

**Braintree District Council Pre-Submission Site Allocation and  
Development Management Policies Plan**

**Sustainability Appraisal and Strategic Environmental Assessment**

**Environmental Report - Annex B: Baseline Information  
Programmes**

**February 2014**



## Contents

<b>1. Introduction .....</b>	<b>9</b>
1.1. Background .....	9
1.2. Sustainability Baseline Information .....	9
<b>2. Biodiversity .....</b>	<b>11</b>
2.1. Essex Biodiversity Action Plan.....	11
2.2. Designated Sites .....	11
2.2.1. International Designations.....	11
2.2.2. Sites of Specific Scientific Interest .....	12
2.2.3. National Nature Reserves .....	14
2.2.4. Local Nature Reserves .....	14
2.2.5. Local Wildlife Sites.....	14
2.3. Summary.....	16
<b>3. Landscape .....</b>	<b>18</b>
3.1. Agricultural Land.....	18
3.2. Protected Lanes .....	19
3.3. Special Verges .....	19
3.4. Summary.....	22
<b>4. Air Quality .....</b>	<b>23</b>
4.1. Air Quality Management Areas .....	23
4.2. Nitrogen Dioxide Monitoring in Braintree District.....	24
4.3. Summary.....	26
<b>5. Climatic Factors .....</b>	<b>27</b>
5.1. Climate Change Projections .....	27
5.2. Total Energy Consumption .....	28
5.3. Carbon Dioxide Emissions.....	29
5.4. Energy Consumption .....	29

5.5.	Renewable Energy Consumption .....	30
5.6.	Code for Sustainable Homes .....	30
5.7.	Summary .....	31
<b>6.</b>	<b>Water Quality .....</b>	<b>33</b>
6.1.	Key Water Courses in Braintree District .....	33
6.2.	Aquifers in Essex County .....	34
6.3.	Water Supply in the East of England .....	34
6.4.	River Basin Management Plan .....	36
6.5.	Planning Permissions Granted Contrary to Environment Agency Advice .....	38
6.6.	Summary .....	38
<b>7.</b>	<b>Flooding .....</b>	<b>39</b>
7.1.	Flood Zones .....	39
7.2.	Flood Risk Assessments .....	41
7.3.	Summary .....	42
<b>8.</b>	<b>Cultural Heritage and Townscape .....</b>	<b>43</b>
8.1.	Historic Environment .....	43
8.2.	Listed Buildings .....	43
8.3.	Historic Buildings At Risk Register .....	45
8.4.	Archaeology, Recorded Sites and Finds in Braintree District .....	46
8.5.	Scheduled Monuments .....	46
8.6.	Historic Landscapes .....	48
8.7.	Conservation Areas .....	48
8.8.	Summary .....	52
<b>9.</b>	<b>Health .....</b>	<b>53</b>
9.1.	Health Summary Indicators .....	53
9.2.	Participation in Sport .....	54
9.3.	Incapacity Benefit Claimants .....	54
9.4.	Safety .....	55

9.4.1. Road Traffic Casualties.....	55
9.5. Summary.....	56
<b>10. Population and Social.....</b>	<b>57</b>
10.1. Population .....	57
10.1.1. Population Structure .....	57
10.2. Deprivation .....	58
10.3. Crime.....	61
10.4. Education, Skills and Training.....	61
10.5. Summary.....	63
<b>11. Economy.....</b>	<b>65</b>
11.1. Working Age Population .....	65
11.2. Labour Supply .....	65
11.3. Job Density.....	66
11.4. Employment by Industry Class .....	67
11.5. Employment by Occupation .....	68
11.6. New Businesses .....	69
11.7. Floorspace Composition .....	69
11.8. Summary.....	70
<b>12. Housing.....</b>	<b>71</b>
12.1. Housing Supply .....	71
12.2. Homelessness.....	75
12.3. Traveller Sites .....	76
12.4. Summary.....	77
<b>13. Transport .....</b>	<b>79</b>
13.1. Road Network.....	79
13.1.1. Car Ownership.....	79
13.2. Travel Patterns and Accessibility .....	79
13.2.1. Travel to Work .....	79

13.2.2. Accessibility .....	81
13.3. Summary.....	81

## List of Tables

Table 1: Number of AQMAs within each district/ borough in Essex.....	23
Table 2: Bias Adjusted Nitrogen Dioxide Diffusion Tube Monitoring Annual Mean Results in $\mu\text{g}/\text{m}^3$ .....	24
Table 3: Total Energy Consumption (GWh) in Braintree and Essex, Excluding Petroleum Products, 2011 .....	28
Table 4: Consumption of Petroleum Products (GWh) in Braintree and Essex, 2011 .....	28
Table 5: CO <sub>2</sub> Emissions per Capita .....	29
Table 6: CO <sub>2</sub> Emissions in kt within Essex 2008.....	29
Table 7: Biomass-using Technologies .....	30
Table 8: Number of Code for Sustainable Homes Certificates Issued by Local Authority within Essex up to Sept 2013.....	30
Table 9: Listed Building Composition for Braintree District.....	43
Table 10: Number of buildings on the Historic Buildings at Risk Register across Essex in 2009, 2010 and 2011 .....	45
Table 11: Conservation Area and the Date of Designation .....	49
Table 12: Health Summary Indicators, Braintree District and England.....	53
Table 13: Participation in Sport and Active Recreation .....	54
Table 14: Total Incapacity Benefit and Severe Disablement Allowance Claims Nov 2011 .....	54
Table 15: Mid-Year Population Estimates 2001-2011 .....	57
Table 16: Estimated Population Structure of Braintree, 2011.....	57
Table 17: Indices of Multiple Deprivation 2007 and 2010.....	58
Table 18: Percentage of seriously deprived areas within Essex .....	59
Table 19: Crime Offences in Braintree District and England .....	61
Table 20: GCSE and Equivalent Results .....	61
Table 21: Working Age Adult Qualifications.....	62

Table 22: Number Attending Schools in Braintree District 2008-2012.....	62
Table 23: Percentage of Total Population of Working Age.....	65
Table 24: Labour Supply (July 2012 – June 2013).....	65
Table 25: Job Density 2011 .....	66
Table 26: Employment by Industry Class 2008.....	67
Table 27: Employment by Occupation July 2012 - June 2013 .....	68
Table 28: New Business Registration rate .....	69
Table 29: Industrial and Commercial Floorspace Composition by Bulk Industry Class in m <sup>2</sup> April 2008 .....	69
Table 30: 5 Year Housing Supply in Braintree District .....	73
Table 31: Count of Traveller Caravans July 2013 .....	76
Table 32: Authorised Gypsy and Travellers sites in Braintree District .....	76
Table 33: Private Vehicle Ownership .....	79
Table 34: Travel to Work Method by Residence, 2011 .....	79
Table 35: Proportion of Braintree Residents with Access to Services within 15 minutes and 30 minutes .....	81

## List of Figures

Figure 1: Sites of Special Scientific Interest in Essex.....	13
Figure 2: Condition of Sites of Specific Scientific Interest in Braintree District based on Last Assessment .....	13
Figure 3: Location of Local Wildlife Sites in Braintree District.....	16
Figure 4: Agricultural Land Classification in Essex.....	18
Figure 6: Special Verges and Protected Lanes in Braintree .....	21
Figure 7: Location of Main Rivers within Braintree District .....	33
Figure 8: Location of Aquifers in Essex County Council.....	34
Figure 9: Water Supply Resource Availability Status in Braintree District.....	35
Figure 10: Location of River and lake water bodies in the Combined Essex river catchment .....	37
Figure 11: Spatial Extent of Flood Zones 2 and 3 (a and b) in Braintree District .....	40

Figure 12: Spatial Extent of Listed Buildings within Braintree District.....	44
Figure 13: Location of Scheduled Monuments in Braintree District .....	47
Figure 14: Location of Conservation Areas in Braintree District .....	51
Figure 15: KSI Casualties per 100,000 Population across Essex, 2010.....	55
Figure 16: Housing Completions in Braintree District.....	71
Figure 17: Housing Trajectory in Braintree District.....	72
Figure 18: Affordable Housing Supply in Braintree District (net) .....	73
Figure 19: Gross Dwelling Completions on Previously Developed Land in Braintree District .....	74
Figure 20: Number of Homeless Acceptances in Priority Need in Braintree District .....	75



## **1. Introduction**

### **1.1. Background**

Braintree District Council commissioned Place Services at Essex County Council to undertake an independent Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) on the Pre-Submission Site Allocation and Development Management Plan.

This Annex forms part of the Environmental Report and includes a comprehensive baseline analysis of the District.

### **1.2. Sustainability Baseline Information**

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 district which should be addressed and provides a basis for predicting and monitoring the effects of implementing the document. The baseline may need to be updated during the SA/SEA process as new information emerges and/or as additional issues come to light.

To ensure the data collected was relevant and captured the full range of sustainability issues it was categorised under 12 thematic topics. They cover all the topics referred to in Annex 1(f) of the SEA Directive and follow the order of:

- Biodiversity
- Landscape
- Air Quality
- Climatic Factors
- Water Quality
- Flooding
- Cultural Heritage and Townscape

- Health
- Population and Social
- Economy
- Housing
- Transport

The summaries of each topic have been included within the main Environmental Report while this annex contains the detailed baseline information.

## **2. Biodiversity**

### **2.1. Essex Biodiversity Action Plan**

The Essex Biodiversity Action Plan (EBAP) is currently being updated to a new 2011 EBAP. As the new action plans are not fully available this baseline will look at the previous EBAP produced in 1999. There are 25 species and 10 habitat action plans covering Essex and those which are relevant to Braintree are listed below.

- Mammals: Brown Hare, Dormouse, European Otter, Pipistrelle bats, Water Vole
- Invertebrates: Shining ramshorn snail, Stag beetle, White clawed crayfish
- Other vertebrates: Great Crested Newt
- Birds: Grey Partridge, Skylark, Song Thrush
- Plants: Native Black poplar, Oxlip
- Habitats: Ancient and/or species rich hedgerows and green lanes, Ancient woodland, Cereal field margin, Heathland, Old orchards, Urban areas

(Source: Essex Biodiversity Action Plan, 2012<sup>1</sup>)

Development would be inappropriate in locations where the above species and habitats would be negatively affected by road traffic, noise and vibration, hedgerow, farmland or grassland loss, the potential pollution of groundwater or water courses or where development would require the excessive management of vegetation as a consideration.

### **2.2. Designated Sites**

#### **2.2.1. International Designations**

There are no Ramsar sites, Special Protection Areas (SPAs) Special Areas of Conservation (SACs), or candidate Special Areas of Conservation (cSACs), in Braintree District.

However a Habitat Regulations Assessment (HRA) was undertaken for the Braintree Core Strategy in order to determine the indirect effects of the Core Strategy on European Sites outside the Braintree District. The HRA concluded that the Braintree Core Strategy in combination with

---

<sup>1</sup> Available online: <http://www.essexbiodiversity.org.uk/>

adjoining authorities could have a likely significant effect on the integrity of European sites of importance, however this could be mitigated through the provision of SANGS and informed by the implementation of site monitoring. An HRA is currently being undertaken for the Pre-Submission Site Allocation and Development Management Plan.

### **2.2.2. Sites of Specific Scientific Interest**

Sites of Special Scientific Interest (SSSIs) are designated areas of land which are considered to be of special interest due to their fauna, flora, geological and/or physiographical features. There are over 4,000 SSSIs in England. In Essex there are 81 SSSIs covering a total of 36,322 ha, the largest proportion of which are along the coastline as shown in Figure 1.

The success of SSSIs is monitored by Public Service Agreement (PSA) targets in which the SSSIs are put in to one of five categories, ranging from favourable to destroyed. A SSSI is deemed to be meeting the PSA target by Natural England, if 95% of the total area is classed as “Favourable” or “Unfavourable Recovering”.

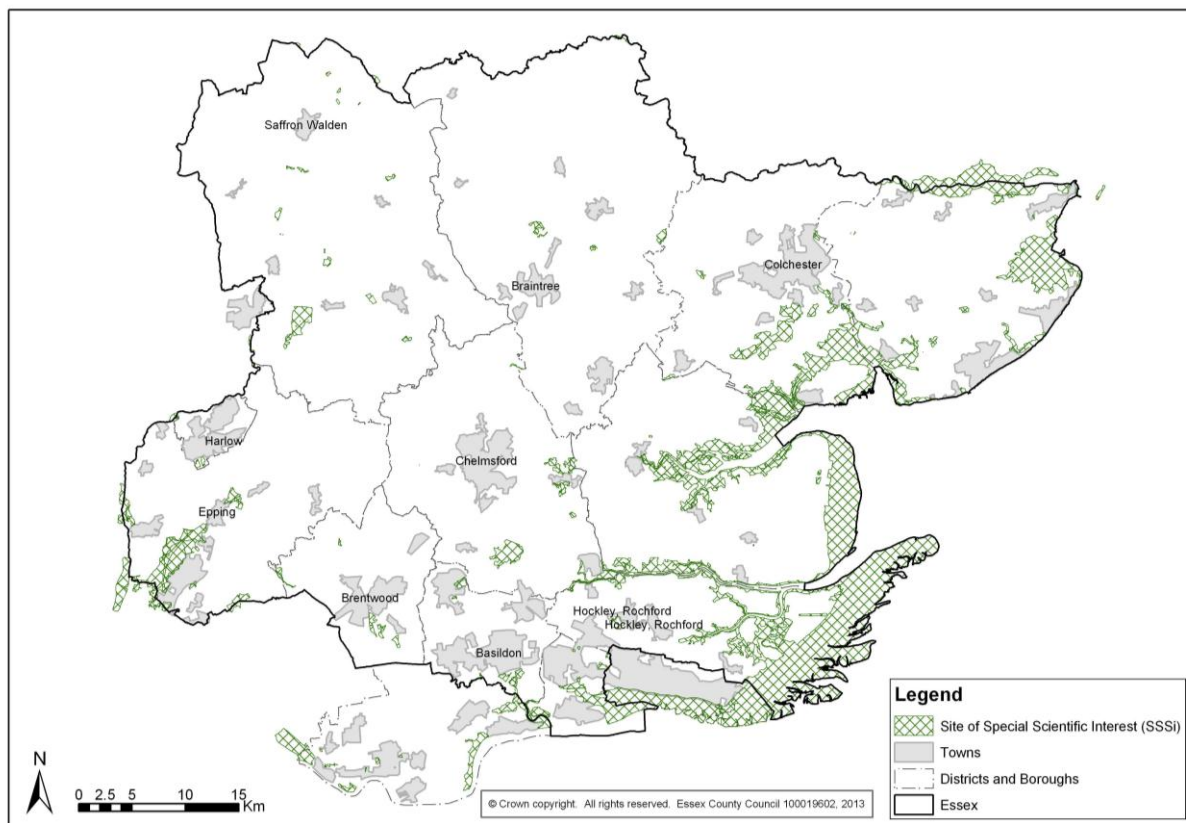
There are four SSSIs in Braintree District at:

- Belcher's and Broadfield Woods
- Bovingdon Hall Woods
- Chalkney Wood
- Glemsford Pits

The condition of SSSIs within Braintree District is reasonable.

On average, Braintree's SSSIs are better than the condition of Essex's total SSSIs since all sites are in 'favourable', 'unfavourable recovering' and unfavourable no change' conditions.

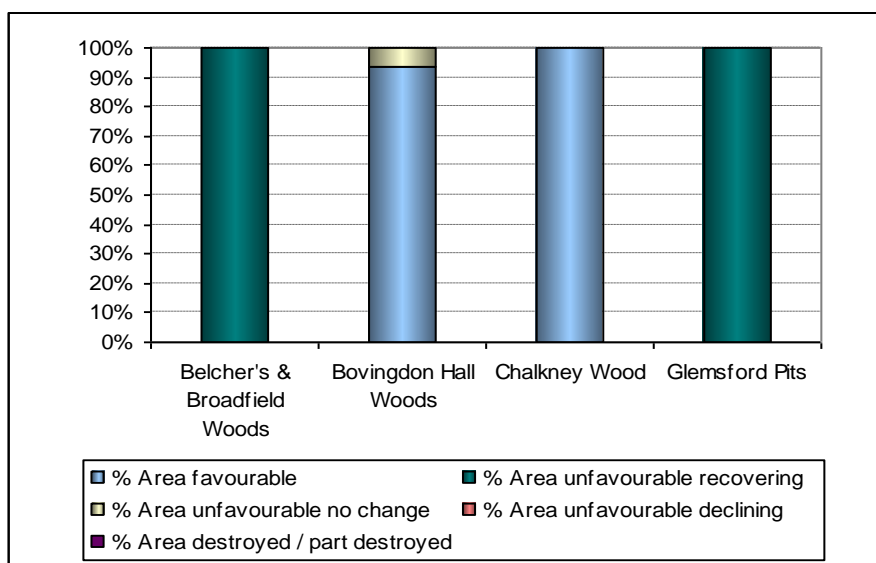
**Figure 1: Sites of Special Scientific Interest in Essex**



Source: Essex County Council, 2013

Figure 2 identifies the proportion of each SSSI in each of the condition classifications.

**Figure 2: Condition of Sites of Specific Scientific Interest in Braintree District based on Last Assessment**



Source: Adapted from Natural England Data (2013)

Chalkney Wood, Belcher's and Broadfield Woods and Bovingdon Hall Woods are currently complying with the PSA target of 95% of all nationally important wildlife sites to be brought into a favourable condition. Of those, Chalkney Wood has 100% of its area in favourable condition while the other two have 100 of their areas in unfavourable recovering conditions. The majority of Glemsford Pits SSSI is also currently complying with the PSA target but 6.7% remain in a condition classed as unfavourable no change.

### **2.2.3. National Nature Reserves**

There are seven National Nature Reserves located in Essex; none of these are in Braintree District.

### **2.2.4. Local Nature Reserves**

Local Nature Reserves (LNRs) are habitats of local significance which contribute to nature conservation; provide opportunities for the public to see, learn about and enjoy wildlife; comprise a substantial part of the district's identified wildlife habitats and also significantly contribute to the district's biodiversity resource.

Braintree District has a total of 7 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 3 other 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.

### **2.2.5. Local Wildlife Sites**

Local Wildlife Sites, previously known as Sites of Importance for Nature Conservation (SINCs) and County Wildlife Sites (CWSs) are areas of land with significant wildlife value. Together with statutory protected areas, LoWS represent the minimum habitat we need to protect in order to maintain the current levels of wildlife in Essex.

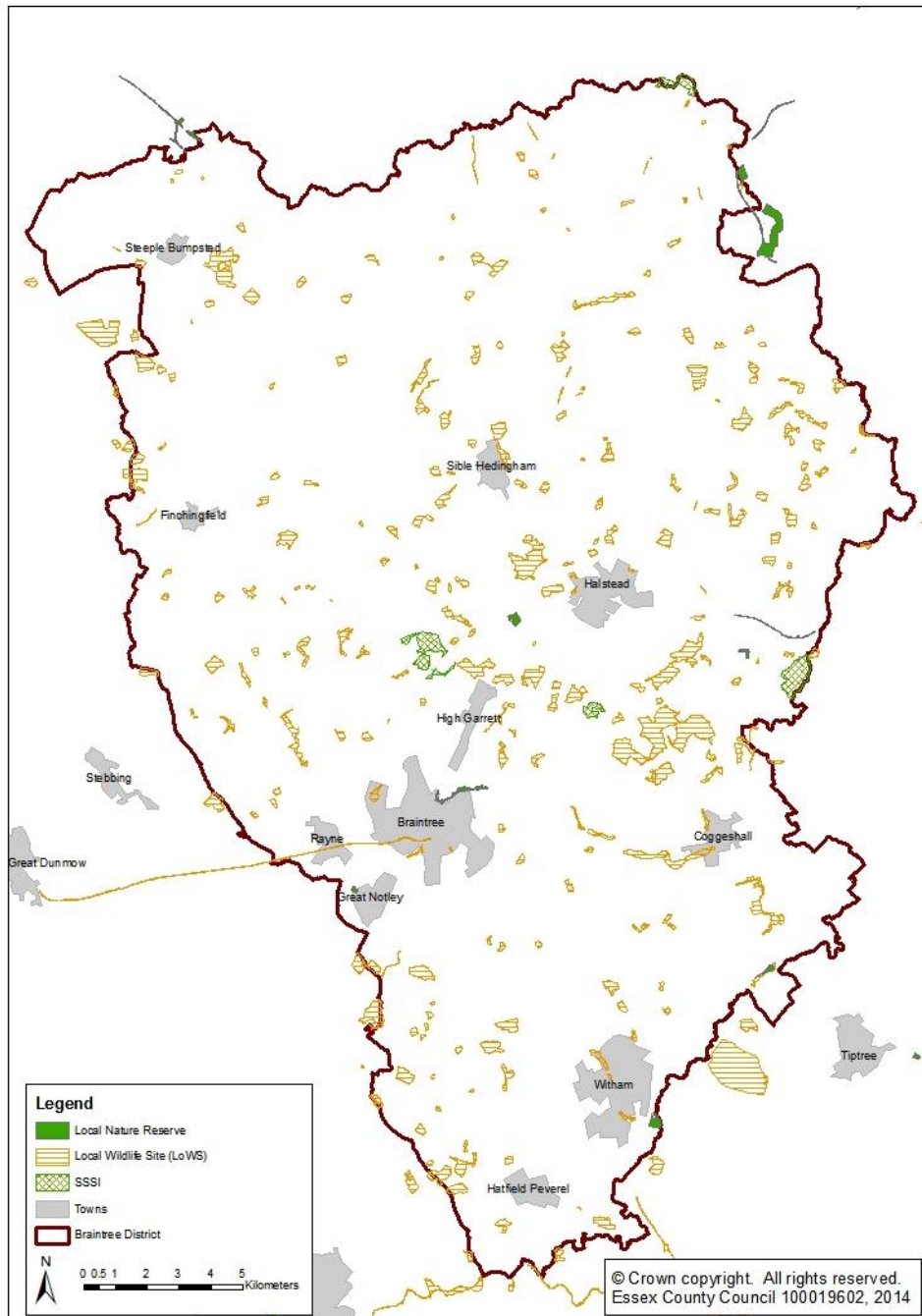
The extent and location of LoWSs in Braintree District follows in figure 3.

There are 251 LoWSs scattered throughout Braintree District, with many concentrated in the centre of the district. Some of the LoWSs correspond with woodland and river valleys in this area and comprise of a total of 165 woodland habitats, 58 grassland, 25 mosaic, and 3 freshwater sites.

The largest LoWS in the district is the Edgars farm complex, which is split into two units of grassland, Edgars Farm East (173.28 ha) and Edgars Farm Meadow (73.00 ha). Other significant LoWSs include Great Monk Wood, a 6.75 ha site of woodland comprising both Sessile and Pedunculate Oak and Small-Leaved Lime coppice. Other tree species present include Ash, Hornbeam and Birch. The woodland floor and rides display a very rich flora, including Early Purple Orchid, Greater Wood-Rush, Great Butterfly Orchid and Ragged Robin.

Moyns Park (0.71ha), is a LoWS of partially improved grassland and is important due to a varied mix of grasses, such as Sweet Vernal Grass, Crested Dog's-tail, Yellow Oat-grass and Meadow Barley. Throughout the park there are many Cowslips. The scattered tree cover adds to both the wildlife interest and landscape appeal of this site.

**Figure 3: Location of Local Wildlife Sites in Braintree District**



Source: Essex County Council, 2014

### 2.3. Summary

There are no international biodiversity designations (Ramsar, SPAs, SACs or cSACs) in Braintree District. However a Habitat Regulations Assessment (HRA) is currently being undertaken.

There are four SSSIs in Braintree District at: Belcher's and Broadfield Woods; Bovingdon Hall Woods; Chalkney Wood and Glemsford Pits. Chalkney Wood, Belcher's and Broadfield Woods



and Bovingdon Hall Woods are currently complying with the PSA target of 95% of all nationally important wildlife sites to be brought into a favourable condition. Of those, Chalkney Wood has 100% of its area in a favourable condition while the other two have 100% of their areas in unfavourable recovering conditions. The majority of Glemsford Pits SSSI is also currently complying with the PSA target but 6.7% remain in a condition classed as unfavourable no change.

There are seven National Nature Reserves located in Essex; none of these are in Braintree District. Braintree District has a total of seven Local Nature Reserves 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.

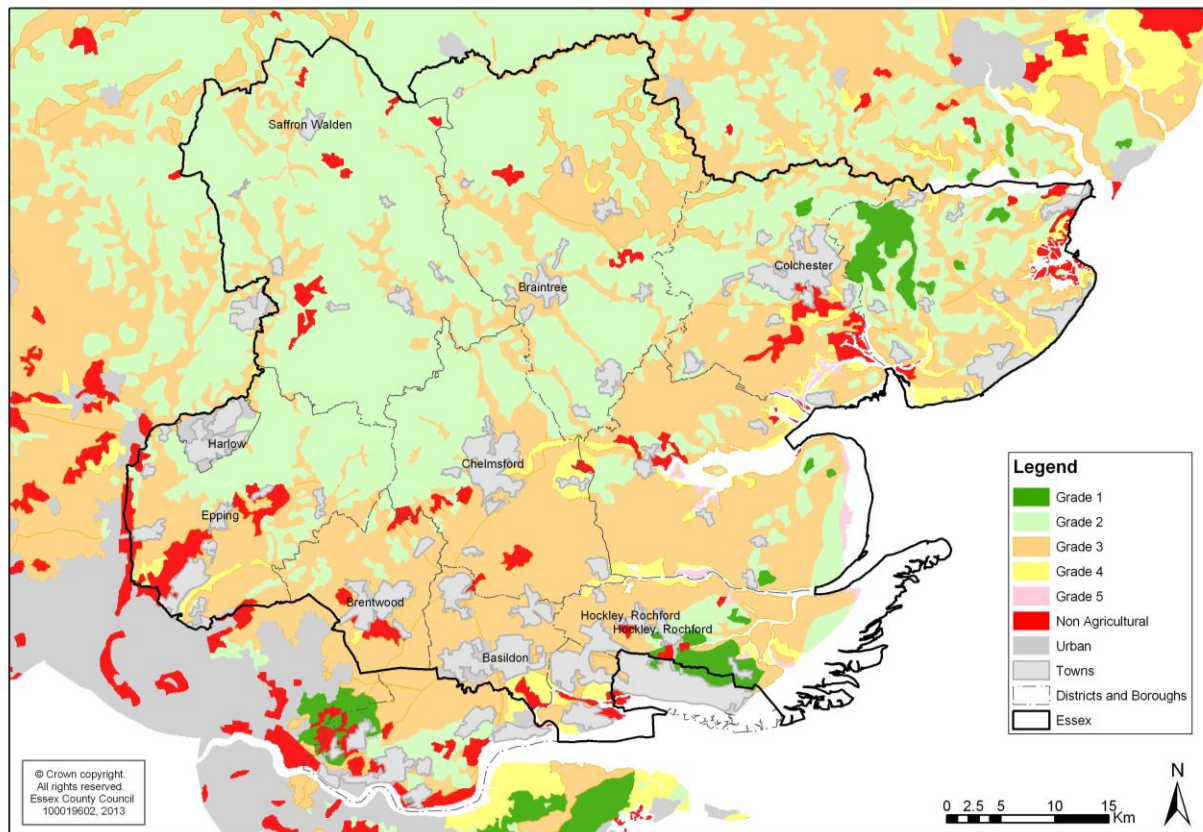
There are 251 LoWSs scattered throughout Braintree District, with many concentrated in the centre of the District.

### 3. Landscape

#### 3.1. Agricultural Land

The East of England contains 58% of the country's Grade 1 and 2 land, with 72% of agricultural land in the region under cultivation. This compares to 29% nationally<sup>2</sup>. The East of England contains just 10% of the country's Grade 4 and 5 land.

**Figure 4: Agricultural Land Classification in Essex**



Source: Essex County Council, 2013

The majority of agricultural land within Essex can be broadly classified as Grade 2 in the north and Grade 3 to the south, as defined by the Agricultural Land Classification System, published by the Ministry of Agriculture, Fisheries and Food (MAFF), now the Department for Environment, Food

<sup>2</sup> Our Environment, Our Future: The Regional Environment Strategy for the East of England. East of England Regional Assembly and East of England Environment Forum, July 2003

and Rural Affairs (DEFRA). This is related to the location of the Essex till, with better quality land located in the north-west of the County.

Agricultural land in Braintree District is classified as Grades 2 and 3, with 65.8% (40,243 hectares) of agricultural land classified as Grade 2 and 29.9% (18,304 hectares) as Grade 3. Strips of Grade 3 soils follow the path of the rivers Brain, Ter, Blackwater and Colne as they flow through the district.

Land classified as Grades 1, 2 and 3 fall into the 'best and most versatile' category in Planning Policy Statement 7: Sustainable Development in Rural Areas (PPS 7), and should therefore be considered a national resource for the future and be given considerable weight when preparing development plans and in exercising development control.

### **3.2. Protected Lanes**

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. The distribution of Protected Lanes through Braintree is shown in Figure 5.

A survey of the existing (141) and proposed (9) Protected Lanes in Braintree was completed in July 2013. The original survey guidelines, developed over 25 years ago, for determining Protected Lane status were found to be no longer available. The 2013 survey used a newly developed set of criteria which had also been applied to Protected Lane surveys in both Chelmsford (2009) and Uttlesford (2012) Districts. In total 101 of the 150 lanes surveyed in Braintree met the criteria for Protected Lane status. The most significant cause of failure of existing Protected Lanes to meet the newly set threshold for Protected Lane status was as a result of agricultural practices. A considerable number of the lanes had their ditches, hedges and verges removed with agricultural production taken up to the very edge of the metalled road. Others failed to meet the criteria due to road improvements following deterioration in their physical condition during the period since their original designation.

### **3.3. Special Verges**

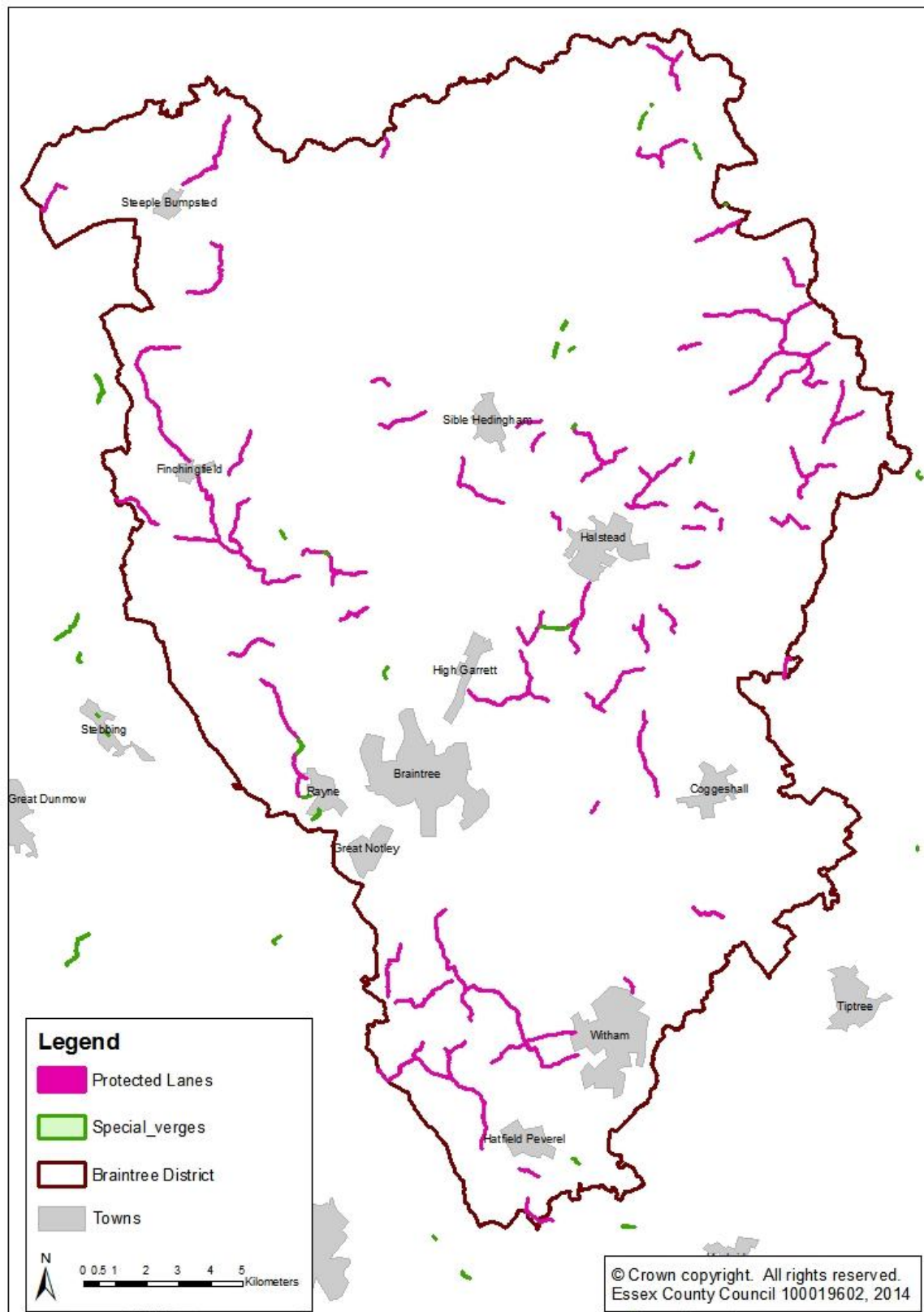
Roadside Verges are important and if sensitively managed they can increase the biodiversity of the verges themselves and from that the surrounding countryside. The reason for this is that verges

can act as corridors interlinking fragmented or isolated habitats. In terms of wildlife value, verges can be split into three broad types:

- Landscaped and intensively managed verges: poorest quality.
- Recently created verges left to colonise naturally: vary in ecological value.
- Ancient verges: often of high ecological value.

With this in mind, in the 1970s, Essex County Council Highways Agency, Nature Conservancy Council and Essex Wildlife Trust identified a number of important verges which were subsequently designated as Special Roadside Nature Reserves. They aim to protect the future of rare and uncommon flowers growing on them. There are over 150 special verges currently designated in Essex with 21 of these in Braintree District as shown in Figure 5. A review of Special Verges in Essex is currently taking place.

**Figure 5: Special Verges and Protected Lanes in Braintree**



Source: Essex County Council, 2014

### **3.4. Summary**

The majority of agricultural land in Braintree District is classified as Grades 2 and 3, with 65.8% (40,243 hectares) of agricultural land classified as Grade 2 and 29.9% (18,304 hectares) as Grade 3. Strips of Grade 3 soils follow the path of the rivers Brian, Ter, Blackwater and Colne as they flow through the district.

Braintree is subject to 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 area to development.

The number of Protected Lanes in Braintree has decreased since they were originally designated mostly due to changes in Agricultural practise but also because of road improvements.

Special Verges are currently under review.

## 4. Air Quality

### 4.1. Air Quality Management Areas

Each local authority in the UK has been carrying out reviews and assessments of air quality within their area since December 1997. The aim of reviewing and assessing the information is to ensure that future and current air quality objectives can be achieved by the deadlines set. If a local authority has an area with measurements of air pollution that are unlikely to meet the objectives, an Air Quality Management Area (AQMA) must be declared. The size of this area can vary from a section of one street to a much larger area of the locality.

Air quality in Essex is generally good. Most industrial processes in Essex are concentrated along the Thames Estuary. The air quality in Essex is influenced by its close proximity to mainland Europe. A total of 65 AQMAs have been designated within the East of England region. There are currently 15 AQMAs within Essex; Table 1 highlights the distribution of these AQMAs.

**Table 1: Number of AQMAs within each district/ borough in Essex**

Local Authority	Number of AQMAs	Local Authority	Number of AQMAs
Basildon	0	Epping Forest	1
Braintree	0	Harlow	0
Brentwood	7	Maldon	0
Castle Point	0	Rochford	1
Chelmsford	1	Tendring	0
Colchester	4	Uttlesford	1
		Total	15

Source: Defra, Jan 2013

All of the aforementioned AQMAs in Essex have been designated as such due to elevated levels of Nitrogen Dioxide (NO<sub>2</sub>).

There are no AQMAs located in Braintree District. The main air quality issues in the district were found to be NO<sub>2</sub> and PM<sub>10</sub> emissions from vehicles travelling on the A12 and A120. Frequent monitoring has shown that all air quality objectives will be met by World Health Organisation

(WHO) target dates and therefore it has not been necessary to declare any AQMAs for any pollutant.

It should be noted that there are currently 5 potentially significant junctions which had daily flows of more than 10,000 vehicles in 2004 and are as follows:

- Newland Street, Witham
- Cressing Road, Witham
- Head Street, Halstead
- Railway Street, Braintree
- Rayne Road, Braintree

#### 4.2. Nitrogen Dioxide Monitoring in Braintree District

Nitrogen Dioxide is monitored from diffusion tubes at 12 locations around Braintree District. The 2010 results showed that 5 monitoring locations exceeded the annual mean NO<sub>2</sub> objective concentration of 40 µg/m<sup>3</sup>. 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.

Relevant exposure levels which reflect the distances of these points from sensitive receptors were all less than the NO<sub>2</sub> objective level indicating that it is unlikely that there will be any exceedences.

Table 2 shows the latest findings. Figures in bold type represent readings which exceeded the annual mean NO<sub>2</sub> objective.

**Table 2: Bias Adjusted Nitrogen Dioxide Diffusion Tube Monitoring Annual Mean Results in µg/m<sup>3</sup>**

Location	Annual mean concentrations (µg/m <sup>3</sup> )		2010 Relevant Exposure Level
	2009	2010	
Braintree - London Road	34.9	36.7	
Braintree - Coggeshall Road	25.1	25.8	
Braintree - Beckers Green Road	21.8	22.1	
Halstead - Colchester Road	27.9	31.5	
Hatfield Peverel - A12	44.3	45.6	
Kelvedon - High Street	29.4	30	
Bradwell, The Street	37.8	43.5	32.2
Braintree - Railway Street	29.5	32.4	



Braintree - Stilemans Wood	31.6	32.6	
Witham - Chipping Hill	49.2	50.3	37.3
Foxden, Rivenhall - A12	n/a	50.5	31.8
Hotel, Rivenhall - A12	n/a	55.3	38.5

Source: 2011 Air Quality Progress Report for Braintree District Council (April 2011)

According to the 2011 Progress Report a new local development, the Rivenhall Incinerator, may impact on air quality and will be included in the next Updating and Screening Assessment which is scheduled for 2012.

### 4.3. Summary

Air Quality in Essex is generally good. There are no AQMAs located in Braintree District. The main air quality issues in the district were found to be nitrogen dioxide and particulate emissions from vehicles travelling on the A12 and A120.

There are currently 5 potentially significant junctions which had daily flows of more than 10,000 vehicles in 2004. They are Newland Street, Witham; Cressing road, Witham; Head Street, Halstead; Railway Street, Braintree; and Rayne Road, Braintree.

Of the 12 passive diffusion NO<sub>2</sub> monitoring tubes located in the district, 5 did exceed the annual mean NO<sub>2</sub> objective concentration of 40 g/m<sup>3</sup> 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.

## **5. Climatic Factors**

### **5.1. Climate Change Projections**

The UK Climate Impact Programme has developed the UK Climate Change Projections 2009 (UKCIP09) which models future climate scenarios for the UK.

The key findings from UKCIP09 of how our climate might change in the future are:

- All areas of the UK will get warmer, and the warming is greater in summer than in winter. Across the UK, central estimates of the average regional summer (June, July, August) temperature rise in the 2080s are between 3 and 4°C.
- Across the UK, central estimates of regional average summer precipitation change are projected to be between -17% to -23% in the 2080s.
- Greater sea level rise in the south of the UK than the north. The central estimates for sea level rise (taking into account land movement) show that sea level is projected to rise by 18cm in London by 2040 and 36cm by 2080.
- Across the UK, central estimates of regional average winter precipitation change are projected to be in the region of +14% (NE) to +23% (SW), in the 2080s.
- Reaching a peak in global emissions in 2016 and achieving a 4% decrease per year thereafter, a global temperature rise to 1.8°C by 2050 is expected, which would then stabilise at about 2°C by 2100.
- Key findings for the East of England for the 2080s (based on medium (current) emissions scenario) are:
  - Under medium emissions, the central estimate of increase in winter mean temperature is 3°C; it is very unlikely to be less than 1.6°C and is very unlikely to be more than 4.7°C.
  - Under medium emissions, the central estimate of increase in summer mean temperature is 3.6°C; it is very unlikely to be less than 1.9°C and is very unlikely to be more than 5.9°C.
  - Under medium emissions, the central estimate of change in winter mean precipitation is 20%; it is very unlikely to be less than 4% and is very unlikely to be more than 44%.
  - Under medium emissions, the central estimate of change in summer mean precipitation is – 20%; it is very unlikely to be less than –44% and is very unlikely to be more than 6%.

Sea level rise and subsidence will lead to more frequent flooding of coastal areas. Increased temperatures and greater fluctuation in annual precipitation will further increase pressure on water resources. With this in mind it is possible to determine the potential flood risk that development sites can add to water bodies in areas of concern. Essex is already one of the driest areas in the UK.

## 5.2. Total Energy Consumption

**Table 3: Total Energy Consumption (GWh) in Braintree and Essex, Excluding Petroleum Products, 2011**

	Braintree			Essex Average		
	Industrial & Commercial	Domestic	Total	Industrial & Commercial	Domestic	Total
Coal	44.8	6.3	51.1	14.27	2.3	16.57
Manufactured Fuels	4.0	0.5	4.5	0.99	0.17	1.17
Natural Gas	259.0	646.4	905.4	216.58	610.24	826.82
Electricity	268.5	287.4	555.9	247.13	228.49	475.63
Renewables	n/a	n/a	5	n/a	n/a	2.46
Total Consumption	n/a	n/a	1521.9	n/a	n/a	1322.65

Source: DECC, 2012

**Table 4: Consumption of Petroleum Products (GWh) in Braintree and Essex, 2011**

	Petroleum Products					
	Industrial & Commercial	Domestic	Road Transport	Rail	Total	Percentage of Total Energy Consumption
Braintree	256.6	68.2	1,242.4	3.1	1570.4	50.78%
Essex Average	138.6	28.80	987.08	4.59	1,159.07	46.70%

Source: DECC, 2012

In 2011 Braintree District consumed more energy than the county average and was the 5th highest consumers amongst all local authorities in the county. A total of 1,245.5 of the District's total 3,092.3GWh energy consumption were from transport related petroleum products. In contrast only 5GWh of energy consumed is generated from renewable sources, however this is a higher amount

that the local authority average for Essex at 2.46GWh and the 2nd highest amount amongst all local authorities in the county.

### 5.3. Carbon Dioxide Emissions

The burning of fossil fuels, changes in land use, and various industrial processes are adding heat-trapping gases, particularly carbon dioxide (CO<sub>2</sub>), to the atmosphere. There is now roughly 40% more CO<sub>2</sub> in the atmosphere than there was before the industrial revolution. One of the main causes of increased CO<sub>2</sub> in the atmosphere is through the burning of fossil fuels for electricity and transportation.

Table 5 sets out the CO<sub>2</sub> emissions per capita for the districts within Essex, with the East of England figures for comparison.

**Table 5: CO<sub>2</sub> Emissions per Capita**

Local Authority	Per capita Total CO <sub>2</sub> (tonnes)				Per Capita Reduction in CO <sub>2</sub> Emissions (%)
	2007	2008	2009	2010	
Braintree	7.3	7.0	6.6	6.7	8.22
Essex Average	7.3	7.0	6.4	6.6	9.59

Source: DECC, 2012

Braintree achieved an 8.22% per capita reduction in CO<sub>2</sub> emissions between 2007 and 2010 which was only slightly less than the Essex average of 9.59%.

### 5.4. Energy Consumption

**Table 6: CO<sub>2</sub> Emissions in kt within Essex 2008**

Authority	Industrial & Commercial		Domestic		Transport		Total
Braintree	295.26	30.29	322.57	33.09	356.87	36.61	974.70
Essex	2766.14	29.71	3209.08	34.47	3333.07	35.80	9308.29

Source: DECC, 2012

Industry, domestic and road transport each produced roughly 1/3 of the total CO<sub>2</sub> emissions within the District in 2008. The industrial and commercial sector produces the smallest amount at 30.29%

while road transport produces the most at 36.61%. When compared to the county average of 35.80%, proportionately more emissions of CO<sub>2</sub> were produced by road transport in the District. Domestic production is proportionally less in the District at 33.09% than the county average of 34.47%.

## 5.5. Renewable Energy Consumption

Braintree consumed 0.16% of its total energy from renewable sources in 2011, the 2nd highest amount amongst Essex Districts/Boroughs and higher than the District/Borough average of 0.09%. (DECC, 2012)

There are 3 Mechanical Biological Treatment (MBT) plants within Essex County Council administrative boundary located in Basildon, Braintree and Colchester as detailed in Table 7. All 3 facilities have planning permission with conditions and respective legal agreements.

**Table 7: Biomass-using Technologies**

Project	Council	Capacity	Nature	Developer
Rivenhall Airfield	Essex County Council (Braintree DC)	Not known	Recycling AD and composting facility	Gent Fairhead & Company Ltd
Stanway Hall Quarry	Essex County Council (Colchester BC)	Not known	MBT with AD and composting	Cory Environmental Ltd
Courtauld Road, Basildon	Essex County Council (Basildon DC)	3 engines 1.46MW	MRF / MBT facility with AD CHP plant using MSW	Essex County Council

Source: Renewables East, 2008

## 5.6. Code for Sustainable Homes

**Table 8: Number of Code for Sustainable Homes Certificates Issued by Local Authority within Essex up to Sept 2013**

Local Authority	Design Stage	Post Construction Stage	Total
Braintree District Council	511	336	847
Essex County Council	191	88	279
Essex Total	4819	3096	7915

Essex Average	370	238	608
---------------	-----	-----	-----

Source: DCLG, Nov 2013

Up to Sept 2013 Braintree District had issued 847 certificates related to the Code for Sustainable Homes, the fifth highest amongst local authorities in Essex and above the local authority average of 608. Of these, 511 certificates were issued at the design stage and 336 post construction.

## 5.7. Summary

Key findings 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°C and an increase in summer mean temperature of approximately 3.6°C. The central estimate of change in winter mean precipitation is 20%; whilst the central estimate of change in summer mean precipitation is –20%.

In 2011 Braintree District consumed more energy than the county average and was the 5th highest consumers amongst all local authorities in the county. A total of 1,245.5 of the District's total 3,092.3GWh energy consumption were from transport related petroleum products. In contrast only 5GWh of energy consumed is generated from renewable sources, however this is a higher amount than the local authority average for Essex at 2.46GWh and the 2nd highest amount amongst all local authorities in the county.

Industry, domestic and road transport each produced roughly 1/3 of the total CO<sub>2</sub> emissions within the District in 2008. The industrial and commercial sector produces the smallest amount at 30.29% while road transport produces the most at 36.61%. When compared to the county average of 35.80%, proportionately more emissions of CO<sub>2</sub> were produced by road transport in the District. Domestic production is proportionally less in the District at 33.09% than the county average of 34.47%.

At 6.7 tonnes in 2010, residents of Braintree District emitted a slightly higher amount of CO<sub>2</sub> per capita than the Essex average, which itself reported a return of 6.6 tonnes, Road transport in Braintree District produces the 4th highest amount of CO<sub>2</sub> per capita across the county's Districts/Boroughs at 2.5 tonnes, which is only just higher than the countywide average of 2.4 tonnes.

Braintree consumed 0.14% of its total energy from renewable sources in 2010, the 2nd highest amount amongst Essex Districts/Boroughs and higher than the District/Borough average of 0.09%.

There are 3 Mechanical Biological Treatment (MBT) plants within Essex County Council administrative boundary located in Basildon, Braintree and Colchester. All 3 facilities have planning permission with conditions and respective legal agreements.

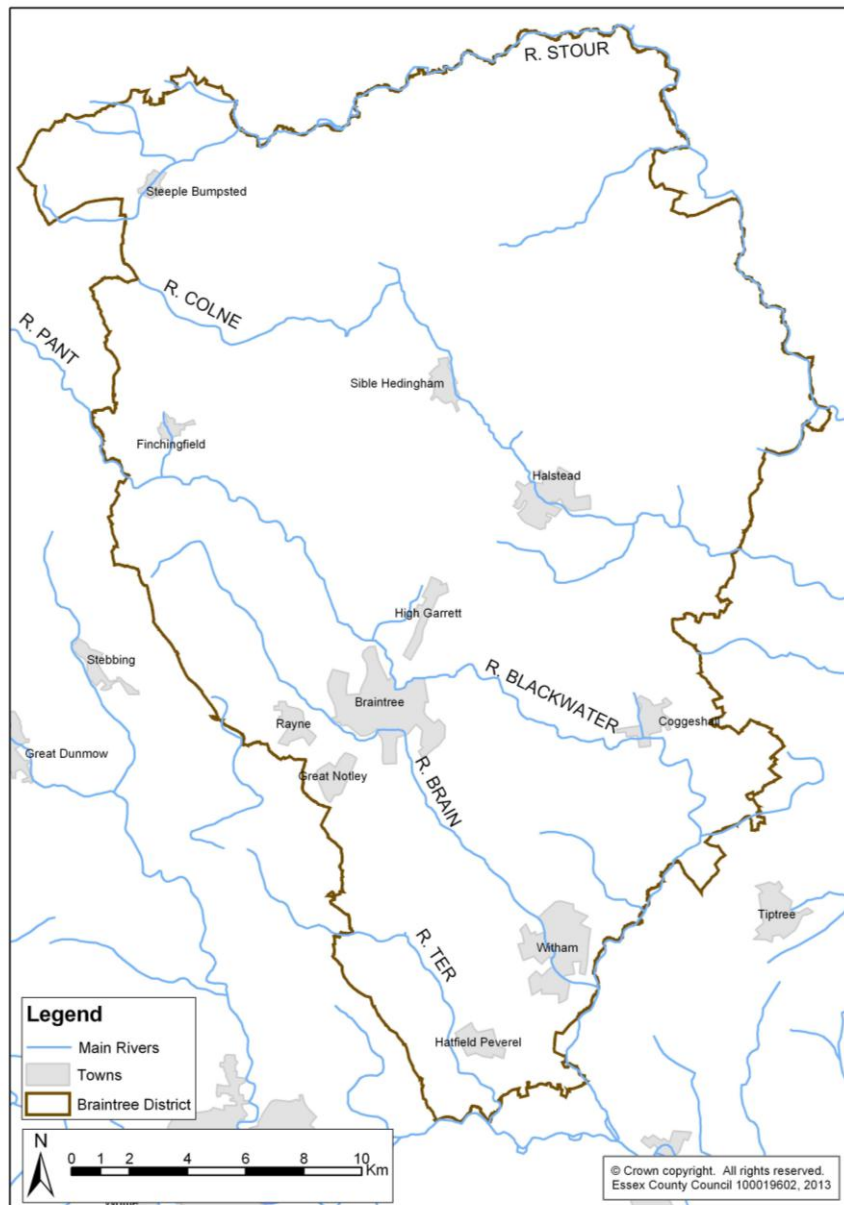
Up to Sept 2013 Braintree District had issued 847 certificates related to the Code for Sustainable Homes, the fifth highest amongst local authorities in Essex and above the local authority average of 608. Of these, 511 certificates were issued at the design stage and 336 post construction.

## 6. Water Quality

### 6.1. Key Water Courses in Braintree District

Figure 6 shows that the main water courses running through Braintree District are the rivers Blackwater, Colne, Brain, Pant, Stour and Ter.

**Figure 6: Location of Main Rivers within Braintree District**



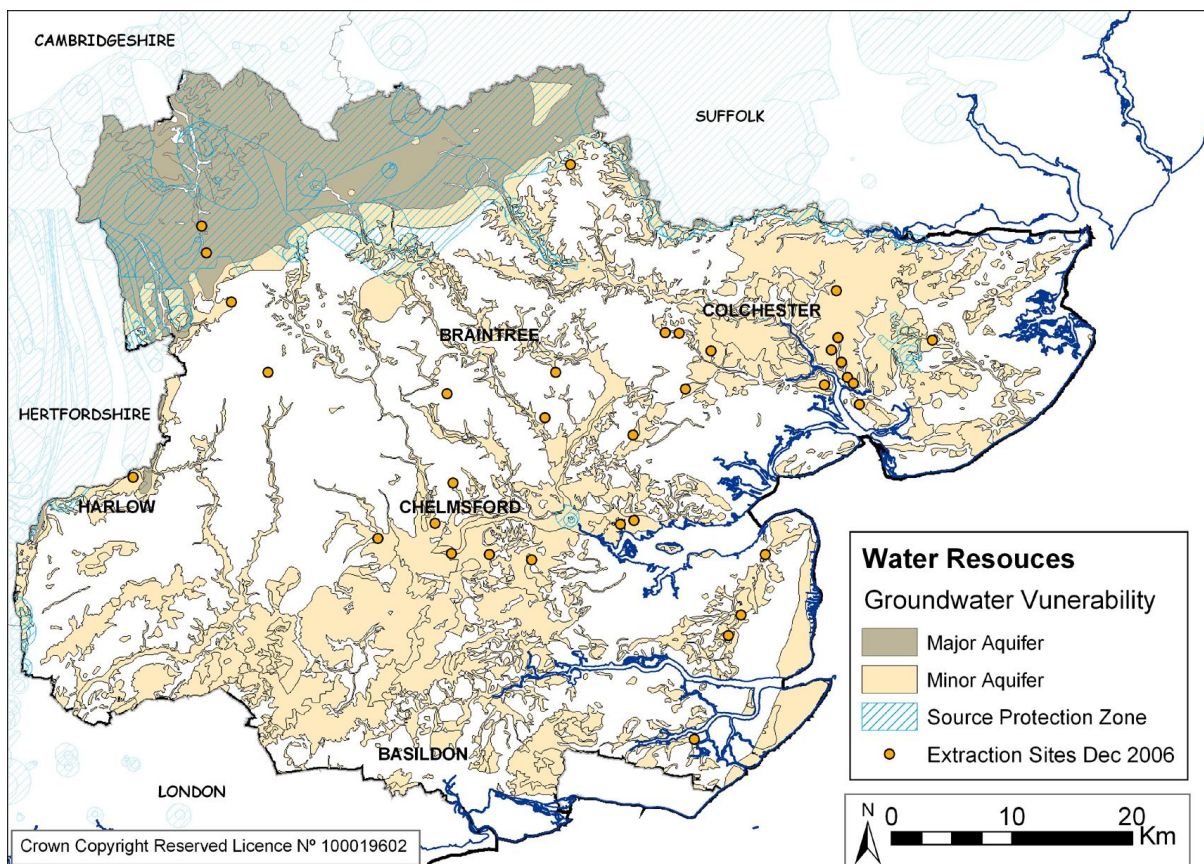
Source: Essex County Council 2013



## 6.2. Aquifers in Essex County

Figure 7 identifies the water resources within Essex, showing the location of the major and minor aquifers and Source Protection Zones within the county. The Environment Agency (EA) has defined Source Protection Zones (SPZs) for groundwater sources such as wells, boreholes and springs used for public drinking water supply. Braintree 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.

**Figure 7: Location of Aquifers in Essex County Council**



Source: Essex County Council 2014

## 6.3. Water Supply in the East of England

The Environment Agency (EA) is responsible for managing water resources in England and Wales. One of the ways that this is done is through licensing water abstraction. The EA developed Catchment Abstraction Management Strategies (CAMS) to:

- inform the public on water resources and licensing practice;
- provide a consistent approach to local water resources management;
- help to balance the needs of water-users and the environment.

Following a national review of 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. Some of the issues that the Combined Essex CAMS cover include:

- Are existing water resources adequate to meet future demands?
- Is the current level of abstraction having a significant impact on flows?
- How much water is needed to protect the river environment, including fish?
- What are the most suitable options for managing the rivers?

The Combined Essex CAMS was published in February 2013, and is available at:

[http://a0768b4a8a31e106d8b0-50dc802554eb38a24458b98ff72d550b.r19.cf3.rackcdn.com/LIT\\_7740\\_6e1970.pdf](http://a0768b4a8a31e106d8b0-50dc802554eb38a24458b98ff72d550b.r19.cf3.rackcdn.com/LIT_7740_6e1970.pdf) .

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 2 relate to areas which include watercourses within Braintree District. These are WRMU1 and WRMU2. Figure 8 outlines the resource availability status for WRMU1 and WRMU2. An explanation of the terms is detailed below:

- No water available: No water is available for further licensing at low flows. Water may be available at higher flows with appropriate restrictions.
- Over-licensed: Current actual abstraction is such that no water is available at low flows. If existing licences were used to their full allocation they could cause unacceptable environmental damage at low flows. Water may be available at high flows, with appropriate restrictions.
- Over-abstracted: Existing abstraction is causing unacceptable damage to the environment at low flows. Water may still be available at high flows, with appropriate restrictions.

**Figure 8: Water Supply Resource Availability Status in Braintree District**

WRMU Name	Associated main river	Resource Availability Status		
		Individual WRMU status	Integrated WRMU status	Target status in 2012
WRMU 1	River Pant / Blackwater	Over-abstracted	Over-abstracted	Over-abstracted
	River Brain	No water available	Over-abstracted	Over-abstracted
	Roman River / Layer Brook	Over-abstracted	Over-abstracted	Over-abstracted

	River Chelmer	Over-abstracted	Over-abstracted	Over-abstracted
	River Ter	Over-licensed	Over-abstracted	Over-abstracted
	Rivers Wid / Can	No water available	Over-abstracted	Over-abstracted
WRMU 2	Upper Colne	No water available	Over-licensed	No water available
	Lower Colne	Over-licensed	Over-licensed	No water available

Source: Combined Essex CAMs, February 2007 (Environment Agency)

The Combined Essex CAMs Annual Update (March 2008) confirmed that the status of WRMU1 remained at over-abstracted whilst the status of WRMU2 remained at no water available. The March 2008 Annual Update is available at: <http://publications.environment-agency.gov.uk/pdf/GEAN0408BNYP-E-E.PDF>

#### 6.4. River Basin Management Plan

Water in rivers, estuaries, coasts and aquifers will improve under measures set out in River Basin Management Plans, drawn up for river basin districts across England and Wales under the Water Framework Directive. River Basin Management Plans are the plans for protecting and improving the water environment, containing the main issues for the water environment and the actions to deal with them. On 22 September 2009 the River Basin Management Plans were submitted to the Secretary of State for Environment, Food and Rural Affairs and Welsh Ministers for approval. These submission versions are available to view at: <http://www.environment-agency.gov.uk/research/planning/33106.aspx>

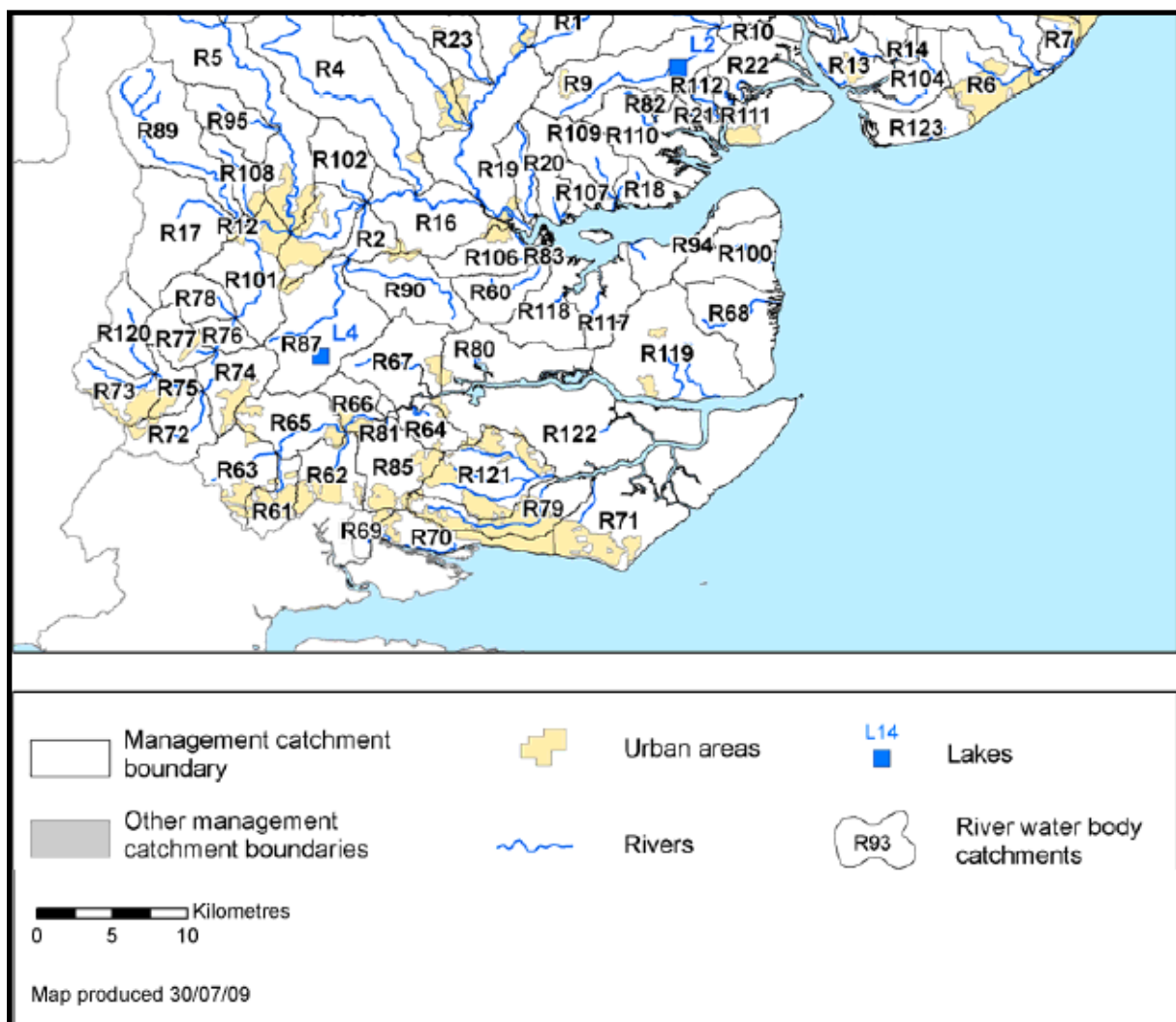
Essex falls within the Anglian River Basin District. The Anglian River Basin District is subdivided into catchment areas and the Essex Rivers catchment area lies within the counties of Essex and Suffolk as well as a small part of Cambridgeshire. It encompasses the rivers and tributaries of the Stour, Colne, Pant/Blackwater, Chelmer, Crouch and Roach, along with the smaller catchments of Sixpenny, Tenpenny, Holland and Asheldham Brook. There are 125 river water bodies and 5 lakes in the catchment. Over 33 per cent of rivers and lakes (in excess of 280km of river length) currently achieve at least good biological status. The River Basin Management Plan for the Anglian River Basin District is available at: <http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/anglian/Intro.aspx>

As shown in Figure 9 the Essex Rivers 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 are given a 'moderate' current overall potential. However the River Blackwater and the River Chelmer are both given a 'poor' current status.

**Figure 9: Location of River and lake water bodies in the Combined Essex river catchment**



Source: River Basin Management Plan Anglian River Basin District, December 2009 (submitted for approval), (Environment Agency)

## **6.5. Planning Permissions Granted Contrary to Environment Agency Advice.**

Between the 1st April 2011 and the 31st March 2012 the Environment Agency objected to no major planning applications in Braintree on water quality grounds.

## **6.6. Summary**

The main water courses running through Braintree District are the rivers Blackwater, Colne, Brain, Pant, Stour and Ter. Braintree 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 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 2 relate to areas which include watercourses within Braintree District. There 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 have 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 are given a 'moderate' current overall potential. However the River Blackwater and the River Chelmer are both given a 'poor' current status.

## **7. Flooding**

### **7.1. Flood Zones**

There is a risk-based sequential test to be applied at all stages of the planning process. Its aim is to steer new development to areas with the lowest probability of flooding. A hierarchy of flood zones for application of the sequential test is 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.

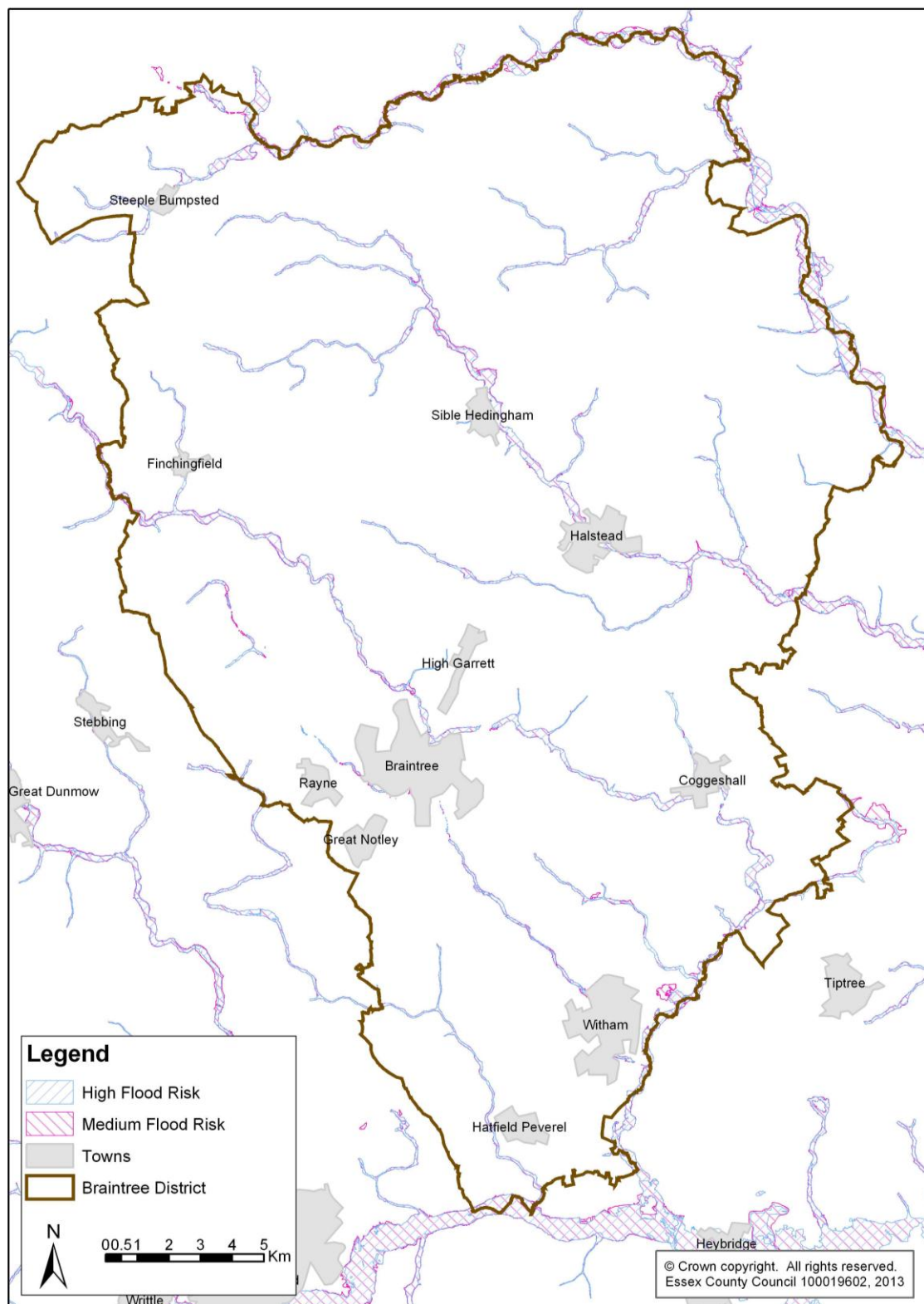
- Zone 3b - The Functional Floodplain

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.

Figure 10 shows the extent of land within Braintree that falls within Flood Zone 2 (medium risk) and Flood Zone 3(a and b) (high risk). As can be seen the areas which are most susceptible to flooding are mainly located next to the major waterways within Braintree District: the Blackwater, Stour and Colne.



**Figure 10: Spatial Extent of Flood Zones 2 and 3 (a and b) in Braintree District**



Source: Essex County Council, 2013

## **7.2. Flood Risk Assessments**

The Mid Essex Strategic Flood Risk Assessment, which covers Braintree District as well as Chelmsford Borough, Colchester Borough and Maldon District, was published in October 2007. This Strategic Flood Risk Assessment is available to view at:

<http://www.braintree.gov.uk/NR/rdonlyres/DC5AB540-9F6F-41F0-B6AB-E9D87B33EA80/0/00MainReport.pdf>

The SFRA is a planning tool that enables the council to select and develop sustainable site allocations away from vulnerable flood risk areas. Area specific strategies identified within the SFRA are outlined below.

- Flood Risk

Consideration to flooding from overland flow should be given for developments occurring throughout the District, but with particular regard to Bocking, Braintree, Witham and Coggeshall.

- Sustainable Drainage Systems (SuDS)

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 exceedence;

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.

- Water Environment

There is a need for sensitivity near watercourses stating development would not be permitted that would harm the open character, nature conservation importance or recreational importance of the floodplains of the River Stour, Colne, Brain, Pent, Blackwater, Ter Valley and their tributaries and the Chelmer and Blackwater Navigation.

Where appropriate, development proposals adjoining the rivers will be required to incorporate riverside paths and open spaces.

Any proposals requiring the provision of a new bridge shall ensure a minimum of 2.3 metres headroom above normal water level to allow for river use and provide fauna passages suitable as wildlife corridors.



### **7.3. Summary**

The areas which are most susceptible to flooding are mainly located next to the major waterways within Braintree District: the Blackwater, Stour and Colne.

Between April 2011 and March 2012 the Environment Agency objected to four planning applications on flood risk grounds, one was granted. Two applications were refused on the grounds of flood risk on site and one application was withdrawn.

The Mid Essex Strategic Flood Risk Assessment which includes Braintree District was published in October 2007. Area specific strategies identified within the SFRA are outlined below.

- Flood Risk

Consideration to flooding from overland flow should be given for developments occurring throughout the District, but with particular regard to Bocking, Braintree, Witham and Coggeshall.

- Sustainable Drainage Systems (SuDS)

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 exceedence;

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.

- Water Environment

There is a need for sensitivity near watercourses stating development would not be permitted that would harm the open character, nature conservation importance or recreational importance of the floodplains of the River Stour, Colne, Brain, Pent, Blackwater, Ter Valley and their tributaries and the Chelmer and Blackwater Navigation.

Where appropriate, development proposals adjoining the rivers will be required to incorporate riverside paths and open spaces.

Any proposals requiring the provision of a new bridge shall ensure a minimum of 2.3 metres headroom above normal water level to allow for river use and provide fauna passages suitable as wildlife corridors.

## 8. Cultural Heritage and Townscape

### 8.1. Historic Environment

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. Cultural heritage adds to the quality of life, by enhancing the local scene and sustaining a sense of local distinctiveness, which is an important aspect of the character and appearance of towns, villages and countryside and should not be compromised by the insensitive location of development. It also has an importance for leisure and recreation.

### 8.2. Listed Buildings

Listed buildings of special architectural or historic interest contribute to the character of the district and are protected under the Listed Buildings and Conservations Areas Act (1990). They are structures that are of national or architectural importance and therefore not limited to older buildings.

There are 375,735 buildings or groups of buildings in England (National Heritage List for England, English Heritage, January 2013) and 13,987 in Essex (Essex County Council HER, January 2013). Of these 3,190 are within Braintree District. Table 9 outlines the listed building composition for the district.

**Table 9: Listed Building Composition for Braintree District**

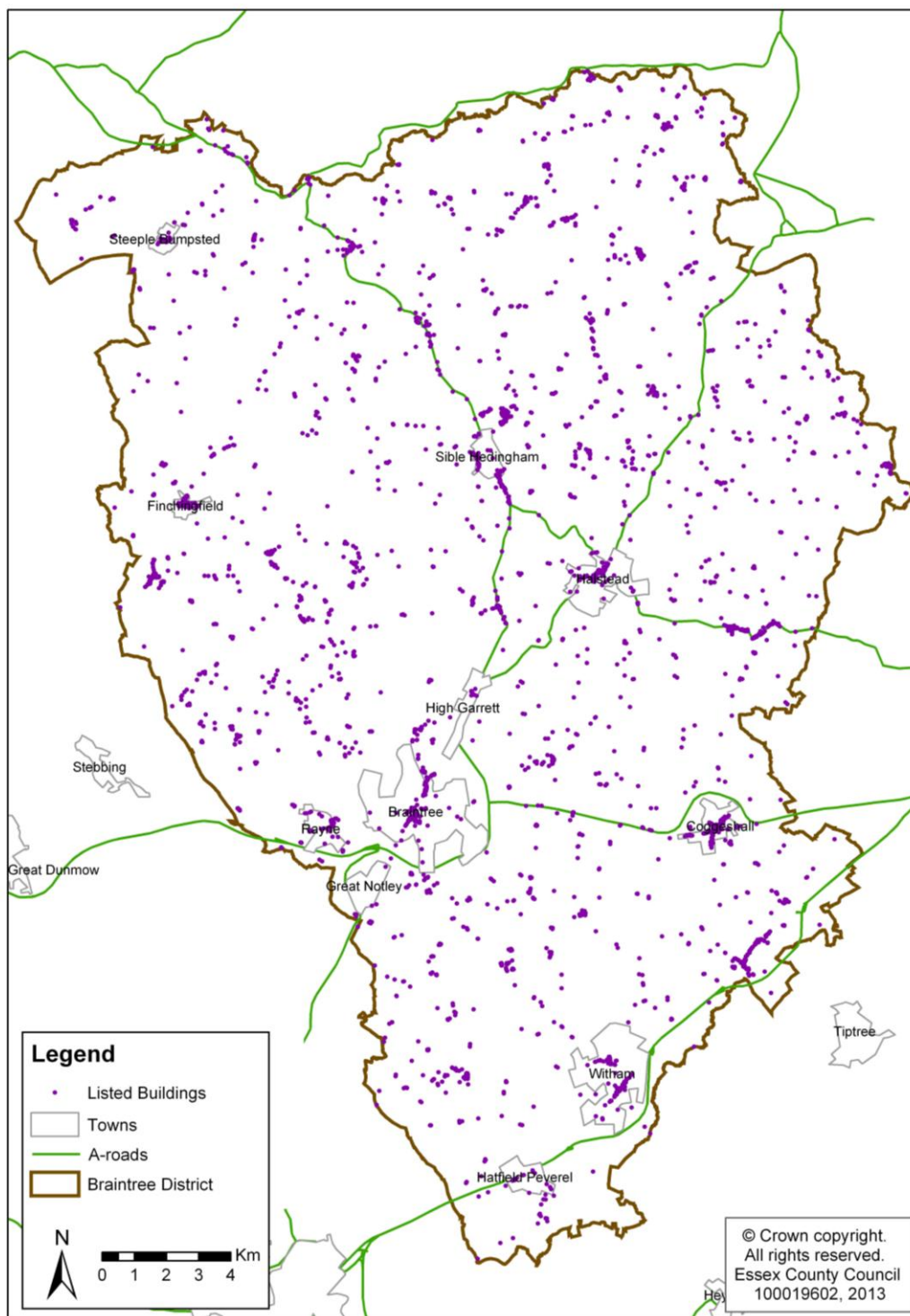
Type of Listed Building	Total Number
Grade I	67
Grade II*	183
Grade II	2,940
Total	3,190

Source: Essex County Council HER (January 2013)

The majority of listed buildings in the district are grade II listed. There are 67 listed buildings of exceptional interest (grade I) and 185 which are particularly important buildings of more than special interest (grade II\*).

The distribution of listed buildings within the district is fairly widely spread. Clusters of listed buildings can be found in the historic settlements such as Coggeshall and linear patterns are identifiable along historic transport routes.

**Figure 11: Spatial Extent of Listed Buildings within Braintree District**



Source: Essex County Council, 2013

### 8.3. Historic Buildings At Risk Register

The Historic Buildings at Risk Register contains details of buildings known to be 'at risk' through neglect and decay, or vulnerable of becoming so. The objective of the register is to outline the state of repair of these buildings with the intention of instigating action towards securing their long term conservation.

**Table 10: Number of buildings on the Historic Buildings at Risk Register across Essex in 2009, 2010 and 2011**

Administrative Area	At Risk		
	2011	2010	2009
Basildon	3	4	4
Braintree	22	19	21
Brentwood	8	9	9
Castle Point	0	0	0
Chelmsford	22	25	15
Colchester	41	48	49
Epping Forest	24	23	23
Harlow	4	4	2
Maldon	12	15	10
Rochford	8	8	7
Tendring	35	33	26
Uttlesford	14	18	16
TOTAL	193	206	182

Source: Heritage at Risk in Essex Register 2011, Essex County Council

The register addresses a 'moving target' where some buildings which are repaired are taken off and others which become 'at risk' are added. The Register shows that the annual number of buildings deemed 'at risk' in Braintree District has been similar over the last three years with 21 in 2009 compared to 22 in 2011. The number of buildings 'at risk' in 2011 in the district is the fourth joint highest when compared with all other local authorities within Essex. It is therefore important that district policies promote and facilitate the preservation and maintenance of the listed buildings.

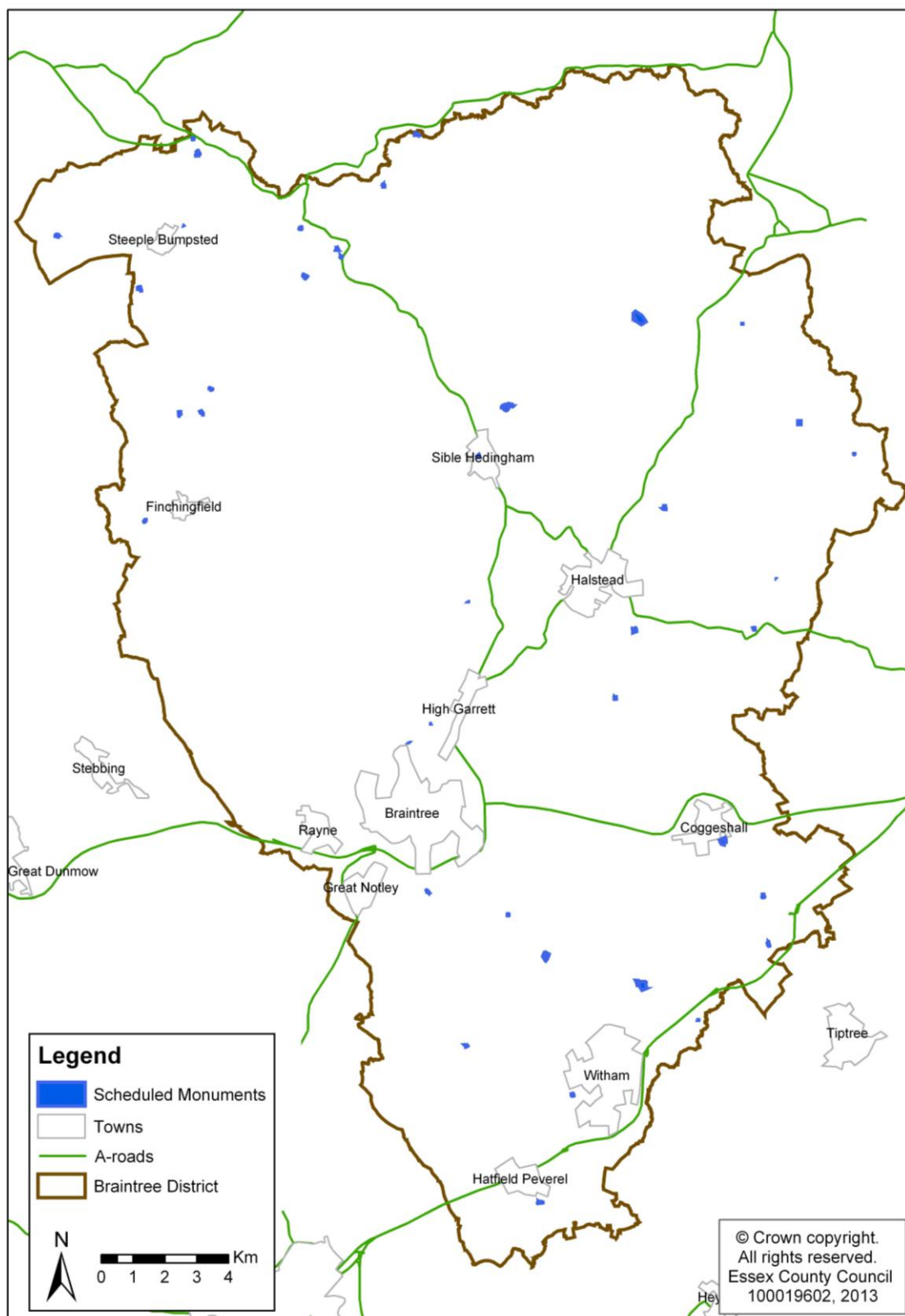
#### **8.4. Archaeology, Recorded Sites and Finds in Braintree District**

The majority of archaeological sites and deposits in Braintree District remain buried, hidden and thus preserved. However, the known archaeological resource in the district is very varied and highly significant. There are approximately 3,459 records of archaeological sites and finds, recorded on the Essex Historic Environment Record (EHER) for Braintree District with approximately 24,699 sites and finds listed within the county as a whole. The archaeological deposits range in date from the Palaeolithic, through to structures related to the Cold War. However, it should also be remembered that the EHER 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.

#### **8.5. Scheduled Monuments**

Scheduled Monuments (SMs) are sites of national importance and protected by the Ancient Monuments and Archaeological Areas Act 1979. The purpose of designating SMs is to preserve the monument for the future and protect it from damage, destruction or any unnecessary interference. Throughout Essex there are 297, ranging from prehistoric burial mounds to unusual examples of World War II defensive structures and 40 of these are within Braintree District. The locations of the SMs in the district are shown in the Figure 12.

**Figure 12: Location of Scheduled Monuments in Braintree District**



Source: Essex County Council, 2013

## **8.6. Historic Landscapes**

In general the fieldscape of Braintree District is ancient, largely comprising irregular fields, many of which are medieval in origin, with extensive areas of meadow pasture along the valley floors. There are numerous areas of ancient woodland and a number of large landscaped parks, some of which are medieval in origin. These include Gosfield Hall, Gosfield Place and Marks Hall Park.

In the southern part of the district the geology becomes more complex, with sands and gravels, brickearths and head deposits. The former extent of Tiptree Heath extended over part of this area. The rural settlement was historically much 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.

The district is notable for the large number of surviving historic buildings and landscape features which add much to its visual attractiveness and give it a definite air of antiquity. The urban areas include the Roman towns of Braintree and Kelvedon, the Roman religious centre and Saxon burh at Witham. These, together with Coggeshall and Halstead, developed into medieval market towns; Braintree, Coggeshall and Halstead also had strong economic links to the textile industry. There is a dense covering of these sites throughout Braintree District, especially in the south.

## **8.7. Conservation Areas**

There are 217 designated Conservation Areas within the county of Essex, 39 of which are within Braintree District. Conservation Areas are defined as historical town centres and buildings having 'special architectural or historical interest, the character of which is desirable to preserve or enhance'. They are protected under the Listed Buildings and Conservations Areas Act (1990). The objective of the Conservation Area designation is to ensure that the character of the defined area is protected from development which would not preserve or enhance its character.

There have been recent amendments to four of the Conservation Areas in the district, namely Bulmer, Cressing and Finchingfield in 2009 and Pebmarsh in 2012. All four have extended boundary lines to include additional buildings and curtilage while Finchingfield Conservation Area also excluded areas from within the existing Conservation Area. Properties on The Chase, Mole End, Hill View, and Molen on Brent Hall Road, and Winsey Chase and the adjacent Police House were excluded due to their neutral/negative impact on the Conservation Area. An appraisas has also been prepared for Sible Hedingham conservation area and one is currently being prepared for Silver End conservation area. Table 11 details the names of the Conservation Areas in the district and the date of their designation and/or last amendment, while Figure 13 shows their location.

**Table 11: Conservation Area and the Date of Designation**

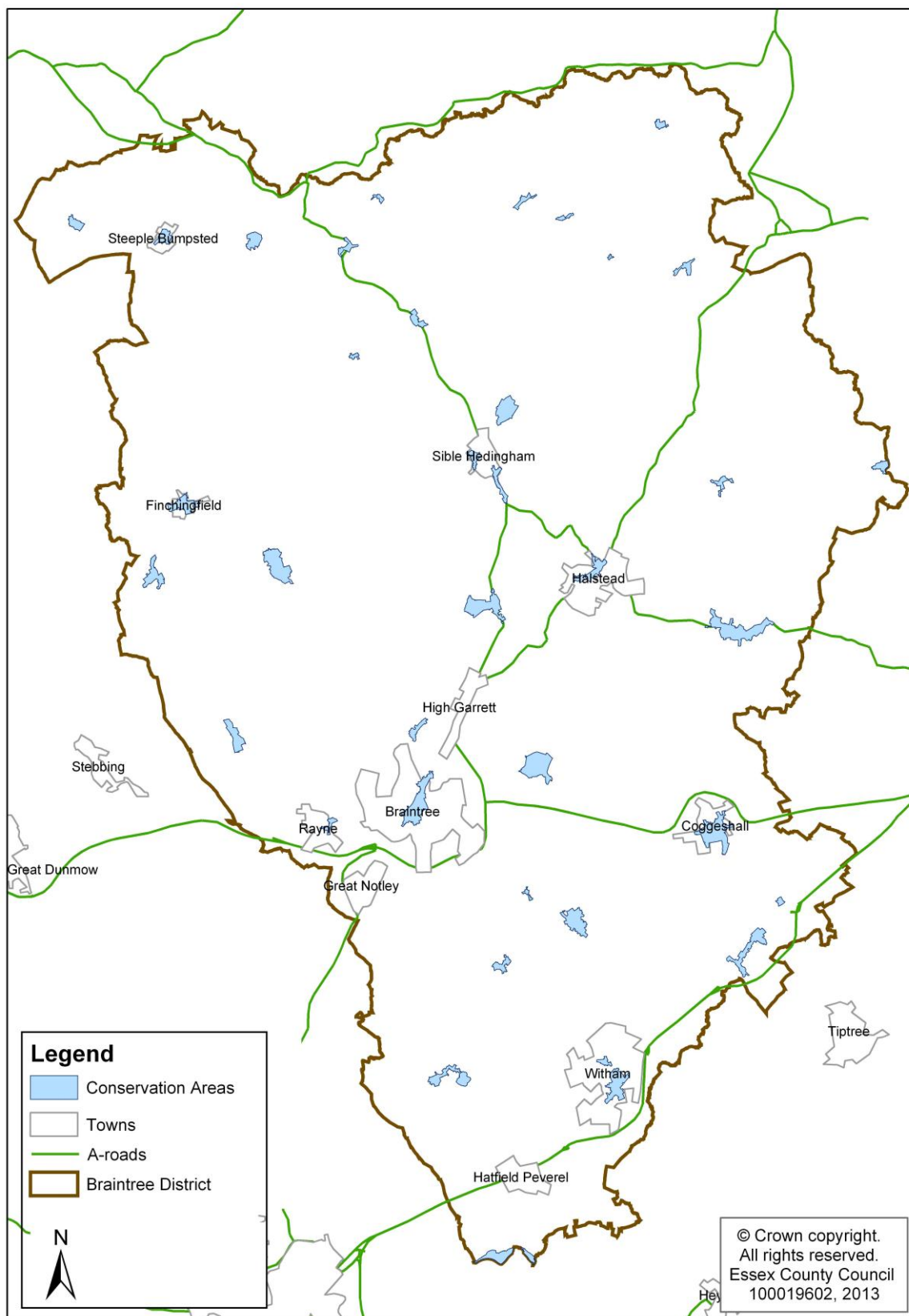
	Conservation Area	Date of Designation		Conservation Area	Date of Designation
1	Ashen	09/11/1989	20	Great Sailing	26/01/1989
2	Belchamp Otten	03/12/1984	21	Great Yeldham	17/10/1985
3	Belchamp St Paul	11/10/1979	22	Halstead Town Centre	07/08/1969, 01/11/1977, 01/05/1986 and 20/11/2007
4	Belchamp Walter	17/07/1980	23	Helions Bumpstead	23/10/1990
5	Birdbrook	30/01/1970	24	Kelvedon	19/06/1969 and 09/11/1989
6	Braintree Town Centre and Bradford Street	19/06/1969, 22/10/1981, 16/05/1985 and 09/11/1989	25	Pebmarsh	09/11/1989 and 11/09/2012
7	Bocking Church Street	22/10/1981	26	Rayne	22/10/1981 and 09/11/1989
8	Bulmer	09/11/1989 and 18/03/2009	27	Ridgewell	02/11/1973, 10/03/1988 and 09/11/1989
9	Bures Hamlet	02/10/1969	28/ 29	Sible Hedingham (2 separate areas)	27/11/1969
10	Castle Hedingham	19/06/1969	30	Silver End	17/01/1983 and 21/12/1999
11	Coggeshall	19/12/1968, 17/07/1980 and 09/11/1989	31	Steeple Bumpstead	07/08/1969 and 17/10/1985
12	Cressing	22/10/1981	32	Stisted	02/11/1973 and



	Conservation Area	Date of Designation		Conservation Area	Date of Designation
		and 10/03/2009			22/10/1981
13	Earls Colne and White Colne West/East	27/11/1969, 17/10/1985, 18/09/1990 and 20/11/2007	33	Terling	02/10/1969
14/ 15	Feering (2 separate areas)	27/05/1976	34	Toppesfield	09/11/1989
16	Finchingfield	02/10/1969 and 10/03/2009	35	Wethersfield	02/11/1973
17	Foxearth	27/05/1976 and 09/11/1989	36	White Notley	10/03/1988
18	Gosfield	05/08/1988	37/ 38	Witham Town Centre (2 Separate areas)	19/12/1968, 23/01/1984 and 26/02/2008
19	Great Bardfield	02/10/1969	39	Chelmer and Blackwater	14/01/1992

Source: Braintree District Council 2013

**Figure 13: Location of Conservation Areas in Braintree District**



Source: Essex County Council, 2013

## **8.8. Summary**

There are 3,190 listed buildings within Braintree District, the majority of which (2,940) are Grade II followed by 183 Grade II\* and 67 Grade I listed. The distribution of listed buildings within the district is fairly widely spread. Clusters of listed buildings can be found in the historic settlements such as Coggeshall and linear patterns are identifiable along historic transport routes. In 2011 there were 22 listed buildings on the 'at risk' register which is a slight increase from previous year total of 19.

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 are 40 Scheduled Monuments within the district. There are 217 designated Conservation Areas within the county of Essex, 39 of which are within Braintree District.

## 9. Health

### 9.1. Health Summary Indicators

**Table 12: Health Summary Indicators, Braintree District and England**

	Braintree District	England Average
Life expectancy male, at birth 2008-2010	79.6	78.6
Life expectancy female, at birth, 2008-2010	82.8	82.6
Physically active children, %, 2009/2010	54.6	55.1
Obese children, % (Year 6) 2010/2011	15.6	19.0
Physically active adults, % aged 16+, 2009-2011	11.0	11.2
Obese adults, %, 2006-2008 (revised)	25.9	24.2
Hip fracture in over 65s (age standardised rate, per 100,000 population) 2010/2011	56.6	45.2
Early deaths from heart disease and stroke, age standardised rate per 100,000 population aged under 75 2008-2010	56.8	67.3
Road injuries and deaths, rate per 100,000 population 2008-2010	52.3	44.3

Source: Braintree Health profile, 2012 Department of Health

Life expectancy is increasing and residents in Braintree District have higher life expectancies at birth than the national averages with men living for an average of 79.6 years and women on average living 82.8 years. The health of the population in Braintree 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.

Obesity in Year 6 children increased from 7.0% to 15.6% between 2008/09 and 2010/11, which reflected similar changes to the national average. The level of adult obesity at 25.9% is higher than the national average of 24.2% for the period 2006-2008.

## 9.2. Participation in Sport

The following results have been taken from the Active People Surveys (APS) carried out by Sport England during October 2005/October 2006, October 2007/October 2008, October 2008/October 2009 and October 2009/October 2010. The definition of 'participation' in this instance is a measure of the percentage of the adult population who participate in at least 30 minutes of sport and active recreation of at least moderate intensity at least 3 days a week. Walking and cycling are included in this.

**Table 13: Participation in Sport and Active Recreation**

	Active People Survey 1	Active People Survey 2	Active People Survey 3	Active People Survey 4
Braintree	16.3%	15.8%	13.0%	17.7%
Essex	20.2%	21.6%	16.0%	15.0%
East of England	20.5%	21.2%	15.8%	15.7%
England	21.00%	21.32%	16.6%	16.5%

Source: Active People Survey, Sport England, 2011

Participation in sports and active recreation in Braintree District declined between the first Active People Survey from 16.3% to only 13.0% in Active People Survey 3; however the latest period corresponding to Active People Survey 4 saw a rise in sports participation and active recreation in the District above the county, region and national averages for the first time. The most recent survey also ranks Braintree District as having the 3rd highest rate of sports participation in the county.

## 9.3. Incapacity Benefit Claimants

As of Nov 2011, 3.2% of the working age population of Braintree District claimed benefits. This is a smaller proportion than those claiming benefits in the East of England and in England which were recorded as being 3.4% and 4.3% respectively. Of those receiving benefits in Braintree the majority were seeking incapacity benefits accounting for 80.5% of total claimants however the district did receive a higher proportion of residents claiming severe disablement at 19.5% compared to 14.4% of total claimants in the region and 12.6% in England.

**Table 14: Total Incapacity Benefit and Severe Disablement Allowance Claims Nov 2011**

Braintree	East of England	England
-----------	-----------------	---------

		%		%		%
Total Population	147,514	n/a	5,862,418	n/a	53,107,169	n/a
Total Receiving Benefits	2,860	3.2%	121,860	3.4%	1,429,030	3.0%

Note: Population figures are from 2011 mid year estimates published in 2012

Source: ONS, 2013

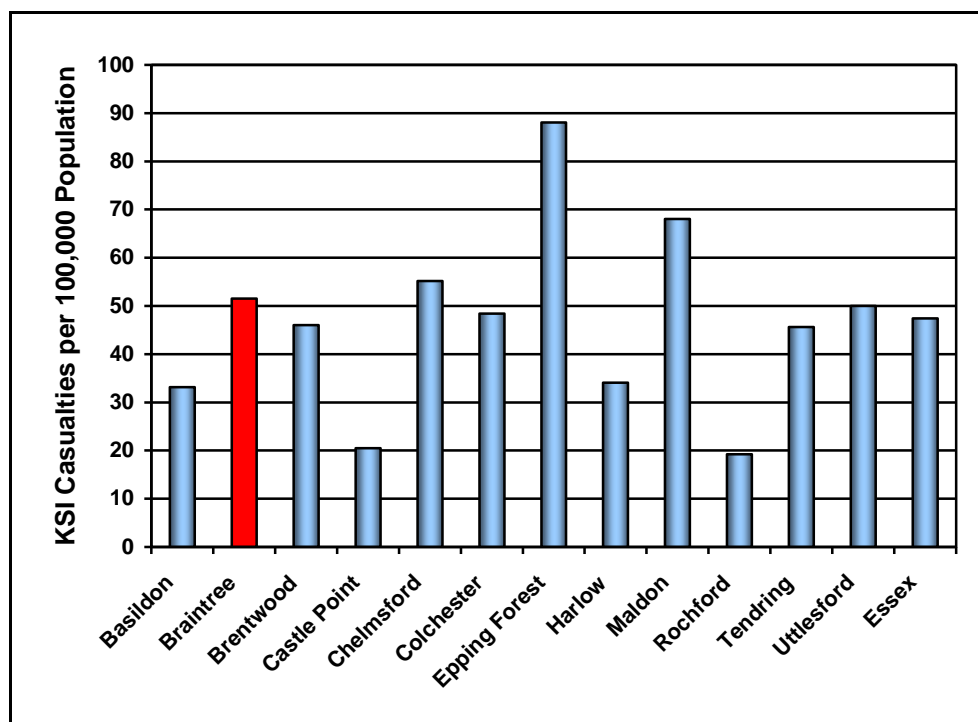
A higher proportion of men claim benefits within the district than women which is similar to the East of England and England. However the proportion of women claiming in the district is slightly higher at 47% of the total number of claimants compared to the region at 46% and 44%.

## 9.4. Safety

The main indicators of road safety are the number of people killed or seriously injured (KSI) in road traffic accidents and the number of children KSI in road traffic accidents. They are collected to assess whether the national casualty reduction target, set by the Public Service Agreement (PSA), is being achieved. This is to reduce the number of people killed or seriously injured in road traffic accidents by 40%, compared with the average for 1994-1998, by 2010. In terms of children killed or seriously injured the target of 50% reduction by 2010 has been set.

### 9.4.1. Road Traffic Casualties

**Figure 14: KSI Casualties per 100,000 Population across Essex, 2010**



Source: Driving Casualties Down in Essex, Southend and Thurrock, 2013

There were 51.52 KSI casualties per 100,000 population in Braintree District in 2010, a higher rate than the number in Essex and ranked the 4th highest figure compared to the other district and boroughs in the county.

## **9.5. Summary**

Life expectancy is increasing and residents in Braintree District have higher life expectancies at birth than the national averages with men living for an average of 79.6 years and women on average living 82.8 years. The health of the population in Braintree 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.

Obesity in Year 6 children increased from 7.0% to 15.6% between 2008/09 and 2010/11, which reflected similar changes to the national average. The level of adult obesity at 25.9% is higher than the national average of 24.2% for the period 2006-2008.

Participation in sports and active recreation in Braintree District declined between the first Active People Survey from 16.3% to only 13.0% in Active People Survey 3; however the latest period corresponding to Active People Survey 4 saw a rise in sports participation and active recreation in the District above the county, region and national averages for the first time. The most recent survey also ranks Braintree District as having the 3rd highest rate of sports participation in the county.

As of Nov 2011, 3.2% of the working age population of Braintree District claimed benefits. This is a smaller proportion than those claiming benefits in the East of England and in England which were recorded as being 3.4% and 4.3% respectively. Of those receiving benefits in Braintree the majority were seeking incapacity benefits accounting for 80.5% of total claimants however the district did receive a higher proportion of residents claiming severe disablement at 19.5% compared to 14.4% of total claimants in the region and 12.6% in England.

As of 2010, Braintree met and exceeded its target to reduce all KSI casualties by 40% of the baseline figure; a reduction of 43.7% was achieved.

## 10. Population and Social

### 10.1. Population

**Table 15: Mid-Year Population Estimates 2001-2011**

	2001	2011	Difference	Percentage Change
Braintree	132,500	147,514	15,014	11.3%
Essex	1,312,600	1,396,599	83,999	6.39%
East of England	5,400,500	5,862,418	461,918	8.55%
England	49,449,700	53,107,200	3,657,500	7.39%

Source: ONS, 2012

As of 2011 the estimated population for the district of Braintree was 147,514 which accounts for approximately 10% of the county's estimated population.

Braintree District has experienced a higher population growth at 11.33% than the county, the region and England as a whole with 6.39%, 8.55% and 7.39% respectively.

#### 10.1.1. Population Structure

**Table 16: Estimated Population Structure of Braintree, 2011**

	0-15	16-24	25-49	50-64 (males), 50-59 (females)	65+ (males), 60+ (females)	16-64 (males), 16-59 (females)	Total Population
Braintree	28,991	14,898	50,129	23,595	29,901	88,622	147,514
Essex	259,927	148,386	458,664	222,925	306,697	829,975	1,396,599
East of England	1,109,488	641,124	1,983,035	905,035	1,223,736	3,529,194	5,862,418
England	10,030,130	6,276,693	18,482,308	7,978,078	10,339,960	32,737,079	53,107,169

Source: ONS, 2012



In 2011, the largest proportion of the population in Braintree District was aged 25-49. There was approximately the same number of under 16 year olds to those aged 65 plus (males) and 60 plus (females).

## 10.2. Deprivation

The Indices of Multiple Deprivation 2010 ranks all local authorities against a list of criteria for a number of issues including housing, education, income, employment, health, access and child poverty.

**Table 17: Indices of Multiple Deprivation 2007 and 2010**

	Braintree	
	IMD 2007	IMD 2010
Rank of Average Score	239 of 354	212 of 354
Rank of Extent	265	238
Rank of Local Concentration	252	232
Rank of Income Scale	165	164
Rank of Employment Scale	179	212

Source: Index of Multiple Deprivation (IMD) 2010, DCLG, 2011

In 2010, Braintree was ranked as the 212th out of the 354 Local Authorities (LAs) in England (1 being most deprived). This shows a worse level of comparative deprivation across LAs in England than the 2007 rankings.

Table 18 shows the percentage of small areas within each district and borough in Essex that are seriously deprived.

Across Essex, serious deprivation is most prevalent in terms of 'Barriers to housing and services' and 'Education, skills and training'. In Braintree District 25.72 of 84 small areas are seriously deprived with regards to 'Barriers to housing and services', and 22.73 are seriously deprived with regards to 'Education, skills and training', however both of these levels of deprivation show an improvement on 2007 figures.



**Table 18: Percentage of seriously deprived areas within Essex**

	Income		Employment		Health & Disability		Education, Skills & Training		Barriers to Housing & Services		Living Environment		Crime		No of small areas
	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Basildon	0.15	0.16	0.10	0.09	-0.38	-0.02	32.30	31.83	21.80	20.29	10.24	6.28	0.02	0.17	110
Braintree	0.11	0.11	0.07	0.07	-0.77	-0.56	22.73	21.04	25.72	25.99	9.75	9.40	-0.64	-0.58	84
Brentwood	0.08	0.08	0.06	0.06	-1.16	-1.10	10.95	9.10	22.93	21.41	10.83	9.13	-0.48	-0.33	45
Castle Point	0.12	0.11	0.08	0.07	-0.58	-0.57	26.65	24.11	15.09	12.80	14.26	11.01	-0.26	-0.41	57
Chelmsford	0.08	0.09	0.06	0.06	-1.06	-0.97	13.36	11.94	17.31	17.36	12.75	11.05	-0.70	-0.49	104
Colchester	0.11	0.11	0.08	0.07	-0.36	-0.31	19.17	19.07	23.16	26.90	11.45	11.42	-0.35	-0.41	104
Epping	0.11	0.11	0.07	0.07	-0.43	-0.62	18.37	17.52	22.73	26.24	13.71	11.92	0.01	0.01	78
Harlow	0.16	0.16	0.11	0.10	0.34	0.15	30.47	31.85	27.43	24.56	8.82	6.97	0.34	0.37	54
Maldon	0.10	0.10	0.07	0.06	-0.64	-0.49	19.70	18.67	23.45	23.07	10.54	8.68	-0.85	-0.73	41
Rochford	0.08	0.09	0.06	0.06	-1.04	-0.81	17.04	15.66	17.20	13.09	10.21	8.52	-0.90	-0.65	53
Tendring	0.16	0.16	0.13	0.12	0.11	0.21	32.21	33.78	26.34	24.81	15.54	14.72	-0.39	-0.27	90
Uttlesford	0.06	0.07	0.04	0.04	-1.08	1.27	8.71	7.19	26.41	24.84	9.58	7.87	-0.94	-1.08	43

Source: Indices of Multiple Deprivation 2010 DCLG

Note: 'Seriously deprived' is represented by areas falling in the 20% most deprived nationally, calculated separately for each domain score.

### 10.3. Crime

The following table show recorded crime statistics for seven key offences in 2012/13 and the percentage change from 2011/12.

**Table 19: Crime Offences in Braintree District and England**

	Braintree offences recorded 2012-13	Braintree % change from 2011/12	Essex & change from 2011/12
Violence against the person	1,044	+3.2%	0%
Sexual offences	100	+3%	+0.5%
Robbery offences	31	+6.8%	-6.7%
Domestic Burglary offences	374	+47.2%	+11.2%
Vehicle Offences	692	+3.2%	-6.2%

Source: ONS Crime in England and Wales 2012/13

All crime in the District has increased. The worst increase is in Domestic Burglary which has increased by 47.2%. All figures are worse than the County figures which generally show a decrease although burglary has increased countywide by 11.2%.

### 10.4. Education, Skills and Training

**Table 20: GCSE and Equivalent Results**

	achieving 5+ A*-C			achieving 5+ A*-G		
	2008	2011	% points difference	2008	2011	% points difference
Braintree District	59.2	73.9	14.7	91.5	95.6	4.1
Essex	65.1	79.9	14.8	92.7	94.9	2.2
East of England	64.7	78.0	13.3	92.9	95.0	2.1
England	64.5	80.8	16.3	80.8	95.3	14.5

Source: Department of Education, 2012

In 2011, 73.9% of pupils in Braintree District achieved 5 or more A\* to C GCSE grades or equivalent. This is a 14.8% points difference to the 2008 figure indicating improvements in education during this period. However the proportion achieving at least 5 A\* to C grades or equivalent in Braintree is lower than the county, regional and national levels of 79.9%, 78% and 80.8% respectively. In contrast the percentage of pupils in the district achieving 5 or more A\*-G grades in 2009 was higher at 95.6% than the county, regional and national levels.

**Table 21: Working Age Adult Qualifications**

	Braintree		Essex	East of England	UK
NVQ4 and above	21,800	23.8%	24.2%	29.2%	32.7%
NVQ3 and above	43,000	47.0%	46.3%	49.9%	52.4%
NVQ2 and above	60,400	66.1%	65.8%	68.5%	69.5%
NVQ1 and above	80,300	87.9%	84.4%	83.8%	82.8%
Other qualifications	4,500	4.9%	6.3%	6.6%	6.8%

Source: ONS, Nomis 2012

The population of Braintree District has in general more qualifications than the overall sub-national and national populations. 87.9% of the working age population of Braintree District which accounts for 80,300 people are qualified to at least level 1 or higher compared to 82.8% across the UK. Level 1 represents foundation GNVQ, NVQ 1 or up to 5 GCSEs at grades A\*-C.

Braintree has a slightly larger proportion of the population qualified at Level 2 and Level 3 than the county average and a slightly lower percentage than the county at Level 4. However compared to the region and the UK the percentage of qualifications in Braintree District at Level 2 and above is lower than average.

**Table 22: Number Attending Schools in Braintree District 2008-2012**

	2008	2009	2010	2011	2012
Primary	11,375	11,287	11,263	11,318	11,504
Secondary	7,798	7,819	7,980	8,015	7,977
Special	209	200	216	151	223
Total	19,382	19,306	19,459	19,484	19,704

Source: Commissioning School Places in Essex 2012-2017

## **10.5. Summary**

As of 2011 the estimated population for the district of Braintree was 147,514 which accounts for approximately 10% of the county's estimated population.

Braintree District has experienced a higher population growth at 11.33% than the county, the region and England as a whole with 6.39%, 8.55% and 7.39% respectively.

In 2011, the largest proportion of the population in Braintree District was aged 25-49. There was approximately the same number of under 16 year olds to those aged 65 plus (males) and 60 plus (females).

The projected population is predicted to increase annually within the district. In 2026 the population is predicted to be 171,800.

In 2010, Braintree was ranked as the 212th out of the 354 Local Authorities (LAs) in England (1 being most deprived). This shows a worse level of comparative deprivation across LAs in England than the 2007 rankings.

Across Essex, serious deprivation is most prevalent in terms of 'Barriers to housing and services' and 'Education, skills and training'. In Braintree District 25.72 of 84 small areas are seriously deprived with regards to 'Barriers to housing and services', and 22.73 are seriously deprived with regards to 'Education, skills and training', however both of these levels of deprivation show an improvement on 2007 figures.

All crime in the District has increased. The worst increase is in Domestic Burglary which has increased by 47.2%. All figures are worse than the County figures which generally show a decrease although burglary has increased countywide by 11.2%.

In 2011, 73.9% of pupils in Braintree District achieved 5 or more A\* to C GCSE grades or equivalent. This is a 14.8% points difference to the 2008 figure indicating improvements in education during this period. However the proportion achieving at least 5 A\* to C grades or equivalent in Braintree is lower than the county, regional and national levels of 79.9%, 78% and 80.8% respectively. In contrast the percentage of pupils in the district achieving 5 or more A\*-G grades in 2009 was higher at 95.6% than the county, regional and national levels.

The population of Braintree District has in general more qualifications than the overall sub-national and national populations. 87.9% of the working age population of Braintree District which accounts for 80,300 people are qualified to at least level 1 or higher compared to 82.8% across the UK. Level 1 represents foundation GNVQ, NVQ 1 or up to 5 GCSEs at grades A\*-C.

Braintree has a slightly larger proportion of the population qualified at Level 2 and Level 3 than the county average and a slightly lower percentage than the county at Level 4. However compared to the region and the UK the percentage of qualifications in Braintree District at Level 2 and above is lower than average.



## 11. Economy

### 11.1. Working Age Population

The following table is based on mid-2011 population estimates as at June 2011.

**Table 23: Percentage of Total Population of Working Age**

	16-24	25-49	50-64 (males), 50-59 (females)	% of population of working age
Braintree	10.10%	33.98%	16.00%	60.08%
Essex	10.62%	32.84%	15.96%	59.43%
East of England	10.94%	33.83%	15.44%	60.20%
England	11.82%	34.80%	15.02%	61.64%

Source: ONS, 2012

At 60.08% of the total population, the percentage of the District population that is of working age is higher than the Essex average. The percentage is in line with the region however lower than that of the country.

### 11.2. Labour Supply

**Table 24: Labour Supply (July 2012 – June 2013)**

	Braintree	Braintree (%)	East (%)	GB (%)
<b>All People</b>				
Economically active	76,300	83.1	80.3	77.3
In employment	70,100	76.1	75.0	71.1
Employees	62,900	69.3	64.1	61.0
Self employed	6,800	6.4	10.3	9.5
Unemployed (model based)	5,200	6.9	6.5	7.8
<b>Males</b>				
Economically active	42,300	90.3	85.8	83.1

In employment	38,400	81.8	80.3	76.1
Employees	33,300	72.4	65.5	62.3
Self employed	5,100	9.4	14.1	13.2
Unemployed (model based)	3,800	9.1	6.4	8.2
<b>Females</b>				
Economically active	34,100	75.7	74.8	71.4
In employment	31,700	70.2	69.8	66.1
Employees	29,600	66.1	62.7	59.7
Self employed	*	*	6.6	5.9
Unemployed (model based)	*	*	6.5	7.3

\* Data unavailable, sample size too small for reliable estimate

Source: ONS, Nomis 2013

The percentage of the District's population that are economically active at 83.1% is higher than the regional and British average. The percentage of the District's population that are in employment is higher at 76.1% than both the British and the regional average.

### 11.3. Job Density

**Table 25: Job Density 2011**

	Braintree	East of England	Great Britain
Job Density	0.60	0.76	0.78

Source: ONS 2013

There are fewer available jobs per single person in the district at 0.60 than the regional average of 0.76 and Great Britain at 0.78.

## 11.4. Employment by Industry Class

**Table 26: Employment by Industry Class 2008**

	Braintree		East of England	Great Britain
Total employee jobs	49,000	n/a	n/a	n/a
Full-time	33,200	67.8	67.2	68.8
Part-time	15,800	32.2	32.8	31.2
Employee jobs by industry				
Manufacturing	6,900	14.1	10.3	10.2
Construction	3,700	7.6	5.4	4.8
Services	37,600	76.7	82.5	83.5
Distribution, hotels & restaurants	12,300	25.2	25	23.4
Transport & communications	2,700	5.5	6	5.8
Finance, IT, other business activities	8,200	16.8	21.4	22
Public admin, education & health	11,700	23.8	25.3	27
Other services	2,700	5.5	4.8	5.3
Tourism-related†	3,700	7.5	7.7	7.6

Source: Nomis 2009

Notes: 1. Tourism-related includes employees also counted as part of the Services Industry Class.  
 2. Employee jobs excludes self employed, government supported trainees and HM Forces.  
 † Tourism consists of industries that are also part of the service industry

The above table has split employment into 4 main categories, namely 'Manufacturing', 'Construction', 'Services' and 'Tourism-related'. Braintree District can be seen to have an above average proportion of people employed in the 'Manufacturing' and 'Construction' sectors and a deficit in 'Services'.

The largest proportion of people work in the 'Services' industry for all geographical areas. The proportion is the lowest in Braintree at 76.7%, compared to 82.5% in the East of England and 83.5% in Great Britain.

The general proportion of full-time to part time jobs, at approximately 2:1, is in line with regional and national averages.

### 11.5. Employment by Occupation

**Table 27: Employment by Occupation July 2012 - June 2013**

Occupation	Number	Percentage
Major Groups 1-3	29,400	42.2%
1 Managers & Senior Officials	13,100	18.7%
2 Professional Occupations	9,800	14.0%
3 Associate Professional & Technical	6,500	9.3%
Major Groups 4-5	14,900	21.4%
4 Administrative & Secretarial	8,500	12.1%
5 Skilled Trades Occupations	6,400	9.2%
Major Groups 6-7	13,300	19.0%
6 Personal Service Occupations	5,800	8.3%
7 Sales & Customer Service Occupations	7,500	10.6%
Major Groups 8-9	12,100	17.4%
8 Process Plant & Machine Operatives	#	#
9 Elementary Occupations	8,700	12.5%

Source: Nomis Employment by Occupation Survey July 2012 - June 2013 (# sample size too small for reliable estimate)

## 11.6. New Businesses

**Table 28: New Business Registration rate**

Year	No. of business births, Braintree	No. of business births, Essex	Essex Average
2005	750	6,565	547
2006	700	6,320	526
2007	810	6,880	573
2008	690	6,715	559
2009	635	5,900	491
2010	570	5,875	489
2011	585	6,280	523
2012	690	6,540	545

Source: ONS 2012 and 2010

There were 690 business births in the District in 2012, the 4th highest amongst the Essex districts. The business formation rate in Braintree is consistently above the Essex average..

## 11.7. Floorspace Composition

**Table 29: Industrial and Commercial Floorspace Composition by Bulk Industry Class in m<sup>2</sup> April 2008**

	Braintree District		East of England		England	
All Bulk Classes	1,376	100.0%	56,904	100.0%	561,777	100.0%
Retail Premises	196	14.2%	10,287	18.1%	100,208	17.8%
Commercial Offices	108	7.9%	7,081	12.4%	81,203	14.5%
Other Offices	22	1.6%	1,583	2.8%	16,362	2.9%
Factories	597	43.4%	18,704	32.9%	192,322	34.2%
Warehouses	399	29.0%	17,186	30.2%	152,485	27.1%
Other Bulk Premises	54	3.9%	2,062	3.6%	19,196	3.4%

Source: ONS 2009

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 than the regional and national averages.

### **11.8. Summary**

At 60.08% of the total population, the percentage of the District population that is of working age is higher than the Essex average. The percentage is in line with the region however lower than that of the country.

The percentage of the District's population that are economically active at 83.1% is higher than the regional and British average. The percentage of the District's population that are in employment is higher at 76.1% than both the British and the regional average.

There are fewer available jobs per single person in the district at 0.60 than the regional average of 0.76 and Great Britain at 0.78.

In a survey of 2008 the largest proportion of people work in the 'Services' industry for all geographical areas. The proportion is the lowest in Braintree at 76.7%, compared to 82.5% in the East of England and 83.5% in Great Britain.

The general proportion of full-time to part time jobs, at approximately 2:1, is in line with regional and national averages.

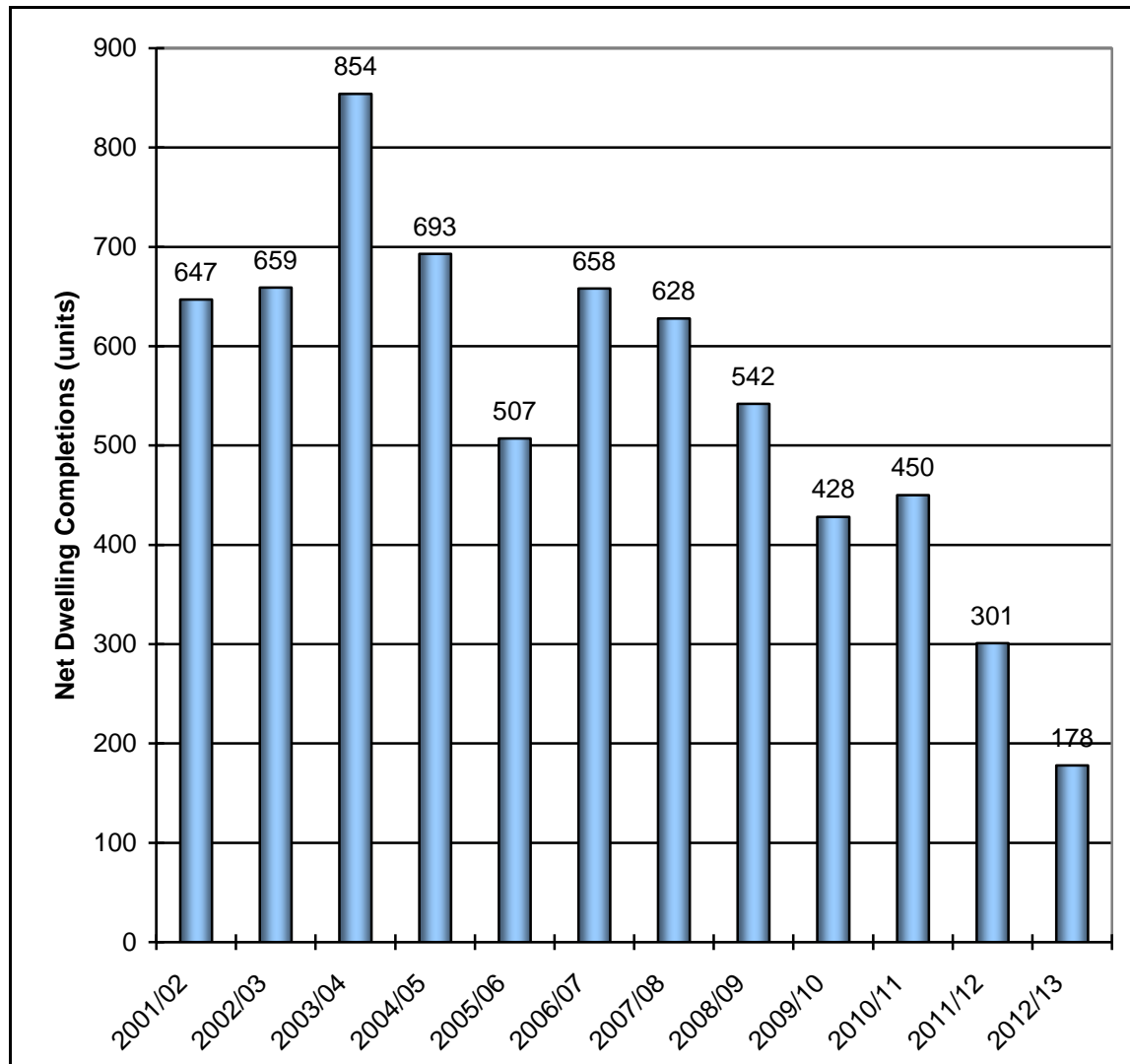
There were 690 business births in the District in 2012, the 4th highest amongst the Essex districts. The business formation rate in Braintree is consistently above the Essex average..

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 than the regional and national averages.

## 12. Housing

### 12.1. Housing Supply

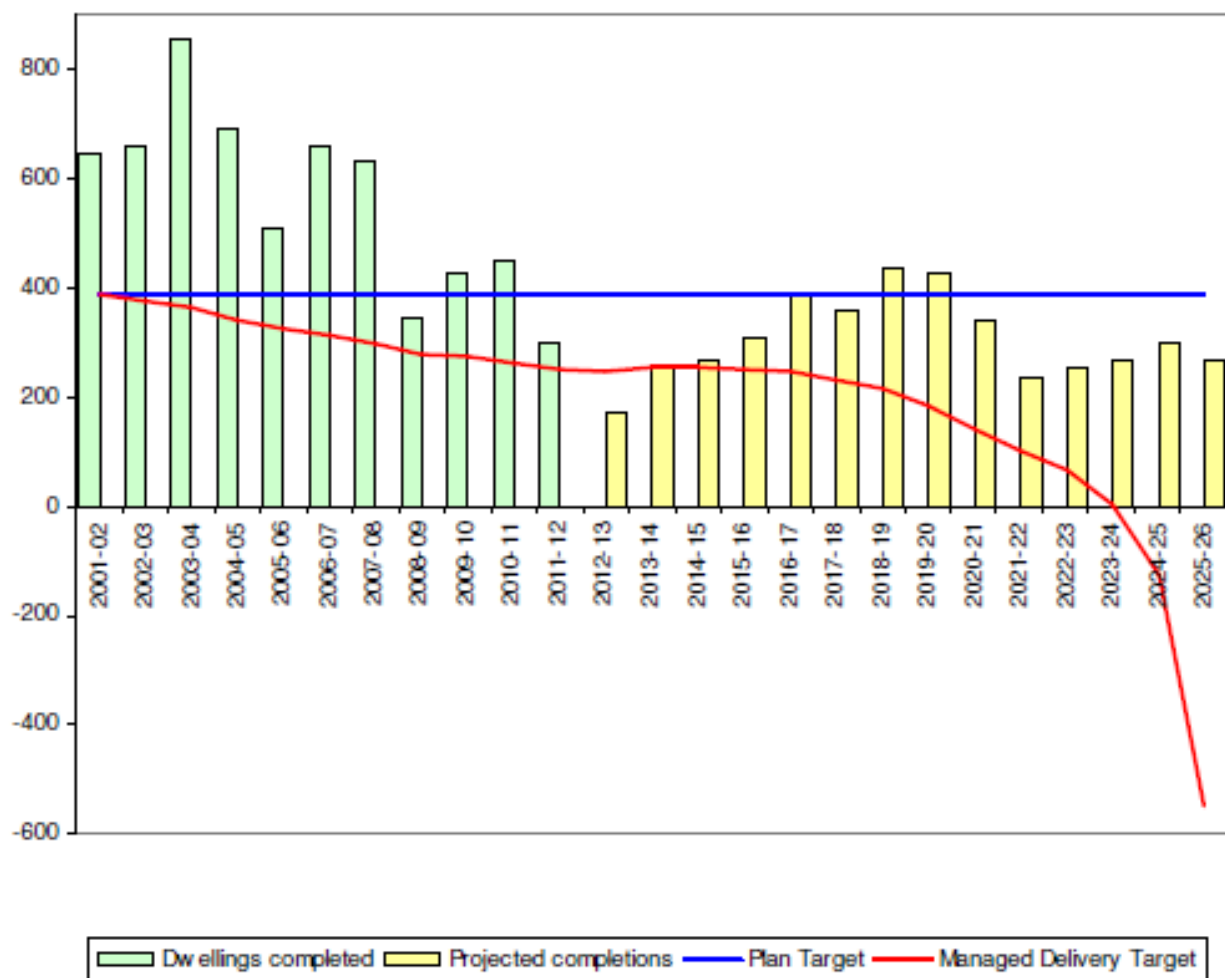
**Figure 15: Housing Completions in Braintree District**



Source: Braintree District's 2013 Annual Monitoring Report

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 most recent annual completion figure is above the annual target.

**Figure 16: Housing Trajectory in Braintree District**



Source: Braintree District's 2012 Annual Monitoring Report

The current trajectory 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 their 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<sup>3</sup> requires local planning authorities to provide a 5-year land supply of deliverable sites which excludes the current reporting year.

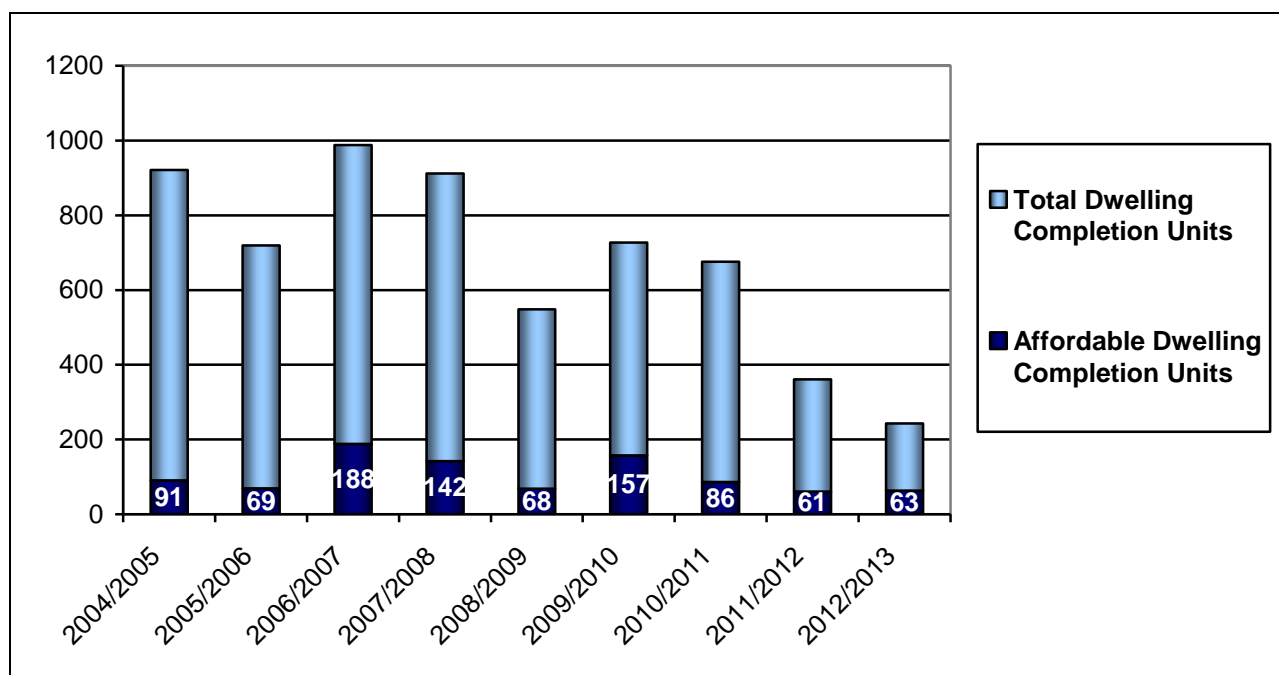
**Table 30: 5 Year Housing Supply in Braintree District**

2012/13	Year 1: 2013/14	Year 2: 2014/15	Year 3: 2015/16	Year 4: 2016/17	Year 5: 2017/18	Total Supply
171	259	265	307	392	361	1584

Source: Braintree District's 2012 Annual Monitoring Report

A total of 1,584 dwellings have been identified on deliverable sites over the next five years starting from 2013/14. This value 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.

**Figure 17: Affordable Housing Supply in Braintree District (net)**

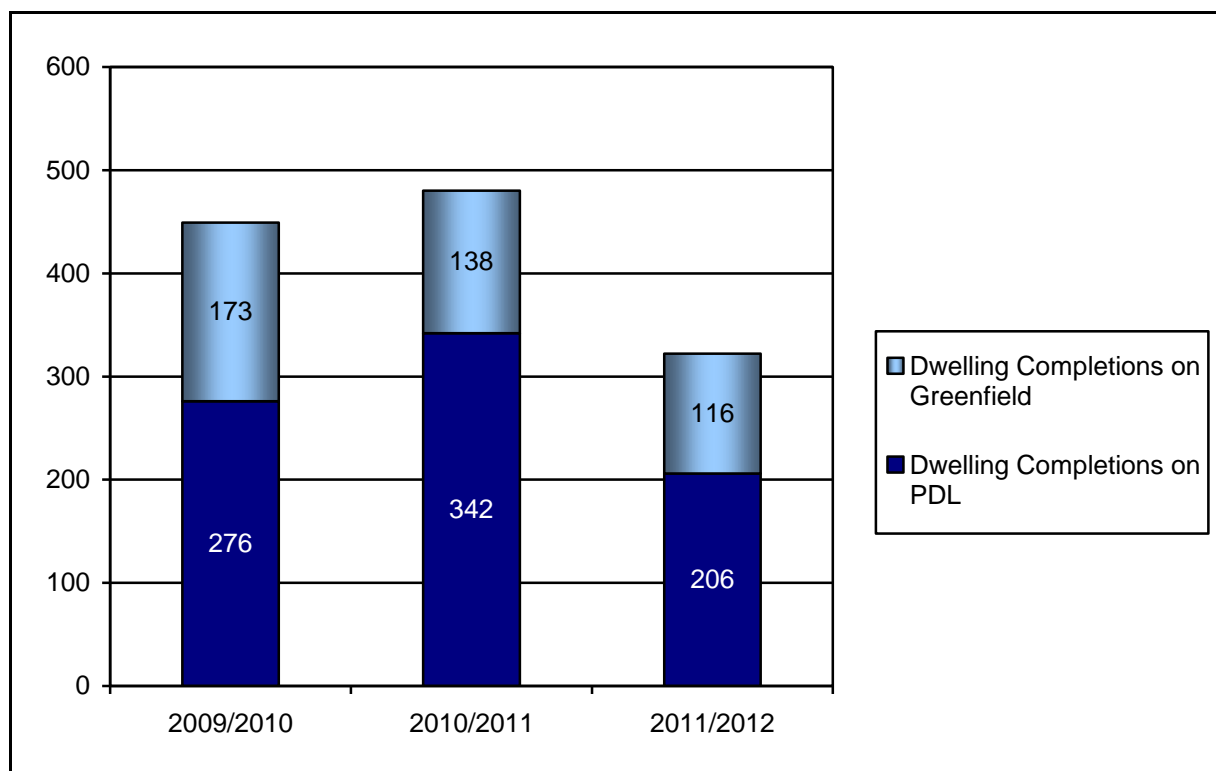


Source: Braintree District's 2013 Annual Monitoring Report and ONS 2013

<sup>3</sup> NPPF (March 2012)

In 2012/13, 35% of the net dwelling completions, which accounts for 63 dwellings, were affordable within the district. To date, the highest proportion of affordable housing achieved within the district was in 2009/2010 at 36.7% which accounted for 157 of the total number of dwellings completed.

**Figure 18: Gross Dwelling Completions on Previously Developed Land in Braintree District**



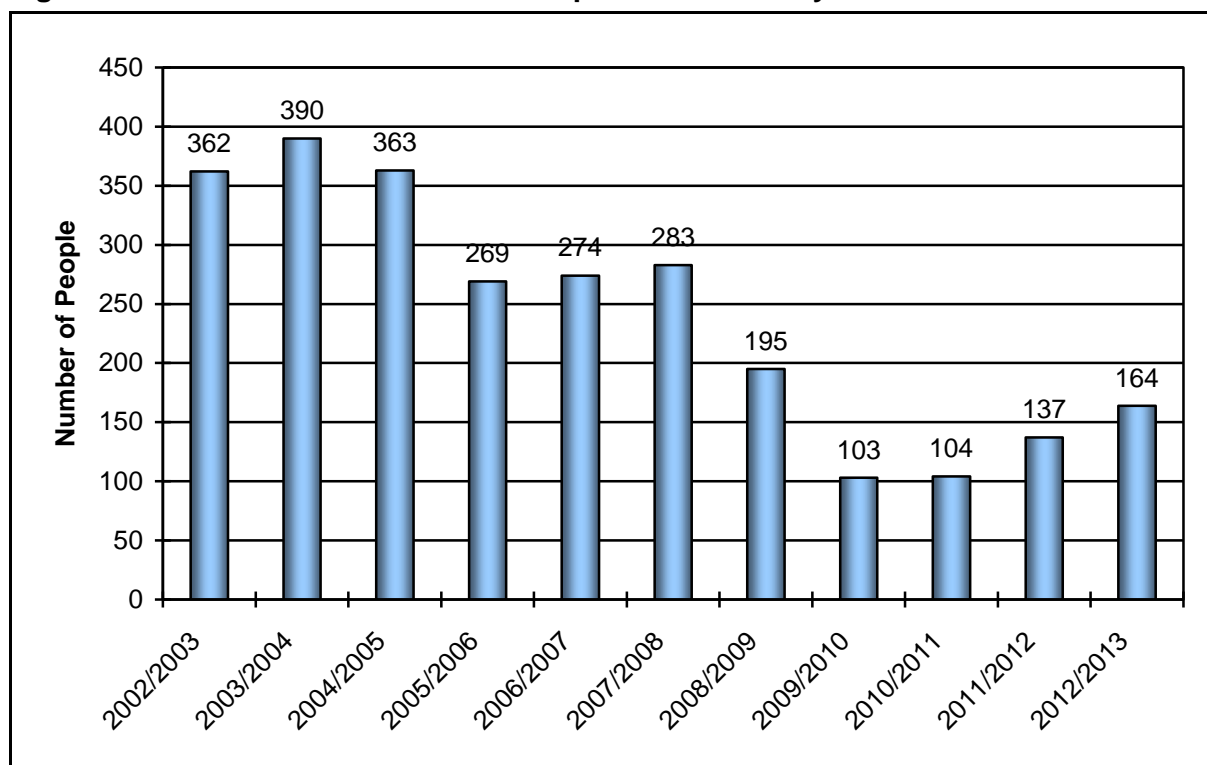
Source: Braintree District Annual Monitoring Report 2012

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.

## 12.2. Homelessness

**Figure 19: Number of Homeless Acceptances in Priority Need in Braintree District**



Source: Braintree District, Homelessness Strategy & Review 2013- 2018 (2013)

The number of homeless people accepted in priority need in Braintree District in 2012/13 was 164. Although this is the fourth lowest figure across the study period with the lowest being the three previous years (2009/10, 2010/11 and 2011/12) at 103, 104 and 137 homeless acceptances. Prior to this, numbers were either near to 200 or significantly more. The latest figure does show a rise in homeless acceptances of 19.7%.

### 12.3. Traveller Sites

**Table 31: Count of Traveller Caravans July 2013**

	Authorised sites (with planning permission)		Unauthorised sites (without planning permission)				Caravan Total
	No. of Caravans Socially Rented	No. of Caravans Private	No. of Caravans on Sites on travellers own land		No. of Caravans on Sites on land not owned by travellers		
			"Tolerated"	"Not tolerated"	"Tolerated"	"Not tolerated"	
Braintree	38	40	0	28	0	0	106
Essex	212	689	58	115	2	17	1093
England	6,530	9,813	1030	1099	1,466	1,204	21,142

Source: July 2013 data provided by DCLG

In July 2013 there were a total of 106 caravans sited within the district, of which 78 were located on authorised sites and 28 on unauthorised sites. All caravans on the unauthorised sites were situated on land owned by gypsies and these were not tolerated. Of the 78 caravans on authorised sites, 40 were private while the remaining 38 caravans were socially rented.

The total number of caravans in Braintree District represents 10% of the total amount within the county and less than 1% of those within England.

**Table 32: Authorised Gypsy and Travellers sites in Braintree District**

	Total number of pitches	of which are:		Caravan capacity	Date site opened	Date of last site changes	Management
		Residential	Transit				
Sandiacres, Cressing	14	14	0	28	1989	2009	ECC
Ridgewell	12	12	0	24	1995	2009	ECC

Source: July 2013 data provided by DCLG

There are two authorised Gypsy sites that are managed by Essex County Council in Braintree District at Cressing and Ridgewell. In July 2013 there was a combined total of 26 pitches which provided a total of 52 residential caravans spaces.

## 12.4. Summary

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 most recent annual completion figure is above the annual target.

The current trajectory 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 their 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<sup>4</sup> requires local planning authorities to provide a 5-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 value 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.

In 2012/13, 35% of the net dwelling completions, which accounts for 63 dwellings, were affordable within the district. To date, the highest proportion of affordable housing achieved within the district was in 2009/2010 at 36.7% which accounted for 157 of the total number of dwellings completed.

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.

---

<sup>4</sup> NPPF (March 2012)

The number of homeless people accepted in priority need in Braintree District in 2012/13 was 164. Although this is the fourth lowest figure across the study period with the lowest being the three previous years (2009/10, 2010/11 and 2011/12) at 103, 104 and 137 homeless acceptances. Prior to this, numbers were either near to 200 or significantly more. The latest figure does show a rise in homeless acceptances of 19.7%.

In July 2013 there were a total of 106 caravans sited within the district, of which 78 were located on authorised sites and 28 on unauthorised sites. All caravans on the unauthorised sites were situated on land owned by gypsies and these were not tolerated. Of the 78 caravans on authorised sites, 40 were private while the remaining 38 caravans were socially rented.

The total number of caravans in Braintree District represents 10% of the total amount within the county and less than 1% of those within England.

As of July 2013 there were 26 Gypsy, Traveller and Travelling Showpersons pitches on 2 authorised sites in the District. The total number of caravans in the district was 106, of which 78 were located on authorised sites and 28 on unauthorised sites.

## 13. Transport

### 13.1. Road Network

#### 13.1.1. Car Ownership

**Table 33: Private Vehicle Ownership**

*per household*

	All Households	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
Braintree	61,043	16.2	40.3	32.1	8.0	3.4	87,944
Essex	581,589	18.0	42.1	29.6	7.4	3.0	795,400
East of England	2,423,035	18.5	42.9	29.1	6.9	2.6	3,231,763
England	22,063,368	25.8	42.2	24.7	5.5	1.9	25,696,833

Source: ONS, Census 2011

Braintree District has a proportionately higher private vehicle ownership compared to the county and England as a whole. Ownership of a single car or van per household is the most common occurrence with 40.3% of households within Braintree District falling within this category. However a greater proportion of households in the district own two or more cars or vans compared to the county or national figures.

### 13.2. Travel Patterns and Accessibility

Journeys to work represent a high proportion of trips in the peak period and are considered in more detail in Table 34.

#### 13.2.1. Travel to Work

**Table 34: Travel to Work Method by Residence, 2011**

	Braintree		East of England		England	
	Count	%	Count	%	Count	%

	Braintree		East of England		England	
	Count	%	Count	%	Count	%
All People	106,718	n/a	4,245,544		38,881,374	
Works mainly at or from home	4,417	4.1	161,428	3.8	1,349,568	3.5
Underground, metro, light rail or tram	211	0.2	33,110	0.8	1,027,625	2.6
Train	6,295	5.9	205,077	4.8	1,343,684	3.5
Bus, minibus or coach	1,653	1.5	106,303	2.5	1,886,539	4.9
Taxi or minicab	262	0.2	13,227	0.3	131,465	0.3
Motorcycle, scooter or moped	460	0.4	22,475	0.5	206,550	0.5
Driving a car or van	48,490	45.4	1,757,121	41.4	14,345,882	36.9
Passenger in a car or van	3,654	3.4	143,769	3.4	1,264,553	3.3
Bicycle	1,101	1.0	100,651	2.4	742,675	1.9
On foot	7,256	6.8	288,663	6.8	2,701,453	6.9
Other	401	0.4	17,708	0.4	162,727	0.4
Not currently working	32,518	30.5	1,396,032	32.9	13,718,653	35.3

Source: ONS, Census 2011

Table 34 illustrates that more than 45% of residents of Braintree drive a car or van to get to work. This is higher than the regional and national figures of 41.4% and 36.9% of the population. Private vehicle use is the most popular travel to work method in all three hierarchies.

Larger proportions of Braintree's population commute as a passenger in a car or van, by train or on foot than at regional and national levels while fewer Braintree residents cycle or use buses, minibuses or coaches compared to regional and national levels.

A comparatively larger proportion of residents of Braintree work mainly at or from home than both the regional and national proportions.



**13.2.2. Accessibility**

Accessibility by public transport or walking to key services and educational facilities is improved considerably within and in close proximity to the town of Braintree, Halstead and Witham.

**Table 35: Proportion of Braintree Residents with Access to Services within 15 minutes and 30 minutes**

Service	Proportion of resident population with access to service within 15 minutes	Proportion of resident population with access to service within 30 minutes
Primary school	79%	94%
Secondary school	41%	81%
Employment site	59%	86%
Retail centre	62%	86%
GP	64%	91%

Source: Essex County Council, October 2010

Over four fifths of the population of Braintree District live within 30 minutes of each of the 5 highlighted services. Over three-quarters of the population of Braintree District live within 15 minutes access of a primary school. This proportion drops when accessibility to the remaining four services are analysed. With respect to secondary schools, just 41% of residents live within 15 minutes access time.

Travel times were calculated on Mondays either between 7am and 9am or 9:30am – 5pm as stated in October 2010.

**13.3. Summary**

Braintree District has a proportionately higher private vehicle ownership compared to the county and England as a whole. Ownership of a single car or van per household is the most common occurrence with 40.3% of households within Braintree District falling within this category. However a greater proportion of households in the district own two or more cars or vans compared to the county or national figures.

More than 45% of residents of Braintree drive a car or van to get to work. This is higher than the regional and national figures of 41.4% and 36.9% of the population. Private vehicle use is the most popular travel to work method in all three hierarchies. Larger proportions of Braintree's population commute as a passenger in a car or van, by train or on foot than at regional and national levels

while fewer Braintree residents' cycle or use buses, minibuses or coaches compared to regional and national levels. A comparatively larger proportion of residents of Braintree work mainly at or from home than both the regional and national proportions.

Accessibility by public transport or walking to key services and educational facilities is improved considerably within and in close proximity to the town of Braintree, Halstead and Witham. Over four fifths of the population of Braintree District live within 30 minutes of each of the 5 highlighted services. Over three-quarters of the population of Braintree District live within 15 minutes access of a primary school. This proportion drops when accessibility to the remaining four services are analysed. With respect to secondary schools, just 41% of residents live within 15 minutes access time.

This information is issued by  
**Place Services Team at Essex County Council**  
You can contact us in the following ways:

Visit our website:  
**[essex.gov.uk](http://essex.gov.uk)**

By telephone:  
**08456 430 430**

By post:  
**Place Services, Essex County Council**  
**PO Box 11, County Hall, Chelmsford, Essex, CM1 1QH**

Read our online magazine at **[essex.gov.uk/ew](http://essex.gov.uk/ew)**

Follow us on  **Essex\_CC**

Find us on  **[facebook.com/essexcountycouncil](https://facebook.com/essexcountycouncil)**

The information in this document can be translated, and/  
or made available in alternative formats, on request.

Published February 2014