

Source: Waste Data Flow, Department for Environment, Food and Rural Affairs (Defra) 2014

Households within Tendring District Council and Colchester Borough Council produce much less household waste per person than the county average, with Braintree also producing lower than the county but higher than Tendring and Colchester. However, a much smaller percentage of this household waste is recycled, re-used or composted in Tendring than the Essex average. Almost half as much is reused, recycled or composted in Tendring compared with Essex as a whole. Colchester is also lower than the Essex value for this, but by a smaller percentage than Tendring. Braintree is marginally above the Essex average for household waste reused, recycled or composted.

13.2 Transfer Facilities

Six transfer facilities have been granted planning permission within Essex and Southend, to support a materials recovery facility, in Basildon. These will, once constructed, accept waste from the Waste Collection Authority vehicles directly from kerbside collection. Here waste will be bulked up, ready for transportation to Basildon.

Table 66: Local Authority Collected Waste Transfer Facility Status

Transfer Facility	Planning Permission reference/date	Throughput (Tonnes Per Annum)	Expected / Actual construction Start Date	Expected Operation Start Date
-------------------	------------------------------------	-------------------------------	---	-------------------------------



Transfer Facility	Planning Permission reference/date	Throughput (Tonnes Per Annum)	Expected / Actual construction Start Date	Expected Operation Start Date
Harlow To serve Harlow and Epping Forest	ESS/38/11/HLW 23/09/2011	55,000	April 2013 (construction underway)	Operational as of early August 2014
Gt Dunmow To serve Uttlesford	ESS/18/12/UTT 22/06/2012	29,400	Build start date yet to be agreed following Judicial Review proceedings	9-month construction period from date of commencement on site.
Chelmsford To serve Chelmsford and Maldon	ESS/31/13/CHL 13/08/2013 (amended permission ESS/65/12/CHL)	90,000	Under Judicial Review with Court of Appeal. Build start date yet to be agreed	Unknown. If appeal refused 12 month construction period from date of commencement on site.
Braintree To serve Braintree	ESS/23/13/BTE 26/07/2013	71,250	March 2014 (construction underway)	January 2015
A120 (west) To serve Colchester and Tendring	ESS/16/13/TEN 28/06/2013	115,000	October 2013 (construction underway)	September 2014
Southend To serve Southend	Existing Site	67,900	An existing waste management site within Southend BC since 1968, but requires alterations for this use	
Total LACW Transfer Throughput		428,550 tpa		

Source: Essex County Council 2014

13.3 The Replacement Waste Local Plan for Essex and Southend-on-Sea (submitted June 2016)

The Replacement Waste Local Plan (Revised Preferred Options) Document 2015, as published by



Essex County Council and Southend-on-Sea as the combined Waste Planning Authority, allocates 4 sites within Tendring, 1 in Braintree and 2 within Colchester for the treatment of biological waste, inert waste, inert landfill and other waste management. These are:

Tendring

- Morses Lane, Brightlingsea
- Sloughs Farm, Ardleigh
- Sunnymead, Elmstead & Heath Farms
- Wivenhoe Quarry Plant area

Braintree

- Rivenhall

Colchester

- Bellhouse Landfill Site
- Fingringhoe Quarry

There is a requirement that Tendring District Council, Braintree District Council and Colchester Borough Council as Local Planning Authorities, include the above allocations within their Local Plan. Their presence should be factors, alongside any Waste Consultation Zones and safeguarding restrictions set at the Waste Planning Authority level, in the formulation of the Local Plan and in the allocation of any sites contained within.

13.4 Waste Miles

There are two distinct types of imports and exports concerning waste, firstly the localised cross boundary movement of waste and the long distance waste travel. The localised cross boundary movements of waste usually occur between adjacent waste planning authorities because the closest waste facility for the arisings is just over the authority boundary.

13.5 Commercial and Industrial Waste (CD&I)

This is waste arising from wholesalers, catering establishments, shops and offices (in both the public and private sector), factories and industrial plants. It can include a number of materials such as food, paper, card, wood, glass, plastics and metals. Increases in growth in these sectors as a result of the Local Plan may require an increase in facilities to manage such waste. These can include biological treatment facilities, such as composting (in the first instance), or non-hazardous landfill facilities.

13.6 Construction, Demolition and Evacuation Waste (CD&E)

This is waste that is biologically stable and does not undergo any significant physical, chemical or biological transformations. This can be in the form of certain types of:

- Construction wastes (e.g. surplus supplies of bricks specifically required for a single project);



- Demolition wastes (e.g. used material resulting from demolition activities); or
- Excavation wastes (e.g. usually consisting of soils and stones which cannot be used beneficially, such as from tunnelling projects or 'overburden' from removing soils from an area in preparation for mineral excavation).

Essex County Council, as the WPA for Essex, identifies a shortfall in available capacity for this waste stream by 2031/32. There is a requirement for an additional 1.27 million tonnes per annum of Construction, Demolition and Excavation waste recovery capacity by 2031/32, which would remove the need to allocate inert landfill capacity completely. It is estimated that without development of increased CD&E Waste recovery capacity (as specified above), there would be a need for inert landfill totalling approximately 16 million tonnes (or 10.64 million cubic metres) if no CD&E recycling facilities were bought forward. The implications for this are that waste management facilities for this waste stream may be needed within the Districts of Tendring, Braintree and the borough of Colchester. It should also be noted that this waste is a direct result of growth, and the relationship between the Waste Local Plan and the Tendring, Braintree and Colchester Part 1 Plan are intrinsically linked in this regard.



14. Minerals

14.1 Links to the Adopted Minerals Local Plan 2014

The MLP summarises a number of key points regarding the geology and mineral infrastructure of the Plan Area:

- Essex has extensive deposits of sand and gravel.
- There are more localised deposits of silica sand, chalk, brickearth and brick clay.
- Marine dredging takes place in the extraction regions of the Thames Estuary and the East Coast, whilst aggregate is landed at marine wharves located in east London, north Kent, Thurrock, and Suffolk. Essex has no landing wharves of its own.
- There are no hard rock deposits in the County so this material must be imported into Essex. This currently occurs via rail to the existing rail depots at Harlow and Chelmsford.
- Essex is the largest producer and consumer of sand & gravel in the East of England. There are 20 permitted sand & gravel sites, one silica sand site, two brick clay and one chalk site.
- There are two marine wharves and four rail depots capable of handling aggregate. Construction, demolition and excavation waste is also recycled at 29 dedicated and active aggregate recycling sites (2011).
- Aggregate is both imported into Essex (hard rock, and sand and gravel) and exported (sand and gravel, primarily to London). Map 3 shows the movement of aggregate in and out of Essex.

Source: Essex County Council Adopted Minerals Plan (2014)

Sites have been identified as preferred or reserved sites for primary mineral extraction of sand and gravel in the Essex Minerals Plan (Policy P1, Table 5), which was adopted in July 2014. These include sites at Bradwell Quarry, Rivenhall Airfield (comprising sites A3-A7), one site at Broadfield Farm, Rayne (site A9), one site on land at Colemans Farm (site A46), two in Colchester at Colchester Quarry, Fiveways (site A13) and Maldon Road, Birch (site A31) and one at Sunnymead, Alresford (site A20). The volume of sand and gravel extracted from these sites will need to meet the minerals demand for the whole of Essex created by major development and new infrastructure projects within the County.

The provision of other forms of development in the District may be constrained by the need to safeguard mineral resources for extraction.

14.2 Sand Gravel

Essex has extensive Kesgrave formation sand and gravel which was laid down during the Ice Age and in river terraces. The river terrace deposits are found not only along current river valleys, but also in historic river channels that are now dry.

The sand and gravel resources in Essex are:

- Significant in national, sub-national and local terms - Essex is one of the largest producers in the



UK,

- Most geographically extensive and significantly mixed within the centre and north of Essex – namely the districts of Uttlesford, Braintree, Chelmsford, Colchester and Tendring,
- Least extensive in south east Essex where deposits appear smallest and least workable, such as in the districts of Maldon and Rochford,
- Present along the River Lea valley terraces adjoining Harlow and Epping Forest districts,
- Mixed deposits capable of being processed to supply a range of construction products including building sand, sharp sands and gravel,
- Used as a raw material to produce concrete, mortar, asphalt and construction fill which is used in the construction industry and for roads.

The majority of the sand and gravel produced in Essex (about 78%) is used within the County itself. This position looks unlikely to change over the long-term. Consequently the main factor influencing production of sand and gravel in the future will be the need to meet the minerals demand for the whole of Essex created by major development and new infrastructure projects within Essex itself.

Source: Essex County Council Adopted Minerals Plan (2014)

14.3 Chalk

Silica sand is another significant mineral resource found in Essex. It is classified as an 'industrial sand' and its distinction from construction sand is based on its applications/uses and market specification. Silica sand contains a high proportion of silica in the form of quartz and has a narrow grain size distribution compared to other sand in Essex.

The silica sand resources in Essex are:

- Processed for industrial purposes at Ardleigh from a mixed resource, north-east of Colchester. Industrial uses include glassmaking, foundry casting, ceramics, chemicals and water filtration
- Capable of reaching selling prices some 20 times above that of regular construction aggregates, allowing them to serve a wider geographical market as the relatively high price off-sets transport costs.

Source: Essex County Council Adopted Minerals Plan (2014)



Place Services

Essex County Council

County Hall, Chelmsford, Essex CM1 1QH

T: +44 (0)333 013 6840

E: enquiries@placeservices.co.uk

www.placeservices.co.uk

June 2017



Essex County Council



North Essex Authorities Strategic Section
One for Local Plans: Draft Publication
(Regulation 19)

**Draft Sustainability Appraisal (SA): Annex C -
Alternatives and Consultation Comments -
June 2017**







Contents

1.	Introduction	2
1.1	Background	2
1.2	The Purpose of this Annex	2
2.	The History of Options / Alternatives Explored – Strategic Growth	3
2.1	Introduction	3
2.2	Issues and Options (before the identification of a Section One)	3
2.3	Section One - Preferred Options (2016)	6
2.4	Between Preferred Options (2016) and Draft Publication (2017)	18
3.	History of Alternatives – The Section One Policies	42
3.1	Introduction	42
3.2	Section One Policies	43
4.	Consultation Comments Received	49
4.1	Preferred Options Consultation Stage	49



1. Introduction

1.1 Background

Braintree District Council, Colchester Borough Council and Tendring District Council, together forming the 'North Essex Authorities,' in conjunction with Essex County Council as a key partner in its strategic role for infrastructure and service provision, commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for a Section One and Two for the respective Council's Local Plans.

Place Services are acting as consultants for this work; therefore the content of this SA should not be interpreted or otherwise represented as the formal view of Essex County Council.

This document is Annex C of the SA Environmental Report for the Section One for Local Plans. It outlines the comprehensive list and history of alternatives explored throughout the Local Plan processes of Braintree, Colchester and Tendring Councils. It also includes the responses and actions of the SA in light of consultation comments received for the SA at the Preferred Options stage.

1.2 The Purpose of this Annex

This annex acts as a 'one stop shop' for all of the alternatives explored throughout the Section One plan-making process. It outlines the history of why the strategic approach has been developed, and importantly the assists in demonstrating how the SA has influenced the plan-making process in assessing all reasonable alternatives.

- This document explores specifically, the following elements of the Section One:
- The housing requirements
- The Spatial Strategy
- The Garden Communities.



2. The History of Options / Alternatives Explored – Strategic Growth

2.1 Introduction

Appendix 1 of the main Environmental Report states that, 'within the Issues and Options Local Plans of Colchester, Braintree and Tendring, the option of Garden Communities, or 'new settlements' was explored, in response to the emerging growth needs identified across the Housing Market Area (HMA), as identified in the initial work from a Strategic Housing Market Assessment (SHMA) 2014.' This section provides the history behind this statement within the Local Plan process, and identifies the SA of options for growth throughout that process.

2.2 Issues and Options (before the identification of a Section One)

At the Issues and Options stage of the three authorities Local Plans, the notion of a 'Section One' was not yet identified. The three authorities prepared and identified Issues and Options Local Plans in which the principle of new Garden Communities, or 'new settlements' was introduced. As is common, a 'call-for-sites' process was started at the same time, in order to identify sites for strategic and non-strategic growth.

The following table outlines where the notion of new settlements is established:

2.2.1 Colchester Borough Council Local Plan Issues and Options, January 2015

The issues and Options Plan stated, 'as set out in the Introduction and Housing sections of this document, the National Planning Policy Framework requires local planning authorities to meet objectively assessed housing need in full. This means that the starting point for each of the options is that they must be able to accommodate the fully objectively assessed need. As explained in the Housing chapter, we do not yet know exactly what our objectively assessed need is, but we expect that it will be in the region of 1,000 or more dwellings per year. This equates to a total of 15,000 new homes over the plan period.

'However, with existing land already identified and allocated for growth through the existing Core Strategy and Site Allocations Development Plan Document, we have an existing supply of allocated land that can contribute towards accommodating this growth. As a result, the Local Plan will need to identify sufficient additional land to accommodate in the region of 10,000 dwellings in order to meet the objectively assessed housing need over the 15 year Plan period (2017-2032). The options set out in this paper are included on the basis that it is expected that they are each capable of accommodating Colchester's required level of growth.

'It is also possible that the Council will allocate land to accommodate a higher number of homes than the level of housing need identified, in order to plan comprehensively for the longer term - post 2032. This would help to ensure maximum sustainability of development, by minimising the need to find additional sites on a piecemeal basis in the future. This could also provide a wider range of sites, which would help the Council to ensure that it could maintain a five year land supply of deliverable sites throughout the Plan period, as required by the National Planning Policy



Framework.

'Under the duty to cooperate, the Council has been engaging with Braintree and Tendring District Councils and they are aware that we are consulting on options which involve potential development of land in their areas. Both Councils are agreed, in principle, to work cooperatively in respect of any potential cross-boundary developments, should either, or both, cross-boundary development options be identified as a preferred option. The Council will also engage with other authorities, bodies and organisations under the duty to cooperate in order to ensure that any strategic issues are identified and addressed.'

Options Identified

Option 1A:	Development to the East and West (a separate sustainable settlement to the west of Colchester town, a separate sustainable settlement to the east of Colchester town, urban development on sites in and around the existing urban area, and proportional expansion of the Rural District Centres - Wivenhoe, Tiptree and West Mersea)
Option 1B:	Development to the East and West (a separate sustainable settlement to the west of Colchester town, a separate sustainable settlement to the east of Colchester town, urban development on sites in and around the existing urban area, proportional expansion of the Rural District Centres – Wivenhoe, Tiptree and West Mersea, and a proportional element of rural growth across the Borough's villages)
Option 2A:	Development to the West (a separate sustainable settlement to the west of Colchester town, urban development on sites in and around the existing urban area, proportional expansion of the Rural District Centres – Wivenhoe, Tiptree and West Mersea)
Option 2B:	Development to the West (as per 2A above, but with an additional proportional element of rural growth across the Borough's villages)
Option 3A:	Development to the East and North (a separate sustainable settlement to the east of Colchester town, a significant urban extension to the north of Colchester town, crossing the A12, in addition to an extension to the north, other urban development in and around the existing urban area, and proportional expansion of Rural District Centres – Wivenhoe, Tiptree and West Mersea)
Option 3B:	Development to the East and North (as per 3A above, but with an additional proportional element of rural growth across the Borough's villages)

2.2.2 Braintree District Council Local Plan Issues and Scoping, January 2015

The Issues and Scoping Plan stated that, 'the Plan will set out the basis for working with partners to provide for future local needs for homes, employment, and business sites, whilst protecting the most valuable countryside and maintaining a high quality of life. The scale of past population growth has proved a challenge for services such as local health and education; the rapid increase in the rate of growth that is expected to be called for in the future is likely to provide an even greater challenge to services for the population of the District.

'One of the District's key objectives will be to demonstrate that the new Plan can achieve and maintain a supply of



readily available development sites for new homes, meeting a much higher target than in the past.

The Government's national planning policy - set out in the National Planning Policy Framework (NPPF) and supporting guidance - requires local planning authorities to significantly boost the supply of new homes, building the homes communities want and need. The Council is considering a range of requirements for the number of new homes for Braintree District; at this stage it is expected that the District will need to accommodate an average of between 750 and 950 homes per year between 2014 and 2033.'

The Plan identified two key issues related to growth. These were, 'Large numbers of new homes are required in the District to support the growing population' and 'The District may not have enough brownfield sites (those where buildings have previously been located) to accommodate the new homes that need to be provided.'

Options Identified

Option 1	New homes should be focused on the existing towns and larger villages
Option 2	New homes should be built in one or more new villages
Option 3	New homes should be dispersed between all areas of the District
Option 4	New homes should be built in areas where they can provide funding for major infrastructure projects such as new roads
Option 5	New homes should be built on the existing public transport/rail network to encourage sustainable travel

2.2.3 Tendring District Council Issues and Options September 2015

The Issues and Options Plan states that, 'To work out how many new homes might be needed in the future, the Council has worked in partnership with Colchester Borough Council, Braintree District Council and Chelmsford Borough Council to commission specialist consultants to calculate the 'objectively assessed housing need' for each area taking into account a range of different factors including government population projections which look at births, deaths and patterns of migration, economic projections and the characteristics of the local housing market.

'The Objectively Assessed Housing Needs Study (2015)' suggests that, to meet projected population growth, our district will need approximately 600 new homes each year over the period of the Local Plan. This means that our Local Plan will need to identify sufficient land to accommodate approximately 10,000 new homes between now and 2032.

'To deliver 10,000 new homes, the Council will need to identify a large amount of greenfield land for development. Over the last few years, the Council has been very successful in directing most development to previously developed 'brownfield sites' but these sites have nearly run out now, meaning that greenfield land will have to be used. The Council's latest evidence which includes the Strategic Housing Land Availability Assessment (2014) suggests that around 4,000 homes could be built on sites that have already got planning permission and other sites, including brownfield sites, within existing built up areas. This leaves around 6,000 homes to be built on additional greenfield sites around the edge of our towns and villages or through the creation of new settlements.'



Options Identified

N/A	<p>The Issues and Option Plan stated that, 'a new settlement will be built on land crossing the Colchester/Tendring border planned for jointly by Tendring District Council and Colchester Borough Council (duty to cooperate) which will deliver approximately 2,000 new homes between now and 2032 of which 1,000 would count towards Tendring's housing requirements and 1,000 would count towards Colchester's with the potential for further phases of development in the longer-term beyond 2032. The development would be accompanied by new schools, medical facilities, a link road between the A120 and A133 and rapid bus services into Colchester town centre. The development would maintain a countryside gap around the valley of Salary Brook on the edge of Colchester and around the village of Elmstead Market.'</p>
-----	---

2.3 Section One - Preferred Options (2016)

At the Preferred Options stage, the notion of a combined Section One covering the strategic content of the three authorities' Local Plans was introduced. It was decided that a common SA for this Section One was required, to better reflect the sustainability issues and concerns over the wider area. This is due to different issues being prevalent for each distinct authority. An aligned Section One and accompanying SA is better equipped to address the balance of all of these issues, within an appropriate scope.

At the Preferred Option stage, the following options were explored, with a summary of sustainability impacts identified in the accompanying SA:



2.3.1 Spatial Strategy Options across the North Essex Area

Option		Sustainability Impacts identified in the SA	Reasons for Progression / Rejection at the Preferred Options stage
Preferred Option	<p>Existing settlements will be the principal focus for additional growth across North Essex. Development will be accommodated within or adjoining settlements according to their scale, sustainability and existing role both within each individual district and, where relevant, across the wider strategic area.</p> <p>Three new garden communities will be developed as part of the sustainable strategy for growth. These new communities will provide strategic locations for 7,500 additional homes within the Plan period as well as accompanying employment development, with expectation that substantial additional development will be delivered beyond the current Local Plan periods.</p>	<p>The principles behind the Spatial Strategy will have a large number of significant positive impacts on the Sustainability Objectives, most notably on those that correspond to housing delivery, economic growth and accessibility. Further long term significant positive impacts associated with Garden Communities can be expected to be realised on health, sustainable travel, education and skills. Minor positive impacts can be expected through Garden Community developments associated with townscapes, air quality pressures in settlements and energy efficiency.</p> <p>Uncertain impacts can be expected to arise from the principle of Garden Communities regarding the natural environment and landscapes.</p> <p>Areas of short to medium term uncertainty relate to the school capacity pressures, historic cores and areas, air quality issues associated with town centres.</p>	<p>The principles behind the Spatial Strategy will have a large number of significant positive impacts on the Sustainability Objectives. The short and medium term impacts of these are related to the notion that development will be accommodated within or adjoining settlements according to their scale and existing role both within each individual district; these correspond to the NPPF requirements of each LPA in the formulation of a Local Plan and offers a local distinctiveness to the strategic area relevant to local needs and communities. Significant long term impacts are different in that they correspond to the requirement for Garden Communities in the latter stages of the plan period to meet unmet or residual needs in a sustainable manner and in sustainable locations. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area.</p>
Alternative 1	<p>A focus on allocating all broad Garden Community options proposed in the Strategic Area</p>	<p>Although this alternative could offer some perceived benefits in terms of long term infrastructure provision in principle, it would not respond to the need for a distribution of growth across existing settlements (i.e.</p>	<p>The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area.</p>



Option		Sustainability Impacts identified in the SA	Reasons for Progression / Rejection at the Preferred Options stage
		<p>the centres of largest population per District/Borough) and meeting identified needs regarding affordability in all areas. In addition, the general distribution of options would see an overprovision in the Colchester area, and would create housing and employment inequalities across the strategic area. Impacts can be expected to be similar at the broad strategic level, however in line with the housing requirements of the Strategic Area, the short to medium term impacts could be expected to be uncertain on housing and employment related objectives in so far as the needs of existing communities would unlikely be met.</p>	
Alternative 2	A focus on existing settlements, commensurate to proportionate growth across the Strategic Area	<p>Although on the face of it over a wide Strategic Area this would appear a sustainable option, this alternative would require the formulation of a joint or combined settlement hierarchy. The appraisal of this alternative has been undertaken on the basis that existing settlements would have to respond to allowing higher densities and the development of more marginal peripheral land. This has seen a large amount of diminishing impacts associated with this continual albeit theoretical trend, culminating in a large amount of uncertain and negative impacts in the long term, when Garden Communities would be coming forward to meet unmet housing and employment needs. The alternative would not correspond to the Local Plan requirements of the NPPF on a LPA basis, and could lead to the</p>	<p>Strategically, the alternative would not offer a sustainable distribution across the wider area. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area. For these reasons the alternative has been rejected.</p>



Option		Sustainability Impacts identified in the SA	Reasons for Progression / Rejection at the Preferred Options stage
		overexpansion of some settlements through the possible development of unsuitable extensions with no wider sustainable or infrastructure benefits.	
Alternative 3	A focus on stimulating infrastructure and investment opportunities across the Strategic Area	<p>The location of the preferred Garden Community options in the Strategic Area could be perceived as being located in line with a need to stimulate investment in transport infrastructure along the A120. In addition, their size indicates the threshold required to deliver a new secondary school in each instance. To extend the premise further to other infrastructure requirements across the strategic area would not ensure Garden Communities meet Garden City Principles and infrastructure requirements in less marketable areas could be expected to warrant notions of housing and employment delivery unviable. Although infrastructure considerations partly represent the case for their preferred status, it should be acknowledged that the preferred Garden Community options represent the most sustainable options in their own right as well as in consideration of their distribution as part of a wider Spatial Strategy. In line with the housing requirements of the Strategic Area, the short to medium term impacts could be expected to be increasingly negative on housing and employment related objectives in so far as the needs of existing communities would unlikely be met until the long term. This is also true for impacts on other relevant</p>	<p>To entirely focus on the premise of distributing growth to the A120 and in order to deliver additional secondary school capacity in the wider area would not be a sustainable one, in so far as it would not take into consideration the benefits and indicative impacts associated with other themes and tenets of sustainability, in particular those that are environmental in nature and seek to protect such assets. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area. For these reasons the alternative has been rejected.</p>



Option		Sustainability Impacts identified in the SA	Reasons for Progression / Rejection at the Preferred Options stage
		Sustainability Objectives in the short and medium term.	
Alternative 4	CAUSE's Metro Plan	<p>This alternative has been deemed as having likely negative impacts due to the focus of growth in Tendring, the least marketable District within the HMA. In addition, the alternative is not clear how the geographic distribution will benefit from the economies of scale of a fewer amount of larger Garden Communities; for this reason no long term impacts have been identified. There is also the potential for cumulative negative impacts on environmental considerations associated with the distribution, especially regarding increasing visitor numbers to the coast and international designations. It should be acknowledged however that a forthcoming HRA or AA would add further detail to these impacts should the option become preferred. The alternative will have significantly positive impacts associated with sustainable transport and accessibility; however it should be acknowledged that the upgrading of multiple rail stations on the same stretch of line would likely have negative implications regarding the deliverability of multiple new settlements in the plan period. In consideration of the OAN Report, it could be considered that this distribution would not meet the existing needs of Braintree District; in particular the requirements to ensure affordable housing and jobs in a range of sectors that could be expected from new</p>	<p>The alternative does not consider the lack of available land within the stated focal points for growth in Tendring. It also does not consider the suitability of land, especially in regard to alternative sites. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area. For these reasons the alternative has been rejected.</p>



Option	Sustainability Impacts identified in the SA	Reasons for Progression / Rejection at the Preferred Options stage
	Garden Communities in the District.	

2.3.2 Garden Community options

Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA	Reasons for Progression / Rejection at the Preferred Options stage
East Colchester	Option 1: Southern Land Focus	- 6,611 homes - 7 ha mixed use - 5 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain 3) Environment Amenity – Significantly positive 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Significantly positive	The broad area of East Colchester has been selected as a preferred option for a new Garden Community due to its ability to stimulate required infrastructure delivery and adhere to Garden City Principles in a largely unconstrained area.
	Option 2: A133 to Colchester - Ipswich rail line	- 8,834 homes - 10 ha mixed use - 5 ha employment	1) Physical limitations – Uncertain 2) Impacts – Uncertain 3) Environment Amenity – Significantly positive	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA	Reasons for Progression / Rejection at the Preferred Options stage
		land	4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Positive	
	Option 3: North to South wrap	- 11,409 homes - 13 ha mixed use - 7 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain 3) Environment Amenity – Positive 4) Transport – Uncertain 5) Resilience – Significantly positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Positive	
North Colchester	Option 1: East of	- 6,606 homes	1) Physical limitations – Negative	The broad area of North Colchester has



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA	Reasons for Progression / Rejection at the Preferred Options stage
	Langham Lane focus	- 7 ha mixed use - 7 ha employment land	2) Impacts – Negative 3) Environment Amenity – Negative 4) Transport – Uncertain 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Uncertain	been rejected as a preferred option for a new Garden Community due to the limited scope for maximum sustainable benefits associated with adhering to Garden City principles.
	Option 2: Maximum Land Take	- 10,132 homes - 10 ha mixed use - 10 ha employment land	1) Physical limitations – Negative 2) Impacts – Negative 3) Environment Amenity – Negative 4) Transport – Uncertain 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA	Reasons for Progression / Rejection at the Preferred Options stage
			10) Developability / Deliverability - Uncertain	
West of Colchester / Marks Tey	Option 1: North and South of A12 / Rail Corridor Focus	- 16,861 homes - 9 ha mixed use - 10 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain 3) Environment Amenity – Uncertain 4) Transport – Positive 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Uncertain	The broad area of West of Colchester / Marks Tey has been selected as a preferred option for a new Garden Community due to its ability to stimulate required infrastructure delivery and adhere to Garden City Principles in a largely unconstrained area.
	Option 2: South of A120 and North of Marks Tey Existing Settlement	- 17,182 homes - 9 ha mixed use - 11 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain 3) Environment Amenity – Uncertain 4) Transport – Positive 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Significantly positive	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA	Reasons for Progression / Rejection at the Preferred Options stage
			8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Uncertain	
	Option 3: South of A120 Focus	- 13,105 homes - 7 ha mixed use - 9 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Positive 3) Environment Amenity – Uncertain 4) Transport – Positive 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Uncertain	
	Option 4: Maximum Land Take	- 27,841 homes - 16 ha mixed use - 15 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Negative 3) Environment Amenity – Significantly positive 4) Transport – Uncertain 5) Resilience – Uncertain	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA	Reasons for Progression / Rejection at the Preferred Options stage
			6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Uncertain	
West of Braintree	Option 1: Braintree DC only	- 9,665 homes - 12 ha mixed use - 10 ha employment land	1) Physical limitations – Positive 2) Impacts – Uncertain 3) Environment Amenity – Significantly positive 4) Transport – Uncertain 5) Resilience – Uncertain 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Positive	The broad area of West of Braintree has been selected as a preferred option for a new Garden Community. As Uttlesford District Council are not currently contributing to the work undertaken by the North Essex Authorities, and are located within a different Housing Market Area, option GCWB2 can be rejected at this stage in so far as the option does not respond to the scope and context of the Common Strategic Part 1 for Local Plans.
	Option 2: Braintree DC and Uttlesford DC Land	- 12,949 homes - 16 ha mixed use - 13 ha	1) Physical limitations – Positive 2) Impacts – Uncertain 3) Environment Amenity – Positive	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA	Reasons for Progression / Rejection at the Preferred Options stage
		employment land	4) Transport – Uncertain 5) Resilience – Uncertain 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - Positive	



2.4 Between Preferred Options (2016) and Draft Publication (2017)

Between the Section One Preferred Options stage and the Draft Publication stage to which this SA relates, a number of additional options were explored. This was to ensure that the North Essex Authorities were continuing to explore sustainable options for growth in the strategic area. Previous Preferred Options and alternatives were re-assessed in light of emerging evidence and consultation responses at the Preferred Option stage. Additional options were also submitted at the Preferred Options consultation stage, and these were included for assessment through the SA process where they were proposed to meet the yields explored for a 'Garden Community' (5,000 homes). These were 'Monks Wood' and a re-assessment of the 'Metro Plan' as a Garden Community alternative.



2.4.1 Spatial Strategy Options across the North Essex Area

Option		Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
The Spatial Strategy	<p>Existing settlements will be the principal focus for additional growth across North Essex. Development will be accommodated within or adjoining settlements according to their scale, sustainability and existing role both within each individual district and, where relevant, across the wider strategic area.</p> <p>Three new garden communities will be developed as part of the sustainable strategy for growth. These new communities will provide strategic locations for 7,500 additional homes within the Plan period as well as accompanying employment development, with expectation that substantial additional development will be delivered beyond the current Local Plan periods.</p>	<p>The Spatial Strategy will have a large number of significant positive impacts on the Sustainability Objectives, most notably on those that correspond to housing delivery, the vitality and viability of centres, economic growth, sustainable transport and accessibility. Further long term significant positive impacts associated with Garden Communities can be expected to be realised on health. There will be additional positive impacts on social objectives. There will likely be uncertain impacts on climate change associated with the level of growth and the feasibility of identifying renewable energy schemes at this stage. Further uncertain impacts can be expected to arise from the principle of Garden Communities regarding the natural environment and landscapes.</p> <p>Areas of short to medium term uncertainty relate to the school capacity pressures and the preservation and enhancement of historic cores and areas. A focus on existing settlements can also be expected to exacerbate air quality issues associated with town centres.</p>	<p>The principles behind the Spatial Strategy will have a large number of significant positive impacts on the Sustainability Objectives. The short and medium term impacts of these are related to the notion that development will be accommodated within or adjoining settlements according to their scale and existing role both within each individual district; these correspond to the NPPF requirements of each LPA in the formulation of a Local Plan and offers a local distinctiveness to the strategic area relevant to local needs and communities. Significant long term impacts are different in that they correspond to the requirement for Garden Communities in the latter stages of the plan period to meet unmet or residual needs in a sustainable manner and in sustainable locations. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area.</p>
Alternative 1	<p>A focus on allocating all of the explored Garden Community options proposed in the Strategic Area at smaller individual scales</p>	<p>A re-appraisal of the alternative in light of the additional number of Garden Community options has led to a number of negative impacts. Although this alternative could offer some benefits in terms of a wider scope of infrastructure provision in principle related to the provision of new schools and open space /</p>	<p>The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area.</p>



Option		Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
		<p>recreational facilities, it would not respond to the need for a distribution of growth across existing settlements (i.e. the centres of largest population for each District/Borough). Should OAN targets remain the focus of growth in the plan period, then it can be considered that each Garden Community option would be required to come forward earlier than currently planned. This would either result in less sustainable outcomes associated with the likely absence of effective masterplanning due to the required timescales of commencement dates earlier in the plan period (particularly affecting the Garden Communities' 'infrastructure first' approach), or lead to difficulties in providing a five year housing land supply due to deliverability concerns. More generally, this alternative would lead to likely overprovision in the Colchester area, and would create housing and employment inequalities across the strategic area.</p>	
Alternative 2	The allocation of one Garden Community only	<p>Alternative 2 has been assessed as not meeting the North Essex Authorities' housing requirement in so far as no single proposal would be suitable or sustainable at the scale required. In addition, no single proposal has been submitted or identified throughout the plan-making process at the required scale. It can be seen that the geographic distribution and scales proposed for the allocated Garden Communities within the spatial strategy responds to ensuring benefits across all Councils in meeting their own long term needs in the plan period, as well as each being of a scale suitable that existing settlements remain resilient. Impacts have been predicted similarly for the preferred spatial strategy option in the short-medium term; however the notion of a single Garden</p>	<p>Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process, its inability to meet the strategic area's OAN requirements (or otherwise be at a scale that would likely result in significant negative impacts on landscape and inclusive access throughout the whole scheme) means that it can not now be considered a 'reasonable' alternative at this Publication Draft stage. The deliverability and sustainability of the Garden Communities was</p>



Option		Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
		Community that could meet the growth requirements of the three LPAs would likely have significant impacts on the natural and historic environment. It would also be unlikely that mitigation would be possible. This alternative has been rejected as it would not meet the North Essex Authorities' housing requirement and does not exist as a viable and available option.	considered to be best served by their location in three distinct areas of the strategic area. For this reason the alternative has been rejected.
Alternative 3	The allocation of two Garden Communities only	Alternative 3 has been assessed as not meeting the North Essex Authorities' housing requirement in so far as no combination of two proposals is considered suitable, appropriate or broadly sustainable (in regard to their required scale and impact on the environment) at the scale required. This alternative can be said to have negative effects on social criteria as a result, with a lack of distribution providing housing more widely across the strategic area. Impacts have been predicted similarly for the preferred spatial strategy option in the short-medium term, however the reliance on two Garden Communities would likely lead to them being required at a scale that would not be suitable in regard to natural or historic environmental conditions; it would be likely that impacts would be significant to the point that mitigation would be difficult.	This alternative has been rejected as it would not meet the North Essex Authorities' housing requirement. Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process, its inability to meet the strategic area's OAN requirements means that it can not now be considered a 'reasonable' alternative at this Publication Draft stage. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area. For this reason the alternative has been rejected.
Alternative 4	A focus on existing settlements only across the Strategic Area, commensurate to proportionate growth (exploring whether needs can be met without the allocation of Garden Communities).	This alternative essentially represents a 'business as usual / do nothing scenario' and explores whether the North Essex Area can feasibly meet identified growth needs without the allocation of Garden Communities. A re-assessment of the alternative at this Draft Publication stage has led to some revised conclusions surrounding the impacts of extending existing settlements in potential unsustainable areas in the latter stages of the plan period	This alternative was explored at an earlier stage of the plan-making process, with findings presented in the Preferred Options SA. Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process,



Option	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
	<p>and beyond. Notionally, over a wide Strategic Area this alternative would represent a sustainable option, however the presence of a Section One, including Garden Communities, is validated by the need to meet housing and employment needs that can not be met in the latter stages of the plan period by a focus on proportionate growth across the North Essex Authorities area's settlements alone. It should be acknowledged that the principle of this alternative exists as a fundamental part of the Section One Spatial Strategy in order to deliver sustainable growth in the short to medium term stages of plan period. This is also in accordance with the Section Two Spatial Strategies of the respective Councils and the allocation of sites for non-strategic level growth in order to demonstrate a five year housing land supply. In order to represent a 'reasonable' alternative, this alternative would require the formulation of a joint or combined settlement hierarchy. Proportionately this would lead to significant focus on Colchester. The appraisal of this alternative has been undertaken on the basis that existing settlements would have to respond to allowing higher densities and the development of more marginal peripheral land. There would be a significant amount of increasing impacts associated with this theoretical trend, culminating in a large amount of uncertain and negative impacts in the long term, when Garden Communities have been identified as required to come forward to meet unmet housing and employment needs. The alternative would not correspond to the Local Plan requirements of the NPPF on a LPA basis, and could lead to the overexpansion of some settlements through the possible development of unsuitable extensions with no wider sustainability benefits. Strategically, it</p>	<p>its inability to meet the strategic area's OAN requirements means that it can not now be considered a 'reasonable' alternative at this Publication Draft stage. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area. For this reason the alternative has been rejected.</p>



Option		Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
		would also not offer a sustainable distribution across the wider area, or reflect that some settlements within the Strategic Area serve an important function in terms of services despite not having a significant population.	
Alternative 5	A focus on stimulating infrastructure and investment opportunities across the Strategic Area	A re-appraisal of this alternative has led to a number of likely negative impacts, becoming more significant in the long term, associated with a possible unsustainable concentration of sites in certain areas where infrastructure improvements would be economically beneficial, and also the allocation of sites that are not done so with sustainability at the forefront of the selection process. The size threshold for Garden Communities is set at that which would require the delivery of a new secondary school in each instance, as determined in the ECC Developers' Guide to Infrastructure Contributes Update 2016. Despite this, to entirely focus on the premise of distributing growth to those areas in order to deliver additional secondary school capacity in the wider area would not be a sustainable one, in so far as it would not take into consideration the benefits and indicative impacts associated with other tenets of sustainability, in particular those that are environmental in nature and seek to protect such assets. To extend the premise further to other infrastructure requirements across the strategic area would not allocate Garden Communities in response their ability to meet Garden City principles. Infrastructure requirements in less marketable areas can be expected to warrant notions of housing and employment delivery unviable.	Although infrastructure considerations partly represent the case for their preferred status, it should be acknowledged that the preferred Garden Community options represent sustainable and developable options in their own right as well as in consideration of their distribution as part of a wider Spatial Strategy. The alternative has been rejected in line with the selection and allocation of Garden Communities based on the balance of opportunities and constraints and sustainability, rather than solely economic purposes. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area. For this reason the alternative has been rejected.
Alternative 6	CAUSE's Metro Plan	This alternative has been deemed as having likely negative	This alternative was explored at an earlier stage



Option	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
	<p>impacts due to the focus of growth in Tendring only, and not distributing growth throughout the North Essex Authorities area. It is unlikely that the geographic distribution will benefit from the economies of scale of a fewer amount of larger Garden Communities, this not only impacts on the ability of locations to stimulate infrastructure, such as schools, and also the ability to mitigate any negative environmental impacts. The Metro Plan, as a Spatial Strategy option, will have positive impacts associated with sustainable transport and air quality; however it should be acknowledged that accessibility is poor at each location regarding A-classified roads and additional public transport infrastructure choices. In consideration of the OAN Report, it could be considered that this distribution would not meet the existing needs of Colchester or Braintree District; in particular the requirements to ensure affordable housing and jobs in a range of sectors that could be expected from a wider distribution of growth, including the locations of the allocated Garden Communities. This is contrary to the NPPF, stating that local planning authorities should positively seek opportunities to meet the development needs of their area, to which the notion of the Section One covering the North Essex Authorities area is in response to. The alternative does not consider the lack of available land within the stated focal points for growth in Tendring. It also does not consider the suitability of land, especially in regard to alternative sites.</p>	<p>of the plan-making process, with findings presented in the Preferred Options SA. Although this alternative was considered a reasonable alternative within earlier stages of the plan-making process and explored primarily to determine its feasibility as part of the SA process, its inability to meet the strategic area's OAN requirements means that it can not now be considered a 'reasonable' spatial strategy alternative at this Publication Draft stage. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area. For this reason the alternative has been rejected.</p>



2.4.2 Garden Community Options

The following Garden Communities were explored for their individual impacts at this stage. Additional options were considered immediately prior to their identification through the Preferred Options consultation. The options were reassessed in line with emerging evidence on a comparable basis (see Appendix 1) and also the consultation responses later in this Annex. Additionally, the re-assessment focused more appropriately on a balance of on-site impacts with the possibility of adhering to Garden City principles, with an adapted approach to measuring these to better differentiate between options, particularly in broad areas.

Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
Tending / Colchester Borders	Option 1: Southern Land Focus	- 6,611 homes - 7 ha mixed use - 5 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain 3) Environment Amenity – Positive 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Significantly positive	The Tending / Colchester Borders Garden Community has more opportunities for sustainable travel links into Colchester than other options, a major regional centre. The Garden Community is also in close proximity to the University and high quality employment opportunities. As one of the major centres in the region, Colchester offers a full range of facilities including a hospital and is a major shopping and cultural destination. This would provide high order services not on the garden community within a closer proximity with the opportunities for public transport, walking and cycling links. Colchester is also a major employer in the region and provides a good level and mix of employment opportunities. There is the opportunity
	Option 2: A133 to Colchester -	- 8,834 homes - 10 ha mixed use	1) Physical limitations – Uncertain 2) Impacts – Uncertain	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
	Ipswich rail line	- 5 ha employment land	3) Environment Amenity – Positive 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Positive	to access these opportunities via public transport, walking and cycling.
	Option 3: North to South wrap	- 11,409 homes - 13 ha mixed use - 7 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain / Negative 3) Environment Amenity – Uncertain / Positive 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Significantly positive 7) Employment – Significantly positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Positive	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
North Colchester	Option 1: East of Langham Lane focus	- 6,606 homes - 7 ha mixed use - 7 ha employment land	1) Physical limitations – Uncertain / Negative 2) Impacts – Negative 3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain / Negative 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Positive	The discounting of the North Colchester site for a Garden Community was based on the negative environmental impacts of a large Garden Community on an area of significant landscape and environmental value. Additionally, the deliverability and sustainability of Garden Communities was considered to be best served by their location in two distinct areas of the Borough as opposed to adjacent communities such as North Colchester.
	Option 2: Maximum Land Take	- 10,132 homes - 10 ha mixed use - 10 ha employment land	1) Physical limitations – Uncertain / Negative 2) Impacts – Negative 3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain / Negative 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
			9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain	
Colchester / Braintree Borders	Option 1: North and South of A12 / Rail Corridor Focus	- 16,861 homes - 9 ha mixed use - 10 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain / Negative 3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain 5) Resilience – Uncertain / Positive 6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain	<p>The Colchester Braintree borders site is in closer proximity to the mainline railway station at Marks Tey, which with upgraded facilities would give regular train links to London, Colchester and beyond within walking, cycling or bus rapid transport system to the station. There are also more opportunities for sustainable travel links into Colchester, a major regional centre of facilities and employment.</p> <p>The Colchester Braintree borders site is in closer proximity to Colchester. As one of the major centres in the region, Colchester offers a full range of facilities including a hospital and is a major shopping and cultural destination. This would provide high order services not on the garden community within a closer proximity with the opportunities for public transport, walking and cycling links.</p>
	Option 2: South of A120 and North of Marks Tey Existing Settlement	- 17,182 homes - 9 ha mixed use - 11 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain / Negative 3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain 5) Resilience – Uncertain / Positive	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
			6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain	Colchester is also a major employer in the region and provides a good level and mix of employment opportunities. There is the opportunity to access these opportunities via public transport, walking and cycling.
	Option 3: South of A120 Focus	- 13,105 homes - 7 ha mixed use - 9 ha employment land	1) Physical limitations – Uncertain 2) Impacts – Uncertain 3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain 5) Resilience – Uncertain / Positive 6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain	
	Option 4: Maximum Land Take	- 27,841 homes - 16 ha mixed use	1) Physical limitations – Uncertain 2) Impacts – Negative	



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
		- 15 ha employment land	3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain / Negative 5) Resilience – Uncertain 6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain	
West of Braintree	Option 1: Braintree DC only	- 9,665 homes - 12 ha mixed use - 10 ha employment land	1) Physical limitations – Uncertain / Negative 2) Impacts – Uncertain / Negative 3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain / Negative 5) Resilience – Uncertain / Positive 6) Housing – Significantly positive 7) Employment – Uncertain / Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain	<p>The West of Braintree garden community is suitable and deliverable. Further work will continue to be undertaken with Uttlesford District Council who will be shortly deciding whether to take forward additional land within UDC. If UDC chose to take this option forward, then further evolutions of the proposals will take place, taking into account a wider development area.</p> <p>Officers have balanced the impacts of development, such as the loss of high quality agricultural land and the change in character of the</p>



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
	Option 2: Braintree DC and Uttlesford DC Land	<ul style="list-style-type: none"> - 12,949 homes - 16 ha mixed use - 13 ha employment land 	<ul style="list-style-type: none"> 1) Physical limitations – Uncertain / Negative 2) Impacts – Uncertain / Negative 3) Environment Amenity – Uncertain / Negative 4) Transport – Uncertain / Negative 5) Resilience – Uncertain / Positive 6) Housing – Significantly positive 7) Employment – Uncertain / Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain 	<p>area, with the benefits of the long term delivery of new homes, infrastructure and community facilities and consider that a new standalone garden community is suitable for West of Braintree and are recommending that this is taken forward in the Local Plan.</p>
CAUSE 'Colchester Metro Plan'	N/A - Option 1: Metro Plan submission	6,000 to 8,000 dwellings proposed by CAUSE	<ul style="list-style-type: none"> 1) Physical limitations – Negative 2) Impacts – Significantly negative 3) Environment Amenity – Significantly negative 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Significantly negative 7) Employment – Uncertain 8) Mixed-use – Uncertain 	<p>The CAUSE option has been rejected due its inability to deliver the required growth, linked to deliverability / developability and the availability / lack of promotion of land within the model to the required scales. It is also not considered that a series of smaller developments can successfully combine to meet the requirements of sustainability / Garden City principles.</p>



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
			9) Environmental Quality & Sustainability – Negative 10) Developability / Deliverability – Significantly Negative	
Monks Wood	N/A - Option 1: Proposal as submitted	- Up to 15,000 homes (5,151 homes in plan period) - 245,300m ² of non-residential (mix of commercial / retail / leisure etc.)	1) Physical limitations – Uncertain 2) Impacts – Uncertain / Negative 3) Environment Amenity – Uncertain / Negative 4) Transport – Negative 5) Resilience – Uncertain / Negative 6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability – Uncertain	Monks Wood is currently located on the highly trafficked and single carriageway section of the A120. The only other roads in the vicinity are very rural lanes in the vicinity and no opportunity to access a site of this size by other routes. If the A120 project is to go ahead, 1 of the 5 options could see the new A120 run through the site, the other 4 would be distant from the site. Whilst any upgrade option would provide capacity on the existing A120 network, there are no guarantees that the project will go forward. With the exception of option A travel to the strategic highway network would need to be via Marks Tey to the east or Braintree to the west. In addition the project is not due to complete until 2026, so completions would not be able to start until that date. The employment market in Braintree is less strong than Colchester and major new employment areas are proposed on the west side of Braintree which is in close



Option	Sub-Option	Indicative dwelling yield and amount of mixed use / employment land (ha)	Summary of sustainability impacts highlighted in the SA (note: the options were re-assessed at this stage in light of emerging evidence and in response to consultation comments)	Reasons for Selection / Rejection
				proximity to the West of Braintree garden community.

2.4.3 Different Permutations of Garden Community Options

The following Garden Communities permutations were explored for their cumulative impacts:

Scenario	Sites forming Permutation			Why considered a reasonable alternative?	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
Allocated GCs	Tendring / Colchester Borders	Braintree / Colchester Borders	West of Braintree	This is the preferred selection of Garden Communities, reflecting the most dispersed, distinct areas of the strategic area.	1) Physical limitations – No impact 2) Impacts – No impact 3) Environment Amenity – No impact 4) Transport – Uncertain 5) Resilience – Positive 6) Housing – Significantly positive 7) Employment – Positive 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - No impact	The preferred Garden Communities reflected deliverability considerations including the availability of sites, and an overall evaluation of the combination of allocations and policies that would produce the most sustainable pattern of growth. The deliverability and sustainability of Garden Communities was considered to be best served by their location in three distinct areas of the strategic area.



Scenario	Sites forming Permutation			Why considered a reasonable alternative?	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
1.	West of Braintree	Monks Wood	Tendring / Colchester Borders	This scenario has been identified in light of an assumption that A120 re-routing will either benefit (i.e. improve access to) one of Monks Wood or the Colchester / Tendring Borders Garden Community (based on the options currently being consulted upon at the time of writing). This views Monks Wood as a more direct alternative to the Colchester / Tendring Borders Garden Community than other options.	1) Physical limitations – No impact 2) Impacts – No impact 3) Environment Amenity – No impact 4) Transport – Uncertain 5) Resilience – Positive 6) Housing – Positive 7) Employment – Uncertain 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - No impact	Please see reasons for rejecting the Monks Wood option above.
2.	Metro Plan	Tendring / Colchester Borders	North of Colchester	This scenario represents an eastern focus of Garden Communities to address historical undersupply in Tendring (and the lack of an up to date development plan since 2011).	1) Physical limitations – Negative 2) Impacts – Negative 3) Environment Amenity – No impact 4) Transport – Positive 5) Resilience – Positive 6) Housing – Significantly negative 7) Employment – Negative 8) Mixed-use – Uncertain 9) Environmental Quality & Sustainability – Negative 10) Developability / Deliverability - No impact	Please see reasons for rejecting the Metro Plan and North of Colchester options above.



Scenario	Sites forming Permutation			Why considered a reasonable alternative?	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
3.	Metro Plan	Tendring / Colchester Borders	Colchester / Braintree Borders	This scenario was identified within the CAUSE 'Metro Plan' submission. It considers that the Metro Plan should be supplemented with a Garden Community at Tendring / Colchester Borders alongside a smaller amount of growth at the Colchester / Braintree Borders at a scale similar to Thorpe-le-Soken, Weeley, Great Bentley and Alresford, with development focused up to a 10minute walking distance from Marks Tey station.	1) Physical limitations – No impact 2) Impacts – Negative 3) Environment Amenity – No impact 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Significantly negative 7) Employment – Uncertain 8) Mixed-use – Uncertain 9) Environmental Quality & Sustainability – Negative 10) Developability / Deliverability - No impact	Please see reasons for rejecting the Metro Plan option above.
4.	North Colchester	Colchester / Braintree Borders	Tendring / Colchester Borders	This scenario has been identified based on Colchester being the largest, main settlement and 'regional centre' within the North Essex area, and focuses single development Garden Community options (i.e. not a series of expanded settlements as per the Metro Plan option) in this broad area.	1) Physical limitations – Negative 2) Impacts – Negative 3) Environment Amenity – Negative 4) Transport – Positive 5) Resilience – Uncertain 6) Housing – Negative 7) Employment – Negative 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - No impact	Please see reasons for rejecting the North of Colchester option above.



Scenario	Sites forming Permutation			Why considered a reasonable alternative?	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
5.	West of Braintree	Monks Wood	Colchester / Braintree Borders	This scenario represents a western focus of Garden Communities to address the fact that housing in Braintree is relatively unaffordable.	1) Physical limitations – Negative 2) Impacts – Negative 3) Environment Amenity – Negative 4) Transport – Uncertain 5) Resilience – Positive 6) Housing – Negative 7) Employment – Negative 8) Mixed-use – Significantly positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - No impact	Please see reasons for rejecting the Monks Wood option above.
6.	Monks Wood	West of Braintree	N/A	This scenario also represents a western focus to address the fact that housing in Braintree is relatively unaffordable, however with two Garden Communities only.	1) Physical limitations – No impact 2) Impacts – No impact 3) Environment Amenity – No impact 4) Transport – Negative 5) Resilience – Uncertain 6) Housing – Significantly negative 7) Employment – Significantly negative 8) Mixed-use – Positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - No impact	Please see reasons for rejecting the Monks Wood option above.
7.	West of	Colchester	Metro Plan	This scenario represents a	1) Physical limitations – No impact	Please see reasons for rejecting the Metro



Scenario	Sites forming Permutation			Why considered a reasonable alternative?	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
	Braintree	/ Braintree Borders		distribution that best responds to the notion of each LPA meeting their own identified needs in their administrative areas with no cross-boundary implications.	2) Impacts – No impact 3) Environment Amenity – No impact 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Negative 7) Employment – Positive 8) Mixed-use – Uncertain 9) Environmental Quality & Sustainability – Negative 10) Developability / Deliverability - No impact	Plan option above.
8.	Metro Plan	Tendring / Colchester Borders	West of Braintree	This scenario has been identified as it avoids the A120 re-routing uncertainty that exists at the current time. Under this scenario, three Garden Communities have been explored, to maximise the certainty of developability in the plan period.	1) Physical limitations – No impact 2) Impacts – Uncertain 3) Environment Amenity – No impact 4) Transport – Positive 5) Resilience – Significantly positive 6) Housing – Negative 7) Employment – Positive 8) Mixed-use – Uncertain 9) Environmental Quality & Sustainability – Negative 10) Developability / Deliverability - No impact	Please see reasons for rejecting the Metro Plan option above.
9.	Tendring / Colchester	West of Braintree	N/A	This scenario has been identified as it avoids the A120 re-routing	1) Physical limitations – No impact 2) Impacts – No impact	This alternative has been rejected as it would not meet the North Essex



Scenario	Sites forming Permutation			Why considered a reasonable alternative?	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
	Borders			uncertainty that exists at the current time. Under this scenario, two Garden Communities have been explored.	3) Environment Amenity – No impact 4) Transport – Positive 5) Resilience – Positive 6) Housing – Significantly negative 7) Employment – Uncertain 8) Mixed-use – Positive 9) Environmental Quality & Sustainability – Significantly positive 10) Developability / Deliverability - No impact	Authorities' housing requirement. The deliverability and sustainability of the Garden Communities was considered to be best served by their location in three distinct areas of the strategic area.

2.4.4 Different Approaches to Delivering Strategic Growth

This part of the SA explores whether Garden Communities are the most sustainable option for the strategic area through a high-level assessment on a broadly comparable basis. It explores the sustainability impacts of the following different approaches.

Option	Summary of sustainability impacts highlighted in the SA	Reasons for Selection / Rejection
1. Garden Communities	<p>There will be positive Impacts on the majority of the sustainability criteria.</p> <p>There will be uncertain Impacts on the following sustainability criteria: rural affordable housing / retail and other services in rural areas / locating development in close proximity to town</p>	Garden Communities can ensure that infrastructure is delivered prior or at the same time as the commencement of homes. The approach can adhere to the aspirations of Garden City Principles, as proposed through the Garden Community model by the North Essex Authorities taking an interventionist approach to strategic development.



	<p>centres / encourage the rural economy / impact on a national, international or European (Natura 2000) designated site / improve rural public transport / required improvements to utilities infrastructure / capacity in GP services / designations, features and areas of historical, archaeological and cultural value / greenhouse gases / renewable energy / water resources and sewerage capacity / air quality along the A12 or A120 / development outside development boundaries</p> <p>There will be negative Impacts on the following sustainability criteria: requiring significant supporting transport infrastructure / landscapes / the loss of high quality agricultural land.</p>	
<p>2. 'Traditional Approaches' to strategic growth (responding to expansions of existing urban areas and other settlements within the strategic area).</p>	<p>There will be positive Impacts on the majority of the sustainability criteria.</p> <p>There will be uncertain Impacts on the following sustainability criteria: meeting Gypsy and Traveller pitch requirements / access to health facilities / rural affordable housing / retail and other services in rural areas / locating development in close proximity to town centres / encourage the rural economy / easy public travelling distance to town centres / improve public transport networks to town centres / increase and/or improve the availability and usability of sustainable transport modes / integration of transport modes / concentrate development and facilities where access via sustainable travel is greatest / impact on a national, international or European (Natura 2000) designated site / improve rural public transport / required improvements to utilities infrastructure / capacity in GP services / designations, features and areas of historical, archaeological</p>	<p>There has been a lack of available, suitable options for urban extensions at the scale required submitted throughout the Local Plan process. In addition, 'traditional approaches' are unlikely to deliver 'infrastructure first' and adhere to the aspirations of Garden City Principles, as proposed through the Garden Community model by the North Essex Authorities taking an interventionist approach to strategic development.</p>



	<p>and cultural value / greenhouse gases / renewable energy / water resources and sewerage capacity / air quality along the A12 or A120 / development outside development boundaries</p> <p>There will be negative Impacts on the following sustainability criteria: requiring significant supporting transport infrastructure / landscapes / the loss of high quality agricultural land.</p>	
<p>3. New Towns (without the application of Garden City Principles in their development)</p>	<p>There will be positive Impacts on few of the sustainability criteria.</p> <p>There will be uncertain Impacts on the following sustainability criteria: community facilities / the range and affordability of housing / access to health facilities / access to sport and recreation facilities, open space and accessible green space / access by walking or cycling / locate development within easy public travelling distance to town centres / improve public transport networks / the delivery of a range of employment opportunities / employment opportunities / support business innovation / improve rural public transport / conserve and enhance species diversity / sustainable transport modes / required improvements to utilities infrastructure / capacity in GP services / greenhouse gases / renewable energy / water resources and sewerage capacity / air quality along the A12 or A120 / development outside development boundaries / access to jobs, shopping, services and leisure facilities / requiring significant supporting transport infrastructure / high quality design principles.</p> <p>There will be negative Impacts on the following sustainability criteria: social inclusion / rural affordable housing / well designed</p>	<p>There has been a lack of available, suitable options for New Towns submitted throughout the Local Plan process. In addition, New Towns are unlikely to deliver 'infrastructure first' and adhere to the aspirations of Garden City Principles, as proposed through the Garden Community model by the North Essex Authorities taking an interventionist approach to strategic development.</p>



and sustainable housing / meeting Gypsy and Traveller pitch requirements / improve existing training and learning facilities / potential impact on a national, international or European (Natura 2000) designated site / maintain and enhance sites otherwise designated for their nature conservation interest / conserve and enhance natural/semi natural habitats / integration of transport modes / requiring significant supporting transport infrastructure / landscapes / the loss of high quality agricultural land / minimise congestion at key destinations / school places / capacity in GP services / designations, features and areas of historical, archaeological and cultural value / open space / ability to mitigate / AQMAs.



3. History of Alternatives – The Section One Policies

3.1 Introduction

This Section sets out the history of the Section One policies. These have been developed from the Preferred Options stage onwards.

This section contains the following policies, and their appraisal throughout the Section One plan-making process covering the Preferred Options and Draft Publication stages.

- Vision for the Strategic Area
- Strategic Objectives
- Policy SP1 – Presumption in Favour of Sustainable Development
- Policy SP2 – Spatial Strategy for North Essex
- Policy SP3 – Meeting Housing Needs
- Policy SP4 – Providing for Employment and Retail
- Policy SP5 – Infrastructure and Connectivity
- Policy SP6 – Place Shaping Principles
- Policy SP7 – Development and Delivery of New Garden Communities in Essex
- Policy SP8 – Tendring / Colchester Borders Garden Community
- Policy SP9 – Colchester / Braintree Garden Community
- Policy SP10 – West of Braintree Garden Community



3.2 Section One Policies

Policy	Alternatives considered	Summary of sustainability impacts highlighted in the SA	Reasons for Selection in light of the alternatives
Vision for the Strategic Area	None considered reasonable	N/A	The Vision can be seen as a general summary of the content of the Strategic Section One for Local Plans. As such, the Vision as written was selected. The individual elements of the Vision are elaborated on in more detail within other policies of the document. Alternatives are explored in more detail within the assessment of these policies later within this SA, commensurate to their individual context.
Strategic Objectives	None considered reasonable	N/A	Similar to the Vision, the Strategic Objectives can be seen as a general summary of the content of the Strategic Section One for Local Plans. The Strategic Objectives reflect those of the strategic area and the requirements of local plans as espoused within the NPPF; as a result of this, the objectives were selected and no other alternatives can be considered reasonable. The individual elements of the Strategic Objectives are elaborated on in more detail within other policies of the document. Alternatives are explored in more detail within the assessment of these policies later within this SA, commensurate to their individual context.
Policy SP1 –	None considered reasonable	N/A	Comments received during the Preferred Options



Policy	Alternatives considered	Summary of sustainability impacts highlighted in the SA	Reasons for Selection in light of the alternatives
Presumption in Favour of Sustainable Development			consultation stage identified a possible approach that the policy insist upon an 'infrastructure first' qualification. The notion of 'infrastructure first' is established throughout the plan and included within the Section One at more relevant points. As such, no alternative approaches can be considered reasonable as the policy reiterates the thread of sustainable development as espoused in the NPPF. As such the Policy was selected. Any alternative that deviates from this approach would be contrary to NPPF and therefore an unsound approach.
Policy SP2 – Spatial Strategy for North Essex	This Policy of Section one is dealt with earlier on in this Annex.		
Policy SP3 – Meeting Housing Needs	Alternative 1 – A lower uplift than the policy approach. This responds to 8% uplift over the HMA and represents an indicative split where Tendring still meets its SNPP provision and the uplift is reduced for the HMA partner authorities. This has been appraised as specific to the OAN alternative, and also of an 'indicative lower' level of growth. (Preferred Options SA 2016, Draft Publication SA 2017)	Uncertain impacts highlighted for housing and landscapes associated with growth levels that are still high in comparison to previous Local Plan targets, but do not meet the area's OAN as significantly.	Policy SP3 will have significantly positive impacts on housing and uncertain impacts on landscapes. The NPPF is clear that the HMA as whole should work to meet its OAN in full, provided that it has the sustainable capacity to do so consistent with the policies in the NPPF. How provision should be distributed between districts will depend on supply factors and policy objectives. In response to this, it should be noted that each authority has identified a justified and achievable indicative housing target in line with their work towards a Local Plan in each instance and these needs are reflected in the policy.



Policy	Alternatives considered	Summary of sustainability impacts highlighted in the SA	Reasons for Selection in light of the alternatives
	<p>Alternative 2 – A higher uplift than the policy approach. This responds to 17% uplift over the HMA and represents an approach where Tendring provides only enough homes to meet its projection before any uplift is applied. This has been appraised as specific to the OAN alternative, and also of an ‘indicative higher’ level of growth. (Preferred Options SA 2016, Draft Publication SA 2017)</p>	<p>Significantly positive impacts on housing due to growth higher than OAN, but with corresponding negative impacts on landscapes as a result. Uncertain impacts are also highlighted for biodiversity and water quality as the Appropriate Assessment does not explore whether mitigation is possible at this level of growth.</p>	
<p>Policy SP4 – Providing for Employment and Retail</p>	<p>Alternative 1 – Forecasts based on EEFM findings only (an indicative higher amount of jobs). (Preferred Options SA 2016, Draft Publication SA 2017)</p>	<p>Significantly positive impacts in the long term, with positive impacts in the short-medium term.</p>	<p>Policy SP4 will have significantly positive short-long term impacts on economic growth. The impacts of the alternative will be similar to the preferred policy methodology, with significant positive impacts on long term employment (SO5), in line with the ‘mixed use’ and sustainable transport infrastructure opportunities associated with Garden Communities. Impacts in the short to medium term are however less significant, due to the alternative primarily not initially factoring in commuting; this leads to forecasts showing a disparity between population growth and job growth. The OAN Report indicates that in Braintree and Colchester there would be a higher population than identified in the 2012</p>



Policy	Alternatives considered	Summary of sustainability impacts highlighted in the SA	Reasons for Selection in light of the alternatives
			<p>Sub National Population Projections (SNPP), suggesting that if population grows in line with the official projection it may not provide enough workers. This issue would rely on being resolved by changes in commuting. The OAN Report also adds that for Tendring the EEFM figure would be well below the SNPP, confirming that trend-based population growth would result in a labour surplus. For these reasons, the alternative has been rejected and the preferred policy approach selected.</p>
Policy SP5 – Infrastructure and Connectivity	None considered reasonable	N/A	<p>The infrastructure requirements are specific to the content of the Strategic Section One for Local Plans and no other alternatives can be considered reasonable. As such, the Policy was selected. It can be considered that alternatives could only regard different permutations of alternatives explored within the SA, in particular those related to Spatial Strategy and Garden Community options explored within this SA and considered in the plan-making process</p>
Policy SP6 – Place Shaping Principles	None considered reasonable	N/A	<p>In so far as the place shaping principles of the Policy reiterate sustainable land use requirements as espoused in the NPPF and PPG, it is considered that there are no reasonable alternative approaches that could be considered distinctively different yet still meet tests of soundness. As such the preferred policy approach has</p>



Policy	Alternatives considered	Summary of sustainability impacts highlighted in the SA	Reasons for Selection in light of the alternatives
			been selected.
Policy SP7 – Development and Delivery of New Garden Communities in Essex	None considered reasonable	N/A	The requirements are specific to the content of the Strategic Section One for Local Plans and no other alternatives can be considered reasonable. It can be considered that alternatives could only regard different permutations of alternatives explored, in particular those Spatial Strategies and Garden Communities explored within this SA and considered in the plan-making process. As such the preferred policy approach has been selected.
Policy SP8 – Tendring / Colchester Borders Garden Community	None considered reasonable	N/A	The principles and requirements of this Policy are specific to the Garden Community, to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such no other alternatives can be considered reasonable and the preferred policy approach has been selected.
Policy SP9 – Colchester / Braintree Garden Community	None considered reasonable	N/A	The principles and requirements of this Policy are specific to the Garden Community, to which this policy relates, ensuring that aspirations surrounding sustainable



Policy	Alternatives considered	Summary of sustainability impacts highlighted in the SA	Reasons for Selection in light of the alternatives
			<p>development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such no other alternatives can be considered reasonable and the preferred policy approach has been selected.</p>
Policy SP10 – West of Braintree Garden Community	None considered reasonable	N/A	<p>The principles and requirements of this Policy are specific to the Garden Community, to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such, the Policy was selected and no other alternatives can be considered reasonable.</p>



4. Consultation Comments Received

4.1 Preferred Options Consultation Stage

Consultee	Comment	SA Response
CAUSE	<p>The Sustainability Appraisal contains a number of serious inconsistencies and omissions. This commentary focuses on :</p> <p>The erroneous inclusion of West Colchester Garden Community in the Preferred Options and the equally erroneous rejection of North Colchester Garden Community.</p> <p>The erroneous exclusion of CAUSE’s Metro Plan, prepared by CAUSE’s professional team. This alternative has received recognition in the wider planning community but has been misunderstood by the authors of the sustainability appraisal. It is a matter of regret that CAUSE has been unable to explain it to the appraisers, despite repeated requests to do so.</p>	<p>Noted. The SA assesses the preferred content of the Section One as it is presented, alongside the assessment of reasonable alternatives. Reasons for rejection and selection are included as per Planning Practice Guidance – Strategic environmental assessment and sustainability appraisal, which states, ‘the sustainability appraisal should outline the reasons the alternatives were selected, the reasons the rejected options were not taken forward and the reasons for selecting the preferred approach in light of the alternatives.’ All content of the Section One, as well as those reasonable alternatives including the Metro Plan option, have been re-assessed where necessary within the SA in light of updated evidence and consultation responses.</p>
	<p>The principal argument in favour of West Colchester GC appears to be that the location will ‘stimulate required infrastructure delivery’. This political argument is highly inappropriate in a sustainability appraisal. Garden settlements should be located in the most sustainable locations from the point of view of society as a whole, not with the intention of securing funding from other parts of the public sector.</p> <p>We conclude that the infrastructure requirements to ensure that West Colchester succeeds as a garden community are too high, both in terms of financial viability and practical deliverability. The location does not support the NPPF principle of reducing journeys and it appears that the</p>	<p>Noted. The Sustainability Appraisal has been amended to reflect these comments.</p>



Consultee	Comment	SA Response
	<p>sustainability appraisal favours it for political rather than economic reasons.</p>	
	<p>Severance.</p> <p>Marks Tey already suffers from severe severance by the A12, the A120 and the GEML. Shops are severed from the village hall which is itself is severed from the main residential area. The industrial area between road and railway has unsatisfactory and dangerous linkages to both A12 and A120.</p> <p>Without huge infrastructure investment these problems will be exacerbated in the expanded settlement. The Appraisal acknowledges the severance caused by the A12 and the GEML. It neglects to mention the additional severance caused by the current A120, the Sudbury line and the new A120 which will join the A12 in the area. Therefore, West Colchester will be a community severed in five directions. See map of Marks Tey, below.</p> <p>North Colchester is capable of forming a coherent community with its own centre and identity. The A12 forms a natural boundary which can be bridged to link the community to Severalls Industrial Park.</p> <p>There is no logic to why such extreme severance is considered acceptable at West Colchester yet the significantly lesser severance at North Colchester is not considered acceptable. The Appraisal should make more attempt to compare the search areas and analyse the differences.</p>	<p>Noted. The SA has re-assessed the options in regard to severance.</p>
	<p>Sustainability and accessibility.</p> <p>There are significant sustainable transport and accessibility issues at West Colchester GC highlighted by Place Services and by Aecom. The impact on the transport network will be exacerbated by the need for many residents to travel to work elsewhere. This is not highlighted sufficiently in the Appraisal.</p> <p>a. Road congestion. It is clear from the Appraisal that road infrastructure represents the main barrier to development at West Colchester GC. The Appraisal contradicts itself, stating, despite its own references to congestion, that the</p>	<p>Noted. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options.</p>



Consultee	Comment	SA Response
	<p>A12 and A120 at West Colchester GC are 'beneficial'. Negative concerns that North Colchester GC will be reliant on the A12 and 'could' increase congestion are therefore also contradictory if the Appraisal believes that location on the A12 at Marks Tey is beneficial when it is considered a negative a few miles away.</p> <p>The Appraisal must compare like with like. The congestion effects on the A12 will be high at both North Colchester GC and West Colchester GC, arguably higher at West Colchester GC due to the larger settlement proposed and the distance from any of North Essex's designated strategic economic areas.</p> <p>b. Rail. It is extraordinary that the Appraisal neglects to discuss the capacity issues on the GEML. Aecom is clear in its assessment of the long term capacity constraints on the line, stating that Network Rail's own proposed interventions will be insufficient. West Colchester's location to encourage rail commuting is flawed.</p> <p>In addition, the accessibility issues at the station raised in the Appraisal 'limit any meaningful expansion'. Relocation of Marks Tey station is suggested, but only in the 'Maximum Land Take' option in the Aecom analysis - yet another illogical piece of analysis. The station must be central in any West Colchester GC option.</p> <p>The location of the station in the new community and the Anglia Route Study capacity forecasts make it clear that the station is not the advantage it is purported to be.</p> <p>c. Bus. The bus service from Little Tey & Marks Tey is cited as a clear advantage for developing a sustainable transport system and BRT, a clear sign that the appraisers have yet to appreciate the scale of development proposed or of infrastructure needed. This is not a location differentiator as there are bus services from all rural areas into the centre of Colchester. Nor does it form the basis for a BRT system, something which is a complex and expensive undertaking!</p> <p>By comparison, at North Colchester GC not only is there already a Park & Ride (referred to in the Appraisal) in place but already the planned provision of a dedicated bus corridor to support existing plans for 1,500 homes at Severalls Hospital (not mentioned in the Appraisal - why?).</p>	



Consultee	Comment	SA Response
	<p>Nor does the Appraisal refer to the Rapid Transit Option Appraisal being investigated to link the Severalls site, University and town centre, which would bring benefits to (and could be extended to) the North Colchester options.</p> <p>It is clear that public transport options under consideration in the north Colchester area are well advanced and would offer considerable benefits to the residents of North Colchester GC. Meanwhile proposals for the West of Colchester still range from heavy rail (cost £2bn), adapting existing rail (cost £500m) or developing a new Bus Rapid Transit system for £25m, which we suspect will do little other than further congest existing roads.</p> <p>d. Cycling & walking. Aecom notes that there are no external cycle and pedestrian ways near the West Colchester GC search area, and a quick glance at the map above makes it clear that retrospective provision will be difficult. The Appraisal neglects to mention this, nor does it refer to the distance of the settlement from Colchester and Braintree, which would discourage cycling and walking.</p> <p>With reference to North Colchester GC, the Appraisal does not cite the benefits of the 'well-established Colchester walking and cycling network linking the [North Colchester] site, the P&R, Stadium and importantly the employment and leisure area on the south side of the A12' (Aecom Garden Communities Concept & Evaluation).</p>	
	<p>e. Reducing journeys. West Colchester, as a new and stand-alone community, offers none of the benefits of existing employment which the North Colchester settlement offers. It is not a Strategic Economic Area and there is no focus for employment (Aecom refers to home-working and touch-down spaces as the employment strategy). Whilst land will be provided for employment, Aecom notes that residents of West Colchester will be attracted to Severalls and the Northern Gateway to work, which will require residents to travel by car on the A12.</p> <p>By contrast, Colchester GC will be adjacent to employment at Colchester's Strategic Economic Area of Severalls and the Northern Gateway. Aecom's schematic demonstrates this relationship.</p> <p>The Appraisal asserts that all Garden Community Options</p>	<p>Noted. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options.</p>



Consultee	Comment	SA Response
	<p>will have broadly the same employment opportunities. This is clearly not the case and nor does the conclusion meet with the NPPF aim to reduce journeys to work and to locate houses for employment.</p> <p>Taking each of the three options:</p> <p>East Colchester benefits from and supports the growth of the University, the Knowledge Gateway (one of Colchester’s three Strategic Economic Areas), and the town centre.</p> <p>North Colchester benefits from and supports the Strategic Economic Area of the Northern Gateway, Severalls (and the town centre).</p> <p>West Braintree benefits from and supports the strategic employment zones of Skyline 120 and Panfield, and is on the ‘right side’ of town for employment at Stansted, where sustainable transport solutions are proposed.</p> <p>West Colchester GC is located far from any strategic employment zone and town centre.</p>	
	<p>Deliverability</p> <p>Place Services reminds us that the deliverability of West Colchester is directly linked to investment decisions by Highways England. There is no such constraint at North Colchester. Aecom and Place Services believe that the road network in its existing state must constrain development at West Colchester to between 500-900 homes.</p> <p>CAUSE believes that the GEML must be additionally considered as a constraint and questions why the Appraisal has not taken it into account.</p> <p>Finally, North Colchester GC carries a lower deliverability risk being entirely within Colchester’s boundaries.</p>	<p>Noted. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options.</p>
	<p>Pollution.</p> <p>It is evident that West Colchester, situated between the A12, current A120 and new A120, will suffer from pollution and air quality issues as evidenced by the image below (Source www.airtext.info 14 September 2016). This topic is</p>	<p>Noted. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options.</p>



Consultee	Comment	SA Response
	<p>not mentioned in the Appraisal's summary comparison between options although in the detail it does state that the main air quality issues for Braintree relate to traffic on the A12 and A120. Once again, the report contradicts itself, stating that cumulatively the garden communities will have a positive impact on air quality due to availability of sustainable transport but that there would be an A120 and A12 air pollution impact of North & East Colchester combined. Air quality issues need to be given far greater consideration and the inconsistencies ironed out.</p>	
	<p>Water.</p> <p>We challenge the assertion that there are major constraints on water delivery at North Colchester because Anglia Water's response to Colchester's Issues & Options consultation did not differentiate between locations (see table below). We have been unable to find the references in the Appraisal which refer to constraints at North Colchester GC.</p>	<p>Noted. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options.</p>
	<p>Solar farm.</p> <p>We do not agree that a 26 hectare solar farm at North Colchester GC (within a total site of between 457ha and 681ha) prevents garden city principles being applied. This is something that could be addressed through masterplanning and exclusion zones (as required at West Colchester for underground and overhead power cables).</p>	<p>Noted. The SA has been amended.</p>
	<p>Impact on existing residents / protected zones.</p> <p>At North Colchester GC, protection could be afforded to the Dedham Vale AONB through masterplanning and green buffers, and the areas of importance at West Colchester can be protected in the same way. Too little thought is given to the entire villages (Marks Tey and Little Tey) which will be engulfed at West Colchester and the Appraisal simply states that this impact is not 'positive'. There needs to be greater consideration of the impact on the existing local residents of West Colchester.</p>	<p>Noted. The SA has been amended.</p>
	<p>Brownfield.</p>	<p>Noted.</p>



Consultee	Comment	SA Response
	<p>The plan states a preference for building on brownfield land as opposed to greenfield. But there is no mention of the brownfield element at North Colchester – the Boxted airfield. The whole CO4 5 postcode is treated as brownfield in the report from BPS Chartered surveyors. It is unclear why the SA favours West Colchester which is treated as greenfield by BPS.</p>	
	<p>Conclusion on North Colchester / West Colchester comparison</p> <p>The Sustainability Appraisal concludes that for North Colchester GC that there is limited scope for maximum sustainable benefits associated with adhering to Garden City principles. This is contradicted by much of the report's own evidence and the research prepared by Aecom and Colchester's Part 2.</p> <p>The conclusion for West Colchester GC that the location will 'stimulate required infrastructure delivery' is also flawed and makes the report look like a political attempt to secure funding rather than a genuine sustainability appraisal. A location for a garden settlement should not be chosen to stimulate infrastructure delivery, nor because it is proposed by land owners. The infrastructure requirements to ensure that West Colchester succeeds as a garden community are too high, both in terms of financial viability and practical deliverability. The location does not support the NPPF principle of reducing journeys. Planners are trying to fit a square peg to a round hole at West Colchester GC.</p>	<p>Noted. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options.</p>
	<p>Assessment of CAUSE Metro Plan in the Sustainability Appraisal relating to North Essex authorities 'Part 1'</p> <p>The Sustainability Appraisal assessment of CAUSE's Metro Plan strategy is disappointing and inadequate. The absence of appropriate testing goes to the heart of soundness.</p> <p>The Appraisal takes a very narrow view of the Metro Plan, failing to acknowledge that this was part of a broader strategy which included not only the 'pearls' but also a garden community development to the East of Colchester focused on the fast employment growth zone of the University. It aims to make the area more self-supporting,</p>	<p>Noted. The SA has been amended. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options. The Metro Plan option is also included as a Garden Community Option in Appendix 1 of the Environmental Report.</p>



Consultee	Comment	SA Response
	<p>with a new rail 'halt' proposed as an early win.</p> <p>It is extraordinary that the Appraisal has "assessed" the CAUSE option as if it was intended to address the total growth through concentrated development around stations on the Colchester-Clacton/ Walton-on-the-Naze line, rather than as a contribution to growth, which could reduce the scale of development (and associated infrastructure requirements) which is being relied upon to meet growth requirements in less sustainable locations, including West Tey. The Metro Plan was never intended to address Braintree District's housing need and nor does the East of Colchester/West of Tendring garden community included in Tendring and Colchester's Preferred Options do so.</p> <p>The Sustainability Appraisal's conclusion regarding the Metro Plan is unsound and for this reason, we believe the Metro Plan option must be re-assessed.</p>	
Mike Lambert	<p>The Sustainability Appraisal in relation to Policy SP9 relies on the Aecom Report but fails to reach a conclusion on each of the options or indeed, to propose any criteria for how the preferred option for growth should be selected.</p> <p>The Sustainability Appraisal Part 1 fails to adequately test and examine the landscape impact of development north of the A120, especially the north east quadrant bounded by A120, Tey Road and the Sudbury-Marks Tey Branch Line. The Sustainability Appraisal gives inadequate weight to the quality and special character of this area, primarily because it has no designated protection under current planning policy.</p>	<p>Noted. Recommendations are included within the SA.</p> <p>Noted. The SA has re-assessed the options in light of new evidence where it is applicable and relevant to all options.</p>
Andrew Martin Planning on behalf of R F West Ltd, Livelihoods and David G Sherwood	On the west of Colchester/Marks Tey options. Unlike the AECOM report, that carries out a performance review of the site options (volume 3), the SA draws no conclusions on a preferred direction for growth within the broad area identified and as split into four options.	Noted. Recommendations are included within the SA.



Consultee	Comment	SA Response
Natural England	Marks Tey Brickpit Site of Special Scientific Interest (SSSI) is in close proximity to these proposals and ... We would expect the Sustainability Appraisal to identify any potential impacts and any mitigation measures which may be required.	The relevant plan policy includes criteria related to the Marks Tey Marks Tey Brickpit SSSI, and the SA assesses that this is an adequate inclusion.
	Landscapes – we recommend using the National Character Areas which divide England into 159 natural areas, each defined by a unique combination of landscape, biodiversity, geodiversity and economic and cultural activity. The new NCA profiles provide an integrated, locally specific evidence base that can be used for making decisions about the natural environment. The NCAs highlight the significant opportunities in each area and therefore provide a useful planning tool that can help guide the design of projects so that they are appropriate to the locality and deliver the maximum benefits for the natural environment. Colchester falls within NCA Profile: 86 South Suffolk and North Essex Clayland, NCA Profile:111 Northern Thames Basin, and NCA Profile: 81 Greater Thames Estuary.	Noted. These NCAs have been factored into the appraisal of the Garden Community options.
	Natural England is generally supportive of the Sustainability Objectives used in the SA of the Part 1 Local Plan.	Noted.
	The assessment of GCWC1 needs to acknowledge the proximity of Marks Tey Brickpit SSSI to the road and dualling proposals around Marks Tey and the potential for significant impacts on the SSSI.	Noted. The dualling implications are not subject to appraisal in the SA as a preferred route has not been identified by the relevant bodies.
	Infrastructure and Connectivity - has identified 0 for Sustainability Objective 5, however this has not taken into account the impacts to Marks Tey Brickpit SSSI.	Noted. The dualling implications are not subject to appraisal in the SA as a preferred route has not been identified by the relevant bodies.
	Policy SP9 states that, paragraph 6.11.2 Significant and Temporal Effects states that – ‘Despite requirements ensuring the protection and/or enhancement of biodiversity assets within and surrounding the site including the Domsey Brook and Roman River corridors, there will be	The assessment of SP9 has been amended to reflect the new policy wording / criteria.



Consultee	Comment	SA Response
	<p>only minor impacts associated with impacts on sites of nature conservation interest; this is due to no specific mention of Marks Tey Brickpit SSSI. Any site option explored in Policy SP6 would have some degree of impact on this designation, as indicated by being in the SSSI's Impact Risk Zone (IRZ) which requires consultation with Natural England.' Natural England disagrees with the assessment of only minor impacts, due to no specific mention of the Marks Tey Brickpit SSSI. The allocation has been located partially within/in very close proximity to the SSSI. This needs to be appropriately assessed.</p>	
	<p>Indicators – we would not recommend using SSSI condition as an indicator, a better indicator would be impacts (direct and indirect) on designated sites.</p>	<p>Noted. This has been amended.</p>
	<p>From the information provided the strategic locations for growth in Colchester appear to be broadly located in areas which are likely to have the least impact on nationally and internationally designated sites and landscapes.</p>	<p>Noted.</p>



Place Services

Essex County Council
County Hall, Chelmsford, Essex CM1 1QH

T: +44 (0)333 013 6840

E: enquiries@placeservices.co.uk

www.placeservices.co.uk

June 2017



Essex County Council