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Rochford District Council

Strategic Environmental Assessment Baseline Information Profile

2009 – 2010

Prepared For
Rochford District Council
by
Essex County Council

Essex County Council

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1 INTRODUCTION

> *Local authorities need to prepare and maintain an up-to-date information base on key aspects of the social, economic and environmental characteristics of their area, to enable the preparation of sound Local Development Documents which can deliver sustainable development objectives (PAS, 2008).*

The production of a sound evidence base is not just the requirement of PPS12, but also as part of Sustainability Appraisal (SA) and the Strategic Environmental Assessment (SEA) of plans and programmes. The requirement for SA and SEA emanates from a high level national and international commitment to sustainable development.

The European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the 'SEA Directive') was adopted in June 2001 with a view to increase the level of protection for the environment, integrate environmental considerations into the preparation and adoption of plans and programmes and to promote sustainable development. The Directive was transposed into English legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulation'), which came into force on 21 July 2004. It requires a Strategic Environmental Assessment to be carried out for all plans and programmes which are:

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

The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between these factors.

Sustainability Appraisals examine the effects of proposed plans and programmes in a wider context, taking into account economic and social considerations together with environmental considerations required by the SEA Directive in order to promote sustainable development. SA is mandatory for all Development Plan Documents and Regional Spatial Strategies in accordance with the Planning and Compulsory Purchase Act 2004 as amended by the Planning Act 2008.

The County Council has entered into a Service Level Agreement with several local authorities in Essex to collect and maintain the baseline information to meet the requirements of the SEA Directive and to provide an up-to-date information base on key aspects of the social, economic and environmental characteristics of their area. This report has been prepared for Rochford District Council by Essex County Council.

The information is collected in a series of three reports:

- The first is the **Executive Summary**. This draws together the conclusions from the more detailed baseline monitoring report. The summary is intended to give an overview of the baseline report, which can be then looked at in detail for specific information on specific topics.
- The second document is the **Baseline Information Profile** which itself is organised into the following topic areas, covered by the SEA Directive. Divided into two parts:

Part I of the report deals with the Natural Environment, and includes the topics of:

- Biodiversity, flora and fauna
- Landscape
- Air Quality
- Climatic Factors
- Water Quality
- Flooding
- Soils, Minerals and Waste

Part II of the report deals with the Built Environment, and the following topics:

- Cultural Heritage and Townscape
- Health
- Population and Social
- Economy
- Housing
- Transport

Each topic is presented in its own Chapter, with each chapter divided into 3 sections,

- Introduction
- Current Baseline Information, with sub-sections defined by the subject matter, including contextual and comparative information for broader geographic areas as appropriate and where possible
- Summary

The last document is the:

- **Plans and Programmes** Annexe which sets out the policy context for each of the topics and subjects presented in the baseline information profile. It sets out a comprehensive list of International, National, Regional, County wide and Local contextual information. A brief summary of each of the Plans and Programmes is provided together with a web link to the document itself.

This report has been compiled using an extensive set of information from a variety of sources. Each source is shown alongside the information it presents, together with the hyperlink where the information originates from a web-site. The information was correct at 30th September 2009. Changes in the source information after that date may affect the continued accuracy of information contained in this report. Essex County Council takes no responsibility for the accuracy, reliability and correctness of any information produced by external sources which are outside of the control of the County Council.

PART ONE:
Natural Environment

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2 BIODIVERSITY, FLORA AND FAUNA

2.1 Introduction

The term biodiversity simply describes the variety of all living things and their habitats. This can be as general as to cover the diversity of plant and animal species (and their genetic variation) globally, or more detailed to cover single ecosystems. Biodiversity is important because it provides us with many of the things that sustain our lives. It is essential that biodiversity and the 'natural balance' of ecosystems are protected because it is necessary to maintain the current quality of life and standard of living.

However, in the UK over 100 species have been lost during the last century as a result of human activity. On a global scale, the rate of loss is now recognised as a serious concern, requiring intensive international action to prevent continued loss of biodiversity.

2.2 Current Baseline Information

A. Indigenous Flagship Species

The EBAP contains action plans for 25 species and 10 habitats throughout Essex. Therefore to ensure that current and future planning policy appropriately addresses issues related to biodiversity and the natural environment, it is important that planning officers are aware of the biological factors evident in the local area. The section below illustrates the species and habitats native within the administrative boundary of Rochford District Council outlined in the BAP, the current status, factors causing loss or decline in the species and relevant policy actions that may be taken to protect and enhance the species.

All species receive extra protection if they are within a designated area, such as a SSSI or other nature or landscape designation.

i) Plants

- Native Black Poplar (Populus Nigra subspecies Betulifolia)

ii) Mammals

- Brown Hare (Lepus Europaeus)
- Dormouse (Muscardinus Avellanarius)
- Harbour Porpoise (Phocoena Phocoena)
- Pipistrelle Bats (Pipistrellus Pipistrellus and Pipistrellus Pygmaeus)

iii) Birds

- Grey Partridge (Perdix Perdix)
- Skylark (Alauda Arvensis)
- Song Thrush (Turdus Philomelus)

iv) Invertebrates

- Heath Fritillary (Mellicta Athalia)

v) Other

- Great Crested Newt (Triturus Cristatus)
- Allis Shad (Alosa Alosa) and Twaite Shad (Alosa Fallax)

Further information on the species listed above, their descriptions, status, forms of legal protection and the offences applicable should they or their habitats are detrimentally effected can be found at:

http://www.essexwt.org.uk/main/welcome.htm or http://www.essexbiodiversity.org.uk/.

B. Native Habitats

- Ancient and/or Species Rich Hedgerows and Green Lanes.
- Ancient Woodland
- Cereal Field Margins.
- Coastal Grazing Marsh.
- Saline Lagoons.
- Sea Grass Beds.
- Heathland.
- Urban Areas.

Further information on the characteristics of these native habitats, which Essex Biodiversity Partnership identified species can be found in each, and the legal status of these areas can be found at:

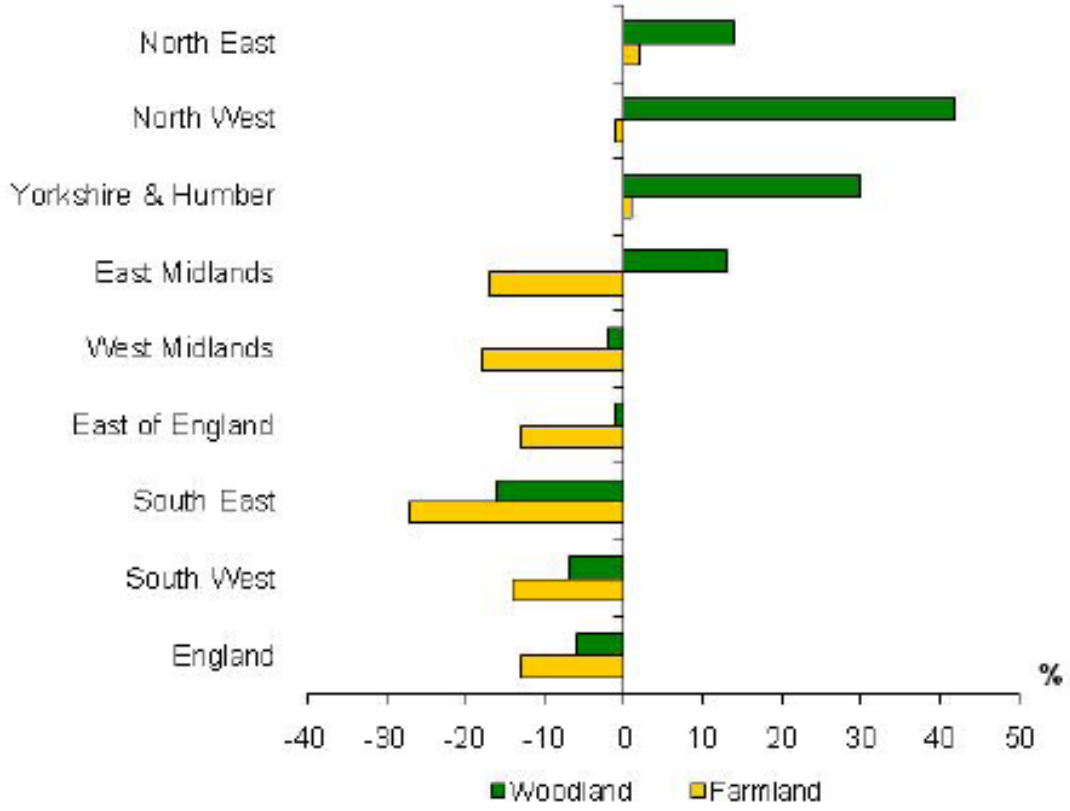
http://www.essexwt.org.uk/main/welcome.htm or http://www.essexbiodiversity.org.uk/.

C. Bird Populations

The bird population can often be a useful indicator to the biodiversity in different areas such as woodland and farmland. They are easier to locate and identify than more illusive species and from their distribution, other species numbers and types (on which the birds are dependant) can be approximated.

Figure 1 shows the change in woodland and farmland bird species across all regions in England.

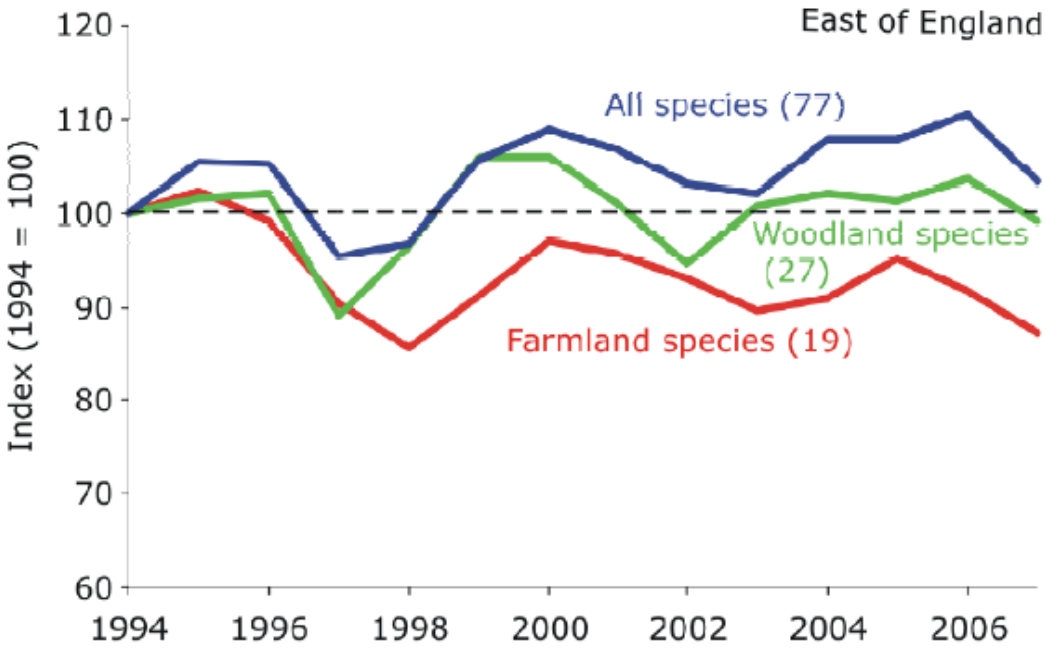
Figure 1: Percentage Changes in Wild Bird Indicators by Region 1994–2007



Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

- Between 1994 and 2007, the population indices of farmland birds in five regions showed a decline of more than 10 per cent. This includes the East of England.
- During this study period woodland bird populations also decreased within the East of England.

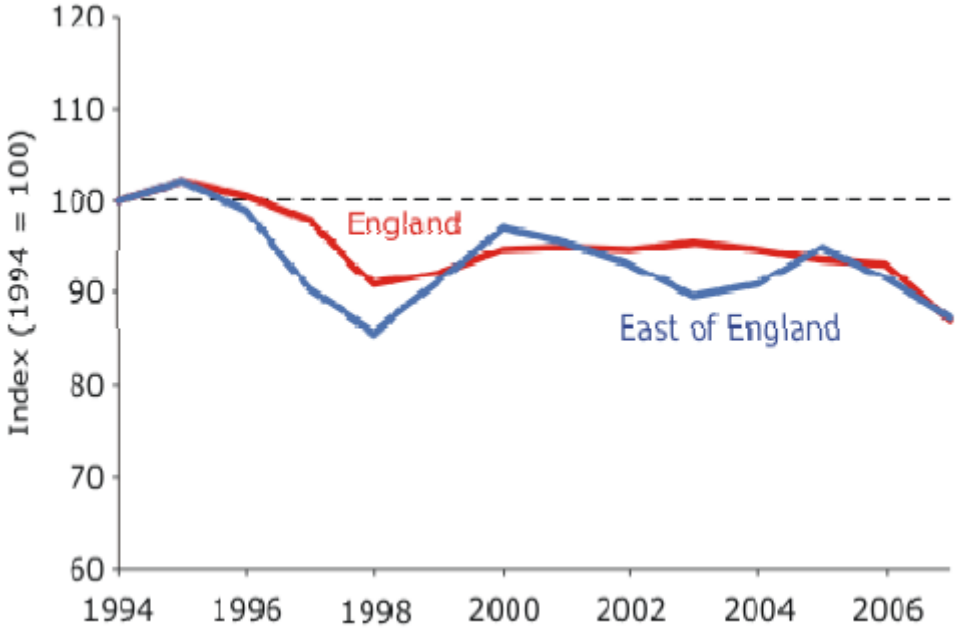
Figure 2: East of England Wild Bird Indices 1994-2007



Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

- Between 1994 and 2007, the East of England population index for all native bird species increased by 3 per cent. There was a 13 per cent decrease in the farmland bird index, while for woodland birds there was a 1 per cent decrease in the index.
- There has been a decrease in both farmland and woodland species between 2006 and 2007.

Figure 3: Change in Farmland Bird Population Indices 1994–2007

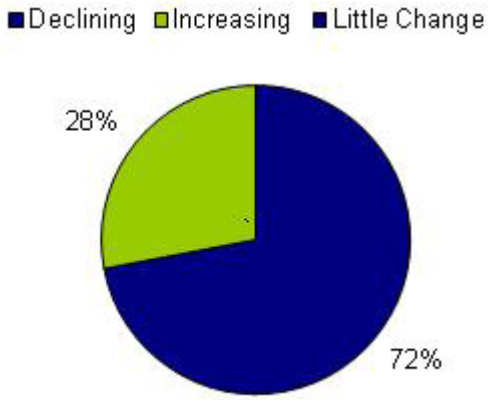


Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

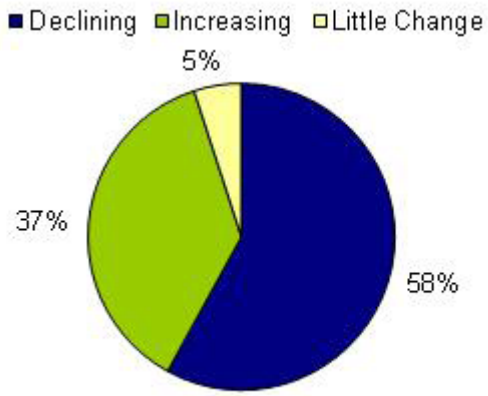
- Across the period of study, the index of farmland birds population decreased by 13% between 1994 and 2007 in both the East of England and England.
- The population indices for Turtle Dove, Linnet, Com Bunting and Yellow Wagtail decreased by more than 40%.
- The population index of the Jackdaw increased by more than 90%.

Figure 4: Proportion of Changes in Farmland Bird Species Populations in the East of England Region

1970 – 1994



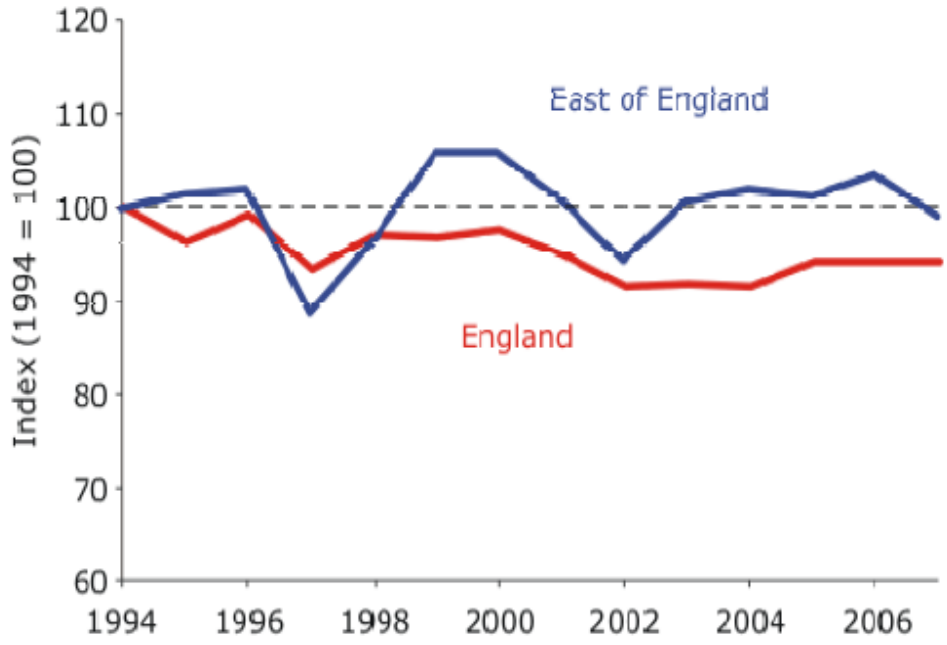
1994 – 2007



Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

- Previously published indices showed that farmland birds in the East of England declined by 44% between 1970 and 1994. Care must be taken when making a direct comparison due to different species composition and methodologies.

Figure 5: Change in Woodland Bird Population Indices 1994–2007

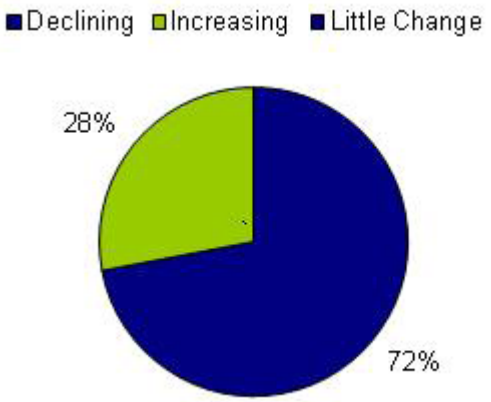


Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

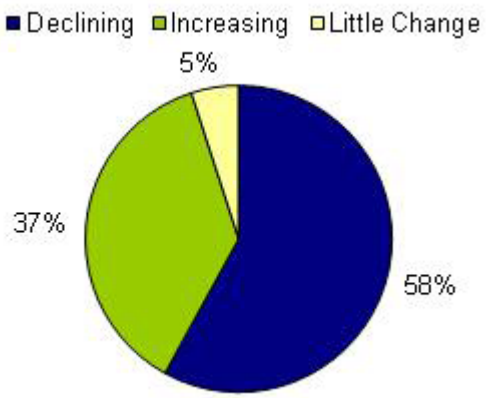
- Across the period of study, the index of woodland bird population decreased by 1% between 1994 and 2007 in the East of England and 6% in England.
- Green Woodpecker and Green Spotted Woodpecker saw increases of more than 100% in their population indices.
- Nightingale and Spotted Flycatcher saw a decrease of more than 60% in their population index.

Figure 6: Proportion of Changes in Farmland Bird Species Populations in the East of England Region

1970 – 1994



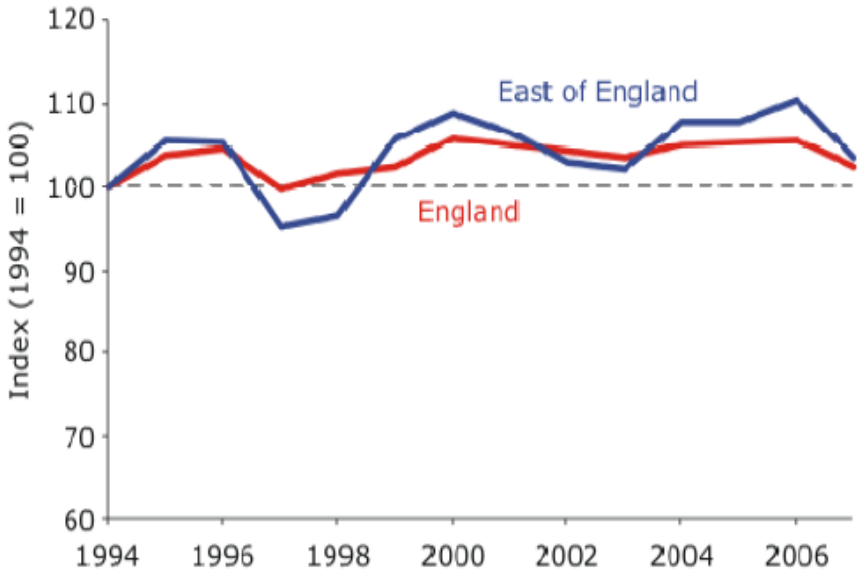
1994 – 2007



Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

- Previously published indices showed woodland birds in the East of England declining by 19% between 1970 and 1994. Care must be taken when making a direct comparison due to different species composition and methodologies.

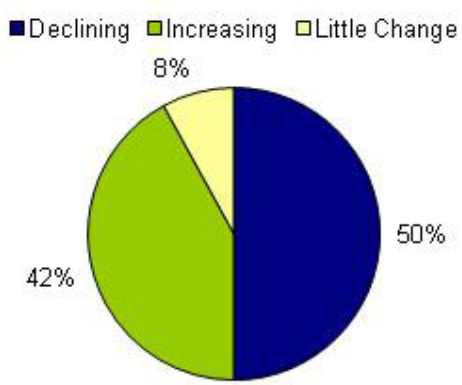
Figure 7: Change in All Native Bird Population Indices 1994–2007



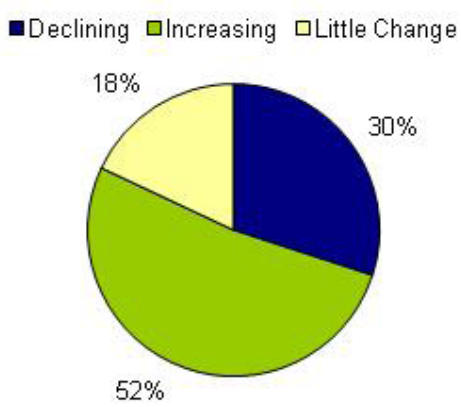
Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

Figure 8: Proportion of Changes in All Native Bird Populations in the East of England

1970 – 1994



1994 – 2007



Source: Defra Wild Bird Population Indicators for the English Regions: 1994 – 2007, 2009 (http://www.defra.gov.uk)

- Across the period of study, the population index of all native birds, including farmland and woodland species, increased by 3% in the East of England and 2% in England.

D. Land Designations

i) Ramsar Sites

Ramsar sites are European designated sites and part of the Natura 2000 network. The Habitat directive protects these sites and requires appropriate measures to reduce potential adverse impacts arising from development proposals.

The UK Government signed the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) in 1973. Ramsar sites are areas which have been formally 'listed' (designated) as Wetlands of International Importance by the Secretary of State. Natural England carries out consultations on the proposed listing with owners, occupiers and local authorities. Many sites qualify for both Ramsar and SPA designations.

Within Rochford District there is the Mid-Essex Coast Ramsar Sites, within which the Crouch and Roach Estuaries (incorporating River Crouch Marshes) was phase three in 1998 and Foulness was phase five listed in 1996.

Further information about Ramsar Sites can be found at:

http://www.ramsar.org

ii) Special Protection Areas

Special Protection Areas (SPAs) are areas classified (designated) by the Secretary of State, under the Directive 79/409/EEC on the Conservation of Wild Birds, adopted in 1979. This is a European designation and forms part of the Natura 2000 network This Directive applies to birds, their eggs, nests and habitats, providing protection, management and control of all species of naturally occurring wild birds in the European territory. It requires Member States to take measures to preserve a sufficient diversity of habitats for these wild

bird species to maintain populations at ecologically and scientifically sound levels. It also requires Member States to take special measures to conserve the habitats of certain particularly rare and migratory species.

Within the Rochford District the same three sites meet the criteria for SPA status as those qualifying for Ramsar protection; Foulness classified in 1996, and Crouch and Roach Estuaries (classified in 1998).

Further information about SPAs can be found at:

http://www.jncc.gov.uk

iii) Special Areas of Conservation

Special Areas of Conservation (SACs) and candidate Special Areas of Conservation (cSACs) are designated by the European Commission after a period of consultation under article 3 of the Habitats Directive (EC Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992). These are European designations made as part of the Natura 2000 network. This directive requires Member States to maintain or restore habitats and species at a favourable conservation status in the community. Special Protection Areas for birds (SPAs) and SACs will together make up a network of sites in Europe called Natura 2000.

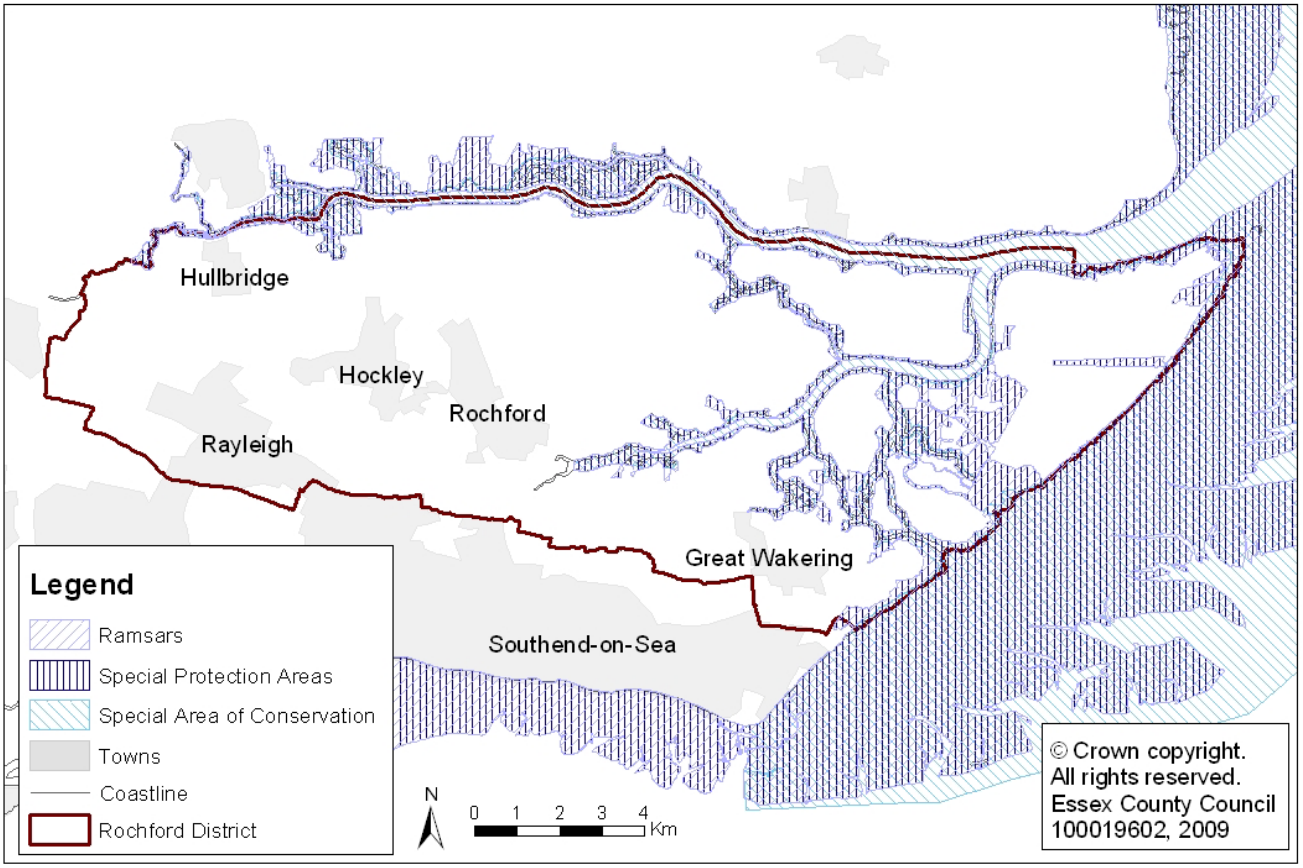
Within the Rochford District, there is part of the Essex Estuaries cSAC. This SAC covers 46,140.82 ha within Essex and covers the whole of the Foulness and Crouch and Roach Estuaries from the point of the highest astronomical tide out to sea. As such it relates to the seaward part of the coastal zone. It was designated as a cSAC due to various features of the habitat:

- Pioneer saltmarsh
- Estuaries
- Cordgrass swards, intertidal mudflats and sandflats
- Atlantic salt meadows
- Subtidal sandbanks
- Mediterranean saltmarsh scrubs

Further information about cSACs can be found at:

http://www.jncc.gov.uk

Figure 9: Ramsar Sites, Special Protection Areas and Special Areas of Conservation in Rochford District



Source: Essex County Council 2009

iv) The Essex Estuaries European Marine Site

Where a SPA or cSAC is continuously or intermittently covered by tidal waters, the site is referred to as a European Marine Site. The marine components of the Essex SPAs and cSACs are being treated as a single European Marine Site called the Essex Estuaries Marine site (EEEMS). Effectively the whole of the District coastline is within the EEEMS, although terrestrial parts of the SPAs (i.e. freshwater grazing marshes inside the sea walls) are not included as they occur above the highest astronomical tide.

E. Sites of Special Scientific Interest

i) Sites of Special Scientific Interest in Essex

Sites of Special Scientific Interest (SSSIs) are designated areas of land which are considered to be of special interest due to its fauna, flora, geological or physiographical features. There are over 4,000 SSSIs in England, covering around 7% of the country's land area. SSSIs are important as they support plants and animals that find it more difficult to survive in the wider countryside.

The success of SSSIs is monitored by 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”.

Table 1: Definition of Sites of Special Scientific Interest Categories

Category	Definition
Favourable	The SSSI is being adequately conserved and meeting conservation objectives, however there is scope for enhancement.
Unfavourable Recovering	The SSSI is not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach a favourable condition in time
Unfavourable No Change	The special interest of the SSSI is not being conserved and will not reach favourable condition unless there are changes to the site management or external pressures. The longer the SSSI remains in this condition, the more difficult it will be to achieve recovery
Unfavourable Declining	The special interest of the SSSI is not being conserved. The site condition is becoming progressively worse.
Part Destroyed	There has been lasting damage to part of the conservation interest of the SSSI such that it has been irreversibly lost.
Destroyed	Lasting damage has occurred to all the special conservation interest of the SSSI that it has been lost. This land will never recover

Source: Natural England Website 2008

The overall condition of SSSIs throughout Essex between 2005 and 2009 is illustrated in Table 2. Please note that data pertaining to 2008 was not obtainable. This table highlights the proportion of the SSSIs that meet the PSA target. Natural England defines the PSA target as the proportion of SSSI sites that are deemed to be in favourable or unfavourable recovering condition.

Table 2: Condition of Sites of Special Scientific Interest in Essex

Condition of Essex SSSIs	% Area				Change 2005-09
	2005	2006	2007	2009	
Meeting PSA target	56.47%	57.02%	57.05%	61.56%	9.01%
Favourable	51.23%	51.79%	51.74%	55.09%	7.53%
Unfavourable recovering	5.24%	5.23%	5.31%	6.47%	23.47%
Unfavourable no change	2.74%	2.71%	2.64%	5.21%	90.15%
Unfavourable declining	40.79%	40.27%	40.30%	33.24%	-18.51%
Destroyed/part destroyed	0.00%	0.00%	0.00%	0.00%	0.00%

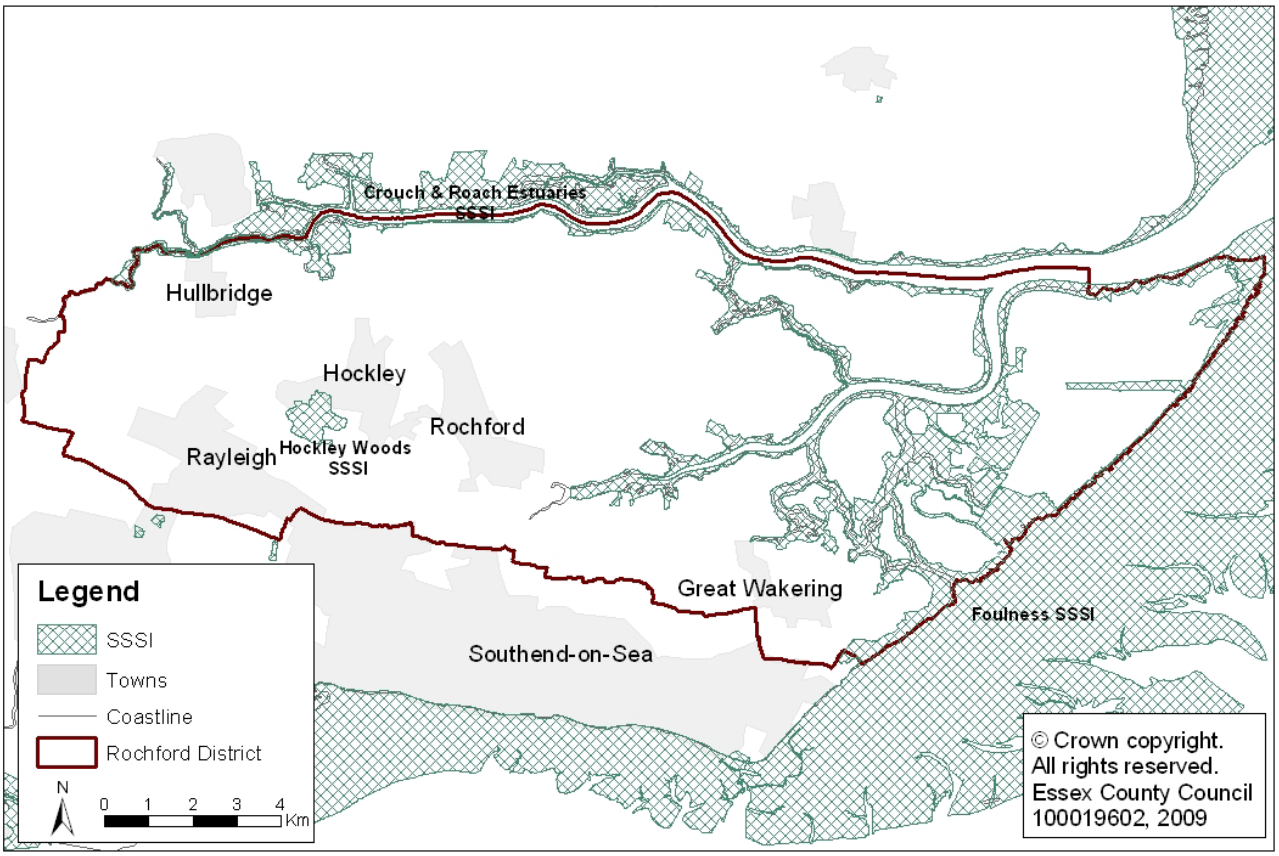
Source: English Nature Website 2009 (http://www.english-nature.org.uk)

- There has been a 9.01% increase in the proportion of SSSIs meeting the PSA target. 56.47% of all SSSIs were meeting the target in 2005 compared to 61.56% in 2009.
- There has been a 18.51% decrease in the proportion of SSSIs unfavourably declining, from 40.79% in 2005 to 33.24% in 2009.
- The largest proportional change can be seen in the proportion of SSSIs which are in an unfavourable condition but are showing no change. The proportion of SSSIs displaying this condition has increased from 2.74% in 2005 to 5.21% in 2009. This represents a proportional increase of 90.15%

ii) Sites of Special Scientific Interest in Rochford District

There are three SSSIs in the District, located at Hockley Woods, Foulness and the Crouch and Roach Estuaries as illustrated in the figure below:

Figure 10: Location of Sites of Special Scientific Interest within Rochford District.



Source: Essex County Council 2009

The description and condition of the above Rochford SSSIs is described in the following table.

Table 3: Sites of Special Scientific Interest - Location, Description and Condition

Hockley Woods			
Location:	To the South of Hockley	**Size:**	92.12 ha
Habitat Type	Broadleaved, mixed and yew woodland - lowland	**PSA Target**	100%
Description & Reasons For Notification	These are a contiguous group of ancient coppice woods incorporating Great Bull Wood, Great Hawkwell Wood, Beeches Wood and Parson's Snipe. They lie on the crest and slopes of a ridge of pre-glacial gravels and clay north-west of Southend-on-Sea, forming one of the most extensive areas of ancient woodland in South Essex. The dominant stand types comprising the Sweet Chestnuts variants of Pedunculate oak-hornbeam – birch-hazel variant and acid Sessile oak-hornbeam. The population of Sessile Oak Quercus petraea is probably the largest in eastern England. The ground fauna is dominated by Bramble and creeping Soft Grass Holcus Mollis with substantial areas of Bracken Pteridium Aquilinum. There is evidence of active management of woodland to create temporary open space and maintain appropriate extent of permanent open space, but ideally would encourage more intervention management of permanent open		

	space to retain desirable habitat qualities for heath fritillary butterflies. Woodland structure good with a mixture of coppice with standards and high forest, but overall understorey over c30% of area consisting of coppice layers or shrubs. Open space collectively c10% of area. The annual creation of large coppice coups creates good temporary open space, although the hornbeam/oak areas provide the suitable habitat for common cow-wheat. Three age classes present over the site with evidence of good regeneration by coppice stools and as saplings. Dead wood (standing & fallen) is adequate.		
Condition Most recent Assessment 19th Jun 2008	The heath fritillary population is below desirable thresholds and consequently targeted management of open space need to be actioned to ensure continued recovery towards favourable condition status. The temporary open space created by coppicing is good within a woodland context but the permanent open space in the rides and adjacent glades are more shaded and overgrown than desirable		
Foulness			
Location:	Foulness lies on the north shore of the Thames Estuary between Southend in the south and the Rivers Roach and Crouch in the north	**Size:**	10946.17 ha
Habitat Type:	Littoral Sediment Supralittoral Sediment Coastal Lagoon Neutral Grassland – Lowland Improved Grassland Broadleaved, Mixed & Yew Woodland - Lowland	**PSA Target**	78.24% of SSSI is Currently meeting Targets
Description & Reasons For Notification	A key site in "A Nature Conservation Review' edited by D.A Ratcliffe (Cambridge University Press, 1977), thus is regarded as an essential element in the success of nature conservation in Britain. It is also proposed as part of the mid-Essex Coast Special Protection Area, under the EEC Directive on the Conservation of Wild Birds (Directive 79/409/EEC) and as a Wetland of International Importance, under the Ramsar Convention. It comprises extensive intertidal sand-silt flats, saltmarsh, beaches, grazing marshes, rough grass and scrubland. The flats are of national and international importance as feeding grounds for nine species of wildfowl and wader, with islands, creeks and grazing land forming an integral part as sheltered feeding and roosting sites. The shell banks support nationally important breeding colonies of Little Terns, Common Terns and Sandwich Terns. The complex matrix of habitats also supports nationally important numbers of breeding Avocets along with plants and invertebrates. Numerous species are locally restricted in their distribution and nationally uncommon or rare. March 2009 – Units 6 to 9, 11 – 16, 18, 20, 23, and 30 were the most recently assessed.		
Condition There are 31 Unit areas in total. The latest assessments were carried out March 2009 on those units detailed	Most of the SSSI is managed well. The areas for concern are due to - Coastal squeeze - Agriculture - Inappropriate Scrub Control - The need for targeted grassland management to increase structural diversity and ditch profile enhancement to achieve favourable status.		
Crouch and Roach Estuaries (shared with Chelmsford Borough and Maldon District)			
Location:	South Essex	**Size:**	Total SSSI area:

			1743.97 ha Within The District: 119.36 ha
Habitat Type	Littoral Sediment Neutral Grassland - Lowland	**PSA Target**	0%
Description & Reasons For Notification	The site comprises the former River Crouch Marshes SSSI with extensions and deletions. The Crouch and Roach Estuaries with both the Dengie SSSI and the Foulness SSSI. These sites run from the mouth of the River Crouch, the Dengie SSSI to the north, and the Foulness SSSI running southwards including the south bank of the River Crouch downstream. Part of the site overlaps the geological SSSI known as The Cliff, Burnham on Crouch. A proportion of the site forms part of the Mid Essex Coast Special Protection Area under EC Directive on the Conservation of Wild birds (Directive 74/409/EEC) and as a wetland of international importance under the RAMSAR convention. The tidal reaches of the Crouch and Roach estuaries are part of the Essex Estuaries possible Special Area of Conservation under the Habitats Directive (Directive 92/43/EEC). The River Crouch occupies a shallow valley between two ridges of London Clay, whilst the River Roach is set predominately between areas of brickearth and loams with patches of sand and gravel. The intertidal zone along the rivers Crouch and Roach is 'squeezed' between the sea walls on both banks and the river channel, leaving a relatively narrow strip of tidal mud in contrast with other estuaries in the county. This however is used by a significant numbers of three different species of waders and wildfowl. Additional interest is provided by the aquatic and terrestrial invertebrates and by the assemblage of nationally scarce plants.		
Condition Unit 1 06 Oct 1998 Unit 2 07 Mar 2005	Unit 1 is unfavourable declining and Unit 2 is unfavourable no change. This condition is mainly due to coastal squeeze and inappropriate water levels. Grazing marsh is currently managed as ESA tier 1 but requires higher water levels. This is difficult due to the isolated nature of the grazing marsh which is surrounded by arable land.		

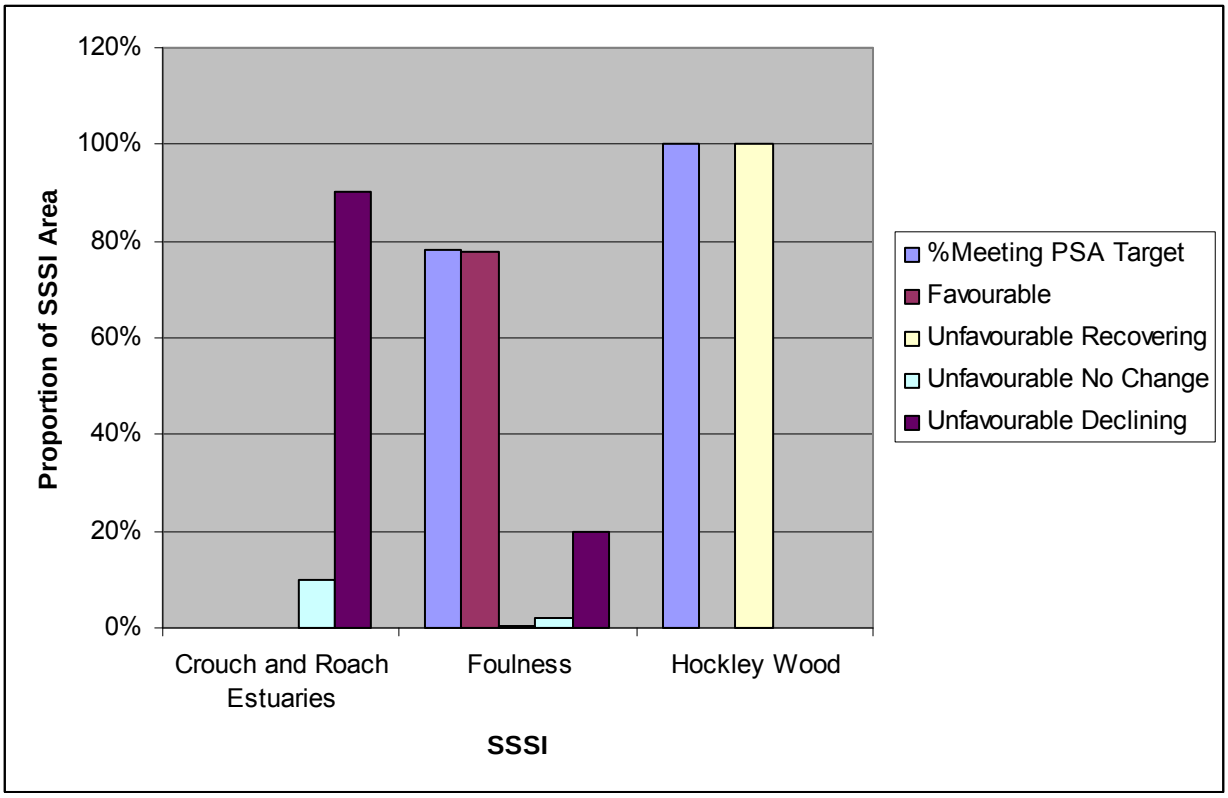
Source Natural England 2009 (http://www.english-nature.org.uk)

Table 4: Condition of Sites of Special Scientific Interest in Rochford District 2009

	Meeting PSA Target	Favourable	Unfavourable Recovering	Unfavourable No Change	Unfavourable Declining
Crouch and Roach Estuaries	0%	0%	0%	9.75%	90.25%
Foulness	78.24%	77.94%	0.30%	2.09%	19.67%
Hockley Wood	100.00%	0%	100%	0%	0%

Source Natural England 2009 (http://www.english-nature.org.uk)

Figure 11: Condition of Sites of Special Scientific Interest in Rochford District 2009

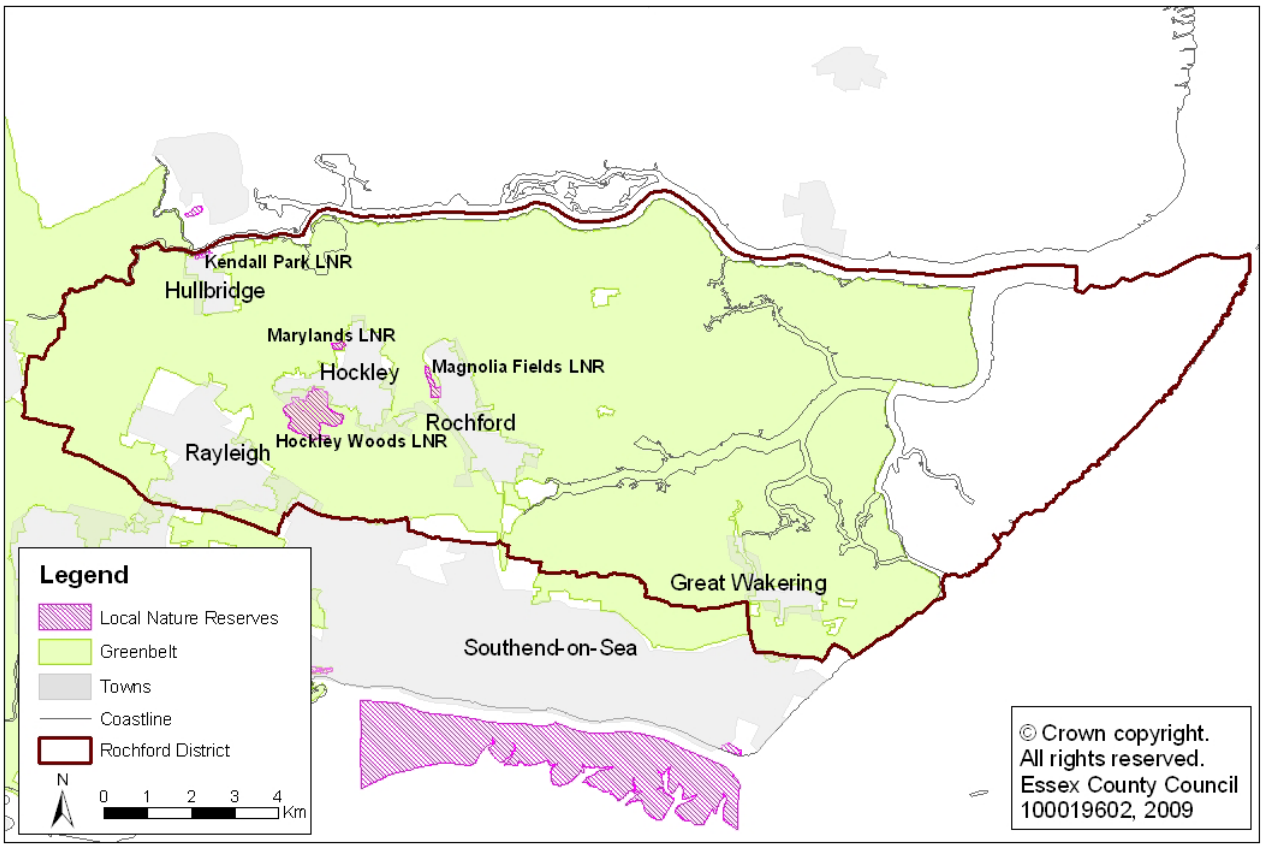


Source: Adapted from Natural England 2009 (http://www.english-nature.org.uk)

- Hockely Wood is the only SSSI to be fully meeting the PSA target, where 100% of its site area has been denoted as being in an unfavourable condition although one which is recovering.
- No part of the Crouch and Roach Estuaries SSSI is meeting the PSA target. 90.25% of this SSSI has been assessed as being in an unfavourably declining condition.
- The majority of the Foulness SSSI is meeting the PSA target, with 78.24% of the total area being in either a favourable or unfavourably recovering condition.

F. Nature Reserves

Figure 12: Rochford District Local Nature Reserves



Source: Essex County Council 2009

G. National Nature Reserves

There are seven National Nature Reserves (NNRs) in Essex, of these there are none in the Rochford District.

H. Local Nature Reserves

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

There are 46 LNRs within Essex. Of these, 4 are within Rochford District:

- Hockley Woods (91 ha)
- Hullbridge Foreshore (4ha)
- Marylands (3.69 ha)
- Magnolia Fields (9.7 ha)

In addition to these there is a proposed extension of the Southend on Sea Foreshore LNR into the Rochford District to include the Maplin Bund in the near future.

Hockley Woods have more ancient woodland plants than any other wood in the country. Hockley Woods have survived because they have been coppice managed as a valuable resource.

Magnolia Fields is an area of habitat with a variety of species present including large numbers of the increasingly rare Bullfinch. The reserve was a former brickworks site and several signs of this trade are still apparent such as the pond that was redeveloped in 1996 to which wildlife has gradually returned. There is an extensive network of pathways through the woods, where there are numerous woodland bird species present.

I. Local Wildlife Sites

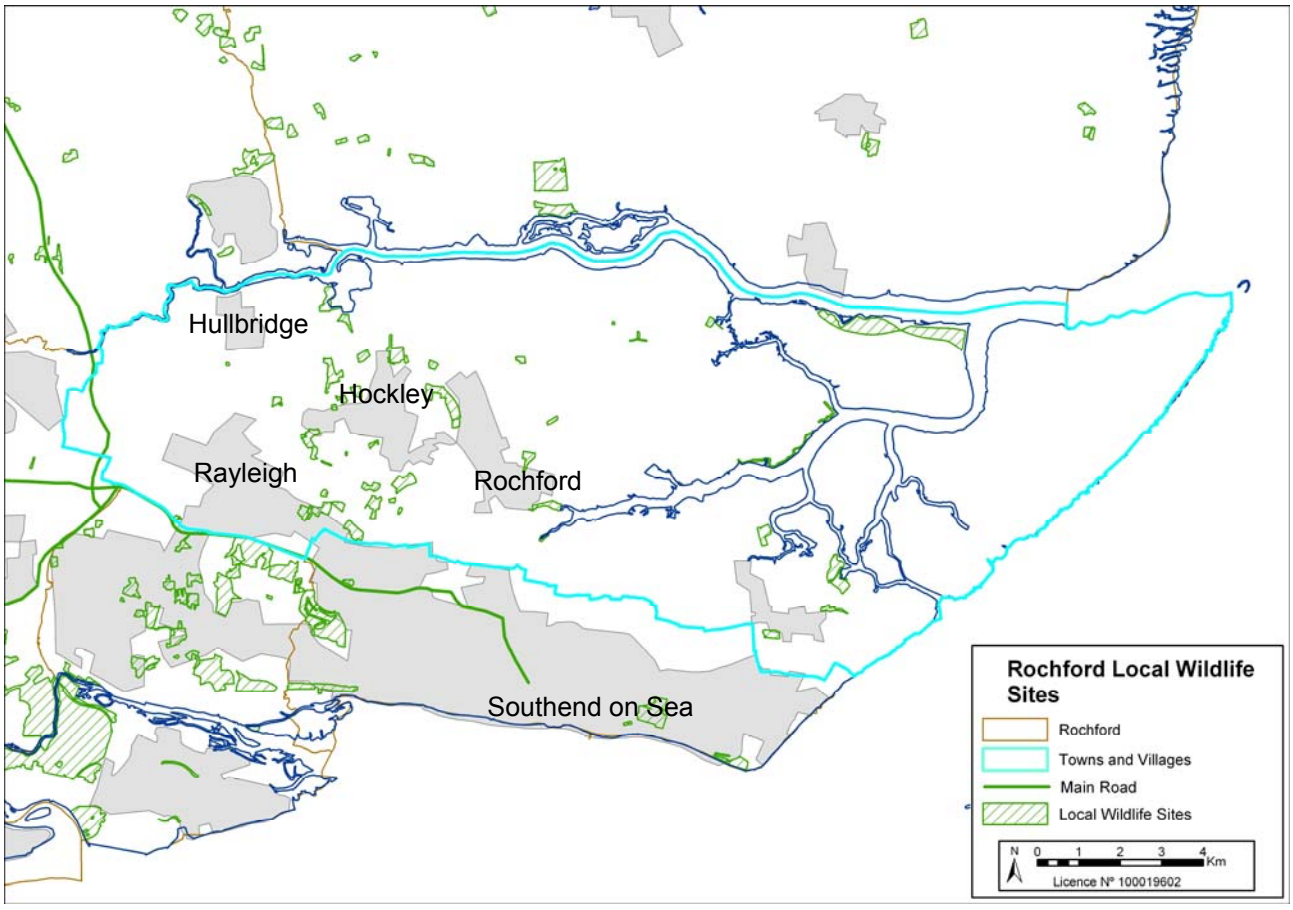
Local Wildlife Sites (LoWSs) are areas of land with significant wildlife value (previously known as Sites of Importance for Nature Conservation (SINCs) and County Wildlife Sites (CWSs). Together with statutory protected areas, LoWSs represent the minimum habitat we need to protect in order to maintain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

There are 39 LoWSs scattered throughout Rochford District, comprising mainly of Woodland, but with some Grassland, Mosaic, Coastal and Freshwater Habitats. The largest LoWS is Rouncefall and Magnolia Fields, which is a 24.35ha mosaic habitat.

Other significant LoWSs include Creeksea Road, an 18.71ha mosaic site and Grove Woods covering 16.62ha.

The extent and location of LoWSs in Rochford District is highlighted in the figure below.

Figure 13: Rochford District Local Wildlife Sites



Source: Essex County Council 2008

2.3 Biodiversity, Flora and Fauna Summary

- The Greengrid Partnership provides opportunities to enhance and restore various Biodiversity issues.

- Within the Rochford District listed in the Essex Biodiversity Action Plan are:
  - One plant Species,
  - Four Mammal Species,
  - Three Bird Species
  - One Invertebrate Species
  - Great Crested Newts and Shads
  - Eight Habitats
- Between 1994 and 2007, the East of England population index for all native bird species increased by 3 per cent. There was a 13 per cent decrease in the farmland bird index, while for woodland birds there was a 1 per cent decrease in the index.
- There are two areas (Foulness and the Crouch and Roach Estuaries) designated as Ramsar sites within the Rochford District, as part of the wider Mid Essex Coast Ramsar site. The same sites are also designated as SPAs, under the Natura 2000 network.
- Within the Rochford District, there is part of the Essex Estuaries SAC designated in 1996.
- There are three SSSIs within the Rochford District, Hockley Woods, Foulness and the Crouch and Roach Estuaries.
- Hockely Wood is the only SSSI in Rochford District to be fully meeting the PSA target, where 100& of its site area has been denoted as being in an unfavourable condition, but one which is recovering. 78.24% of Foulness SSSI accords with the PSA agreement but no part of Crouch and Roach Estuaries SSSI has been assessed as either being in a favourable or unfavourable but recovering condition.
- Rochford District has no NNRs.
- Rochford District has a total of four LNRs, Hockley Woods, Hullbridge Foreshore Marylands and Magnolia Fields.
- Rochford District contains 39 LoWSs. These are predominantly woodland, but there are also significant areas of grassland, mosaic coastal and freshwater habitat types.

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3 LANDSCAPE

3.1 Introduction

Natural processes and human use (especially since the Industrial Revolution) have shaped the Essex landscape into its present form. The result is a combination of physical components such as landforms; visible spatial components (for example, scale and patterns); and non visible spatial components which can incorporate sound and cultural associations.

It is the particular combination of these aspects which determines an areas distinctive character which can then be classified into wider character areas, or remain as distinct unique areas (as described in Essex Landscape Character Assessment, Essex County Council, 2003).

3.2 Baseline Information

A. Designated Areas

Within the Essex landscape there are many areas of special interest which have been designated and protected from inappropriate development. The main areas of importance are:

- Special Landscape Areas (SLA)
- Landscape Character Areas (LCA)
- Areas of Outstanding Natural Beauty (AONBs)
- Ancient Woodlands
- Historic Parks and Gardens
- Protected Lanes
- Special Verges

There are no AONBs, Historic Parks and Gardens or Protected Lanes in Rochford District.

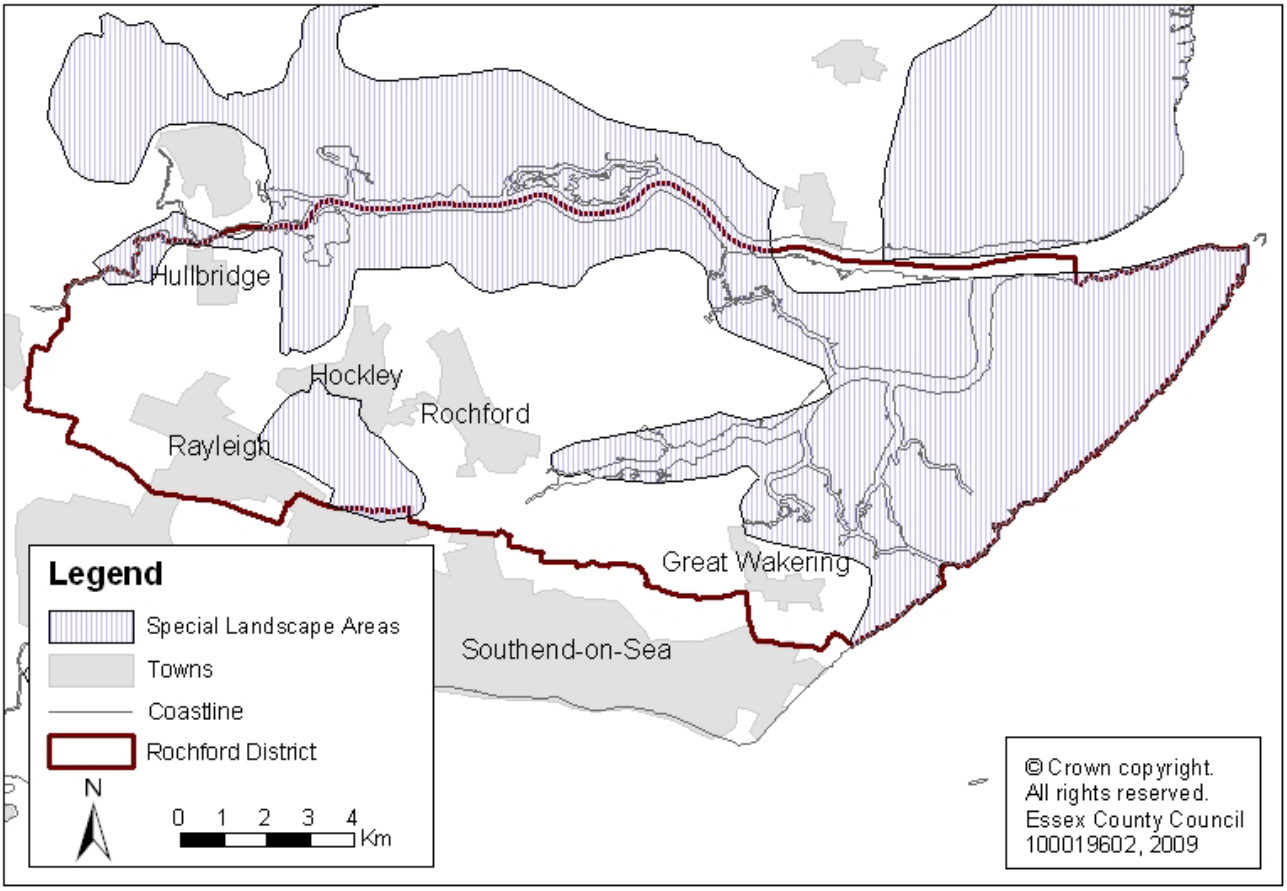
B. Special Landscape Areas

Special Landscape Areas (SLAs) are defined as a series of areas of distinctive scenic attraction and of great landscape value resulting from a combination of features such as vegetation cover and landform. They are non statutory designations, selected by Essex County Council, which are in the process of being replaced by Landscape Character Areas. The conservation and maintenance of features important to the local landscape such as trees, hedges, copses, woodlands and ponds are encouraged.

In Rochford District the major SLA is ‘North Essex’ although there are three smaller SLAs:

- Hockley Woods, a complex of ancient woodlands and farmland on undulating ground between Hockley and Southend-on-Sea;
- Upper Crouch which contains numerous creeks, mudflats and saltings on either shore and is relatively treeless and unspoiled; and
- Crouch/Roach Marshes which consist of a number of islands, creeks, and channels with salt marsh, mudflats, and drainage ditches. The area is mainly remote and supports a large bird population.

Figure 14: Special Landscape Areas within Rochford District



Source: Essex County Council 2009

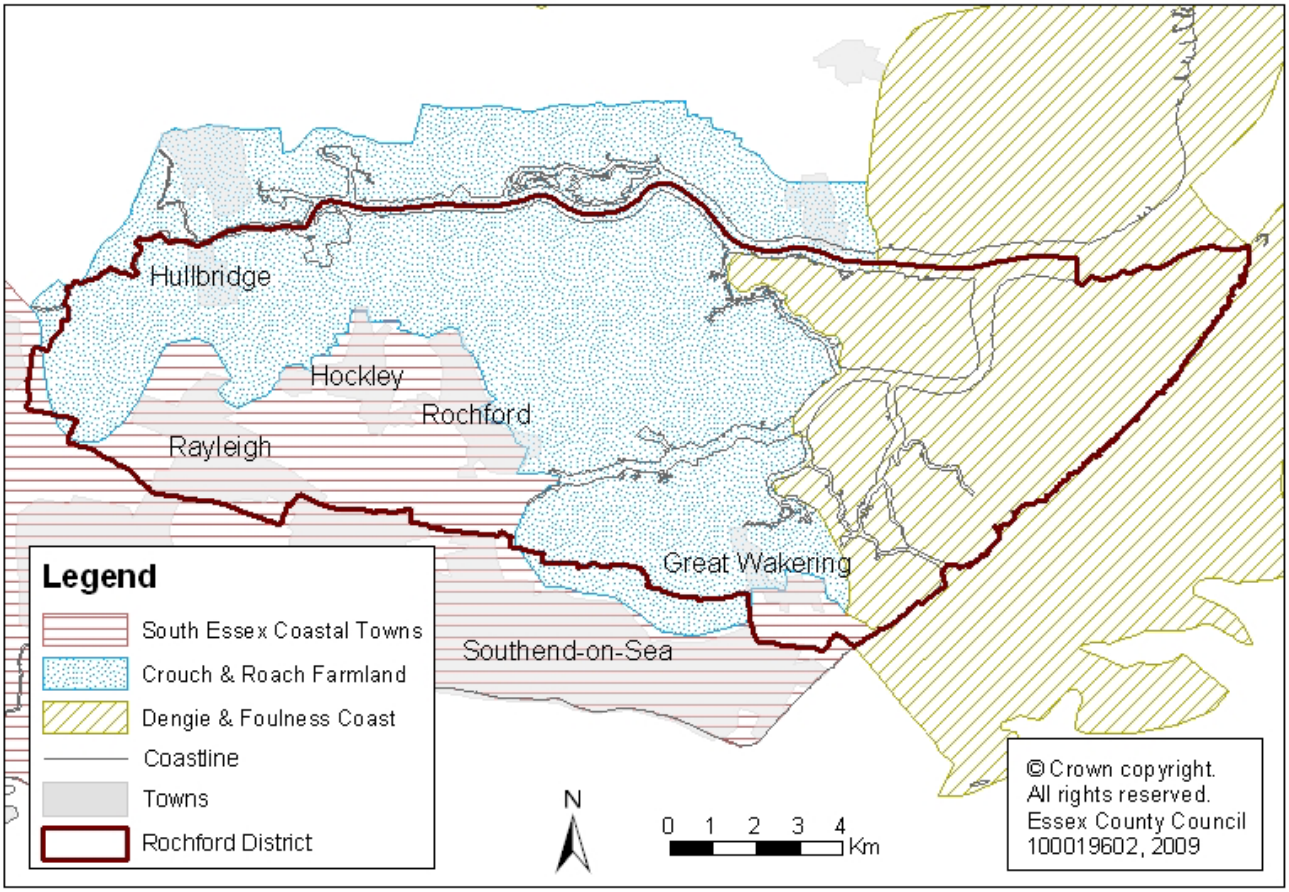
C. Landscape Character Areas

There have been a number of landscape character assessments carried out in Essex. The Essex Landscape Character Assessment (2003) establishes a 'baseline' of the existing landscape character for the whole of Essex and identifies 35 different 'Landscape Character Areas' (LCAs). Each area has a recognisable pattern of landscape characteristics, both physical and experiential, which combine to create a distinct sense of place. There are three Landscape Character Areas covering Rochford District:

- the Crouch and Roach Farmland;
- the Dengie and Foulness Coast; and
- South Essex Coastal Towns.

Detailed information of each is provided within Table 5 and Table 6.

Figure 15: Landscape Character Areas within Rochford District



Source: Essex County Council 2009

Table 5: Coastal Landscapes (F)

Coastal Landscapes (F)			
Crouch & Roach Farmland (F2)			Sensitivity: Medium - High
Summary of Character	The coastal character of the area is defined by the narrow estuaries which penetrate far inland, with associated low lying mudflats, salt marsh and reclaimed marshlands, including grazing marsh. The lands between the estuaries and their immediate margins are undulating arable farmland. Moderate to steep sided estuary valley sides are a distinctive backdrop either side of the Crouch with long views across the farmland to the estuaries. Typically, the field boundaries are thick hedgerows dominated by scrub elm. However, there has been significant loss of hedgerows especially in the south of the area, as well as the general loss of elm, resulting in a fairly open character. There is a strong pattern of right angled lanes due to field boundaries. The settlement pattern is sparse along the edge of the estuaries, with small settlements positioned on higher drier land, with the largest town being South Woodham Ferrers with extensive modern estates. The area has a tranquil character, apart from where the A130 crosses the landscape and near the larger settlements. Other important landscape features include various Church towers and spires, wet gravel pits, scattered ponds and small reservoirs, and small caravan parks. There are also occasional marinas, pontoons and river moorings, especially at Burnham on Crouch		
Landscape Condition	Hedgerows	Many are fragmented	
	Settlements	Very mixed, often including out of character modern infill	
Past Trends And Changes		Likely Future Trends	
There has been significant loss of grazing marsh as a result of agricultural intensification since the Second World War. Loss of elm trees from the farmland in the 1960's and 1970's made the character of the area more open.		Urban development around South Woodham Ferrers. Transportation developments near Southend. Demand for additional boat moorings, marina facilities along the estuaries. Flood protection measures	
Dengie and Foulness Coast (F3):			Sensitivity: High - Medium
Summary of Character	Dengie and Foulness coast is an extensive area of reclaimed marshland, tidal mudflat sands and fringing salt marshes (rich in wildlife) beyond the sea wall. It is a flat exposed landscape, with a sense of openness and space, dominated by the sky and sea. A large scale pattern of arable fields on the marshlands is defined by straight or sinuous ditches, with very few trees and limited hedging. Settlement is very sparse, the older marshlands have occasional farmsteads and barns, but on the more recent reclaimed areas there are isolated barns and farmsteads. The small villages are situated on the edge of the marsh. No major roads cross the area so this increases its remote tranquil character. Important features in the landscape include Bradwell Nuclear Power Station, a significant landmark along with the isolated church at Bradwell on Sea. There are also Military ranges, decoy ponds, a shingle spit at Foulness Point, traces of redhills and the caravan sites/leisure parks at St Lawrence Bay.		
Landscape Condition	Intrusion	Some intrusive farm buildings occur around historic farmsteads. Locally intrusive industrial/warehouse buildings.	
Past Trends And Changes		Likely Future Trends	

Since the Second World War there has been significant loss of coastal grazing marsh and of features such as decoy ponds and an old sea wall, as a result of agricultural intensification.	The main future influences on changes are likely to be agricultural and flood protection.

Table 6: Urban Landscapes (G)

Urban Landscapes (G)			
South Essex Coastal Towns (G3)			Sensitivity: Medium
Summary of Character	An area of very mixed character, but unified by the overall dominance of urban development, with frequent views of an urban skyline. The major urban areas of this area include Basildon New Town, Southend-On-Sea, Rayleigh, Hockley, Wickford and Canvey Island. The major towns spread over gently undulating or flat land, but locally extend over prominent ridgelines and hillsides as well. A distinctive steep sided south facing escarpment between Hadleigh and Basildon retains significant areas of open grassland, as well as a patchwork of small woods, including woods on former plotlands and small pastures. Contrasting flat coastal grazing marsh lies to the south. In some parts such as south of Hadleigh, and around Hockley, the urban form is softened by very large woodlands and the Roach Valley is largely undeveloped. However, many residential and industrial edges with areas of adjacent open arable farmland are hard and abrupt with few hedgerows and woodlands remaining. Pylon routes visually dominate the farmland in the A130 corridor. There are extensive flat coastal grazing marshes adjacent to the Thames Estuary. Other landscape features are the two castles at Rayleigh and Hadleigh, pylons and overhead lines, oil storage depots, and landfill sites near Canvey Island. Also of importance are the presence of Southend Airport and a large number of Golf Courses.		
Landscape Condition	Settlement	Very mixed, poor quality intrusive commercial 'shed' development is common within the area	
	Hedgerows and woodland	Moderate.	
Past Trends And Changes			Likely Future Trends
The area has been subject to very significant change in the 20th Century, with massive expansion of urban areas,			Urban development

Source: Essex Landscape Character Assessment 2003

i) Actions to Preserve Character Areas

- There are opportunities for large scale managed realignment together with creation/restoration of salt marshes and grazing marshes. Preservation measures should move away from visually intrusive hard sea walls.
- Areas where traditional landscape character survives well, such as the Upper Roach Valley, the Crouch Valley, the Thames Marshes, Langdon Hills and Dunton Ridges need particular protection from development and/or changes in the landscape. Recreational pressures are also likely to be considerable.

ii) Sensitivities within Landscape Character Areas

As shown in Table 7 below, the sensitivity of these LCAs to change is quite variable. The most sensitive area is the Dengie and Foulness Coast (F3) which is highly sensitive to eight of the potential changes. The least susceptible LCA is the South Essex Coastal Towns (G3) which is only highly sensitive to two of the potential changes.

Overall, the LCAs in Rochford District are most sensitive to utilities development i.e. masts, pylons, and least sensitive to incremental small-scale developments.

Table 7: Landscape sensitivity level to developments and changes in Rochford District

Type/Scale of Development/Change	Landscape Character Area		
	Crouch & Roach Farmland	Dengie & Foulness Coast	South Essex Coastal Towns
Major urban extensions (>5ha) and new settlements	H	H	M
Small urban extensions (<5ha)	M	H	L
Major transportation developments/improvements	M	H	M
Commercial/warehouse estate/port development	H	H	M
Developments with individual large/bulky buildings	H	H	L
Large scale 'open uses'	M	M	M
Mineral extraction/waste disposal	M	H	M
Incremental small-scale developments	M	M	L
Utilities development i.e. masts, pylons	H	H	H
Decline in traditional countryside management	M	H	H

Source Essex Landscape Character Assessment 2003

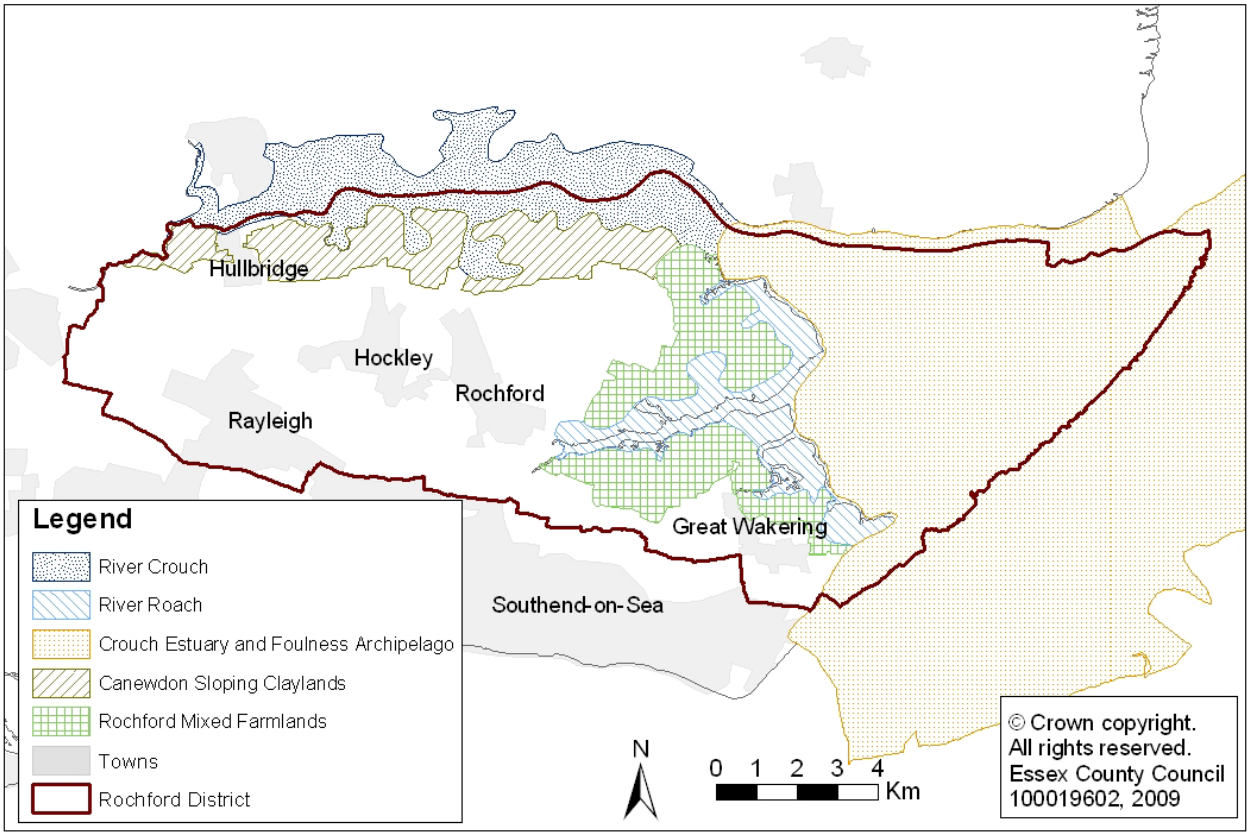
A landscape character assessment of the Essex coast was carried out in 2005 which divided the coastline into three sections; South Essex, Mid Essex and North Essex. The mid Essex coastline is further subdivided into the Foulness Archipelago, River Crouch, Dengie Peninsular and River Blackwater as shown in Table 8. Both Foulness Archipelago and the River Crouch sections lie within the boundaries of Rochford District.

Table 8: Mid Essex Coastal Landscape Character Areas

Section		Character Areas
MID ESSEX	FOULNESS ARCHIPELAGO SECTION	Crouch Estuary and Foulness Archipelago
		Rochford Mixed Farmlands
		River Roach
	RIVER CROUCH SECTION	Canewdon Sloping Claylands
		River Crouch
		Burham Sloping Claylands
	DENGIE PENINSULA SECTION	Dengie Coastlands
		Tillingham Ancient Farmlands
	RIVER BLACKWATER SECTION	Dengie Ancient Claylands
		Upper Blackwater Estuary
		Lower Blackwater Estuary
		Maldon Mixed Farmlands
		Tollesbury Rolling Farmlands
		Tollesbury Coastlands

Source: Landscape Character Assessment of the Essex Coast 2005

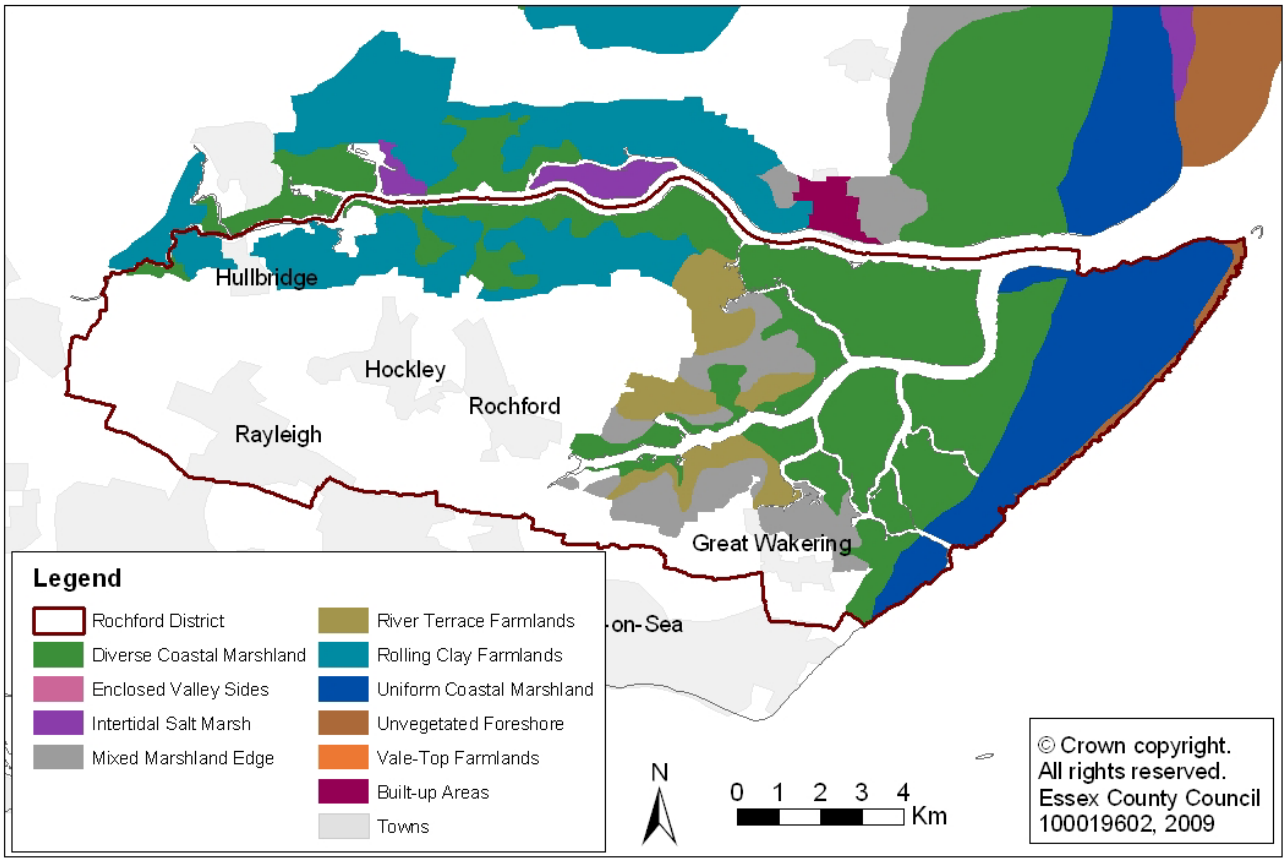
Figure 16: Coastal Landscape Character Areas within Rochford District



Source: Essex County Council 2009

The Landscape Character Assessment of the Essex Coast (2005) also defined the coastal landscape character types which are shown in Figure 17. Of the ten coastal landscape character types, six are located with Rochford District.

Figure 17: Mid Essex Coastal Landscape Character Types within Rochford District



Source: Essex County Council 2009

D. Other Landscape Designations

There are a number of different landscape features which help form the distinct landscape characters that are visible within the district. They are detailed within this section of the chapter.

i) Ancient Woodland

Trees covered most of prehistoric Essex and were managed carefully by coppicing and pollarding as wood was a vital resource. However, since the Industrial Revolution the need for wood has dwindled as has its management. Many neglected woods have been grubbed out, or planted with fast growing conifers for intensive wood production. The remaining ancient woodlands hold many rare plants and are one of the most irreplaceable of all the semi-natural habitats in the UK.

There are 14 areas of ancient woodland in Rochford District, half of which lie in the Upper Roach Valley. Hockley Woods contains the largest area of ancient semi-natural woodland at more than 100 hectares.

ii) Special Verges

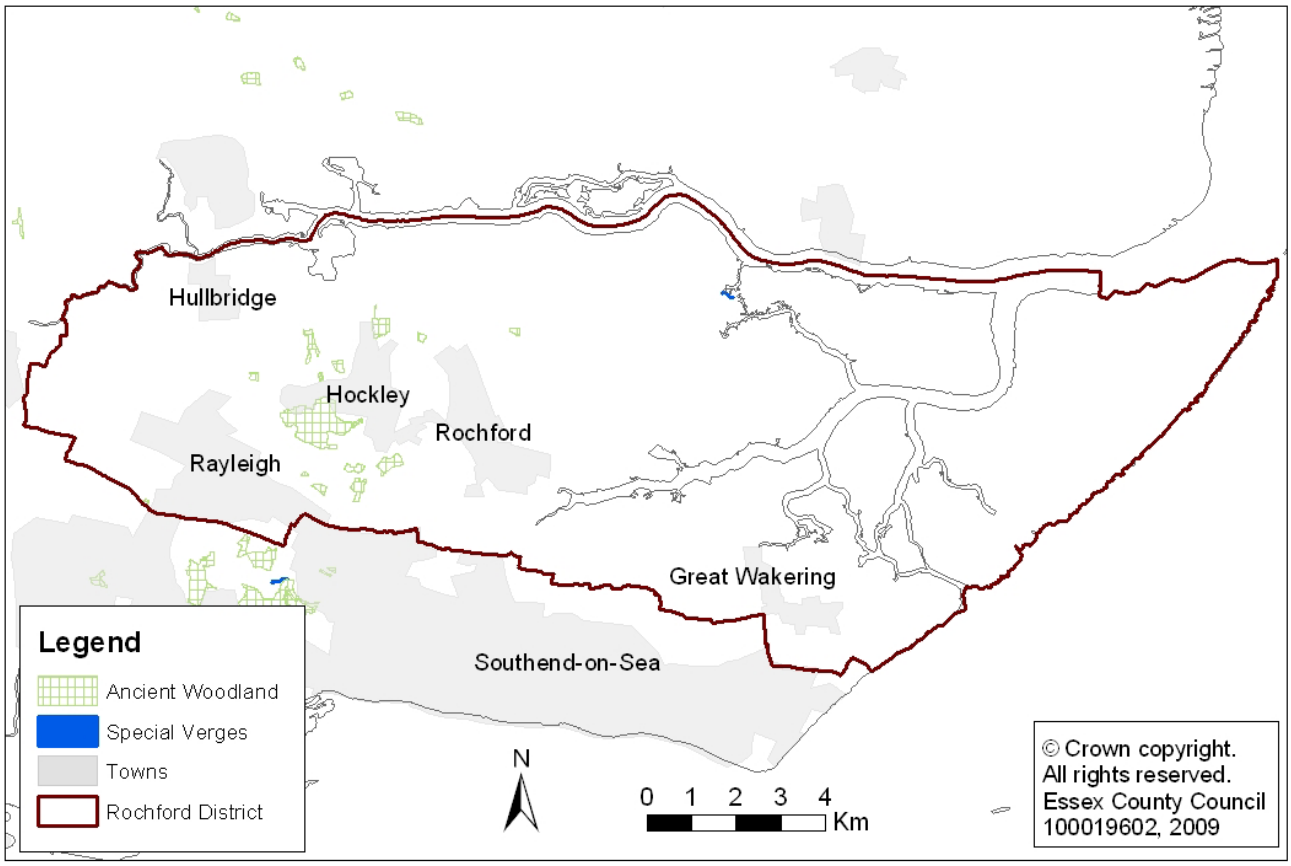
Roadside verges are important and if sensitively managed they can increase the biodiversity of the verges themselves and from that the surrounding countryside. The

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.

A number of important verges have been designated as Special Roadside Nature Reserves in order to protect the future of rare and uncommon flowers growing on them. There are over 100 special verges designated in Essex, one of which is within the district.

Figure 18: Ancient Woodland and Special Verges within Rochford District



Source: Essex County Council 2009

3.3 Landscape Summary

- There are Special Landscape Areas (SLAs) located within the District, including the Crouch and Roach Marshes.
- Three Landscape Character Areas (LCAs) have been identified within Rochford District from the countywide assessment. Of the three, Dengie and Foulness Coast LCA was the most sensitive to change and development.
- The main approach to protecting the sensitivity of LCAs is to use opportunities for managed coastal realignment and restoring natural features such as salt and grazing marshes. Additionally in areas where traditional landscape character survives well, there needs to be particular protection from landscape or development change.
- The Landscape Character Assessment of the Essex Coast (2005) identified five coastal landscape character areas within Rochford District and six different landscape character types within these characters areas.

- Rochford District has 14 areas designated as ancient semi-natural woodland, the largest being Hockley Woods covering over 100 hectares.
- There is one special verge within Rochford District.

4 AIR QUALITY

4.1 Introduction

The quality of our air affects human health and quality of life as well as the natural environment. Poor air quality can also affect the health of our ecosystems, and can adversely affect our built cultural heritage. The air we breathe today is cleaner that at any time since before the Industrial Revolution, but recent research has indicated that some pollutants in the air are more harmful than previously believed.

Local air quality is affected by emissions from industrial activity, airports, power stations and natural sources, but road transport accounts for around 40% of UK Nitrogen dioxide emissions. Additionally, diesel vehicles are a significant source of the emissions of fine particulates.

4.2 Baseline Information

A. National Air Quality Standards

The UK has adopted objectives that are based on the Air Quality Standards Regulations 2007. The following table, sourced from the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007, details the relative objectives for a number of potential air pollutants.

Table 9: National Air Quality Standards

Pollutant	Objective	Concentration measured as	Date to be achieved by and maintained thereafter	European obligations	Date to be achieved by and maintained thereafter	New or existing
Particles (PM10)	50µg/m^{-3} not to be exceeded more than 35 times a year	24 hour mean	31 December 2004	50µg/m^{-3} not to be exceeded more than 35	1 January 2005	Retain existing
	40µg/m^{-3}	Annual mean	31 December 2004	40µg/m^{-3}	1 January 2005	
Particles (PM2.5) Exposure Reduction	25µg/m^{-3}	Annual mean	2020	Target value 25µg/m^{-3} [12]	2010	New (European obligations still under negotiation)
	Urban Area - Target of 15% reduction in concentrations at urban background		Between 2010 and 2020	Target of 20% reduction in concentrations at urban background	Between 2010 and 2020	
Nitrogen dioxide	200µg/m^{-3} not to be exceeded more than 18 times a year	1 hour mean	31 December 2005	200µg/m^{-3} not to be exceeded more than 18 times a year	1 January 2010	Retain existing
	40µg/m^{-3}	Annual mean	31 December 2005	40µg/m^{-3}	1 January 2010	
Ozone	100µg/m^{-3} not to be exceeded more than 10 times a year.	8 hour mean	31 December 2005	Target of 120µg/m^{-3} not to be exceeded more than 25 times a year averaged over 3 years	31 December 2010	Retain existing
Sulphur dioxide	350µg/m^{-3} not to be exceeded more than 24 times a year	1 hour mean	31 December 2004	350µg/m^{-3} not to be exceeded more than 24 times a year	1 January 2005	Retain existing
	125µg/m^{-3} not to be exceeded more than 3 times a year	24 hour mean	31 December 2004	125µg/m^{-3} not to be exceeded more than 3 times a year	1 January 2005	
	266µg/m^{-3} not to be exceeded more than 35 times a year	15 minute mean	31 December 2005	None	N/A	
Polycyclic Aromatic hydrocarbons	0.25ng/m^{-3}	As annual average	31 December 2010	Target of 1ng/m^{-3}	31 December 2012	Retain existing

Pollutant	Objective	Concentration measured as	Date to be achieved by and maintained thereafter	European obligations	Date to be achieved by and maintained thereafter	New or existing
Benzene	16.25µg/m^{-3}	Running annual mean	31 December 2003	None	N/A	Retain existing
	5µg/m^{-3}	Annual Average	31 December 2010	5µg/m^{-3}	1 January 2010	
1,3- butadiene	2.25µg/m^{-3}	Running annual mean	31 December 2003	None	N/A	Retain existing
Carbon monoxide	10mg/m^{-3}	Maximum daily running 8 hour mean	31 December 2003	10mg/m^{-3}	1 January 2005	Retain existing
Lead	0.5µg/m^{-3}	Annual mean	31 December 2004	0.5µg/m^{-3}	1 January 2005	Retain existing
	0.25µg/m^{-3}	Annual mean	31 December 2008	None	N/A	

Source: The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volume 1) 2007 (http://www.official-documents.gov.uk)

The Essex Air Consortium was formed in 1995 to address local and strategic Air Quality issues across the County. This consortium includes Essex County Council, the 12 District Councils and the 2 Unitary Authorities, BAA Stansted Airport, the University of Essex and the Environment Agency. The role of the Essex Air Quality Consortium is:

- To ensure that monitoring and modelling are carried out in a uniform manner.
- To achieve data handling standardisation and data sharing across Essex.
- To research and advise on the role, scope and effectiveness of available air quality modelling systems.
- To consider and advise on the input and consequences of relevant legislation and air quality issues in Essex.
- To help coordinate and share best practice on effective practical solutions to air quality management issues.

B. Air Quality Management Areas

i) Air Quality Management Areas in Essex County

Each local authority in the UK has been carrying out reviews and assessments of air quality within their area since December 1997. Air pollution is measured and the results are used to try to predict what the air will be like in the future. 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 must be declared. The size of this area can vary from 1 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 45 AQMAs have been designated within the East of England region, as shown below. There are currently 14 AQMAs within the county, 8 of which were newly introduced in 2005. The table below highlights the distribution of these AQMAs around the County.

Table 10: AQMAs within Essex County 2009

Local Authority	No. of AQMAs
Basildon	0
Braintree	0
Brentwood	7
Chelmsford	1
Colchester	2
Epping Forest	1
Harlow	0
Maldon	0
Rochford	0
Uttlesford	3
Total	14

Source: UK National Air Quality Archive 2009 http://www.airquality.co.uk/

- All of the aforementioned AQMAs in Essex have been designated as such due to elevated levels of Nitrogen Dioxide (NO_2).

- There are no AQMAs within Rochford District.

C. Pollution Monitoring

i) Nitrogen Dioxide Monitoring in Rochford District

Technical guidance for Nitrogen Dioxide monitoring recommends the co-location of diffusion tubes with an automatic analyser to ensure accurate and representative reporting of NO_2 concentrations, with any positive or negative local bias to be subsequently taken into account. However, the Council does not monitor NO_2 continuously and therefore a locally derived bias adjustment factor is not available. Instead, a default factor obtained from DEFRA has been used. The bias adjustment factor used in 2007 was 0.903, down from 1.18 in 2005. The following three figures give the locations of NO_2 diffusion tube sites in Rochford, with the accompanying table detailing NO_2 monitoring results from these three sites between 2005 and 2007. Figures within Table 11 in bold type represent readings which exceeded the World Health Organisation (WHO) annual mean NO_2 objective of 40µg/m^3 whilst 2010 results are projected from those in 2007 using DEFRA adjustment factors.

Figure 19: Location of NO_2 Monitoring Tube 1: Rochford Market Square

The location of the monitoring site indicates that it is close to relevant exposure.

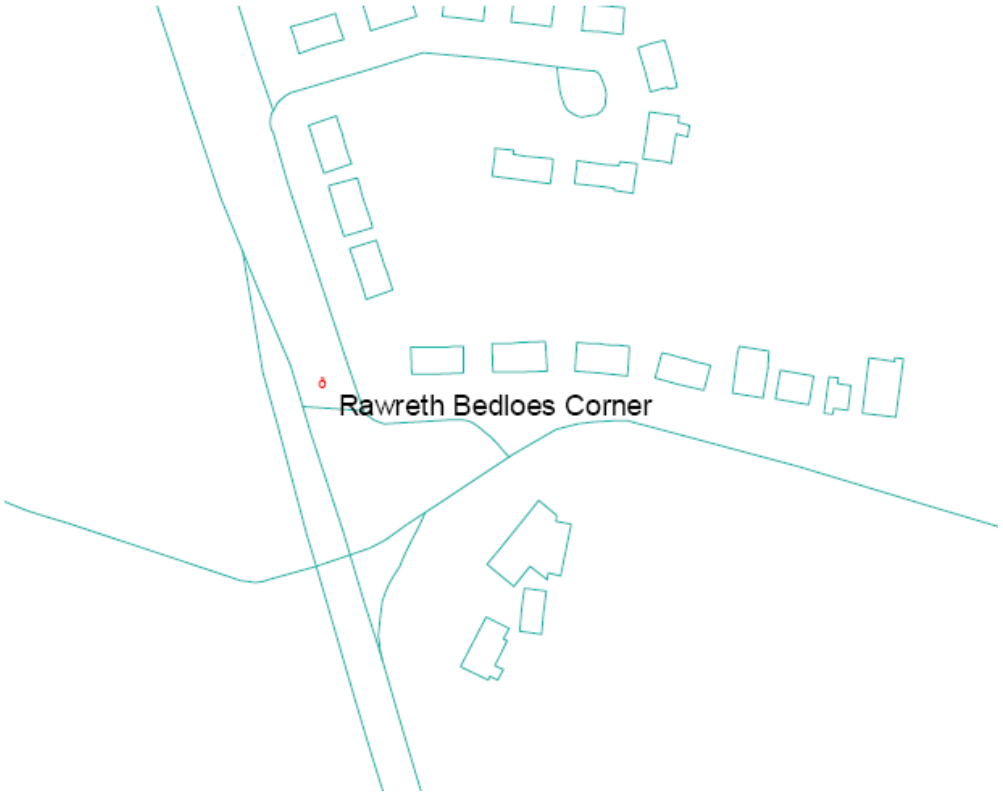
Source: Third Round Updating and Screening Assessment for Rochford District Council, 2006 (http://microsites.essexcc.gov.uk)

Figure 20: Location of NO_2 Monitoring Tube 2: Junction of Eastwood Road and High Street, Rayleigh

The location of the monitoring site indicates that it is close to relevant exposure.

Source: Third Round Updating and Screening Assessment for Rochford District Council, 2006 (http://microsites.essexcc.gov.uk)

Figure 21: Location of NO_2 Monitoring Tube 3: Bedloes Corner, Rawreth



Source: Third Round Updating and Screening Assessment for Rochford District Council, 2006 (http://microsites.essexcc.gov.uk)

Table 11: Bias Adjusted NO_2 Diffusion Tube Monitoring Results in µg/m^3

Location	Concentration (µgm-3)			
	2005	2006	2007	2010
Rochford Market Square	40.4	34.6	33.7	30.0
Rayleigh (Eastwood Road / High Street	53.7	49.5	45.7	40.7
Rawreth (Bedloes Corner)	38.3	34.6	33.6	29.9

Source: Rochford District Council Local Air Quality Management Progress Report April 2008

- The NO_2 monitoring results for Rochford District show that one site has exceeded the WHO annual mean NO_2 objective of 40µg/m^3. Figures for the Rayleigh site do however show a year on year decrease from 53.7µg/m^3 in 2005 to 45.7µg/m^3 in 2007. There is still expected to be a 0.7µg/m^3 exceedence of the WHO objective in 2010.
- The Rochford site recorded a NO_2 concentration of 40.4µg/m^3 in 2005, a figure over the WHO objective. However, figures for both 2006 (34.6µg/m^3) and 2007 (33.7µg/m^3) are below the WHO NO_2 objective and this is also expected to be the case in 2010, with concentrations predicted to be 30µg/m^3.
- The Rawreth monitoring site has remained below the WHO NO_2 objective between 2005 and 2007 and currently records a concentration of 33.6µg/m^3. This is predicted to fall even further in 2010, to 29.9µg/m^3.

ii) Particles (PM10)

In 2007 Rochford Council carried out a study relating to PM_{10} monitoring at Rawreth Industrial Estate. The results of this study can be found below. Please note that a value for 2006 was calculated from 2007 results whilst the number of exceedences was calculated using an equation defined in DEFRA guidance LAQM TG(03).

Table 12: Annualised PM_{10} Monitored Results for Rawreth Industrial Estate

Monitoring Period	Monitoring Period Mean	Annualisation Factor	Annualised Mean	Days Exceedence of PM10 24hr Mean
May - Aug 2004	31.4	1.04	32.7	39
Feb - May 2005	33.9	1.03	34.9	49
Apr - Jul 2007 (representing 2006)	32.0	1.33	42.6	98
Apr - Jul 2007	32.0	1.21	38.8	71

Source: Rochford District Council Local Air Quality Management Progress Report April 2008

- The World Health Organisation sets a PM_{10} annual mean of 40µg/m^3. From Table 12 it can be seen that this objective, to be achieved by December 2004, was calculated to have been exceeded in 2006.
- There have been complaints about dust at the Rawreth Industrial Estate. The potential sources in this area include the waste transfer station, a stonemason, a concrete batching plant, plus numerous movements of heavy road vehicles on unmade surfaces. Dust complaints have also arisen concerning fugitive emissions from the waste transfer sites at the Purdeys Industrial Estate, Rochford and at Great Wakering.

- Experience from monitoring in other areas with waste transfer sites has confirmed that high PM_{10} concentrations can arise both from fugitive sources and the re-suspension of material deposited on roads.
- The study concluded that the Council should declare an AQMA in this area whilst additional monitoring will be carried out in a Further Assessment to clarify the extent of the exceedances of the PM_{10} objective. The Detailed Assessment also advised that improvements to mitigate the emissions were proposed at one of the likely emissions sources.

iii) Benzene

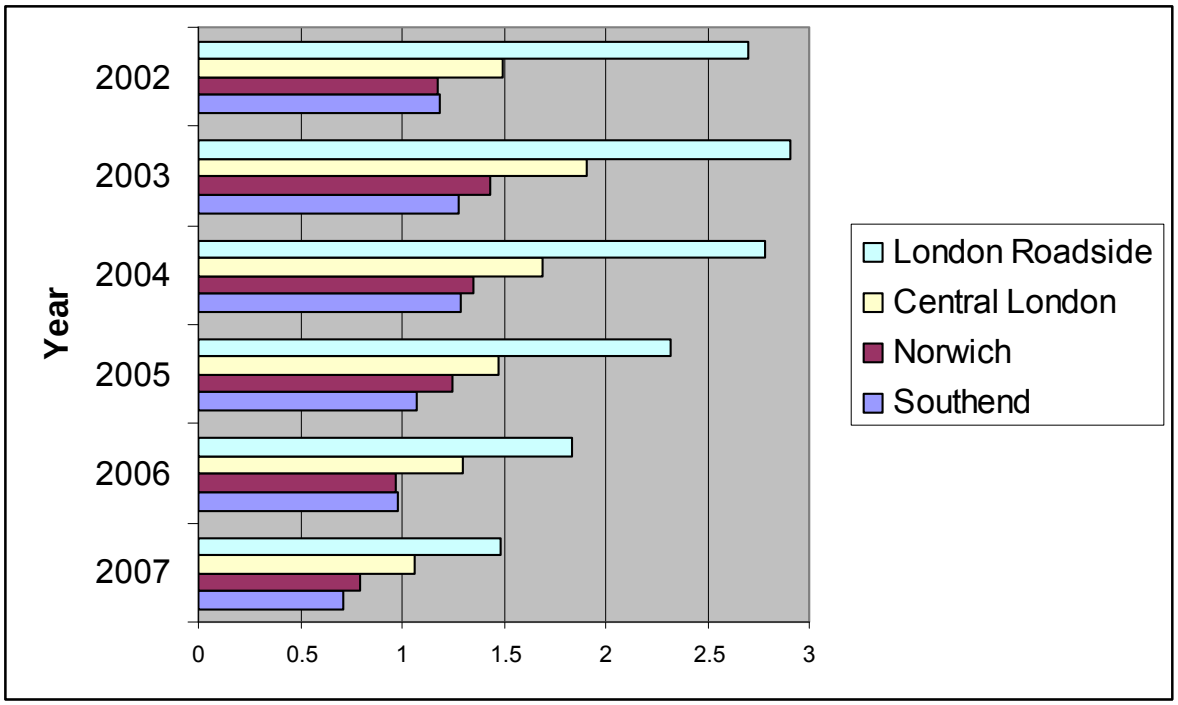
The Council does not undertake benzene monitoring in the district. However, monitoring is undertaken at the urban background site in Southend. These monitoring results are considered to be representative of the county area and are reproduced in Table 13 and Figure 22 below:

Table 13: Annual Mean Concentrations of Benzene (concentrations in μgm^{-3})

Authority	2002	2003	2004	2005	2006	2007
Southend	1.19	1.28	1.29	1.07	0.98	0.71
Norwich	1.18	1.43	1.35	1.25	0.97	0.79
Central London	1.49	1.91	1.69	1.47	1.3	1.06
London Roadside	2.7	2.91	2.78	2.32	1.83	1.48

Source: Third Round Updating and Screening Assessment for Rochford District Council 2006 and Essex County Council 2008 (www.essexair.org and www.airquality.co.uk)

Figure 22: Annual Mean Concentrations of Benzene (concentrations in μgm^{-3})



Source: Third Round Updating and Screening Assessment for Rochford District Council 2006 and Essex County Council 2008 (www.essexair.org and www.airquality.co.uk)

- At no stage in the above study did benzene readings exceed the NAQS December 2010 objective of 5μgm^{-3}.
- 2007 represents the year during which all 4 locations reported the lowest annual mean of benzene. In all cases, benzene concentrations in 2007 can be seen to be just over half of their maximum measured annual mean, a value typically found in 2003.
- Across the 5 years measured, Southend displayed a lower annual mean of benzene than Norwich in 3 of those years. Where annual mean concentrations were exceeded in 2002 and 2006, this exceedence was 0.01μgm^{-3} each time. Annual mean concentrations in Southend have been below those found in Central London and on London roadsides.
- In each year, London roadsides have reported the highest annual mean concentrations of benzene. In all cases other than 2006, the London roadside concentration has been double that recorded in Southend.

iv) Carbon Monoxide (CO)

Rochford District Council does not undertake continuous CO monitoring in its area although monitoring is undertaken in other Essex local authorities; namely Southend, Tendring and Thurrock. The results of this monitoring are considered to be representative of the Councils area. As there have been no significant changes in CO concentrations or emissions in the district since the second round of USA, a Detailed Assessment of CO based on monitoring is not required.

v) 1,3 Butadiene

The Council does not undertake monitoring of 1,3 Butadiene within the district. However, continuous monitoring is undertaken at the busy central London site at Marylebone Road which is part of the Government's automated network. No additional assessment was required for this compound and attainment of the Air Quality Standard is expected at all locations relevant to the assessment.

vi) Lead

The Council does not monitor lead in its area. Similarly there is no monitoring of lead undertaken by other authorities in Essex. However, lead monitoring based in London could be taken as being representative of the highest likely concentrations in the Council's area. The results indicate that the concentrations will not exceed the 2004 and 2008 lead objectives.

vii) Sulphur Dioxide (SO2)

The Council does not undertake SO_2 monitoring in the district. However, monitoring is undertaken at Southend, Castle Point and Thurrock. These monitoring results are considered to be representative of the County area. There have been no significant changes to SO_2 concentrations or emissions and as a result a Detailed Assessment for SO_2 will not be required.

4.3 Air Quality Summary

- There are 14 Air Quality Management Areas (AQMA) across Essex although none of these are located in Rochford District.
- Of the three NO_2 monitoring sites within Rochford District, only the tube located at the junction between Eastwood Road and the High Street at Rayleigh is currently exceeding the WHO NO_2 of 40μg/m^3 and it has been doing so since at least 2005.

The Rochford Market Square site last exceeded its objective in 2005 whilst the Rawreth site has been within the WHO target since monitoring began in 2005.

- The World Health Organisation sets a PM_{10} annual mean of 40µg/m^3 to be achieved by December 2004. Monitoring at Rawreth Industrial Estate suggests this was exceeded in 2006 although concentrations were again below the WHO target by 2007. Despite this studies have recommended that Rawreth Industrial Estate be declared an AQMA.
- The Council does not undertake benzene monitoring in the district. However, monitoring is undertaken at the urban background site in Southend and these monitoring results are considered to be representative of the County area. Between 2002 and 2007, benzene concentrations were below the NAQS objective.

5 CLIMATIC FACTORS

5.1 Introduction

Climate is an important contributing factor to quality of life, as many other attributes which affect quality of life, such as flooding and rising temperatures, are directly caused by changes in climate. Alongside continuing discussions about the causes of climate change, the Government is aiming to reduce the human factors which contribute towards it. A number of initiatives have been set up to seek to reduce greenhouse gases which contribute to climate change. These include reducing the consumption and emissions of fossil fuels and the recycling of waste products.

5.2 Baseline Information

A. Energy Consumption

The following table highlights total energy consumption across Essex in Giga watts per hour (GWh)

Table 14: Total Energy Consumption in GWh within Essex in 2006

Area	Coal			Manufactured Fuels		
	Industry & Commercial	Domestic	Total	Industry & Commerce	Domestic	Total
Basildon	110.8	0.9	111.6	0.1	0.1	0.1
Braintree	9.5	5.4	14.9	3.5	0.3	3.9
Brentwood	22.8	1.3	24.1	0.0	0.1	0.1
Castle Point	8.0	0.2	8.2	0.0	0.0	0.0
Chelmsford	10.0	4.3	14.3	0.2	0.3	0.4
Colchester	7.3	3.4	10.8	0.0	0.2	0.2
Epping Forest	3.5	3.9	7.3	0.2	2.5	2.7
Harlow	18.1	0.2	18.3	0.2	0.0	0.3
Maldon	3.3	3.3	6.7	0.3	0.2	0.5
Rochford	1.6	1.3	3.0	0.0	0.1	0.1
Tendring	3.8	4.2	8.0	0.1	0.3	0.4
Uttlesford	6.4	5.1	11.5	0.0	0.3	0.3
Essex Average	17.1	2.8	19.9	0.4	0.4	0.8
East of England	1,194.5	154.7	1,349.2	646.5	21.3	667.8

Table 14: Total Energy Consumption in GWh within Essex in 2006 (continued)

Area	Natural gas			Electricity		
	Industry & Commercial	Domestic	Total	Industry & Commercial	Domestic	Total
Basildon	471.0	1,137.7	1,608.7	534.1	349.8	883.8
Braintree	288.3	763.5	1,051.8	304.4	310.9	615.3
Brentwood	179.3	600.5	779.8	177.0	159.5	336.5
Castle Point	86.3	680.7	767.0	96.9	183.7	280.6
Chelmsford	308.3	1,005.2	1,313.4	400.8	358.0	758.8
Colchester	414.2	984.1	1,398.3	433.7	334.4	768.0
Epping Forest	582.5	923.1	1,505.6	233.2	281.9	515.1
Harlow	357.2	530.6	887.8	376.7	144.2	520.9
Maldon	77.8	275.9	353.7	198.3	149.2	347.4
Rochford	95.6	619.6	715.2	152.4	167.7	320.1
Tendring	238.2	913.5	1,151.7	258.2	310.6	568.8
Uttlesford	227.7	416.0	643.7	247.7	177.3	425.0
Essex Average	277.2	737.5	1,014.7	284.4	243.9	528.4
East of England	19,765.9	34,679.3	54,445.2	16,827.2	11,973.4	28,800.5

Area	Petroleum Products					Renew-ables & Waste	Grand Total
	Industry & Commercial	Domestic	Road transport	Rail	Total		
Basildon	522.3	21.0	911.1	0.0	1,454.4	21.5	4,080.3
Braintree	209.5	113.5	1,233.4	5.5	1,561.9	4.4	3,252.2
Brentwood	120.4	27.4	1,126.4	4.2	1,278.4	4.5	2,423.4
Castle Point	71.6	6.7	317.8	0.0	396.1	1.3	1,453.3
Chelmsford	214.1	90.8	1,354.3	4.9	1,664.1	7.7	3,758.8
Colchester	179.7	77.4	1,169.1	6.6	1,432.7	5.8	3,615.9
Epping Forest	68.0	78.2	2,100.2	1.0	2,247.4	2.8	4,280.9
Harlow	156.9	5.6	292.6	0.9	456.0	5.8	1,889.1
Maldon	128.9	75.2	296.4	0.2	500.7	2.5	1,211.4
Rochford	94.4	29.5	372.3	0.0	496.2	0.9	1,535.5
Tendring	168.4	92.6	759.7	4.8	1,025.5	2.6	2,757.0
Uttlesford	272.2	111.4	1,515.5	6.6	1,905.7	3.6	2,989.8
Essex Average	183.9	60.8	954.1	2.9	1,201.6	5.3	2,770.6
East of England	16,405.5	3,309.6	50,206.4	553.9	70,475.5	529.0	156,267.2

Source: Department of Energy & Climate Change (DECC), 2009 (http://www.decc.gov.uk)

- At 1535.5GWh, Rochford District consumed less energy in total than the Essex average of 2770.6GWh. This is the 10th highest value across Essex, with Epping

Forest District consuming the most energy at 4280.9Gwh and Maldon the least at 1211.4GWh.

- The fuel type most responsible for the energy consumed in Rochford District was natural gas, with 715.2GWh of the total 1535.5GWh (46.58%) consumed being derived from this product. Domestic consumption accounted for 619.6GWh of natural gas, amounting to 86.63% of total natural gas consumption. Rochford District's total natural gas consumption was the sixth highest in Essex and below the Essex average of 1014.7GWh. Basildon consumed the most natural gas at 1608.7GWh whilst Castle Point consumed the least at 396.1GWh
- The second most commonly consumed fuel type within the district were petroleum products at 496.2GWh, or 32.32% of total energy consumed. The average amount of energy consumed through the use of petroleum products in Essex was 1201.6GWh, with Epping Forest consuming the most at 2247.4GWh and Castle Point the least at 396.1GWh
- Rochford District consumed less energy derived from coal than the Essex average as well as less energy derived from manufactured fuels, electricity and renewables and waste.

Table 15: Percentage Use of Energy Generation Products within Essex in 2006

	Coal	Manufactured Fuels	Petroleum Products	Natural Gas	Electricity	Renewables and Waste
Basildon	2.71	0.00	35.65	39.43	21.66	0.53
Braintree	0.29	0.16	48.03	32.34	18.92	0.14
Brentwood	0.94	0.01	52.75	32.18	13.89	0.19
Castle Point	0.55	0.00	27.26	52.78	19.31	0.09
Chelmsford	0.27	0.01	44.27	34.94	20.19	0.21
Colchester	0.20	0.01	39.62	38.67	21.24	0.16
Epping Forest	0.08	0.14	52.50	35.17	12.03	0.06
Harlow	0.96	0.02	24.14	47.00	27.57	0.31
Maldon	0.27	0.03	41.33	29.20	28.68	0.21
Rochford	0.11	0.00	32.32	46.58	20.85	0.06
Tendring	0.14	0.01	37.20	41.77	20.63	0.10
Uttlesford	0.21	0.01	63.74	21.53	14.21	0.12
Essex Average	0.62	0.00	43.37	36.62	19.07	0.19
East of England	0.76	0.43	45.10	34.84	18.43	0.34

Source: DECC 2009 (http://www.decc.gov.uk)

- At 46.58% of total energy generated, natural gas was the most commonly used energy generation product within Rochford District in 2006. This is the highest proportion within Essex and therefore exceeds the Essex average of 36.62%, as well as the average for the East of England (34.84%) but not the UK (48.15%). At 21.53%, Uttlesford generated the smallest proportion of its energy from natural gas.
- Of the 12 districts and borough comprising Essex, 7 of these derived the highest proportion of their total generated energy in 2006 from petroleum. Of the remaining 5, all generated the single highest proportion of their energy via natural gas. Petroleum was the second most commonly used energy generation product in Rochford, generating 32.32% of its total energy in 2006.

- Both Essex and the East of England have a greater reliance in terms of proportionality on petroleum products than the UK as a whole, whilst the UK has higher proportional natural gas consumption. The biggest relative difference can be seen within manufactured fuels, with the UK proportion of 0.44% eclipsing the 0.03% recorded in Essex.

Table 16: Energy Consumption in GWh by Consuming Sector in Rochford and Essex in 2007

	Industry & Commercial		Domestic		Transport		Total
	Number	%	Number	%	Number	%	
Basildon	1,659.8	40.68	1,509.4	36.99	911.1	22.33	4,080.3
Braintree	819.7	25.20	1,193.5	36.70	1,238.9	38.10	3,252.2
Brentwood	504.1	20.80	788.6	32.54	1,130.6	46.65	2,423.4
Castle Point	264.0	18.17	871.4	59.96	317.8	21.87	1,453.3
Chelmsford	941.1	25.04	1,458.4	38.80	1,359.2	36.16	3,758.8
Colchester	1,040.7	28.78	1,399.5	38.70	1,175.7	32.52	3,615.9
Epping Forest	890.2	20.80	1,289.5	30.12	2,101.2	49.08	4,280.9
Harlow	914.9	48.43	680.7	36.03	293.5	15.54	1,889.1
Maldon	411.0	33.93	503.8	41.59	296.6	24.48	1,211.4
Rochford	345.0	22.47	818.2	53.29	372.3	24.25	1,535.5
Tendring	671.4	24.35	1,321.1	47.92	764.5	27.73	2,757.0
Uttlesford	757.7	25.34	710.1	23.75	1,522.1	50.91	2,989.8
Essex	9,219.7	27.73	12,544.2	37.73	11,483.6	34.54	33,247.5
Essex Average	768.3	27.73	1,045.3	37.73	957.0	34.54	2,770.6
East of England	55,368.6	35.43	50,138.4	32.09	50,760.3	32.48	156,267.2

Source: DECC 2009 (http://www.decc.gov.uk)

- At 1535.5GWh, Rochford District consumed less energy in total than the Essex average of 2770.6GWh. This is the 10th highest value across Essex, with Epping Forest District consuming the most energy at 4280.9GWh and Maldon the least at 1211.4GWh.
- Transport energy consumption in Rochford District totalled 372.3GWh or 24.25% of total energy consumed. This is the 9th highest total in the County and below the Essex average of 957GWh. Epping Forest recorded the highest amount of energy being used within the Transport sector at 2101.2GWh (49.08% of total). Proportionally, Uttlesford District shows the highest consumption across Essex at 50.91% with the Essex average being 34.54%. The lowest consumption with regard to transport can be seen in Maldon at 296.6GWh whilst Castle Point registered the lowest proportional consumption at 21.87%.
- 53.29% of total fuel consumption within Rochford District was consumed via domestic practices. This equates to 818.2GWh and is the 8th highest consumption in this sector across Essex. Basildon District consumed the most energy within the Domestic sector at 1509.4GWh whilst Maldon consumed the least at 503.8GWh. The Essex average for domestic energy consumption was 1045.3GWh (37.73%) whereas in the East of England, the proportion was recorded as 32.09%.

- Industry and commercial practices were responsible for the lowest proportion of energy consumed within Rochford District at 20.8% or 504.1GWh. This is however below the Essex average proportion of 27.73% and 768.3GWh consumed. Basildon recorded the highest consumption at 1659.8Gwh whilst Castle Point recorded the lowest at 264GWh.

B. Emissions

The use of fossil fuels in the production of energy creates greenhouse gas emissions. This is mainly in the form of Carbon Dioxide (CO_2), but also includes Methane (CH_4), Nitrous Oxides (NO_x), Sulphur Dioxide (SO_2) and water vapour, which all contribute towards climate change.

i) Carbon Dioxide (CO_2) Emissions

One of the main greenhouse gases is CO_2. The main causes of increased CO_2 in the atmosphere are said to be deforestation and burning fossil fuels for:

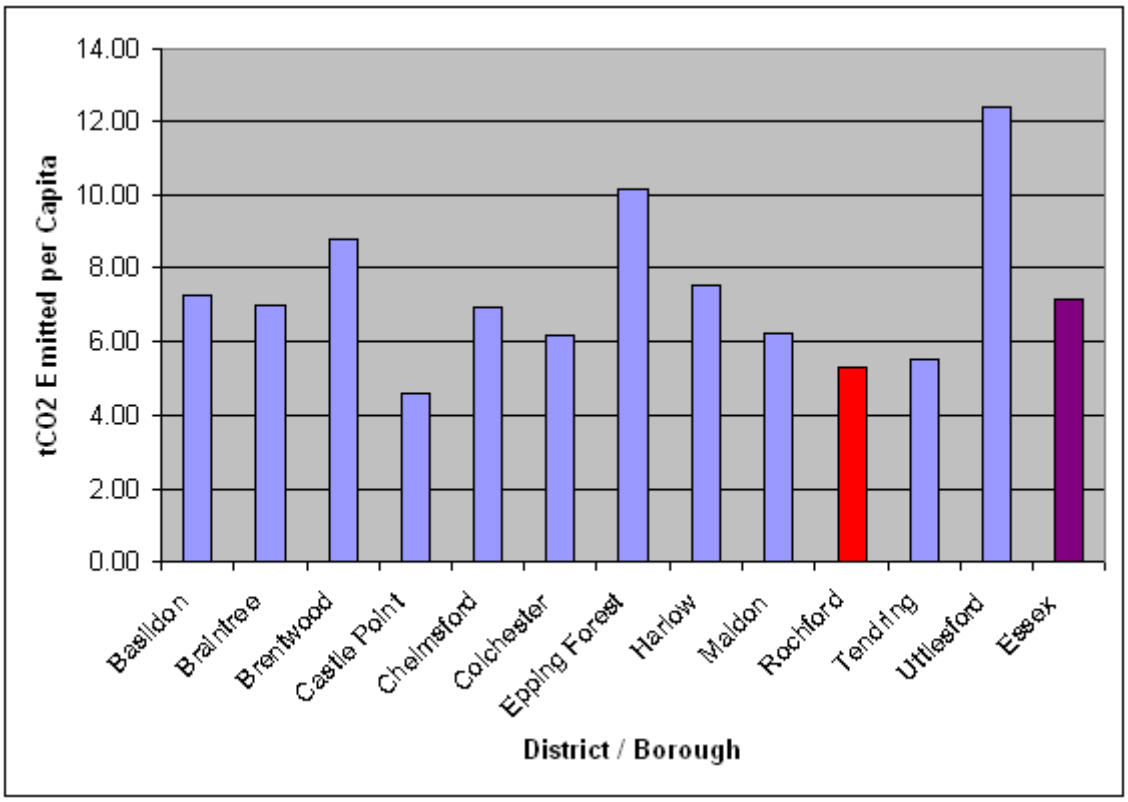
- Electricity
- Heating dwellings and other buildings
- Transportation (using internal combustion of fossil fuels and fossil fuel products)

Table 17: Carbon Emissions in Kilotonnes (kt) across Essex in 2007

	Total Industrial and Commercial per Annum		Total Domestic per Annum		Total Road Transport per Annum		Land Use, Land Use Change and Forestry		Total per Annum ($ktCO_2$)	Mid-year Population Estimate ('000s)	per Capita Emissions per Annum (tCO_2)
	kt CO_2	Proportion of Total kt CO_2	kt CO_2	Proportion of Total kt CO_2	kt CO_2	Proportion of Total kt CO_2	kt CO_2	Proportion of Total kt CO_2			
Basildon	546.61	44.43%	384.98	31.29%	298.35	24.25%	0.24	0.02%	1,230.17	169.80	7.24
Braintree	261.00	26.51%	328.92	33.41%	399.21	40.55%	-4.66	-0.47%	984.48	140.90	6.99
Brentwood	151.99	24.10%	194.27	30.81%	284.01	45.04%	0.38	0.06%	630.64	71.60	8.81
Castle Point	86.12	20.84%	214.05	51.79%	112.71	27.27%	0.45	0.11%	413.33	89.20	4.63
Chelmsford	345.73	30.42%	389.21	34.25%	403.76	35.53%	-2.23	-0.20%	1,136.47	164.50	6.91
Colchester	340.58	31.45%	371.08	34.27%	371.82	34.34%	-0.60	-0.06%	1,082.88	175.50	6.17
Epping Forest	247.13	19.73%	328.63	26.23%	677.94	54.12%	-0.96	-0.08%	1,252.74	123.30	10.16
Harlow	312.31	53.00%	169.01	28.68%	108.13	18.35%	-0.17	-0.03%	589.29	78.30	7.53
Maldon	130.12	33.59%	147.44	38.06%	106.01	27.37%	3.81	0.98%	387.39	62.40	6.21
Rochford	122.80	28.37%	202.16	46.71%	104.16	24.06%	3.70	0.85%	432.83	82.20	5.27
Tendring	198.48	24.85%	344.03	43.07%	252.65	31.63%	3.65	0.46%	798.80	146.20	5.46
Uttlesford	223.49	24.86%	195.24	21.72%	487.10	54.19%	-6.91	-0.77%	898.91	72.50	12.40
Essex	2,966.36	30.15%	3,269.02	33.23%	3,605.85	36.65%	-3.30	-0.03%	9,837.93	1,376.40	7.15

Source: DECC 2009 (http://www.decc.gov.uk)

Figure 23: CO_2 Emissions per Capita in 2007



Source: DECC 2009 (http://www.decc.gov.uk)

- At 432.83kt, Rochford District emitted the 10th highest amount of CO_2 in Essex. Epping Forest emitted the highest at 1252.74kt whilst the lowest amount, 387.39kt, was recorded by Maldon. As a County, Essex emitted 9,837.93kt of CO_2
- The single largest proportion of carbon dioxide emitted in Rochford District was emitted through domestic practices. 202.16kt (46.71%) of emissions were from this source. This is the 8th highest amount and 2nd highest proportion across Essex. Basildon released the largest amount of CO_2 in this sector at 384.98kt whilst the smallest domestic amount was released by Maldon at 147.44kt. In terms of proportion, Castle Point released the highest amount of domestic emissions at 51.79% with Uttlesford releasing the smallest amount at 21.72%. 33.23% of CO_2 emissions across Essex were released through domestic practices.
- Industrial and commercial practices were responsible for 122.8kt (28.37% of total) CO_2 emissions within Rochford District in 2006, the 6th highest proportion in the District and below the Essex value of 36.65%. Basildon released the most CO_2 in this sector at 546.61kt whilst in terms of proportion; Harlow released the most at 53% of emissions. Castle Point released the smallest amount of emissions from industry and commercial practices at 86.12kt with Epping District releasing the smallest proportion at 19.73%
- Transportation accounted for 104.16kt (24.06%) of CO_2 emissions within Rochford District. This was the lowest amount in terms of kt across Essex and the 2nd lowest proportion. Uttlesford reported the highest proportion within the road transport sector at 54.19% with Harlow reporting the smallest proportion at 18.35% whilst Essex recorded a proportion of 36.65%. In terms of ktCO_2 released, Epping Forest emitted the largest amount at 677.94kt.
- Land use change in Rochford District has been responsible for an increase in CO_2 emissions, amounting to an increase of 3.7kt, or 0.85%, of the total amount of CO_2

emitted. This is the second largest increase in Essex, behind only Maldon District at 3.81kt or 0.98% of their total emissions. Uttlesford reported the largest reduction at 6.91kt or 0.77% of their total emissions. Essex recorded a reduction of 0.03%

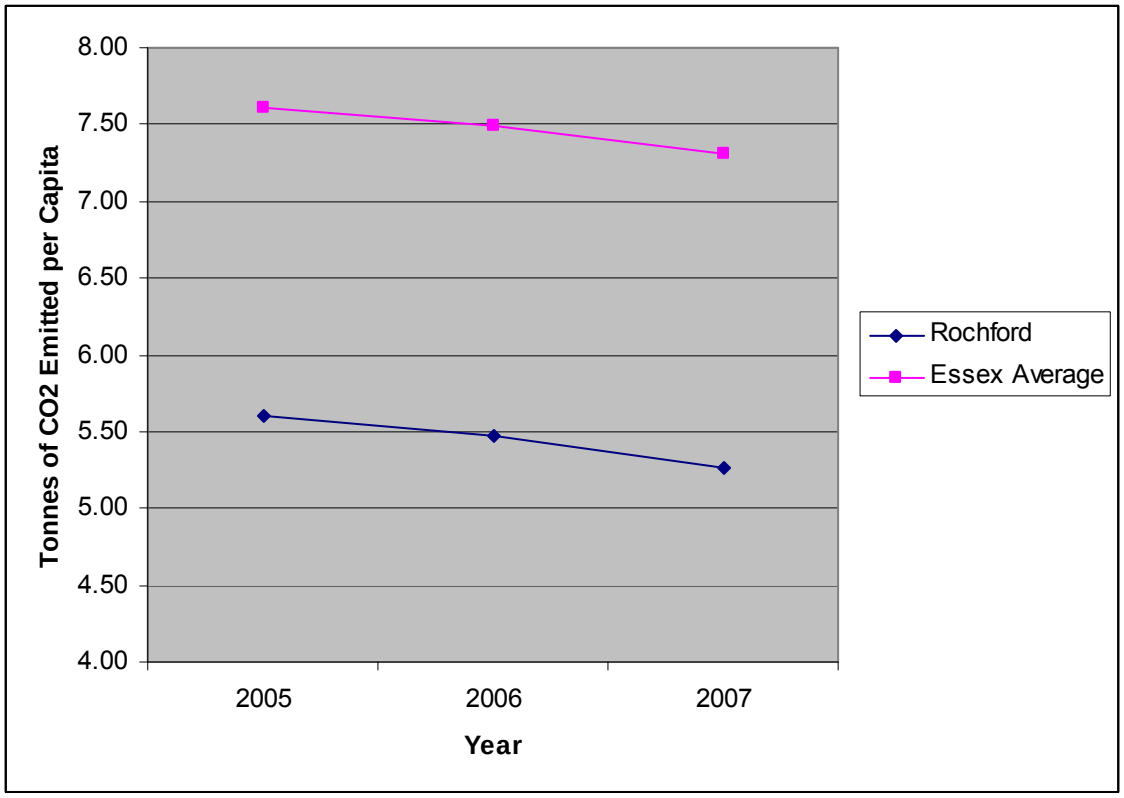
- At 5.27t, residents of Rochford District emit the 10th highest amount of CO_2 per person. At 12.4t per person, Uttlesford emit the highest value with Castle Point the lowest at 4.63t. Across Essex, the total is 7.15t per person.

Table 18: Emissions of CO_2 per Capita 2005 – 2007

	CO2 Emissions per Capita		
	2005	2006	2007
Basildon	7.33	7.29	7.24
Braintree	7.38	7.18	6.99
Brentwood	9.24	9.26	8.81
Castle Point	4.84	4.76	4.63
Chelmsford	7.01	6.96	6.91
Colchester	6.59	6.46	6.17
Epping Forest	10.25	9.92	10.16
Harlow	8.00	7.85	7.53
Maldon	6.88	6.72	6.21
Rochford	5.60	5.47	5.27
Tendring	5.78	5.67	5.46
Uttlesford	12.34	12.38	12.40
Essex Average	7.60	7.49	7.31

Source: DECC 2009 (http://www.decc.gov.uk)

Figure 24: Emissions of CO_2 per Capita 2005 – 2007



Source: DECC 2009 (http://www.decc.gov.uk)

- Across the period of study, the amount of CO_2 emitted by residents has fallen year-on-year in Rochford, from 5.6t per person in 2005 to 5.27t per person in 2007. Within Essex there has also been a year-on-year reduction, from 7.6t in 2005 to 7.31t in 2007.
- Between 2005 and 2007, the per capita emission rate of CO_2 within Rochford was below that seen across Essex.

5.3 Climatic Factors Summary

- At 1535.5GWh in 2006, Rochford District consumed less energy in total than the Essex average of 2770.6GWh. This is the 10th highest value across Essex.
- The fuel type most responsible for the energy consumed in Rochford District in 2006 was natural gas, with 715.2GWh of the total 1535.5GWh (46.58%) consumed being derived from this product. Domestic consumption accounted for 619.6GWh of natural gas, amounting to 86.63% of total natural gas consumption. Rochford District's total natural gas consumption was the sixth highest in Essex and above the Essex average of 36.62%.
- Transport energy consumption in Rochford District totalled 372.3GWh or 24.25% of total energy consumed. This is the 9th highest total in the County and below the Essex average of 957GWh.
- At 432.83kt, Rochford District emitted the 10th highest amount of CO_2 in Essex. Epping Forest emitted the highest at 1252.74kt whilst the lowest amount, 387.39kt, was recorded by Maldon. As a County, Essex emitted 9,837.93kt of CO_2
- The single largest proportion of carbon dioxide emitted in Rochford District was emitted through domestic practices. 202.16kt (46.71%) of emissions were from this source. This is the 8th highest amount and 2nd highest proportion across Essex. 33.23% of CO_2 emissions across Essex were released through domestic practices.

- Land use change in Rochford District has been responsible for an increase in CO_2 emissions, amounting to an increase of 3.7kt, or 0.85%, of the total amount of CO_2 emitted. This is the second largest increase in Essex, behind only Maldon District at 3.81kt or 0.98% of their total emissions. Uttlesford reported the largest reduction at 6.91kt or 0.77% of their total emissions. Essex recorded a reduction of 0.03%.
- At 5.27t, residents of Rochford District emit the 10th highest amount of CO_2 per person. At 12.4t per person, Uttlesford emit the highest value with Castle Point the lowest at 4.63t. Across Essex, the total is 7.15t per person.
- Across the period of study, the amount of CO_2 emitted by residents has fallen year-on-year in Rochford, from 5.6t per person in 2005 to 5.27t per person in 2007. Within Essex there has also been a year-on-year reduction, from 7.6t in 2005 to 7.31t in 2007.

6 WATER QUALITY

6.1 Introduction

Water policy in England aims to protect both public health and the environment by maintaining and improving the quality of water. In England, the Department for Environment, Food and Rural Affairs (Defra) oversees water policy. The Environment Agency makes sure that these policies are carried out. The Environment Agency has a responsibility to protect and enhance the environment as a whole, monitoring and enforcing aspects not only of water quality, but of air quality and waste management as well. (PPS23, Annex 1)

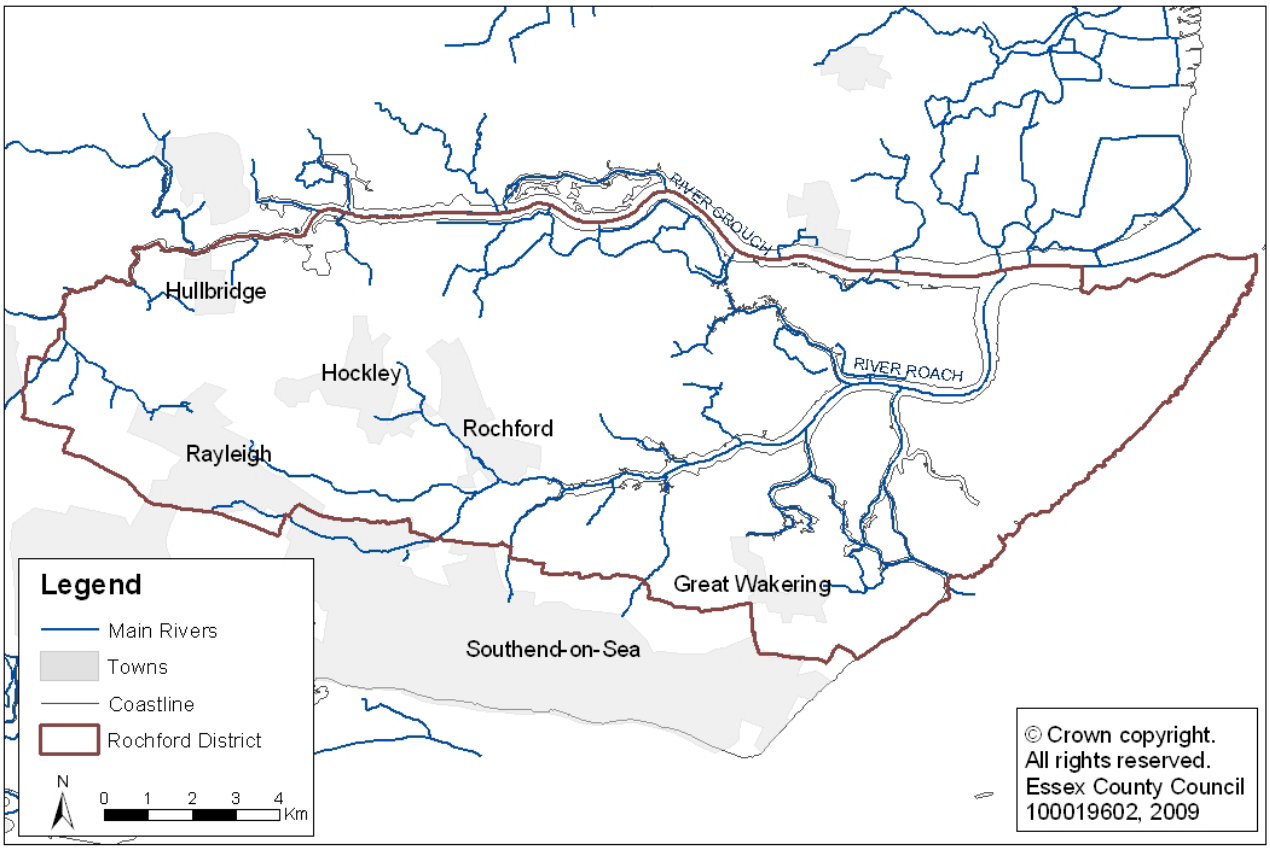
In addition to the ever increasing demand from human uses, water contributes to the natural environment, having ecological, aesthetic, scientific, educational and recreational value.

6.2 Baseline Information

A. Key Water Courses in Rochford District

Figure 25 shows the main water courses running through Rochford District. Water courses associated with Rochford District are the Roach, Crouch, Eastwood Brook, Hawkwell Brook/Roach, Prittle Brook and Rayleigh Brook.

Figure 25: Main Rivers within Rochford District

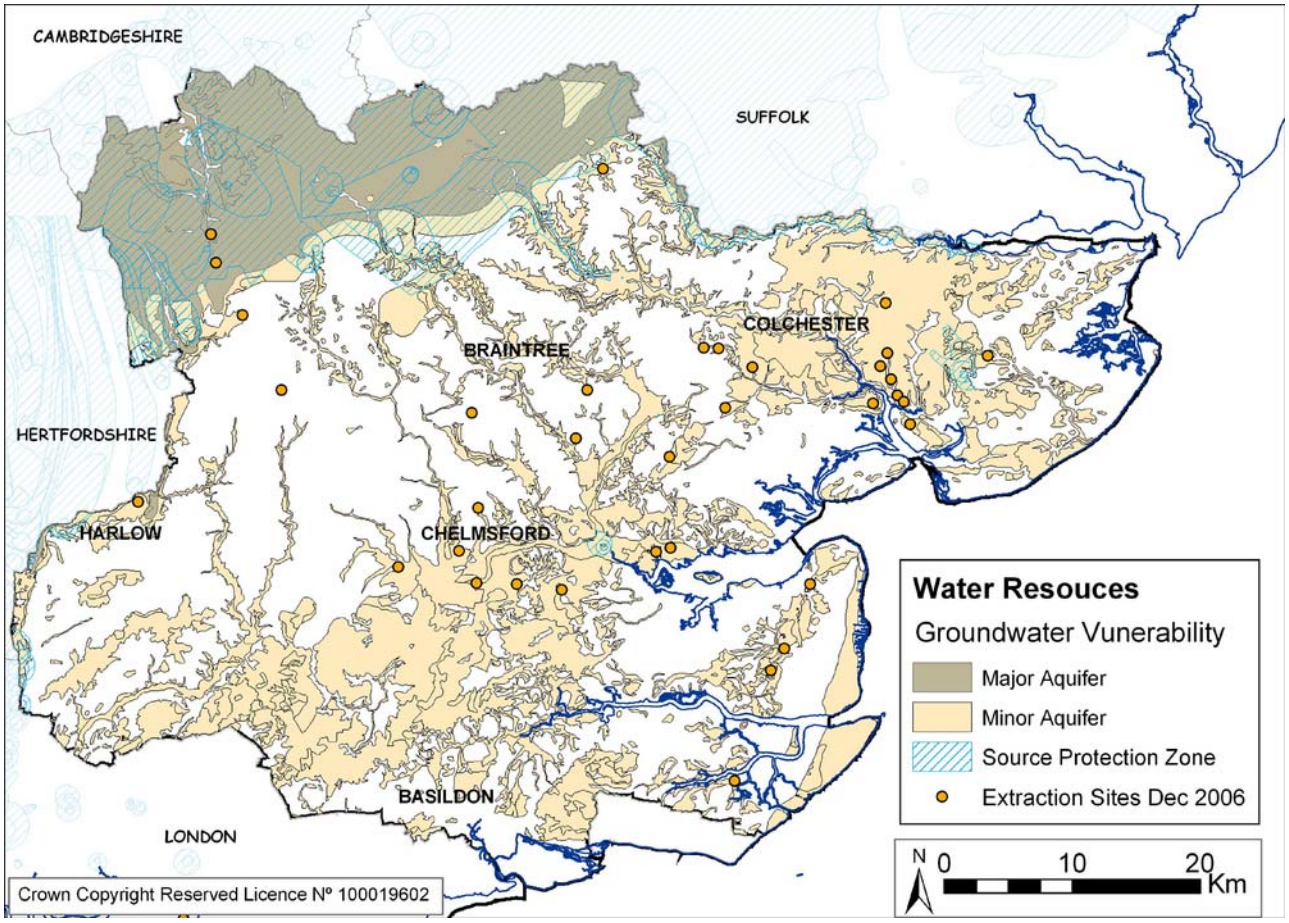


Source: Essex County Council 2009

B. Aquifers in Essex County

Figure 26 identifies the water resources within Essex, showing the location of the major and minor aquifers and source protection zones within the county. Minor aquifers are located within Rochford District.

Figure 26: Aquifers in Essex County Council



Source: Essex County Council 2009

C. 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. The Combined Essex CAMS examines issues such as:

- 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 the fish?
- What are the most suitable options for managing the rivers?

The Combined Essex CAMS was published in February 2007, and is available at: http://publications.environment-agency.gov.uk.

The Combined Essex CAMS sets out the issues for the whole of Essex. The document splits the county into Water Resource Management Units (WRMU). Rochford District includes three WRMUs:

- South Essex WRMU 2 (Upper Roach);
- South Essex WRMU 3 (Upper Crouch); and
- South Essex WRMU 4 (River Mardyke).

The table below outlines the resource availability status for these WRMUs. An explanation of the terms used to describe the status is also detailed below:

- Water available: Water is likely to be available at all flows including low flows. Restrictions may apply.
- No water available: No water is available for further licensing at low flows. Water may be available at higher flows with appropriate restrictions.

Table 19: Resource Availability Status

Associated main river	Resource Availability Status		
	Individual WRMU status	Integrated WRMU status	Target status in 2012
WRMU 2 – Upper Roach	Water available	Water available	No water available
WRMU 3 – Upper Crouch	Water available	Water available	No water available
WRMU 4 – River Mardyke	Water available	Water available	No water available

Source: Combined Essex CAMs, February 2007 (Environment Agency) (http://publications.environment-agency.gov.uk)

The Combined Essex CAMs Annual Update (March 2008) confirmed that the water availability and restrictions for South Essex WRMU2, 3 and 4 have not changed since the publication of the CAMS in February 2007. The March 2008 Annual Update is available at: http://publications.environment-agency.gov.uk

D. River Basin Management Plan

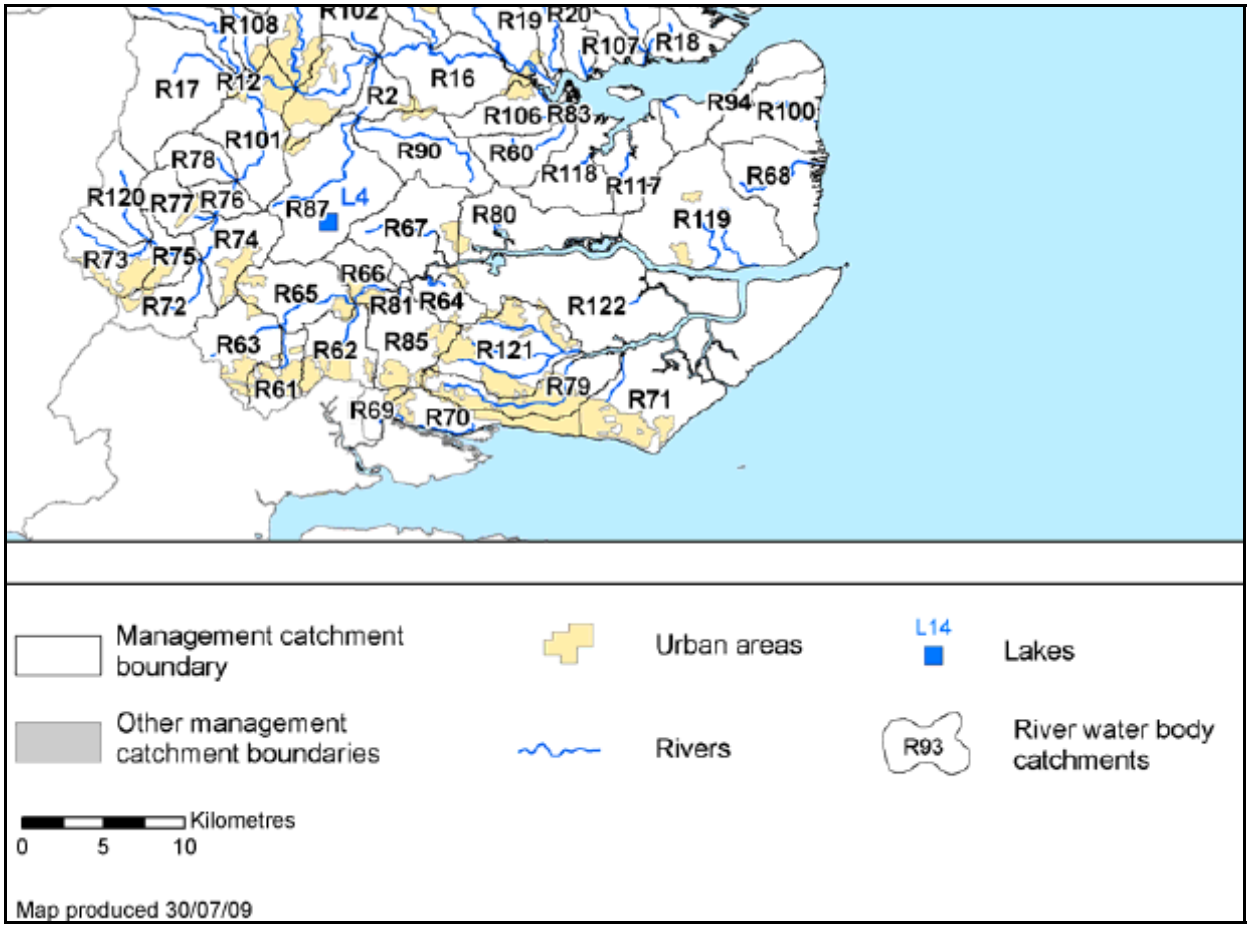
Water in rivers, estuaries, coasts and aquifers will improve under measures set out in River Basin Management Plans, drawn up for river basin districts across England and Wales under the Water Framework Directive. River Basin Management Plans are the plans for protecting and improving the water environment. They contain 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

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

Figure 27: 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, 2009) (http://wfdconsultation.environment-agency.gov.uk)

As shown in Figure 27 the Combined Essex catchment area is further subdivided into water body catchment areas. The water bodies associated with Rochford District are:

- R64: Crouch Estuary;
- R122: Paglesham Creek Tributary;
- R121: River Roach, Nobles Ditch and Eastwood Brook;
- R79: Prittle Brook; and
- R71: Roach and Canvey.

Table 20 to Table 24 detail the ecological and chemical status of these water bodies.

Table 20: River R64 (Crouch Estuary)

Waterbody Name:	Crouch Estuary	
National Grid Reference:	TQ 79925 94569	
Current Overall Status:	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027	
Protected Area Designation:	Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated AWB/HMWB	
Note: Current Status and Status Objectives for this water body are based on Expert Judgement		
Ecological Status (Note: no biology data)		
Current Status (and certainty that status is less than good)	Moderate (Uncertain)	
Supporting Conditions		
Element	Current status (and certainty of less than good)	Predicted Status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good
Morphology	Supports Good	Supports Good
Chemical Status		
Current Status (and certainty that status is less than good)	Does not require assessment	

Source: River Basin Management Plan Anglian River Basin District, December 2009 (submitted for approval), (Environment Agency, 2009) (http://wfdconsultation.environment-agency.gov.uk)

Table 21: River R122 (Pagglesham Creek Tributary)

Waterbody Name:	Pagglesham Creek Tributary	
National Grid Reference:	TQ 92157 93396	
Current Overall Status:	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027	
Protected Area Designation:	Nitrates Directive, Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated AWB/HMWB	
Note: Current Status and Status Objectives for this water body are based on Expert Judgement		
Ecological Status (Note: no biology data)		
Current Status (and certainty that status is less than good)	Moderate (Uncertain)	
Supporting Conditions		
Element	Current status (and certainty of less than good)	Predicted Status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good

Morphology	Supports Good	Supports Good
Chemical Status		
Current Status (and certainty that status is less than good)	Does not require assessment	

Source: River Basin Management Plan Anglian River Basin District, December 2009 (submitted for approval), (Environment Agency, 2009) (http://wfdconsultation.environment-agency.gov.uk)

Table 22: River R121 (River Roach, Nobles Ditch and Eastwood Brook)

Waterbody Name:	River Roach, Nobles Ditch and Eastwood Brook		
National Grid Reference:	TQ 84312 88749		
Current Overall Status:	Moderate		
Status Objective (Overall):	Good by 2027		
Status Objective(s):	Good Ecological Potential by 2027		
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible		
Protected Area Designation:	Nitrates Directive		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Heavily modified		
Reason for Designation:	Flood protection		
Ecological Potential			
Current Status (and certainty that status is less than good)	Moderate (Very Certain - WoE)		
Biological Elements			
Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	High	High	
Invertebrates	Poor (Very Certain)	Poor	Not required (MS)
Supporting Elements			
Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia	Poor (Very Certain)	Moderate	Technically infeasible (A2b)
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Bad (Very Certain)	Bad	Disproportionately expensive (P1b)
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia	Poor (Very Certain)	Moderate	Technically infeasible (A2b)

Supporting Conditions		
Element	Current status (and certainty of less than good)	Predicted Status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good

Ecological Potential Assessment			
Element	Current Status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation measures that have defined Ecological Potential	
Mitigation Measure	Status
Sediment management strategies (develop and revise)	In Place
Retain marginal aquatic and riparian habitats (channel alteration)	In Place
Appropriate techniques (invasive species)	In Place
Appropriate timing (vegetation control)	In Place
Appropriate vegetation control technique	In Place
Selective vegetation control regime	In Place
Appropriate techniques to align and attenuate flow to limit detrimental effects of these features	Not In Place
Increase in-channel morphological diversity	Not In Place
Chemical Status	
Current Status (and certainty that status is less than good)	Does not require assessment

Source: River Basin Management Plan Anglian River Basin District, December 2009 (submitted for approval), (Environment Agency, 2009) (http://wfdconsultation.environment-agency.gov.uk)

Table 23: River R79 (Prittle Brook)

Waterbody Name:	Prittle Brook
National Grid Reference:	TQ 85572 86933
Current Overall Status:	Moderate
Status Objective (Overall):	Good by 2027
Status Objective(s):	Good Ecological Potential by 2027
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible
Protected Area Designation:	Nitrates Directive, Shellfish Water Directive
SSSI (Non-N2K) related:	No
Hydromorphological Designation:	Heavily modified
Reason for Designation:	Flood protection, Urbanisation
Ecological Potential	
Current Status (and certainty that status is less than good)	Moderate (Very Certain - WoE)

Biological Elements			
Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Bad (Very Certain)	Bad	Not required (MS)
Supporting Elements			
Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1a)
Temperature	High	High	
Ammonia	High	High	

Supporting Conditions		
Element	Current status (and certainty of less than good)	Predicted Status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good

Ecological Potential Assessment			
Element	Current Status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a, M3b)

Mitigation measures that have defined Ecological Potential	
Mitigation Measure	Status
Sediment management strategies (develop and revise)	In Place
Retain marginal aquatic and riparian habitats (channel alteration)	In Place
Appropriate techniques (invasive species)	In Place
Appropriate timing (vegetation control)	In Place
Appropriate vegetation control technique	In Place
Selective vegetation control regime	In Place
Appropriate techniques to align and attenuate flow to limit detrimental effects of these features	Not In Place
Increase in-channel morphological diversity	Not In Place

Chemical Status	
Current Status (and certainty that status is less than good)	Does not require assessment

Source: River Basin Management Plan Anglian River Basin District, December 2009 (submitted for approval), (Environment Agency, 2009) (http://wfdconsultation.environment-agency.gov.uk)

Table 24: River R71 (Roach and Canvey)

Waterbody Name:	Roach and Canvey	
National Grid Reference:	TQ 91312 88433	
Current Overall Status:	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027	
Protected Area Designation:	Bathing Water Directive, Natura 2000 (Habitats and/or Birds Directive), Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated AWB/HMWB	
Note: Current Status and Status Objectives for this water body are based on Expert Judgement		
Ecological Status (Note: no biology data)		
Current Status (and certainty that status is less than good)	Moderate (Uncertain)	
Supporting Conditions		
Element	Current status (and certainty of less than good)	Predicted Status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good
Morphology	Supports Good	Supports Good
Chemical Status		
Current Status (and certainty that status is less than good)	Does not require assessment	

Source: River Basin Management Plan Anglian River Basin District, December 2009 (submitted for approval), (Environment Agency, 2009) (http://wfdconsultation.environment-agency.gov.uk)

6.3 Water Quality Summary

- The main water courses running through Rochford District are the Roach, Crouch, Eastwood Brook, Hawkwell Brook/Roach, Prittle Brook and Rayleigh Brook.
- Minor aquifers are located within Rochford 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 sets out the issues for the whole of Essex. The document splits the County into Water Resource Management Units (WRMU). Rochford District includes three WRMUs: South Essex WRMU 2 (Upper Roach); South Essex WRMU 3 (Upper Crouch); and South Essex WRMU 4 (River Mardyke).
- The individual WRMU status for all three was 'water available' at February 2007, the Combined Essex CAMs Annual Update (March 2008) confirmed that the water availability and restrictions for South Essex WRMU2, 3 and 4 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 in Rochford District are: R64 -

Crouch Estuary; R122 - Paglesham Creek Tributary; R121 - River Roach, Nobles Ditch and Eastwood Brook; R79 - Prittle Brook; and R71 - Roach and Canvey.

- The water bodies within Rochford are currently classified as having ‘moderate’ ecological status.

7 FLOODING

7.1 Introduction

River flooding is a natural process that plays an important role in shaping the natural environment. However, flooding threatens life and causes substantial damage to property, therefore incurring significant costs. The effects of heavy and/or prolonged rainfall can be increased in severity as a result of planning decisions about the location, design, nature of settlement and land use. Increasingly flooding is viewed as a potential consequence of future climate change. Although flooding cannot be completely prevented, its impacts can be avoided and reduced through good planning and management.

7.2 Baseline Information

A. Location of Flood Risk Zones 2 and 3

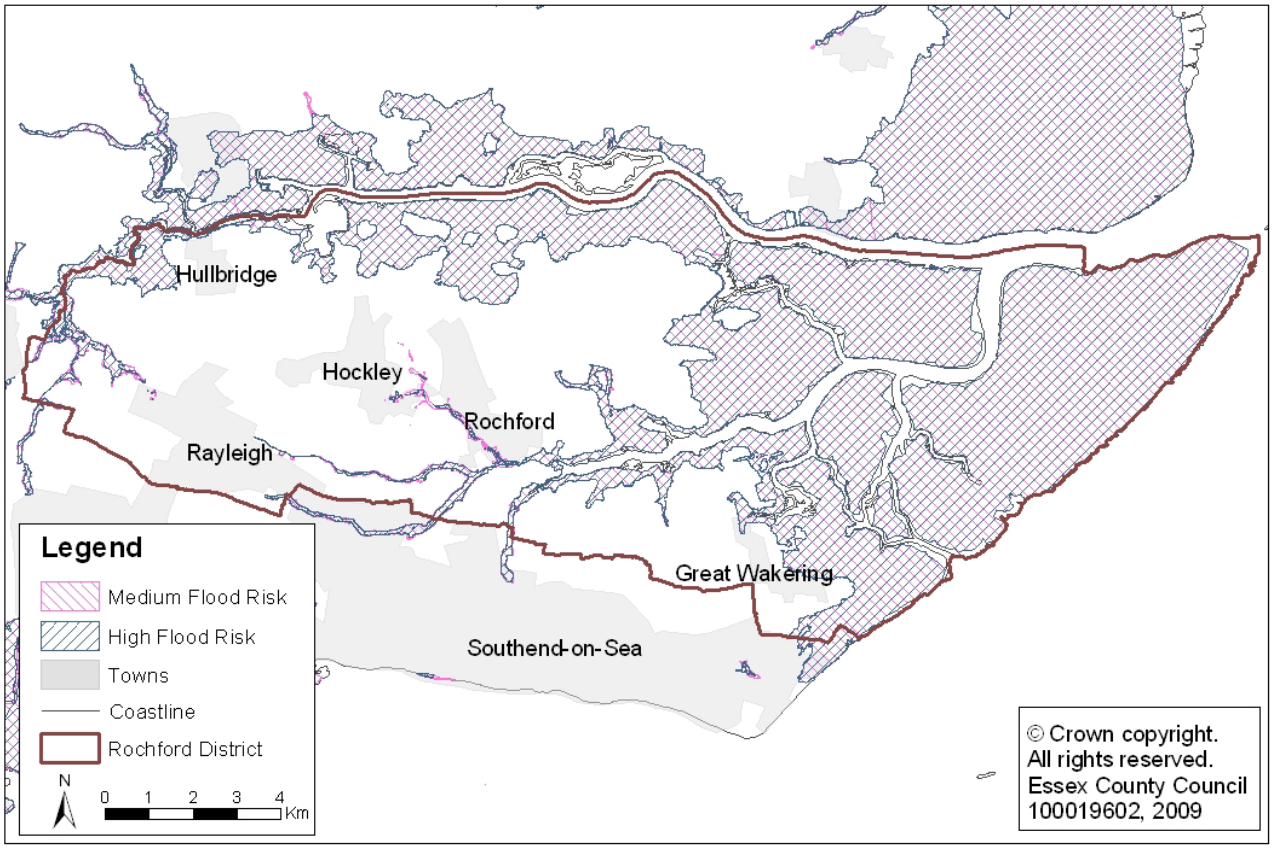
Planning Policy Statement 25: Development and Flood Risk requires developments to be carried out in areas of as low a risk of flooding as possible. Annex D of PPS 25 sets out a risk-based sequential test to be applied at all stages of the planning process. Its aim is to steer new development to areas 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.

Further information on flood risk zones can be found in PPS 25 at: http://www.communities.gov.uk

Figure 28 shows the extent of land within Rochford that falls within Flood Zone 2 (medium risk) and Flood Zone 3 (a and b) (high risk). The areas that are most susceptible to flooding in the district are those surrounding the coast and the Crouch estuary.

Figure 28: Spatial Extent of Flood Zones 2 and 3(a and b)



Source: Essex County Council, 2009

B. Planning Permissions granted contrary to Environment Agency advice.

Between the 1st April 2008 and the 31st March 2009 the Environment Agency objected to the following applications on the grounds of flood risk.

Table 25: Environment Agency Objections to Planning Applications on Flood Risk Grounds.

LPA Reference	Nature of proposed development	Reason for Agency Objection	Decision
07/01010/FUL	Mixed Use - Minor	- Sequential Test not adequately demonstrated - Unsatisfactory FRA/FCA Submitted	Refused
08/00196/FUL	Residential - Minor	- Unsatisfactory FRA/FCA Submitted	Refused
08/00211/FUL	Infrastructure - Minor	- Sequential Test not adequately demonstrated - Unsatisfactory FRA/FCA Submitted	Permitted contrary to EA advice
08/00279/FUL	Mixed Use - Minor	- PPS25/TAN15 - Request for FRA/FCA - Sequential Test not adequately demonstrated	Refused
08/00326/FUL	Residential - Minor	- PPS25/TAN15 - Request for FRA/FCA - Sequential Test not adequately demonstrated	Withdrawn

LPA Reference	Nature of proposed development	Reason for Agency Objection	Decision
08/00387/FUL	Residential - Minor	- Unsatisfactory FRA/FCA Submitted	Refused
08/00421/FUL	Residential - Minor	- PPS25/TAN15 - Request for FRA/FCA - Sequential Test not adequately demonstrated	Refused
08/00427/FUL	Residential - Minor	- PPS25/TAN15 - Request for FRA/FCA	Permitted (EA withdrew objection)
08/00631/FUL	Residential - Minor	- Sequential Test not adequately demonstrated - Unsatisfactory FRA/FCA Submitted	Permitted (EA withdrew objection)
08/00670/FUL	Residential - Major	- Adverse Impact on Surface Water Run-Off - Unsatisfactory FRA/FCA Submitted	Permitted (EA withdrew objection)
08/00808/FUL	Residential - Minor	- Unsatisfactory FRA/FCA Submitted	Permitted (EA withdrew objection)

Source: Environment Agency, 2009

Of the eleven applications which received an objection from the Environment Agency, one was subsequently withdrawn. Two of the applications were refused on the grounds of Flood Risk on site. Three further applications were refused although flood risk was not cited as a reason for refusal. Four applications were approved following the submission of additional material which satisfied the EAs objection, which was then removed. One application was granted contrary to EA advice, the officer's report in this instance also recommended refusal of the application.

C. Flood Risk Assessments

A Strategic Flood Risk Assessment (SFRA) for Rochford District was published in November 2006. This document is available at:

http://floodrisk.tgessex.co.uk/

The SFRA is a planning tool that enables the council to select and develop sustainable site allocations away from vulnerable flood risk areas. The SFRA identified that Rochford District Council contains several areas of low-lying land that would be inundated in the event of a breach in flood defences. Much of this area is farmland or marshland and as such the consequences of a flood event in terms of risk to life and property are limited.

The SFRA contains:

- An overview of flood risk issues for each of the District's Growth Options;
- Recommended policies to aid the councils in managing the flood risk within the District; and
- An outline of requirements for detailed Flood Risk Assessments (FRAs).

7.3 Flooding Summary

- The areas that are most susceptible to flooding in the district are those surrounding the coast and the Crouch estuary.
- Of the eleven applications which received an objection from the Environment Agency, one was subsequently withdrawn. Two of the applications were refused on the grounds of Flood Risk on site. Three further applications were refused, however flood risk was not sited as a reason for refusal.
- Four applications were approved following the submission of additional material which satisfied the EAs objection, which was then removed. One application was granted contrary to EA advice, the officer's report in this instance also recommended refusal of the application.
- A Strategic Flood Risk Assessment (SFRA) for Rochford District was published in November 2006.
- The SFRA identified that Rochford District Council contains several areas of low-lying land that would be inundated in the event of a breach in flood defences. Much of this area is farmland or marshland and as such the consequences of a flood event in terms of risk to life and property are limited.

8 SOILS, MINERALS AND WASTE

8.1 Introduction

The soil types and minerals profile within Essex have helped to shape the landscape, wildlife and economy of the county.

Providing for mineral extraction and for the processing and disposal of waste usually makes significant land-use demands. Therefore, the careful planning of such developments is essential to manage their impact on both the surrounding environment and local residents.

The safe, efficient and sustainable disposal of waste is a major and growing concern across the whole of the United Kingdom, with the monitoring of waste and recycling data being imperative to the identification of trends in both waste generation and disposal habits.

8.2 Baseline Information

This chapter begins with a look at the different types of agricultural soil present in Essex and Rochford District, and then moves on to waste analysis. Both the amount of waste recycled and landfilled is analysed on a total amount between 2000/2001 and 2008/2009 and a per dwelling basis for the year 2008/2009. The chapter concludes with an overview of the mineral and waste applications which were submitted to Essex County Council between 1st April 2008 and the 31st March 2009.

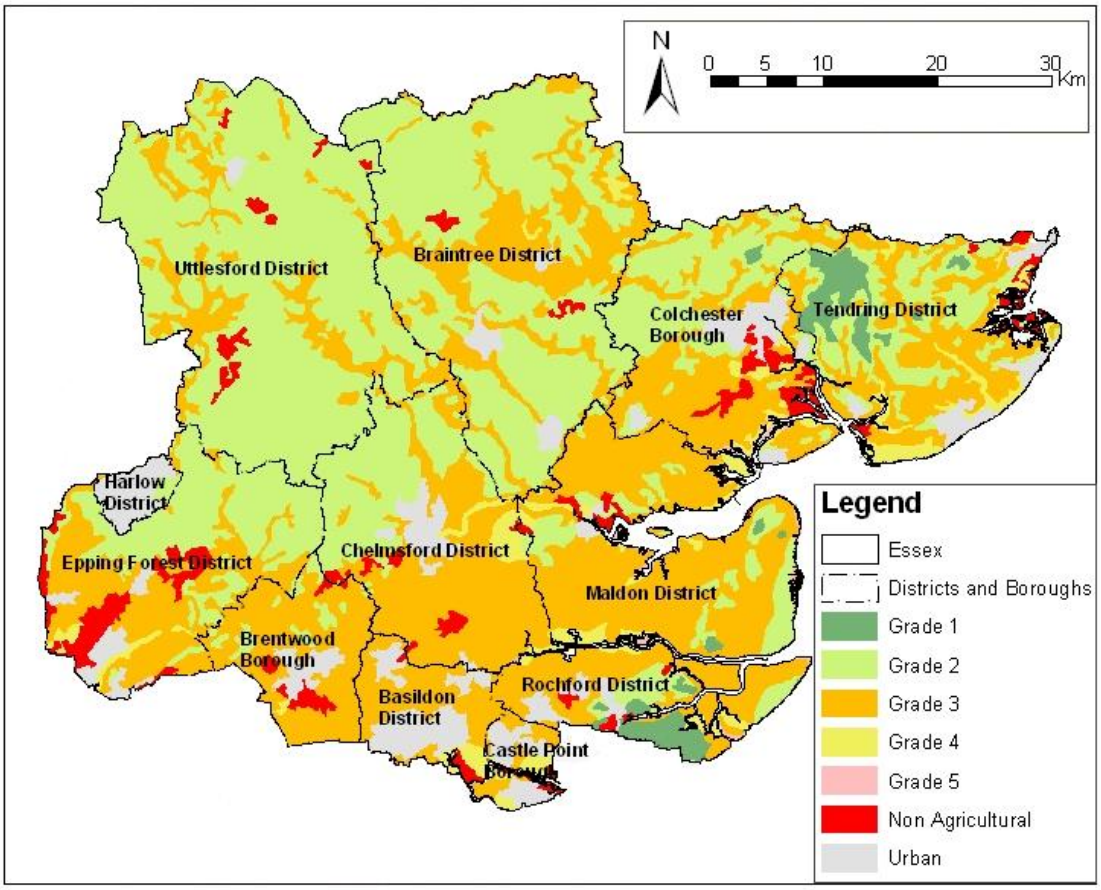
A. Agricultural Land Classification

i) Agricultural Land Classification in the East of England

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 (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). The East of England contains just 10% of the country's Grade 4 and 5 land.

ii) Agricultural Land in Essex

Figure 29: Agricultural Land Classification in Essex

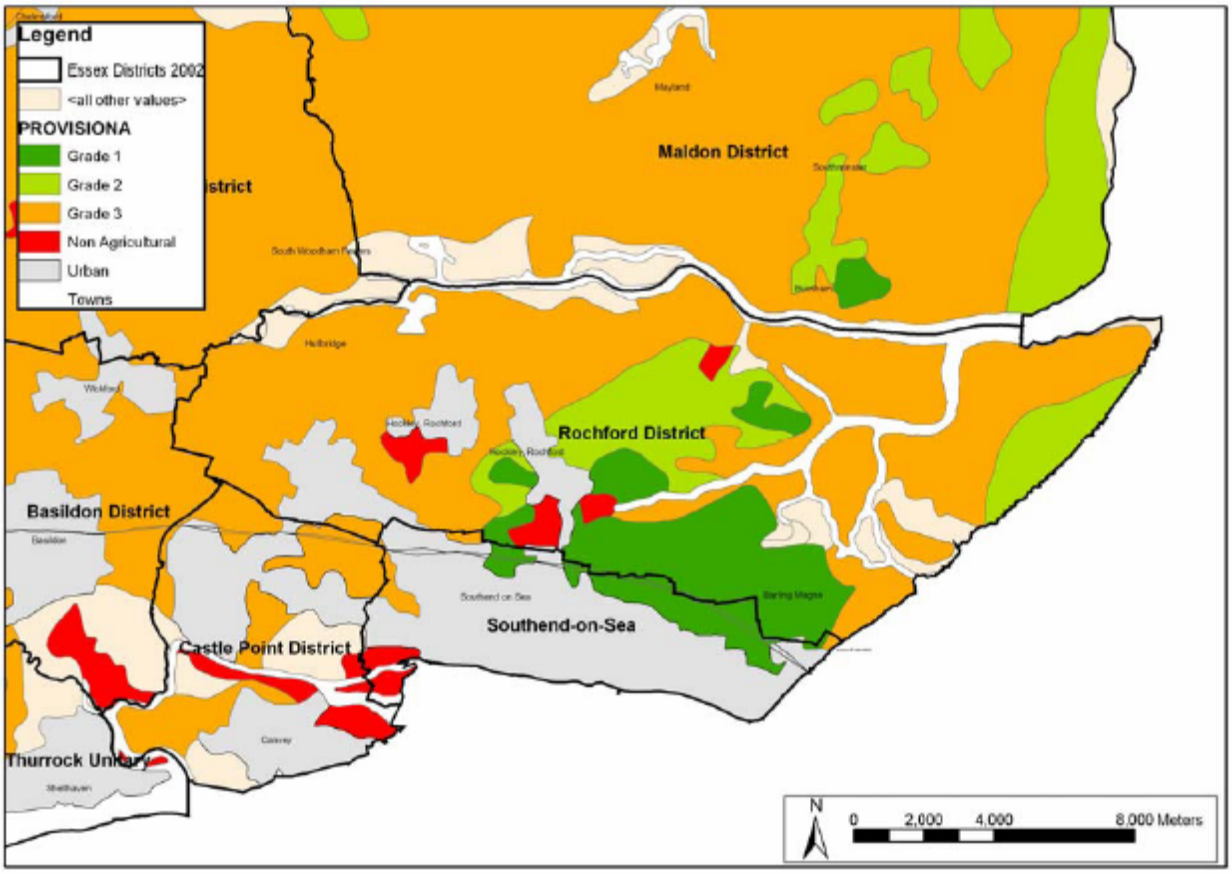


Source: Essex County Council, 2008

- There are significant areas of Grade 1 agricultural land within Tendring and Rochford districts.
- 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 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.

iii) Agricultural Land in Rochford District

Figure 30: Agricultural Land Classification in Rochford District



Source: Essex County Council 2008

- Within Rochford District, 13.8% (2,352 hectares) of agricultural land is classified as Grade 1, 14.2% (2,417 hectares) as Grade 2, and 55.6% (9,488 hectares) is classified as Grade 3.
- Figure 30 shows that the majority of grade 1 listed agricultural soils can be found to the south of the district on the border with Southend On Sea Unitary Authority, with the majority of grade 2 listed land centrally located in the district as well as there being a small isolated area present to the east.
- The highest grade land is found to the east of the settlements of Rochford and Ashingdon, between the Crouch estuary and the built-up areas of Southend-on-Sea, and between the settlements of Rochford and Hawkwell. This land falls into the 'best and most versatile' category in Planning Policy Statement 7: Sustainable Development in Rural Areas, 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.

B. Waste Movements

This section will look at the proportion of both total waste and total waste per dwelling which went to landfill and was recycled in Rochford District and Essex between 2000/2001 and 2008/2009. Please note that 'per dwelling' data for 2008/2009 cannot be incorporated into a trend analysis as before this date the data was collected from WasteDataFlow (the Government's national system for collection of waste data) whereas from 2008/2009

onwards the data is collected from the Valuation Office as provided via CLG. This is the figure used for the calculations of the latest waste National Indicators.

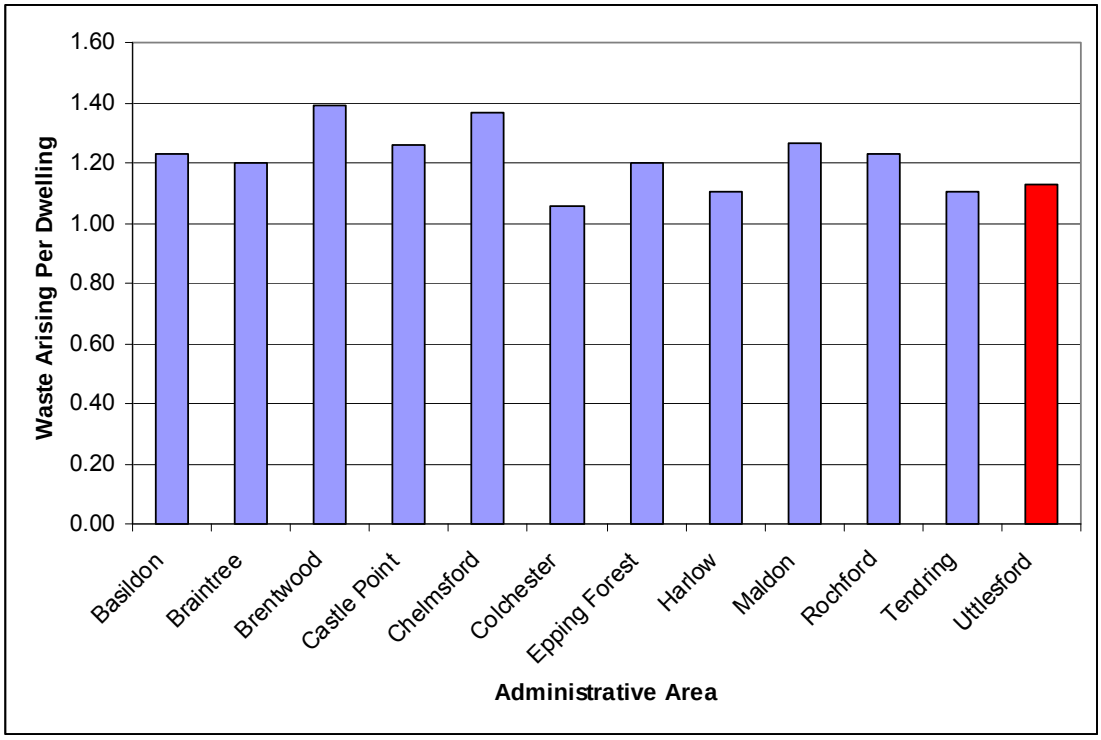
Each analysis will come in two parts, first waste collected from the home (otherwise known as District waste) and second, wastes collected from Household Waste Recycling Centres (HWRC), formerly known as Civic Amenity sites. A wide range of items can be recycled at these centres, including glass, paper, plastic and garden waste.

Table 26: Total Wastes Arising by Essex Districts and Boroughs 2008/2009

Administrative Area	Number of Dwellings	Total Waste Arisings (Tonnes)	Total Waste per Dwelling
Basildon	73,873	90,942.45	1.23
Braintree	61,118	73,324.12	1.20
Brentwood	31,698	44,100.12	1.39
Castle Point	36,917	46,603.33	1.26
Chelmsford	70,702	96,753.78	1.37
Colchester	73,681	78,003.13	1.06
Epping Forest	53,525	64,215.71	1.20
Harlow	35,315	39,085.01	1.11
Maldon	26,651	33,753.40	1.27
Rochford	34,440	42,343.73	1.23
Tendring	66,962	74,033.54	1.11
Uttlesford	31,615	35,707.27	1.13
Essex	596,497	718,865.59	1.21

Source: Essex County Council 2009

Figure 31: Total Waste Arisings by Essex Districts and Boroughs 2008/2009



Source: Essex County Council 2009

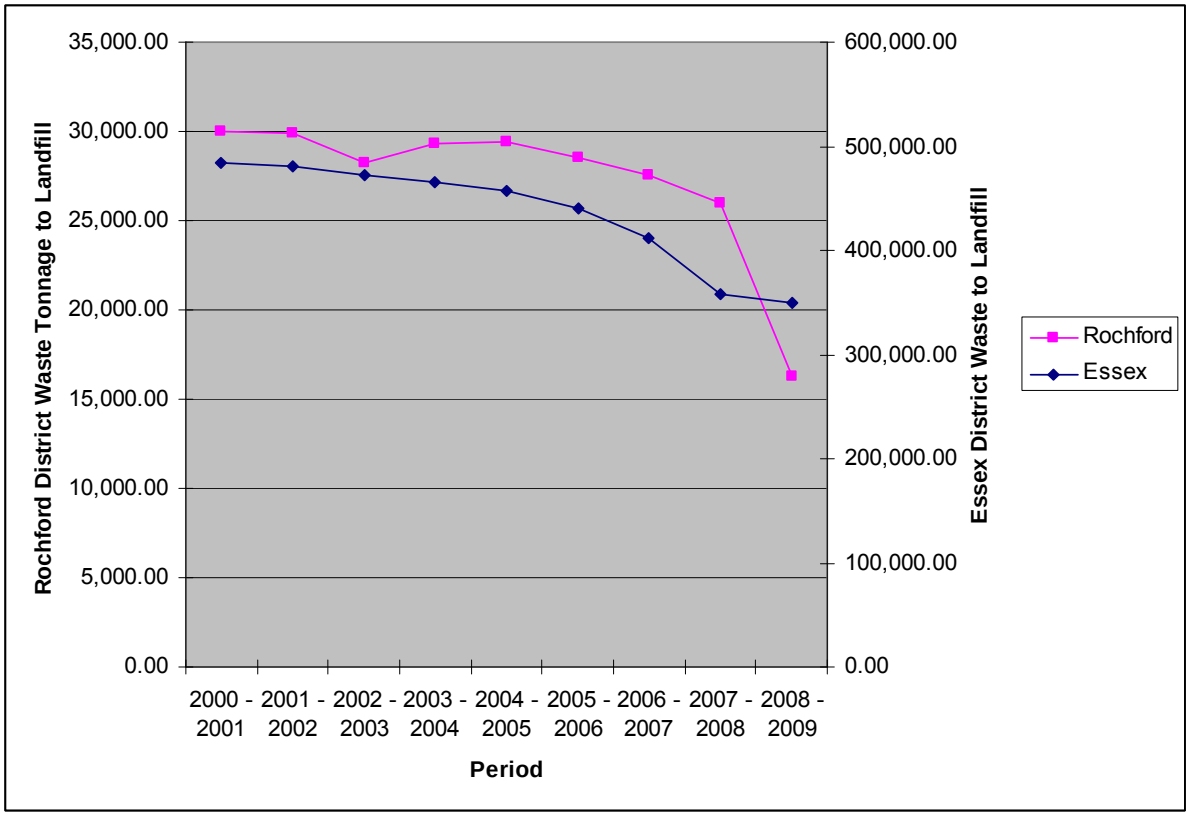
- Within Rochford District, 42,343.73 tonnes of waste was produced in 2008/2009. This is the fourth lowest amount in the County, with Essex as a whole producing 718,865.59 tonnes across the 12 districts and boroughs.
- Basildon District is the single largest producer of waste at 96,753.78 tonnes whilst Maldon District produced the least at 33.753.40 tonnes.
- Braintree District recorded a per dwelling waste arisings total of 1.23. This is the 4th highest in the county and above the county average of 1.21 tonnes. Residents of Brentwood produced the highest total at 1.37 tonnes per dwelling, with Colchester producing the least at 1.06 tonnes.

Table 27: Total District Waste Tonnage Sent to Landfill by Rochford District 2000 - 2009

	Rochford	Essex
2000 - 2001	30,047.29	483,593.58
2001 - 2002	29,875.50	480,910.57
2002 - 2003	28,215.75	471,596.39
2003 - 2004	29,321.28	465,789.94
2004 - 2005	29,376.74	457,457.40
2005 - 2006	28,566.54	440,096.33
2006 - 2007	27,538.96	411,649.32
2007 - 2008	25,997.01	358,161.56
2008 - 2009	16,232.12	349,013.25

Source: Essex County Council 2009

Figure 32: Total District Waste Tonnage Sent to Landfill by Rochford District 2000 – 2009



Source: Essex County Council 2009

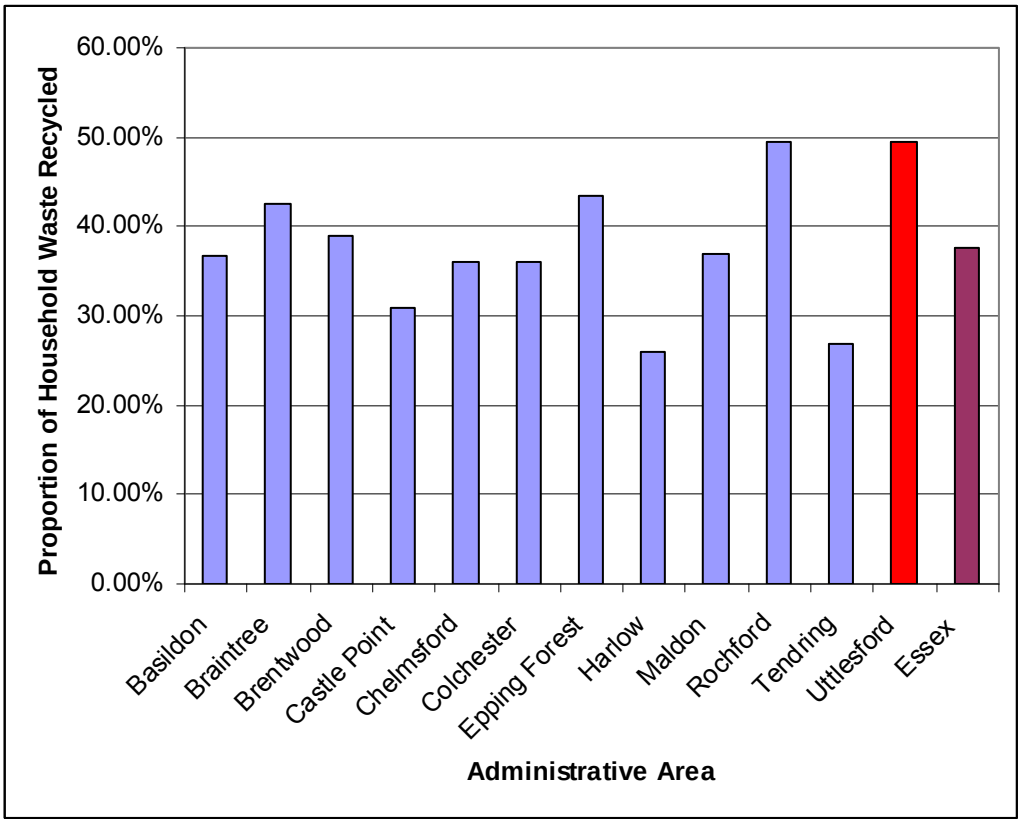
- The amount of waste taken to landfill in both Essex County and Rochford District has decreased over the period of study.
- Across the 8 years studied, the total amount of waste sent to landfill in Rochford has decreased from 30,047.29 tonnes in 2000/2001 to 16,232.12 tonnes in 2008/2009, meaning that Rochford District sent 54.21% of its total landfilled waste in 2000/2001 to landfill in 2008/2009. The corresponding figure for Essex as a whole is 72.2%.
- There has only been one period of increase in the amount of waste sent to landfill in Rochford District across the period of study. This occurred between the years 2002 and 2004.
- The single largest yearly decrease of total landfilled waste in Rochford was witnessed between 2007/2008 and 2008/2009. Within Essex it was the previous period 2006/2007 and 2007/2008.
- It is a stated aim of the Waste Strategy for England 2007 that the amount of waste entering landfill is to be reduced. The strategy also considers the outcome of removing the ban on local authorities in introducing household financial incentives for waste reduction and recycling. It is predicted that this could reduce annual landfilled waste by up to 15%.

Table 28: Proportion of District Waste which was Recycled and Composted in Essex 2008/2009

Authority	Total Household Waste	Household Waste Composted and Recycled (Tonnes)	Percentage of Household Waste Composted and Recycled
Basildon	80,595.40	29,610.80	36.74%
Braintree	60,195.72	25,608.92	42.54%
Brentwood	31,117.03	12,122.57	38.96%
Castle Point	35,859.22	11,066.14	30.86%
Chelmsford	79,770.75	28,766.13	36.06%
Colchester	62,222.42	22,367.88	35.95%
Epping Forest	50,739.28	22,048.34	43.45%
Harlow	27,462.35	7,153.83	26.05%
Maldon	22,661.30	8,359.01	36.89%
Rochford	32,150.45	15,918.33	49.51%
Tendring	45,976.92	12,327.07	26.81%
Uttlesford	30,932.69	15,321.24	49.53%
Essex	559,683.53	210,670.28	37.64%

Source: Essex County Council 2009

Figure 33: Proportion of District Waste which was Recycled and Composted in Essex 2008/2009



Source: Essex County Council 2009

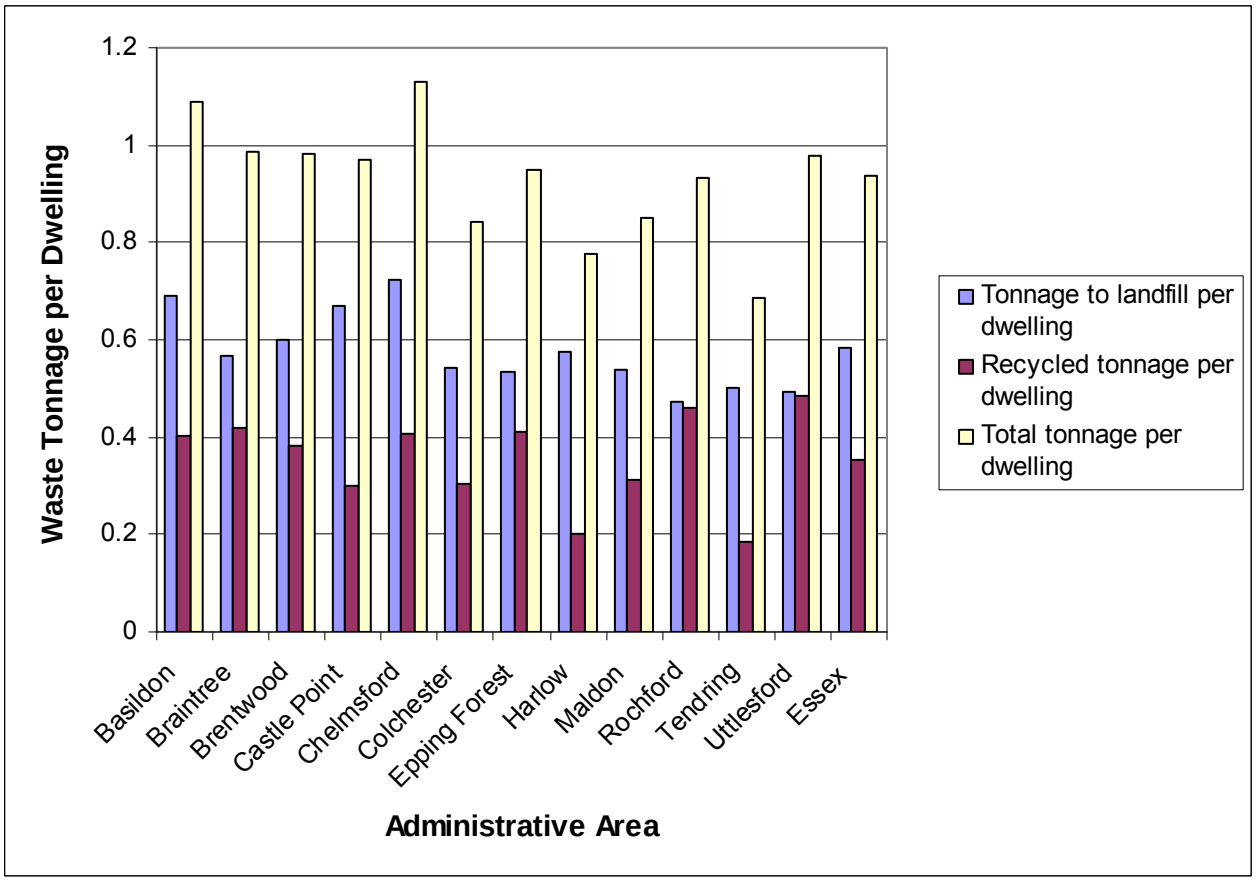
- 49.51% of Rochford District's household waste was recycled in 2008/2009. This is the 3rd highest proportion in the county and is above the 19.39% recorded in 2007/2008 which was the lowest proportion across Essex. The Essex average is recorded as 37.64%, up from 34.52% in 2007/2008.
- With 49.53% of household waste recycled, Uttlesford District was the highest performer in this field. Harlow District's proportion of 26.05% is the lowest in the county.

Table 29: District Waste Collection per Dwelling in Essex 2008/2009

District	Dwellings	Tonnage to landfill per dwelling	Ranking (1 = lowest per dwelling)	Movement from last year (+ = worse)	Recycled tonnage per dwelling	Ranking (1 = highest per dwelling)	Movement from last year (- = worse)	Total tonnage per dwelling	Ranking (1 = lowest per dwelling)	Movement from last year (+ = worse)
Basildon	73,873	0.69	11	0	0.40	6	0	1.09	11	0
Braintree	61,118	0.57	7	+3	0.42	3	0	0.98	10	+2
Brentwood	31,698	0.60	9	+6	0.38	7	-2	0.98	9	+2
Castle Point	36,917	0.67	10	+1	0.30	10	-1	0.97	7	-2
Chelmsford	70,702	0.72	12	+2	0.41	5	-1	1.13	12	0
Colchester	73,681	0.54	6	0	0.30	9	-1	0.84	3	0
Epping Forest	53,525	0.54	4	-1	0.41	4	-2	0.95	6	0
Harlow	35,315	0.58	8	0	0.20	11	-1	0.78	2	0
Maldon	26,651	0.54	5	-2	0.31	8	-1	0.85	4	0
Rochford	34,440	0.47	1	-11	0.46	2	+10	0.93	5	0
Tendring	66,962	0.50	3	+1	0.18	12	-1	0.69	1	0
Uttlesford	31,615	0.49	2	+1	0.48	1	0	0.98	8	-2
Essex	596,497	0.59	N/A	N/A	0.35	N/A	N/A	0.94	N/A	N/A

Source: Essex County Council 200

Figure 34: District Waste Collection per Dwelling in Essex 2008/2009



Source: Essex County Council 2009

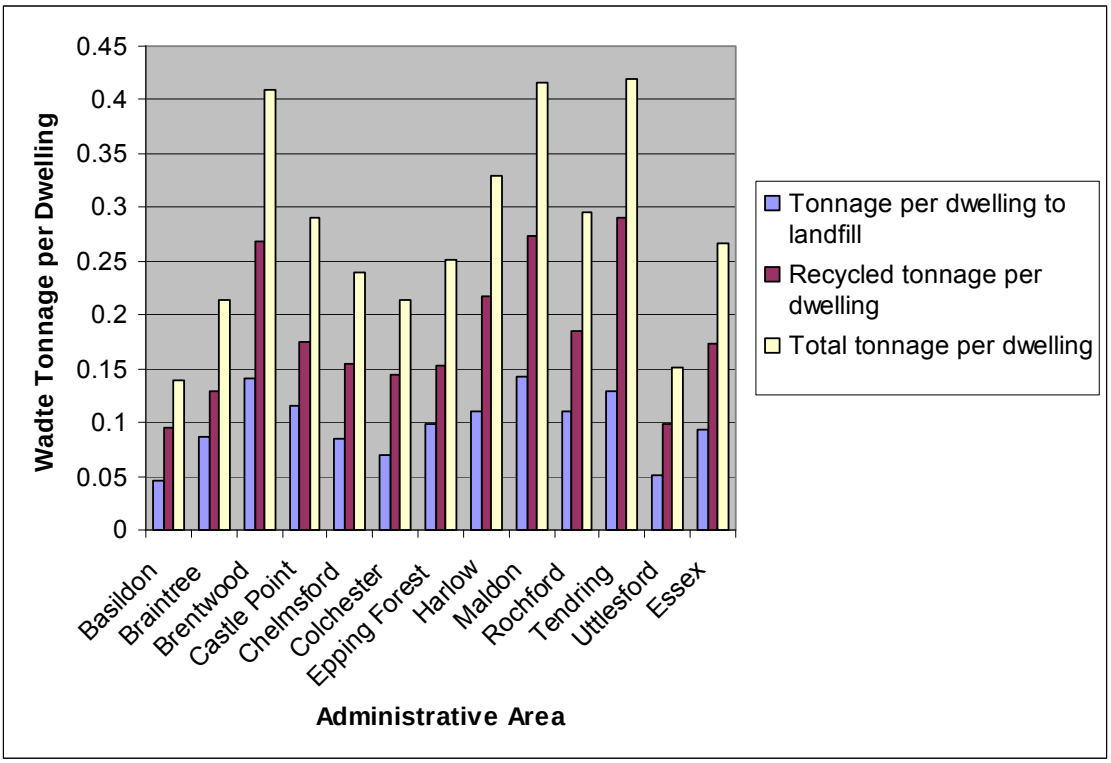
- For each dwelling within Rochford District, an average of 0.93 tonnes of waste was collected from the home. This was the 5th highest amount in the county. In 2008 - 2009, the total amount of district waste per resident was 0.01 tonnes below the Essex average of 0.94 tonnes.
- The highest amount of waste per dwelling was collected in Chelmsford, at 1.13 tonnes per dwelling. With 0.69 tonnes, Tendring District produced the least amount of waste by tonnage per dwelling.
- Of the 0.93 tonnes collected from each Rochford District dwelling, 0.47 tonnes went to landfill. This is the lowest amount in the county whereas previously the district was recording the highest per dwelling amount to landfill.
- On average, Essex sent 0.59 tonnes to landfill. Chelmsford sent the most amount of waste to landfill at 0.72 tonnes per dwelling whilst Rochford sent the least at 0.47 tonnes.
- 0.46 tonnes of waste per dwelling in Rochford District was recycled. This is the 2nd highest performance in the county and is an improvement on 10 places from the previous year. Rochford District is sending a larger amount of waste to recycling per dwelling than the Essex per dwelling average of 0.35 tonnes. Uttlesford residents recycled the most waste at 0.48 tonnes per dwelling whilst Tendring is sending the least at 0.18 tonnes.

Table 30: Waste Collected from Household Waste Recycling Centres per Dwelling in Essex 2008/2009

District	Dwellings	Tonnage per dwelling to landfill	Ranking (1 = lowest per dwelling)	Movement from last year (+ = worse)	Recycled tonnage per dwelling	Ranking (1 = highest per dwelling)	Movement from last year (- = worse)	Total tonnage per dwelling	Ranking (1 = lowest per dwelling)	Movement from last year (+ = worse)
Basildon	73,873	0.05	1	0	0.09	12	0	0.14	1	0
Braintree	61,118	0.09	5	0	0.13	10	0	0.21	4	+1
Brentwood	31,698	0.14	11	0	0.27	3	-2	0.41	10	-2
Castle Point	36,917	0.12	9	+1	0.18	6	-1	0.29	7	-1
Chelmsford	70,702	0.09	4	0	0.15	7	+1	0.24	5	0
Colchester	73,681	0.07	3	0	0.14	9	0	0.21	3	-1
Epping Forest	53,525	0.10	6	-1	0.15	8	-1	0.25	6	0
Harlow	35,315	0.11	8	-1	0.22	4	0	0.33	9	0
Maldon	26,651	0.14	12	+2	0.27	2	0	0.42	11	+1
Rochford	34,440	0.11	7	+1	0.19	5	+1	0.30	8	+1
Tendring	66,962	0.13	10	-2	0.29	1	+2	0.42	12	+1
Uttlesford	31,615	0.05	2	0	0.10	11	0	0.15	2	0
Essex	596,497	0.09	N/A	N/A	0.17	N/A	N/A	0.27	N/A	N/A

Source: Essex County Council 2009

Figure 35: Waste Collected from Household Waste Recycling Centres per Dwelling in Essex 2008/2009



Source: Essex County Council 2009

- 0.3 tonnes of waste per Rochford District dwelling was sent to Household Waste Recycling Centres (HWRC) in 2008 - 2009. This is the 8th highest amount in the county, and below the Essex average of 0.27 tonnes. At 0.42 tonnes per dwelling, Tendring residents sent the most waste to HWRC whilst Basildon sent the least at 0.14 tonnes per dwelling.
- 0.19 tonnes per dwelling of waste sent to a HWRC went on to be recycled. This is the 5th highest amount in the county, with a positive increase of a single place relative to the previous year, and above the county average of 0.17 tonnes per dwelling. Tendring District had the highest amount of HWRC waste sent to recycling at 0.29 tonnes per dwelling whilst Basildon reported the lowest at 0.09 tonnes per dwelling.
- In Rochford District, 0.11 tonnes of HWRC waste per dwelling was sent to landfill. This is the 7th highest amount in the county and above the Essex average of 0.11. Maldon landfilled the highest amount of HWRC waste at 0.14 tonnes per dwelling, with Basildon the least at 0.05 tonnes.

i) Comparison of Rochford District Landfilled and Recycled Waste Tonnage against Average Essex Performance 2000/2009

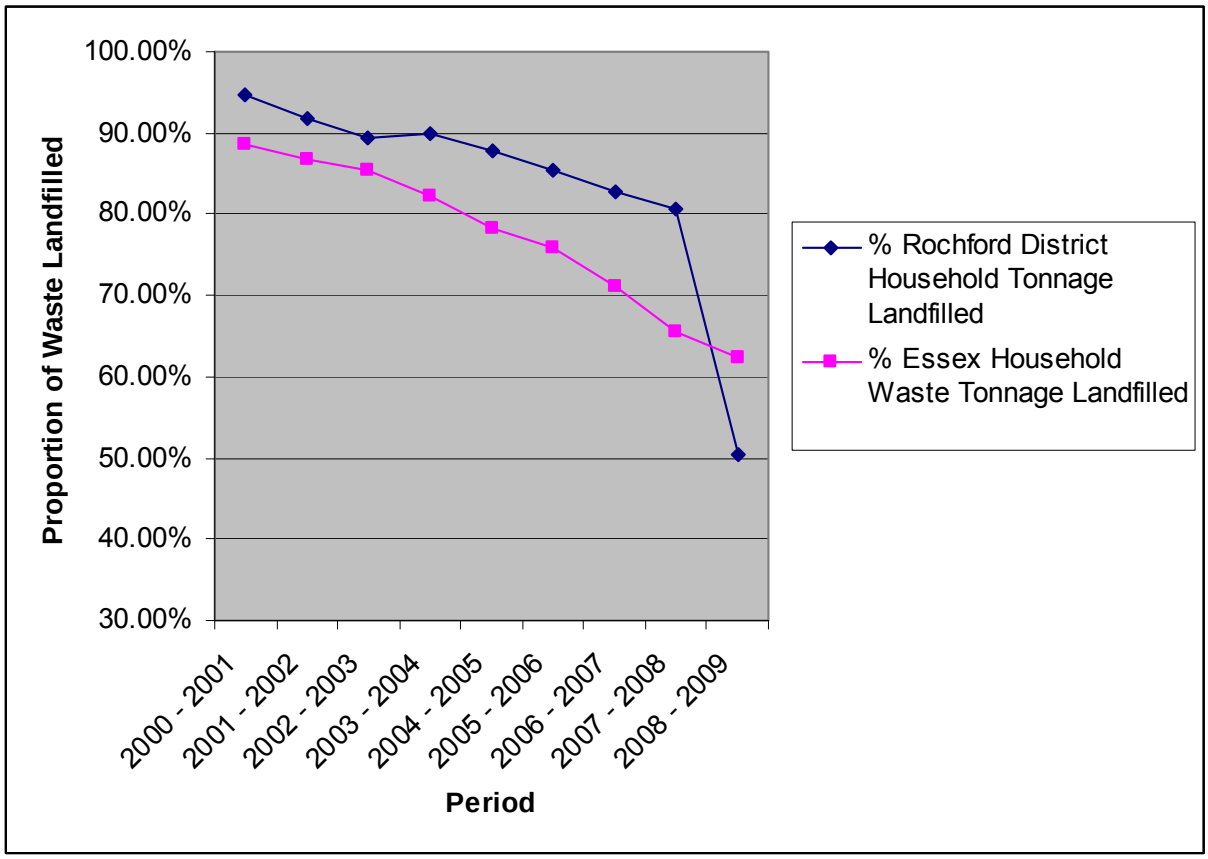
This section includes four separate tables with associated graphs, with two tables recording household waste movements and the remaining two focussing on HWRC waste. Each graph will display the total amount of waste collected in Rochford and Essex as well as the total amount that was either recycled or landfilled. Whilst it is realised that each pair of tables and graphs are the inverse of the other, they are included here for completeness.

Table 31: Household Waste Landfilled in Rochford and Essex 2000/2009

	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009
Rochford Household Waste Tonnage Landfilled	30,047	29,876	28,216	29,321	29,377	28,567	27,539	25,997	16,232
Rochford Total Household Waste Tonnage	31,698	32,531	31,535	32,578	33,504	33,428	33,252	32,252	32,150
% Rochford District Household Tonnage Landfilled	94.79%	91.84%	89.47%	90.00%	87.68%	85.46%	82.82%	80.61%	50.49%
Essex Household Waste Tonnage Landfilled	483,594	480,911	471,596	465,790	457,457	440,096	411,649	358,162	349,013
Essex Total Household Waste Tonnage	546,143	554,390	552,468	566,635	584,892	580,694	578,108	546,948	559,684
% Essex Household Waste Tonnage Landfilled	88.55%	86.75%	85.36%	82.20%	78.21%	75.79%	71.21%	65.48%	62.36%

Source: Essex County Council 2009

Figure 36: Proportion of Household Waste Landfilled in Rochford and Essex 2000/2009



Source: Essex County Council 2009

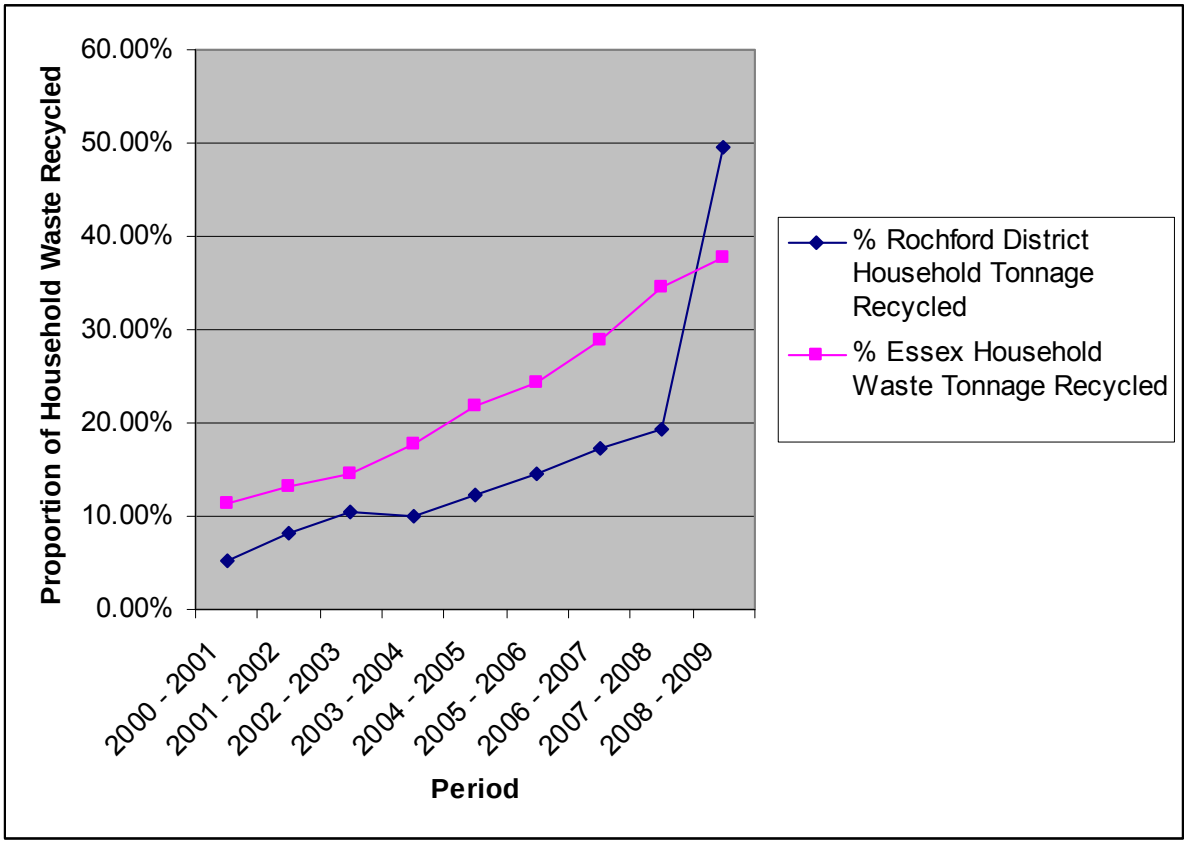
- The proportion of Rochford District household waste that was landfilled has fallen over the period of study, from 94.79% in 2000/2001 to 50.49% in 2008/2009. Within Essex, the proportion has also reduced across this time period, from 88.55% to 62.36%.
- The proportion of waste landfilled in Rochford District was above that of Essex across the period of study save for the final year, 2008/2009. This year represents by far the biggest decrease in the proportion of household waste landfilled in the district.
- Across the period of study, there has only been one instance of an upturn in the proportion of household waste landfilled in Rochford. This occurred during the period 2002/2003 to 2003/2004. Within Essex as a whole there has been a year on year reduction.

Table 32: Household Waste Recycled in Rochford and Essex 2000/2009

	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009
Rochford Household Waste Tonnage Recycled	1,651	2,656	3,320	3,257	4,127	4,862	5,713	6,255	15,918
Rochford Total Household Waste Tonnage	31,698	32,531	31,535	32,578	33,504	33,428	33,252	32,252	32,150
% Rochford District Household Tonnage Recycled	5.21%	8.16%	10.53%	10.00%	12.32%	14.54%	17.18%	19.39%	49.51%
Essex Household Waste Tonnage Recycled	62,550	73,479	80,872	100,845	127,434	140,597	166,458	188,786	210,670
Essex Total Household Waste Tonnage	546,143	554,390	552,468	566,635	584,892	580,694	578,108	546,948	559,684
% Essex Household Waste Tonnage Recycled	11.45%	13.25%	14.64%	17.80%	21.79%	24.21%	28.79%	34.52%	37.64%

Source: Essex County Council 2009

Figure 37: Proportion of Household Waste Recycled in Rochford and Essex 2000/2009



Source: Essex County Council 2009

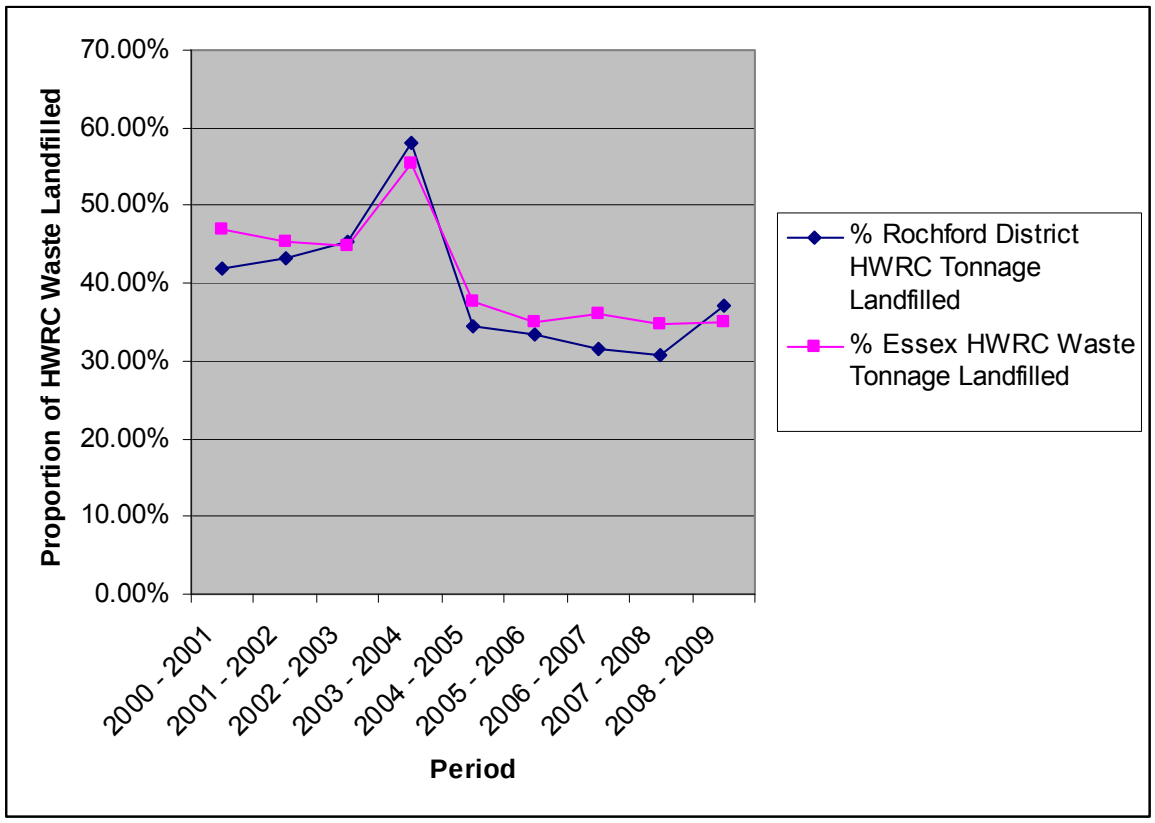
- The proportion of Rochford District household waste that was recycled has increased over the period of study, from 5.21% in 2000/2001 to 49.51% in 2008/2009. Within Essex, the proportion has also increased across this time period, from 11.45% to 37.64%.
- The proportion of household waste recycled in Essex has been above that in Rochford across the period of study save for the final year, 2008/2009, where Rochford reported a proportional increase to 49.51%, up from 19.39% in 2007/2008.
- Across the period of study, there has only been one instance of a downturn in the proportion of household waste recycled in Rochford. This occurred during the period 2002/2003 to 2003/2004. Within Essex as a whole there has been a year on year increase.

Table 33: Household Waste Recycling Centre Waste Landfilled in Rochford and Essex 2000/2009

	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009
Rochford HWRC Waste Tonnage Landfilled	4,292	5,311	4,979	5,364	3,534	3,188	3,330	3,300	3,795
Rochford Total HWRC Waste Tonnage	10,236	12,282	10,954	9,219	10,237	9,529	10,551	10,690	10,193
% Rochford District HWRC Tonnage Landfilled	41.94%	43.24%	45.45%	58.19%	34.53%	33.45%	31.56%	30.87%	37.24%
Essex HWRC Waste Tonnage Landfilled	75,620	82,899	80,402	85,109	59,982	51,933	57,745	56,459	55,613
Essex Total HWRC Waste Tonnage	161,509	183,226	179,141	153,476	159,363	148,751	160,397	162,486	159,182
% Essex HWRC Waste Tonnage Landfilled	46.82%	45.24%	44.88%	55.45%	37.64%	34.91%	36.00%	34.75%	34.94%

Source: Essex County Council 2009

Figure 38: Household Waste Recycling Centre Waste Landfilled in Rochford and Essex 2000/2009



Source: Essex County Council 2009

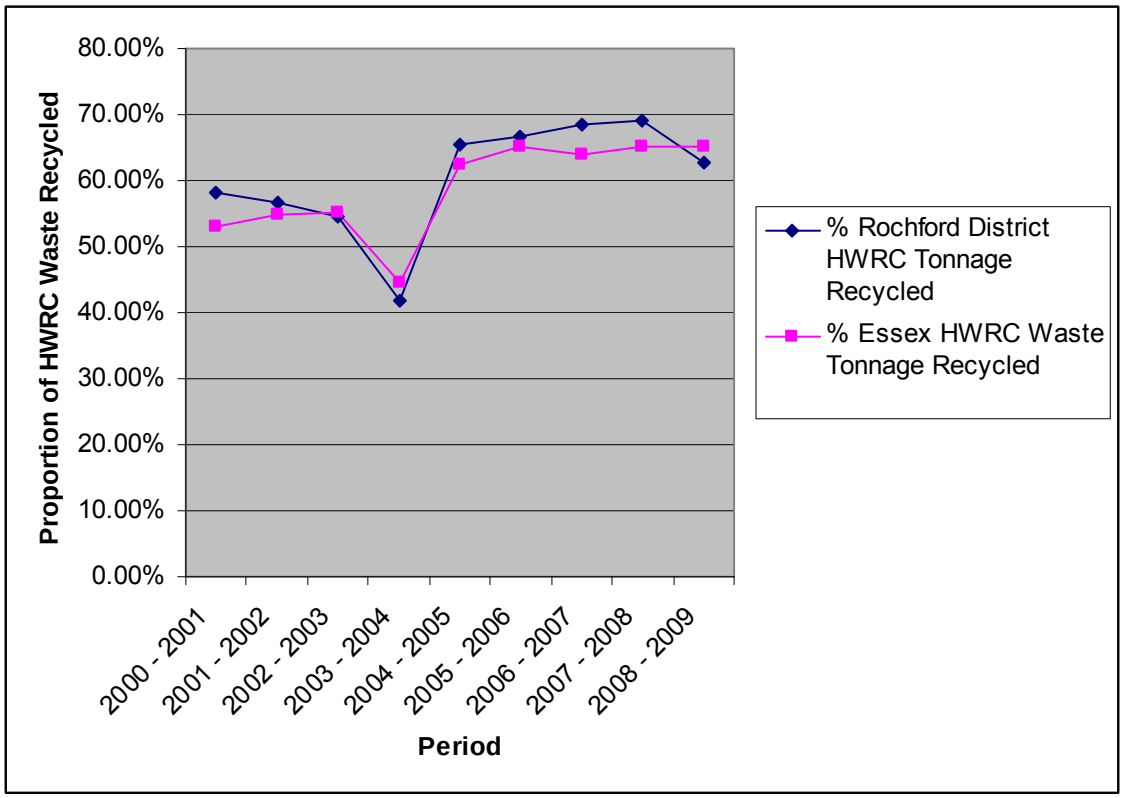
- The proportion of Rochford District HWRC waste that was landfilled has fallen over the period of study, from 41.94% in 2000/2001 to 37.24% in 2008/2009. Within Essex, the proportion has also reduced across this time period, from 46.82% to 34.94%.
- Both Rochford and Essex recorded a spike in HWRC waste which was landfilled in 2003/2004.
- Since 2004/2005, the proportion of HWRC waste landfilled has typically been higher in Essex. However, in 2008/2009, a larger proportional increase of landfilled HWRC waste was reported in Rochford than Essex, taking the overall proportion of landfilled waste in Rochford above that of Essex.
- The proportional landfilled waste increase reported in Rochford in 2008/2009 was the first increase since 2006/2007.

Table 34: Household Waste Recycling Centre Waste Recycled in Rochford and Essex 2000/2009

	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009
Rochford HWRC Waste Tonnage Recycled	5,943	6,971	5,975	3,855	6,702	6,341	7,221	7,390	6,398
Rochford Total HWRC Waste Tonnage	10,236	12,282	10,954	9,219	10,237	9,529	10,551	10,690	10,193
% Rochford District HWRC Tonnage Recycled	58.06%	56.76%	54.55%	41.81%	65.47%	66.55%	68.44%	69.13%	62.76%
Essex HWRC Waste Tonnage Recycled	85,889	100,327	98,739	68,368	99,381	96,818	102,652	106,027	103,569
Essex Total HWRC Waste Tonnage	161,509	183,226	179,141	153,476	159,363	148,751	160,397	162,486	159,182
% Essex HWRC Waste Tonnage Recycled	53.18%	54.76%	55.12%	44.55%	62.36%	65.09%	64.00%	65.25%	65.06%

Source: Essex County Council 2009

Figure 39: Household Waste Recycling Centre Waste Recycled in Rochford and Essex 2000/2009



Source: Essex County Council 2009

- The proportion of Rochford District HWRC waste that was recycled has increased over the period of study, from 58.06% in 2000/2001 to 62.76% in 2008/2009. Within Essex, the proportion has also increased across this time period, from 53.18% to 66.06%.
- Since 2004/2005, the proportion of HWRC waste recycled has typically been higher in Rochford. However, in 2008/2009, a larger proportional decrease of recycled HWRC waste was reported in Rochford than Essex, taking the overall proportion of recycled waste in Rochford below that of Essex.
- The proportional recycled waste decrease reported in Rochford in 2008/2009 was the first decrease since 2006/2007.

C. Essex County Performance against National Indicators 191 and National Indicator 192

Please note that earlier editions of this AMR focussed on performance against BVPI 82a; the percentage of total household waste recycled and BVPI82b; the percentage of total household waste that was composted. These have been superseded by NI191 and 192 which look at, respectively, the amount and proportion of household waste which is reused, recycled or composted over the monitoring period. As such this AMR will reproduce the performance statistics across Essex for the period 2008 – 2009 for both NI191 and NI192.

Table 35: Performance against National Indicators 191 and 192

AUTHORITY	Household Waste to Landfill (Tonnes)	Household Waste Reused or Recycled (Tonnes)	Household Waste Composted (Tonnes)	Total Household Waste Arisings (Tonnes)	Local Performance Indicators		Number of Households	National Indicators		Local Area Agreement	
					Household Waste Reused or Recycled (%)	Household Waste Composted (%)		NI191 Residual Household Waste Per Household (Kg)	NI192 Household Waste Reused, Recycled, Composted (%)	NI191 Target (08/09)	NI192 Target (08/09)
Basildon	47,055.99	18,894.80	10,716.00	76,666.79	24.65%	13.98%	73,873	637	38.62%	701	33.0%
Braintree	31,245.34	15,171.93	10,436.99	56,854.26	26.69%	18.36%	61,118	511	45.04%	530	43.0%
Brentwood	16,434.91	8,254.09	3,868.48	28,557.48	28.90%	13.55%	31,698	518	42.45%	556	40.0%
Castle Point	23,085.31	7,441.00	3,625.14	34,151.46	21.79%	10.61%	36,917	625	32.40%	698	28.0%
Chelmsford	46,282.10	14,765.68	14,000.45	75,048.23	19.67%	18.66%	70,702	655	38.33%	729	36.0%
Colchester	38,275.77	13,919.14	8,448.74	60,643.65	22.95%	13.93%	73,681	519	36.88%	583	34.0%
Epping Forest	28,690.94	14,519.82	7,528.52	50,739.28	28.62%	14.84%	53,525	536	43.45%	562	40.0%
Harlow	20,308.52	6,714.83	439.00	27,462.35	24.45%	1.60%	35,315	575	26.05%	633	24.0%
Maldon	14,302.29	5,037.77	3,321.24	22,661.30	22.23%	14.66%	26,651	537	36.89%	594	34.5%
Rochford	16,232.12	8,332.31	7,586.02	32,150.45	25.92%	23.60%	34,440	471	49.51%	734	25.0%
Tendring	33,585.50	12,327.07	0.00	45,912.57	26.85%	0.00%	66,962	502	26.85%	548	26.0%
Uttlesford	12,852.20	9,525.53	5,795.71	28,173.45	33.81%	20.57%	31,615	407	54.38%	424	55.0%
Waste Collection Authority Total	328,350.99	134,903.99	75,766.29	539,021.27	25.03%	14.06%	596,497	550	39.08%		
Essex County Council	55,613.08	43,719.10	34,741.37	134,073.55	32.61%	25.91%	596,497	93	58.52%	99	60.0%
Essex Total	383,964.07	178,623.10	110,507.66	673,094.82	26.54%	16.42%	596,497	644	42.96%	710	40.25%

Source: Essex County Council 2009

- Against a NI191 target of 471kg, Rochford District reported a NI191 of 734kg. Regarding NI192, Rochford reported a score of 49.51% which is above the minimum target of 25%. Rochford therefore satisfied the requirements of NI191 and NI192.
- With a NI191 target of 710kg, Essex County reported a value of 644kg. NI192 was also satisfied, with the county value of 42.96% exceeding the requirement of 40.25%.
- All of the districts and boroughs across Essex satisfied the performance requirements of NI191, with Uttlesford the only District to fail under NI192.

D. Minerals and Waste Planning Applications 2008-2009

Table 36 outlines the total number of Minerals and Waste Planning Applications which were determined by Essex County Council within the 2008/2009 monitoring year (1st April 2009 to the 31st March 2009).

As can be seen there was only one new minerals extraction site in the county which was an extension to Martells Quarry in Tendring District. All other minerals applications were variation of condition applications for existing sites except for one periodic review of an IDO.

Table 36: Total Number of Minerals and Waste Planning Applications Determined in 2008/09

Type of applications determined.	Waste			Minerals			Total		
	D	G	R	D	G	R	D	G	R
Full Application	22	18	4	1	1	0	23	19	4
Retrospective Application	0	0	0	0	0	0	0	0	0
Certificate of Lawful Existing Use	2	1	1	0	0	0	2	1	1
Variation of Conditions	4	2	2	6	6	0	10	8	2
IDO	N/A	N/A	N/A	1	1	0	1	1	0
Total	28	21	7	8	8	0	36	29	7

Source: Essex County Council 2009 (D=Determined, G=Granted, R=Refused)

- There were three and a half times as many waste applications compared to minerals planning applications in the 2008/09 monitoring year. The type of waste operations permitted as a result of the 21 waste planning applications granted within the County is outlined in Table 37.

Table 37: Type of waste operations permitted in Essex 2008/09

Type of waste operations permitted	Number
Composting	1
Incinerator	0
Civic Amenity Site	0
Inert Landfill	1
Metal / ELV	3
Non-Haz Landfill	0
Materials Recycling Facility	6
Waste Transfer	6
Treatment	2
Sewage Treatment	0
Other	219
TOTAL	238

Source: Essex County Council 2009

- There were no minerals planning applications and one waste planning application within Rochford during the 2008/09 monitoring year. The details of the waste planning application are outlined in Table 38.

Table 38: Minerals and Waste Applications in Rochford 2008/09

Site/ Location	Application Number	Type of Application	Description of Proposal	Decision Date	Decision	Type of Waste Facility
Eco Logic Yard, Purdeys Industrial Estate, Rochford	ESS/20/08/ROC	Variation of Conditions	Continuation of use as a waste transfer station without compliance with Condition 1 (application details) attached to planning permission ESS/53/06/ROC to allow the rearrangement of permitted structures within the site, relocation of soil screen, increase	15/08/2008	Granted	C&D Recycling

Source: Essex County Council 2009

8.3 Soils, Minerals And Waste Summary

- 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 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.
- Within Rochford District, 13.8% (2,352 hectares) of agricultural land is classified as grade 1, 14.2% (2,417 hectares) as grade 2, and 55.6% (9,488 hectares) is

classified as grade 3. The majority of grade 1 listed agricultural soils can be found to the south of the district on the border with Southend On Sea Unitary Authority, with the majority of grade 2 listed land centrally located in the district as well as there being a small isolated area present to the east.

- Within Rochford District, 42,343.73 tonnes of waste was produced in 2008/2009. This is the fourth lowest amount in the County, with Essex as a whole producing 718,865.59 tonnes across the 12 districts and boroughs.
- The total amount of waste sent to landfill in Rochford has decreased from 30,047.29 tonnes in 2000/2001 to 16,232.12 tonnes in 2008/2009, meaning that Rochford District sent 54.21% of its total landfilled waste in 2000/2001 to landfill in 2008/2009. The corresponding figure for Essex as a whole is 72.2%.
- 49.51% of Rochford District's household waste was recycled in 2008/2009. This is the 3rd highest proportion in the county and is above the 19.39% recorded in 2007/2008 which was the lowest proportion across Essex. The Essex average is recorded as 37.64%, up from 34.52% in 2007/2008.
- For each dwelling within Rochford District, an average of 0.93 tonnes of waste was collected from the home. This was the 5th highest amount in the county. In 2008/2009, the total amount of district waste per resident was 0.01 tonnes below the Essex average of 0.94 tonnes.
- Of the 0.93 tonnes collected from each Rochford District dwelling, 0.47 tonnes went to landfill. This is the lowest amount in the county whereas previously the district was recording the highest per dwelling amount to landfill. On average, Essex sent 0.59 tonnes to landfill.
- 0.46 tonnes of waste per dwelling in Rochford District was recycled. This is the 2nd highest performance in the county and is an improvement on 10 places from the previous year. Rochford District is sending a larger amount of waste to recycling per dwelling than the Essex per dwelling average of 0.35 tonnes.
- 0.3 tonnes of waste per Rochford District dwelling was sent to Household Waste Recycling Centres (HWRC) in 2008/2009. This is the 8th highest amount in the county, and below the Essex average of 0.27 tonnes.
- 0.19 tonnes per dwelling of waste sent to a HWRC went on to be recycled. This is the 5th highest amount in the county, with a positive increase of a single place relative to the previous year, and above the county average of 0.17 tonnes per dwelling.
- In Rochford District, 0.11 tonnes of HWRC waste per dwelling was sent to landfill. This is the 7th highest amount in the county and above the Essex average of 0.11.
- The proportion of Rochford District household waste that was landfilled has fallen over the period of study, from 94.79% in 2000/2001 to 50.49% in 2008/2009. Within Essex, the proportion has also reduced across this time period, from 88.55% to 62.36%.
- The proportion of Rochford District HWRC waste that was landfilled has fallen over the period of study, from 41.94% in 2000/2001 to 37.24% in 2008/2009. Within Essex, the proportion has also reduced across this time period, from 46.82% to 34.94%.
- Against a NI191 target of 471kg, Rochford District reported a NI191 of 734kg. Regarding NI192, Rochford reported a score of 49.51% which is above the minimum target of 25%. Rochford therefore satisfied the requirements of NI191 and NI192.
- There were no minerals planning applications and one waste planning application within Rochford during the 2008/09 monitoring year.

PART TWO:
Built Environment

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9 CULTURAL HERITAGE AND TOWNSCAPE

9.1 Introduction

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 influences the character of towns, villages and the countryside.

9.2 Baseline Information

A. 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 373,981 listed buildings or groups of buildings in England and 14,317 in Essex (English Heritage, September 2009). Of these 327 are within Rochford District. This accounts for 2.28% of all listed buildings within the county. Table 39 outlines the listed building composition for the district.

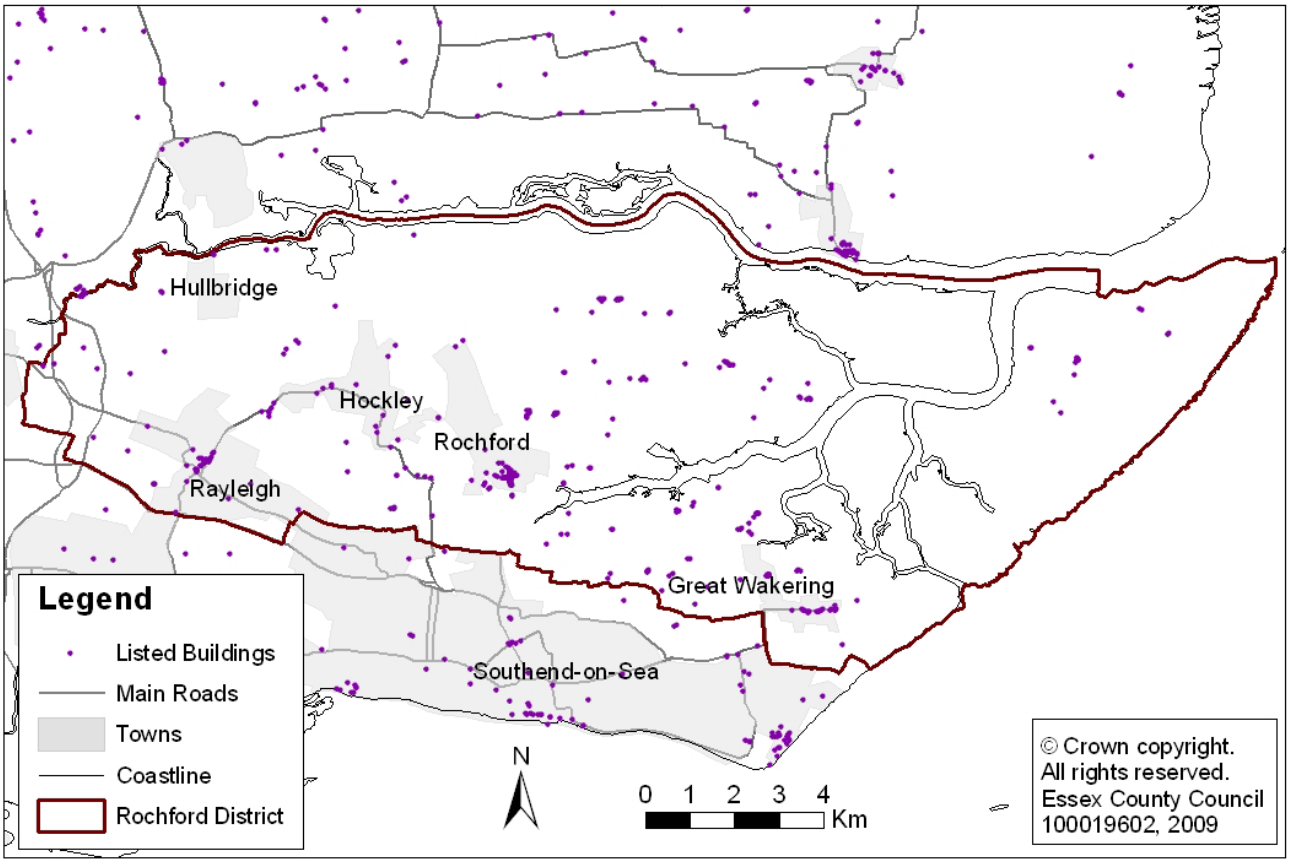
Table 39: Listed Building Composition for Rochford District

Type of Listed Building	Total Number
Grade I	1
Grade II*	17
Grade II	309
Total	327

Source: English Heritage, September 2009 (http://www.english-heritage.org.uk/)

- The majority of listed buildings in the district are grade II listed. There is one listed building of exceptional interest (grade I) and 17 which are particularly important buildings of more than special interest (grade II*).

Figure 40: Listed Buildings in Rochford District



Source: Essex County Council, 2009

There are clusters of listed buildings within the historic settlements and located along historic transport routes with few in the more rural parts of the district.

B. Historic Buildings At Risk Register (BARR)

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 40: Number of buildings on the Buildings at Risk Register in 2007, 2008 and 2009

Administrative Area	At Risk		
	2009	2008	2007
Basildon	4	2	2
Braintree	20	23	27
Brentwood	8	9	9
Castle Point	0	0	0
Chelmsford	15	12	16
Colchester *	36	36	38
Epping Forest	23	23	15
Harlow	2	2	2
Maldon	10	11	10
Rochford	7	7	9
Tendring	26	28	26
Uttlesford *	15	16	16
TOTAL	166	169	170

Note: * No figures received from Local Authority

Source: Essex County Council 2009

The register addresses a 'moving target' where some buildings which are repaired are taken off and others which become at risk are added.

The number of buildings at risk in 2009 in the district is the fourth lowest in the county. There have been no buildings added or removed from the register in 2009 meaning that there are still 7 buildings at risk in the district. These are:

- Ridgemarsh Farmhouse, Court End, Foulness (Grade II)
- Barn south east of Ridgemarsh Farmhouse, Court End, Foulness (Grade II)
- Quay Farmhouse (Monkton Barns), Foulness (Grade II)
- Bake/Brewhouse 3m N of Quay Farmhouse, Foulness (Grade II)
- Trenders Hall, Trenders Avenue, Rawreth (Grade II)
- Outbuilding at Apton Hall Farmhouse, Canewdon (Grade II)
- Clements Hall, Victor Gardens, Hawkwell (Grade II)

The most recent addition to the register is Bake/Brewhouse which was added in 2005 while the buildings which have been on the register for the longest length of time are Ridgemarsh Farmhouse and the Barn south east of Ridgemarsh Farmhouse. These were added in 1991.

Table 41: Buildings 'At Risk' by Priority, 2009

Administrative Area	2009					
	A	B	C	D	E	F
Basildon	1	0	2	0	0	0
Braintree	9	0	5	2	4	0
Brentwood	5	0	4	1	0	0
Castle Point	0	0	0	0	0	0
Chelmsford	3	1	9	0	2	0
Colchester	18	0	12	4	1	0
Epping Forest	5	2	10	0	2	1
Harlow	1	0	1	0	0	0
Maldon	4	1	3	1	1	0
Rochford	0	0	3	4	0	0
Tendring	0	0	11	3	0	0
Uttlesford	6	0	6	4	0	0
TOTAL	52	4	66	19	10	1

Source: Essex County Council 2009

- There are no buildings on the BARR listed as being in priority A or B in Rochford District which means there are no buildings at immediate risk of further rapid deterioration or loss of fabric. The three buildings categorised in priority C are in slow decay with no solution for restoration agreed while the four in priority D are in slow decay but with solutions agreed but not yet implemented.

For further information about the individual buildings on the BARR within the district visit the Essex County Council website at:

http://www.essexcc.gov.uk

C. Archaeology, recorded sites and finds in Rochford District

The majority of archaeological sites and deposits in Rochford District remain buried, hidden and thus preserved. However, the known archaeological resource in the district is very varied and highly significant. There are 1,158 records of archaeological sites and finds recorded on the Essex Historic Environment Record (EHER) for Rochford District with approximately 21,298 sites and finds listed within the county as a whole. The archaeological deposits range in date from the Palaeolithic, through a variety of prehistoric, Roman, Saxon and medieval settlements to post-medieval / modern industrial sites and World War II / Cold War monuments. 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.

D. Scheduled Monuments

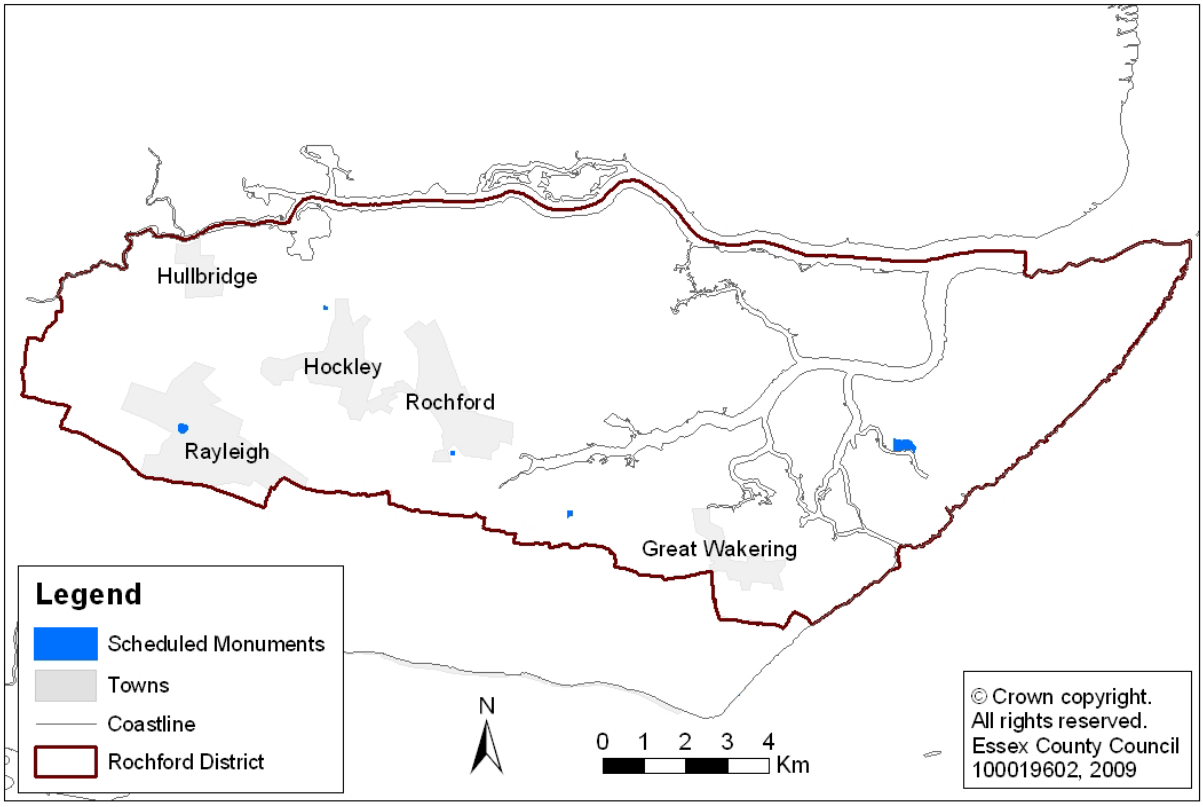
Scheduled Monuments (SMs) are sites of national importance and are protected by the Ancient Monuments and Archaeological Areas Act 1979. The purpose of designating SMs is to preserve the monument for the future and protect it from damage, destruction or any unnecessary interference. Throughout Essex there are 297, ranging from prehistoric burial

mounds to unusual examples of World War II defensive structures. Five SMs are within Rochford District:

- Plumberow Mount, Hockley
- A Second World War heavy anti-aircraft gun site near Butlers Gate, Sutton
- A Romano-British burial site on Foulness Island, Foulness
- Rayleigh Castle, Rayleigh
- Rochford Hall (uninhabited portions), Rochford

The locations of the SMs in the district are shown in Figure 41.

Figure 41: Scheduled Monuments in Rochford District



Source: Essex County Council, 2009

E. Historic Landscape

The district is dominated by the urban areas of Rayleigh and Rochford. Both of these are mainly Post World War II developments, with smaller historic cores (both of which are designated Conservation Areas) located within them. The town of Rayleigh contains a fourteenth century church and the moat of a Norman Royal Castle.

Beyond the urban areas there is generally a flat landscape around the coastal areas and gently undulating arable farmland around the rivers Crouch and Roach. There are many isolated farms and barns and small fringe villages.

Across the district, woodland is concentrated in large blocks in the centre of the area. Narrow bands and broader areas of gently undulating arable farmland separate urban areas with a complex network of transportation routes.

The landscape of the district can be summarised into three categories; urban, farmland and coastal. Farmland areas, concentrated to areas surrounding the two rivers in the

district, contain a network of lanes to which small settlements arise. The coastal areas of the district contain vast tidal mudflats and sands, extensive salt marshes and arable farmland of reclaimed marshlands, intersected by ditches and dykes.

F. Conservation Areas

There are 215 designated Conservation Areas within the county of Essex, 10 of which are within Rochford 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 developments which do not preserve or enhance its character.

Conservation Area Appraisals and Management plans have been produced by the district for all 10 Conservation Areas and recommendations from the appraisals regarding changes to the boundary lines for five of the Conservation Areas have since been approved with the boundary lines adjusted. The five Conservation Areas are Rayleigh, Rochford, Canewdon High Street, Canewdon Church and Great Wakering.

Table 42 details the names of the Conservation Areas in the district and the date of their designation and/or last amendment, while Figure 42 shows their location.

Table 42: Conservation Area and the Date of Designation and/or Last Amendment

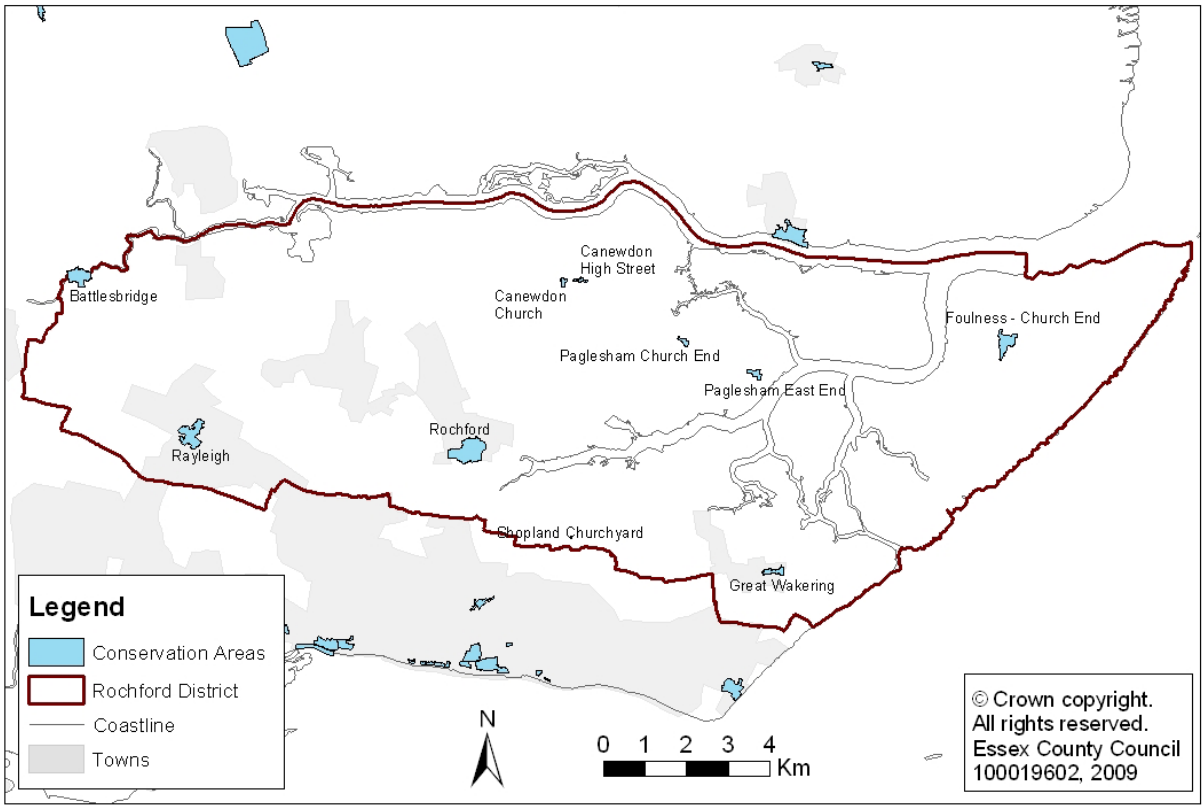
	Name of Conservation Area	Date of Designation & Amendments
1	Battlesbridge (Joint with Chelmsford BC)	March-1992
2	Canewdon Church	March-1986 (Amended 2009)
3	Canewdon High Street	March-1992 (Amended 2009)
4	Foulness Churchend	March-1992
5	Great Wakering	March-1986 (Amended 2006 & 2009)
6	Pagelsham Churchend	November-1973
7	Pagelsham East End	March-1986
8	Rayleigh	October-1969 (Amended 2001 & 2009)
9	Rochford	June-1969 (Amended 2001 & 2009)
10	Shopland Churchyard	March-1992

Source: Rochford District Council, 2009

For further information regarding Rochford District's Conservation Areas and their appraisals visit Rochford District Councils website at:

www.rochford.gov.uk

Figure 42: Conservation Areas in Rochford District



Source: Essex County Council, 2009

9.3 Cultural Heritage and Townscape Summary

- There are 327 listed buildings within Rochford District, the majority of which (309) are Grade II followed by 17 Grade II* and one Grade I listed.
- In 2009, there were seven buildings on the Buildings at Risk Register (BARR) in Rochford District with none being added or removed.
- The most recent addition to the BARR is Bake/Brewhouse which was added in 2005 while the oldest buildings are Ridgemarsh Farmhouse and the Barn south east of Ridgemarsh Farmhouse which were added in 1991.
- There are five Scheduled Monuments within the district:
    - Plumberow Mount, Hockley
    - A Second World War heavy anti-aircraft gun site near Butlers Gate, Sutton
    - A Romano-British burial site on Foulness Island, Foulness
    - Rayleigh Castle, Rayleigh
    - Rochford Hall (uninhabited portions), Rochford
- There are 1,158 records of archaeological sites and finds, recorded on the Essex Historic Environment Record (EHER) for Rochford District.
- There are 10 Conservation Areas in Rochford District, five of which have recently had their boundary lines amended. These are Rayleigh, Rochford, Canewdon High Street, Canewdon Church and Great Wakering Conservation Areas.

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10 HEALTH

10.1 Introduction

Health is of paramount importance to the sustainability of any community although until recently it hasn't formed a central part of the planning process. A good quality of health is inextricably linked to such factors as the potential for economic growth, poverty and other forms of deprivation, quality of life, population and housing.

10.2 Baseline Information

The Health chapter opens with an analysis of age standardised mortality rates for cancer and circulatory diseases. The expected life expectancy at birth within the district will be compared to Regional and National results as will the rate of teenage pregnancy. Following this will be an analysis of the proportion of people receiving Incapacity Benefit and Severe Disablement Allowance to the total population. The chapter also includes information relating to sport participation and the availability of sport and leisure centres. The chapter concludes with a look at the public perception of the availability of leisure facilities, open space and activities for teenagers. This is looked at across the county and is broken down by local authority.

A. Directly Standardised Mortality Ratio

The directly standardised mortality rate is used for calculating the number of mortalities that would occur in a standard population (per 100,000) if that standard population had the age specific mortality rates of a given area. In this case the European standard population is used. Separate directly standardised mortality ratios are presented for all circulatory diseases and cancer for those under 75. This distinction is made as deaths under the age of 75 are deemed 'early deaths' and are the most preventable.

Please note that whilst there appears to be more variance in the trend witnessed for Rochford District, it is recognised that direct standardisation (and indirect standardisation) will show a wider variation in its results as the calculations are made using a relatively smaller population and therefore a smaller number of deaths. The fact that directly standardised calculations are also based on the number of deaths in separate age groups further exacerbates this problem.

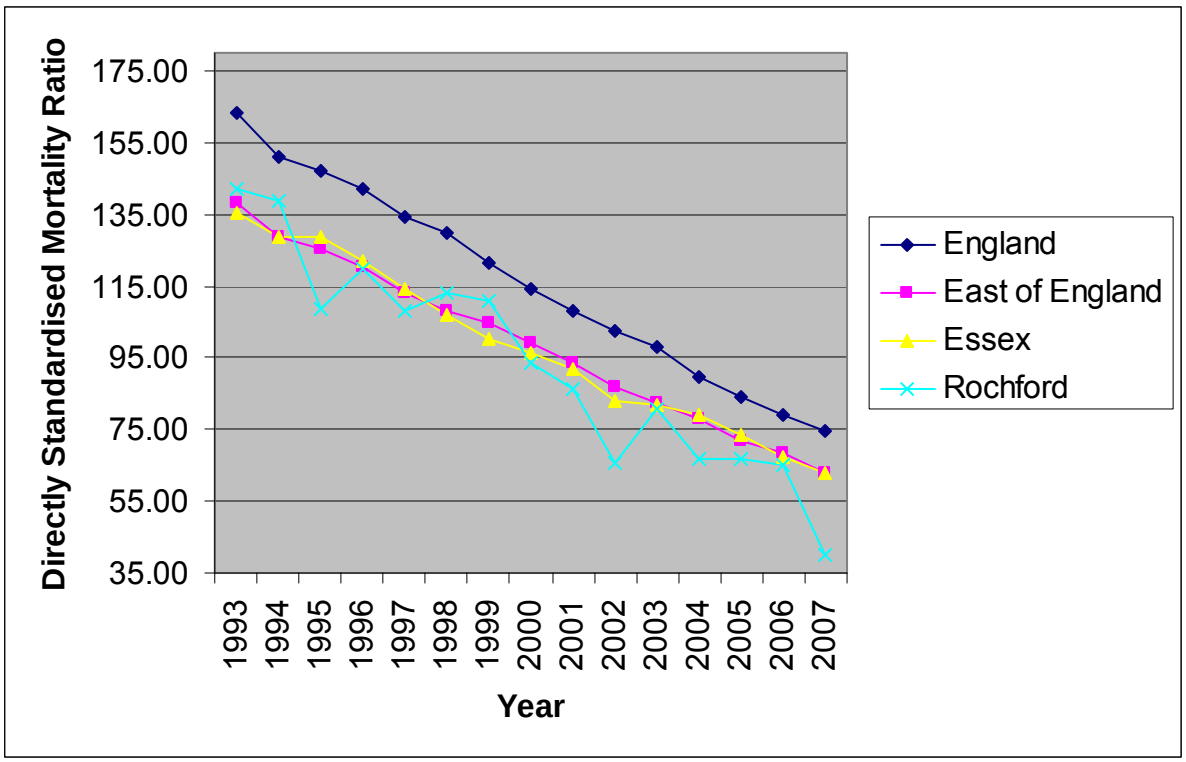
Table 43: Directly Standardised Mortality Rate for All Circulatory Diseases for People under 75 across Essex 1993 - 2007

	1993	1994	1995	1996	1997	1998	1999	2000
England	163.19	150.95	147.34	142.35	134.27	129.54	121.69	114.07
East of England	138.35	128.95	125.19	120.34	112.90	108.26	104.73	99.26
Essex	135.11	128.81	128.69	122.00	113.97	106.73	100.30	96.33
Rochford	142.26	138.60	108.81	119.92	107.86	112.95	110.57	93.59

	2001	2002	2003	2004	2005	2006	2007
England	107.85	102.75	97.76	89.69	84.03	79.00	74.40
East of England	93.37	86.99	82.34	77.94	72.07	68.71	63.01
Essex	91.62	83.22	82.04	78.89	73.54	67.47	62.63
Rochford	86.41	65.60	80.53	67.04	66.65	65.04	39.92

Source: Clinical and Health Outcomes Knowledge Base 2009 (http://www.nchod.nhs.uk/)

Figure 43: Rochford District Comparison of Directly Standardised Mortality Rate for All Circulatory Diseases for People under 75 1993 - 2007



Source: Clinical and Health Outcomes Knowledge Base 2009 (http://www.nchod.nhs.uk/)

- There has been a decrease in the number of deaths suffered by all circulatory diseases at all geographical hierarchies.
- In 2007, 39.92 people per 100,000 could be expected to die from circulatory diseases within the district. This is significantly lower than the rates of 74.40 in England, 63.01 in the East of England and 62.63 in Essex.

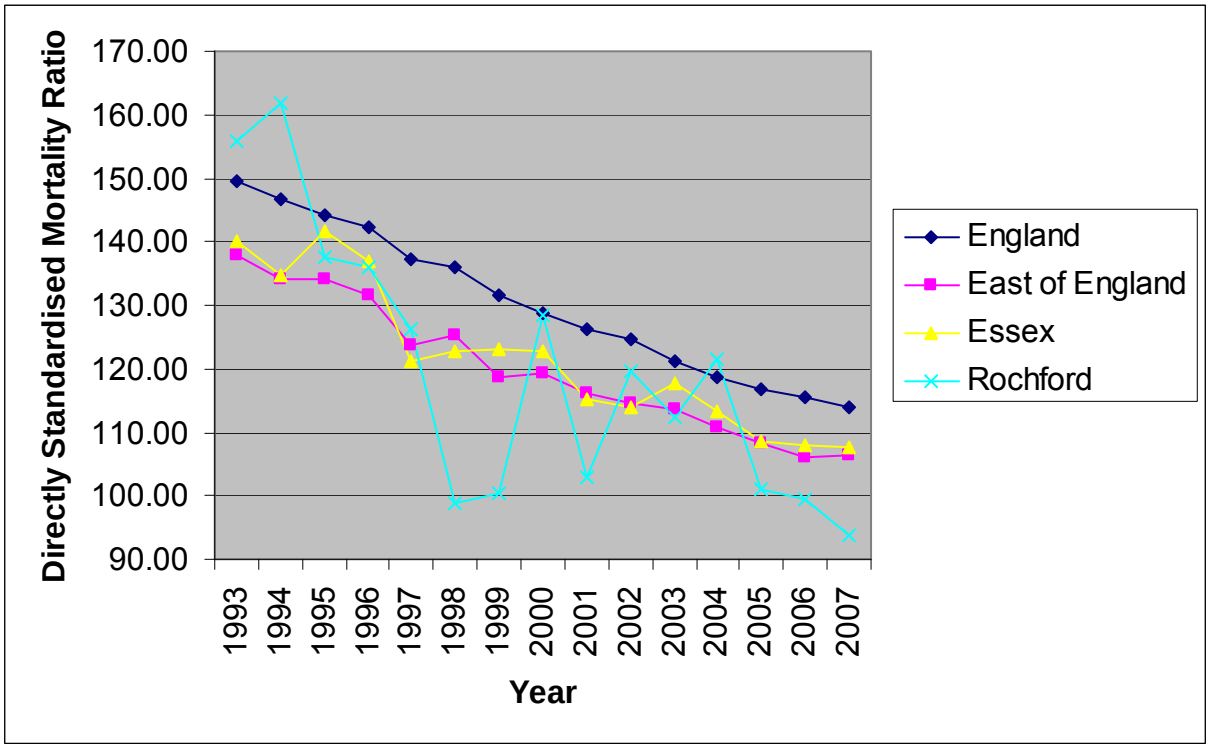
Table 44: Directly Standardised Mortality Rate for All Cancers for People under 75 across Essex 1993 - 2007

	1993	1994	1995	1996	1997	1998	1999	2000
England	149.56	146.63	144.21	142.18	137.23	135.96	131.52	128.66
East of England	137.80	134.16	134.24	131.55	123.76	125.12	118.67	119.17
Essex	140.22	134.58	141.59	136.88	121.25	122.80	123.16	122.67
Rochford	155.77	161.66	137.71	135.94	126.15	98.88	100.35	128.35

	2001	2002	2003	2004	2005	2006	2007
England	126.07	124.75	121.30	118.75	116.80	115.54	114.07
East of England	116.29	114.46	113.54	110.90	108.17	105.91	106.53
Essex	115.17	114.08	117.74	113.20	108.66	108	107.65
Rochford	102.90	119.57	112.22	121.53	100.96	99.44	93.64

Source: Clinical and Health Outcomes Knowledge Base 2009 (http://www.nchod.nhs.uk/)

Figure 44: Rochford District Comparison of Directly Standardised Mortality Rate for All Cancers for People under 75 across Essex 1993 - 2007



Source: Clinical and Health Outcomes Knowledge Base 2009 (http://www.nchod.nhs.uk/)

- There has been a decrease in the rate of mortality in the under 75s caused by all cancers across the period of study.
- Whilst reported mortality rates in the district can be seen to rapidly fluctuate, they have been below those seen in England since 2004.

- In 2007 Rochford reported a DSMR of 93.64 for deaths relating to cancer in people aged under 75. This is a lower mortality rate than England (114.07), the East of England (106.53) and Essex (107.65).

B. Life Expectancy

The table below highlights the average life expectancy of Rochford District, East of England and England residents at birth. Please note that all references to 'life expectancy' should be taken to mean 'life expectancy at birth' in the remainder of this section.

Table 45: Life Expectancy at Birth in Rochford District, East of England and England

	January 2001 - December 2003		January 2002 - December 2004		January 2003 - December 2005		January 2004 - December 2006		January 2005 - December 2007	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Rochford	78.5	82.3	78.9	82.7	78.9	83.1	79.3	84.3	79.6	84.4
East of England	77.3	81.4	77.6	81.6	78.0	81.9	78.3	82.2	78.7	82.6
England	76.2	80.7	76.5	80.9	76.9	81.1	77.3	81.6	77.7	81.8

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- Life expectancy has shown a general upward trend in all areas between January 2001 and December 2007.
- By January 2005 – December 2007, life expectancy increased to 79.6 years for males and 84.4 years for females. This is above the life expectancy for the East of England and nationally.

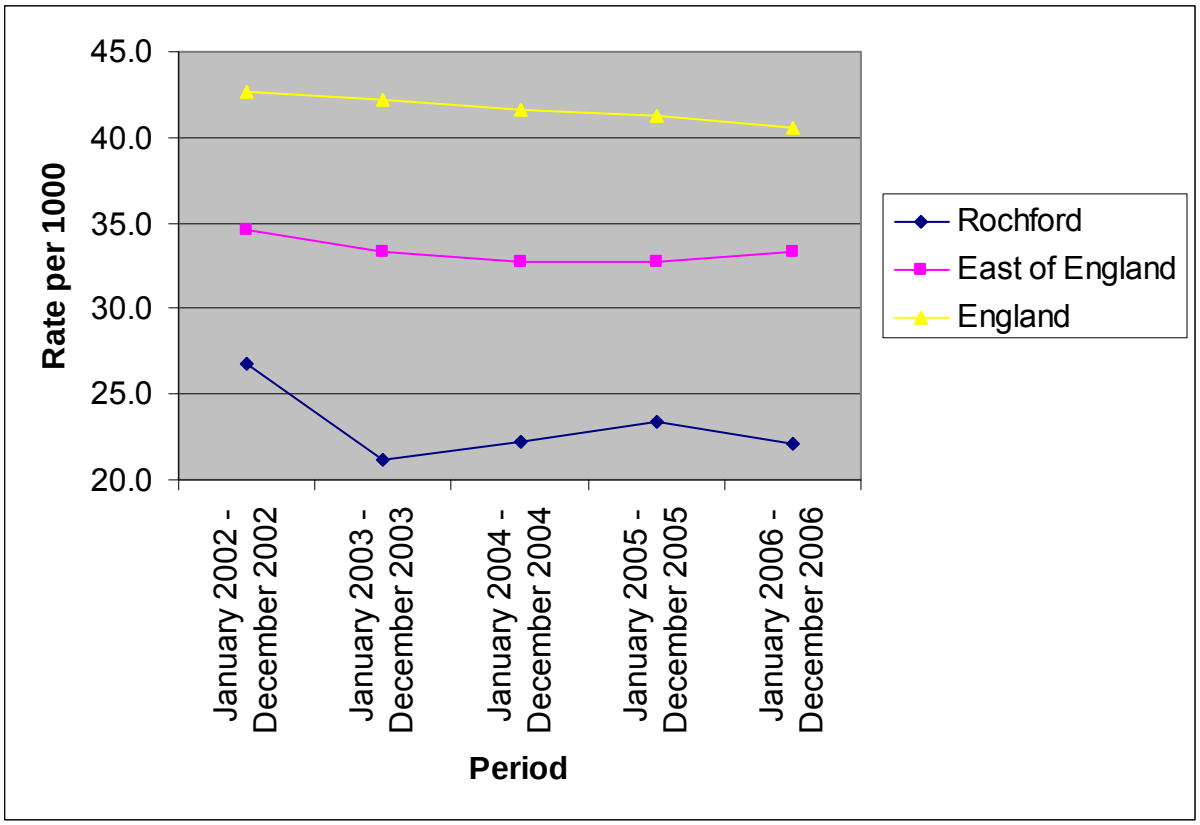
C. Teenage Pregnancy

Table 46: Teenage Conception Rates across Essex per 1,000 Females Aged 15 - 17

	January 2002 - December 2002		January 2003 - December 2003		January 2004 - December 2004		January 2005 - December 2005		January 2006 - December 2006	
	Count	Rate per 1000	Count	Rate per 1000	Count	Rate per 1000	Count	Rate per 1000	Count	Rate per 1000
Basildon	174	56.7	170	54.2	131	40.2	155	47.0	121	36.9
Braintree	55	23.1	81	32.6	73	28.0	87	33.0	105	39.1
Brentwood	32	27.3	24	19.4	24	18.6	20	15.4	21	15.8
Castle Point	51	30.0	57	32.5	54	30.8	55	32.0	53	29.9
Chelmsford	74	25.3	71	23.0	82	25.6	70	21.7	91	28.7
Colchester	103	37.8	88	30.3	96	31.7	113	36.8	112	37.3
Epping Forest	45	21.1	53	24.5	66	29.6	53	22.2	64	26.4
Harlow	64	42.1	79	52.2	85	54.9	63	41.5	81	52.0
Maldon	25	24.4	24	21.8	26	23.6	29	25.9	26	22.8
Rochford	38	26.8	31	21.2	33	22.2	36	23.4	35	22.1
Tendring	107	47.7	85	36.7	85	34.8	86	34.4	103	41.0
Uttlesford	21	16.0	17	12.1	19	13.1	20	13.9	29	20.0
Southend	146	51.1	140	48.4	135	47.4	136	47.5	143	48.8
Thurrock	119	41.9	120	41.2	123	43.0	129	43.6	141	46.4
East of England	3,424	34.6	3,374	33.3	3,392	32.7	3,441	32.7	3,529	33.3
England	39,350	42.7	39,553	42.2	39,593	41.6	39,804	41.3	39,170	40.6

Source: Office for National Statistics 2009 (http://neighbourhood/statistics.gov.uk)

Figure 45: Teenage Conception Rate Trend Analysis



Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- The rate of teenage pregnancies in Rochford District has fallen since 2005, contrary to the regional average.
- The conception rate in Rochford has been well below the regional and national averages since January 2002 to December 2006.

D. Incapacity Benefit and Severe Disablement Allowance

Incapacity Benefit is paid to people who are assessed as being incapable of work due to six defined reasons. These are mental disorders, diseases of the nervous system, disease of the respiratory or circulatory system, musculoskeletal disease, injury or poisoning and other.

Severe Disablement Allowance (SDA) claimants have to be aged between 16 and 65, been unable to work for at least 28 weeks and are unable to get Incapacity Benefit. Since April 2001 it has not been possible to make a new claim for SDA.

Table 47 details the breakdown in Incapacity Benefit and SDA claims in Rochford District, the East of England and England.

Table 47: Total Incapacity Benefit and SDA Claims in November 2008

	Rochford	Percentage	East of England	Percentage	England	Percentage
Total Population	83,200	100.00%	5,728,700	100.00%	51,446,200	100.00%
Total Receiving Benefits	1,940	2.33%	179,140	3.13%	2,103,220	4.09%
Claimants						
Total Incapacity Benefit Claimants	1,730	89.18%	159,090	88.81%	1,898,020	90.24%
Total Severe Disablement Claimants	210	10.82%	20,050	11.19%	205,190	9.76%
Male	1,070	55.15%	99,950	55.79%	1,207,730	57.42%
Female	870	44.85%	79,150	44.18%	895,490	42.58%
Age of Claimant						
Claimants Aged 16-24	120	6.19%	12,070	6.74%	129,080	6.14%
Claimants Aged 25-49	840	43.30%	87,020	48.58%	1,012,620	48.15%
Claimants Aged 50-59	660	34.02%	56,950	31.79%	689,460	12.93%
Claimants Aged 60+	320	16.49%	23,100	12.89%	271,990	12.93%
Claim Duration						
Claim Duration Less Than 6 Months	170	8.76%	15,620	8.72%	176,870	8.41%
Claim Duration 6 Months - 1 Year	130	6.70%	11,710	6.54%	126,300	6.01%
Claim Duration 1-2 Years	170	8.76%	18,060	10.08%	197,520	9.39%
Claim Duration 2-5 Years	380	19.59%	35,910	20.05%	407,090	19.36%
Claim Duration 5 Years+	1,090	56.19%	97,840	54.62%	1,195,450	56.84%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

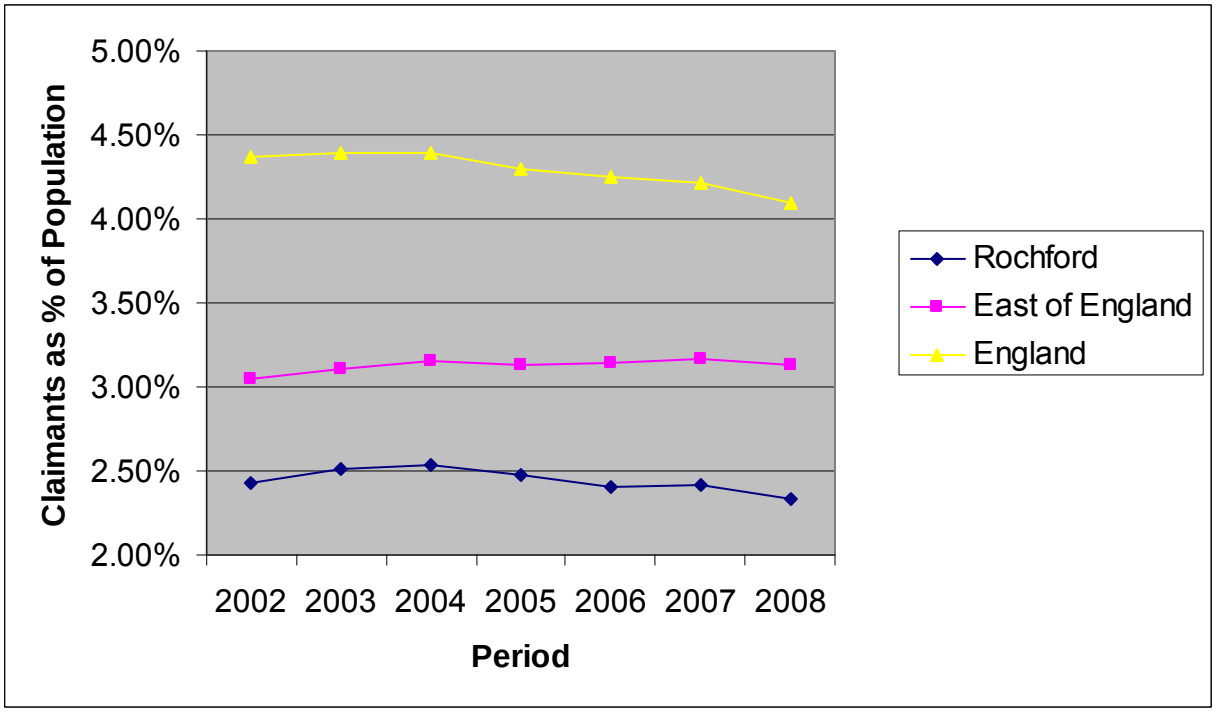
- There is a smaller percentage of people claiming benefits in the district (2.33%) then the East of England (3.13%) and England (4.09%).
- Of those, 10.82% of district benefit claimants receive Severe Disablement Allowance, compared to 11.19% in the East of England and 9.76% in England.
- The highest proportion of claimants are in the 25 – 49 age group and have been claiming for over 5 years.

Table 48: Total Incapacity Benefit and SDA Claimants as a Percentage of Total Population

	Total Claimants as Percentage of Total Population						
	Nov-02	Nov-03	Nov-04	Nov-05	Nov-06	Nov-07	Nov-08
Rochford	2.43%	2.51%	2.54%	2.48%	2.40%	2.42%	2.33%
East of England	3.05%	3.11%	3.16%	3.13%	3.14%	3.17%	3.13%
England	4.37%	4.39%	4.39%	4.30%	4.25%	4.22%	4.09%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

Figure 46: Total Incapacity Benefit and SDA Claimants as a Percentage of Total Population



Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

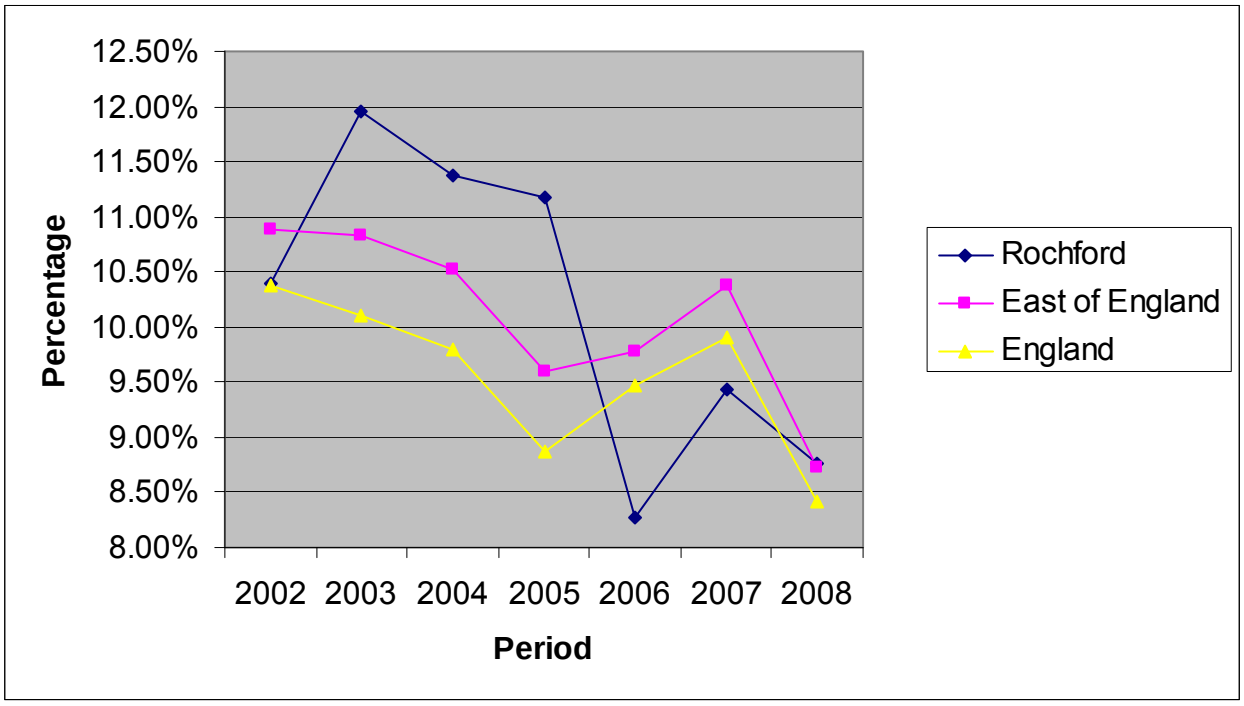
- The proportion of claimants in Rochford District has been lower than the East of England and England across the period of study.
- Between November 2002 and November 2008, the total proportion of claimants has slightly decreased in Rochford District, increased regionally and decreased nationally.

Table 49: Comparison between Changing Trends Witnessed In Short Term Claimants

	Proportion Who Have Claimed For Less Than 6 Months						
	Nov-02	Nov-03	Nov-04	Nov-05	Nov-06	Nov-07	Nov-08
Rochford	10.40%	11.96%	11.37%	11.17%	8.27%	9.43%	8.76%
East of England	10.88%	10.83%	10.52%	9.59%	9.77%	10.37%	8.72%
England	10.38%	10.10%	9.79%	8.88%	9.47%	9.90%	8.41%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

Figure 47: Comparison between Changing Trends Witnessed In Short Term Claimants



Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

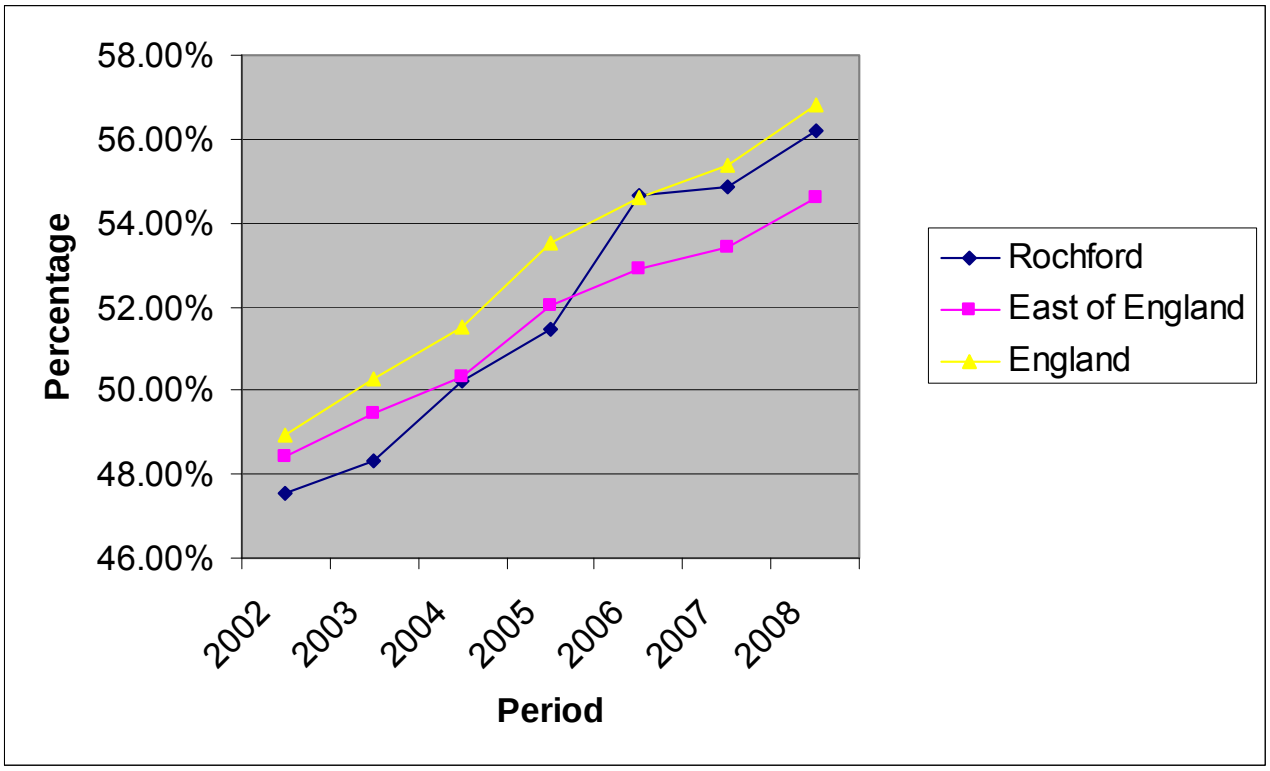
- There has been a decrease in short term claimants in Rochford between November 2002 (10.40%) and November 2008 (8.76%.
- Between 2002 and 2008 the proportion of claimants claiming short term benefits has also decreased across both the East of England and England. Rochford's noticeable upturn in the proportion of short term claimants between 2006 and 2007 is also matched regionally and nationally.
- In November 2008, 8.76% of Rochford District Incapacity Benefit claimants had been claiming short term, with the comparative figures being 8.72% in the East of England and 8.41% in England.

Table 50: Comparison between Changing Trends Witnessed In Long Term Claimants

	Proportion Who Have Claimed For More Than 5 Years						
	Nov-02	Nov-03	Nov-04	Nov-05	Nov-06	Nov-07	Nov-08
Rochford	47.52%	48.33%	50.24%	51.46%	54.64%	54.84%	56.19%
East of England	48.44%	49.43%	50.35%	52.04%	52.92%	53.41%	54.62%
England	48.93%	50.26%	51.52%	53.50%	54.60%	55.39%	56.84%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

Figure 48: Comparison between Changing Trends Witnessed In Long Term Claimants



Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- The proportion of benefit claimants who have claimed for a period of over 5 years can be seen to have increased at all geographical hierarchies from November 2002 to November 2008.
- Between November 2002 and November 2008, Rochford has shown an increase in claimants who have claimed for a period of over 5 years of 8.67%. This is higher than the increases regionally and nationally, which were 6.18% and 7.91% respectively.
- In 2008 56.19% of all claimants had claimed for 5 years or more in the district, higher than the 54.62% claiming long term in the region and lower than the 56.84% of all claimants claiming in the country.

E. Participation in Sport

The following results have been taken from the Active People Survey 3 carried out by Sport England in 2009. The definition of 'participation' in this instance is a measure of the percentage of the adult population who participate in at least 3 days times 30mins, moderate intensity participation (sport and recreational walking and cycling and for those

aged 65 years and over - yoga; pilates; indoor and outdoor bowls' archery and croquet) per week (all adults). Walking and cycling are included in this measure.

Table 51: Percentage of Participation in Sport across Essex October 2007 – October 2008

	Male		Female		16-34		35-54		55+		White		Non-White		Limiting Disability		No Limiting Disability	
	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08
Basildon	22.5	25.0	13.9	16.5	25.6	26.2	19.8	23.4	9.3	12.7	17.8	20.2	21.8	29.9	7.6	8.9	19.8	22.2
Braintree	21.8	21.1	21.0	15.8	30.1	23.5	23.3	18.8	12.7	14.0	21.4	18.3	19.0	23.7	11.3	5.3	22.9	20.5
Brentwood	23.0	30.0	23.1	15.7	28.7	35.7	25.5	24.3	17.2	12.0	23.1	22.6	21.5	20.5	9.1	9.1	25.1	24.7
Castle Point	24.3	18.9	14.0	15.5	30.4	23.5	21.3	19.8	10.5	11.4	18.7	17.4	32.1	0.0	8.5	4.4	20.9	20.2
Chelmsford	22.2	26.4	20.1	22.7	31.3	35.3	19.2	24.1	14.6	16.0	21.4	25.2	15.1	8.2	6.9	4.3	23.0	27.4
Colchester	23.8	23.1	23.4	24.5	31.5	30.6	28.1	23.4	11.4	16.7	23.4	24.8	27.8	8.5	15.0	8.6	25.0	26.3
Epping Forest	23.5	21.1	19.1	23.5	30.9	33.0	22.4	22.1	13.1	15.0	21.1	22.5	22.4	20.9	8.6	10.4	23.0	24.2
Harlow	23.2	23.4	15.8	19.9	28.4	31.4	18.6	23.7	11.0	9.5	19.0	21.1	23.0	28.4	8.5	10.3	21.4	23.6
Maldon	23.7	30.2	18.9	22.0	31.0	43.0	23.9	24.3	13.4	18.0	21.4	25.9	14.8	37.7	6.2	14.3	23.9	28.2
Rochford	22.9	24.6	17.8	17.8	32.3	37.2	23.7	18.2	10.2	13.8	20.6	20.8	4.7%	40.9	10.5	12.1	21.9	22.9
Tendring	17.7	21.4	15.4	19.4	29.0	32.7	17.9	22.5	10.5	14.1	16.5	20.5	13.2	8.0	5.5	4.7	19.2	24.0
Uttlesford	23.1	26.9	23.2	25.7	35.6	41.0	23.5	25.8	14.9	17.8	23.6	26.3	0.0%	21.8	5.8	5.7	25.9	30.1
Southend	26.7	22.2	17.3	16.9	32.4	28.5	21.5	19.0	14.4	13.3	22.0	19.7	18.4	10.8	7.3	8.7	24.6	21.4
Thurrock	19.5	17.5	14.7	14.6	22.4	17.8	19.2	19.0	8.8	10.7	17.5	16.3	12.2	13.3	9.7	10.0	18.4	17.2
Essex	22.4	23.9	18.6	20.0	30.0	31.4	22.1	22.5	12.1	14.3	20.5	22.0	20.3	18.0	8.7	7.6	22.5	24.4

Source: Sport England Active People Survey 3, 2009 (http://www.sportengland.org)

- At 24.6% the proportion of male adults participating in sport in the district is above the Essex average of 23.9%. At 17.8% the proportion of female adults participating in sport in the district is below the Essex average of 20%.
- Participation across all age groups except those aged 16-34 is below the Essex average. Participation from those with a limiting long term disability at 12.1% in 2007/2008 is above the Essex average of 7.6% and is the second highest percentage of all districts, boroughs and unitaries in the county.

F. Choice Of Sporting Facility

Residents who have a range of sporting facilities within a short journey of their residence are more likely to use such facilities and reap the health benefits of doing so. The following table highlights the percentage of residents in an area who have access to at least 3 sporting facilities within 20 minutes travel time, with at least one of these being awarded a quality mark. The 20 minute journey time constraint is dependent on the type of area lived in, meaning a 20 minute walk in urban areas and a 20 minute drive in rural areas.

Table 52: Percentage of Residents Living Within 20 Minutes Travelling Time of 3 Different Types of Sporting Facility of which At Least One Has Been Awarded a Quality Mark

	Dec-05	Dec-06	June-07 (Interim)
Basildon	13.60%	13.63%	13.63%
Braintree	46.40%	53.37%	43.68%
Brentwood	30.80%	30.63%	30.63%
Castle Point	1.20%	1.44%	0.25%
Chelmsford	33.50%	59.79%	65.40%
Colchester	20.40%	19.77%	19.77%
Epping Forest	7.70%	53.90%	54.09%
Harlow	0.00%	0.00%	0.00%
Maldon	58.50%	56.49%	55.27%
Rochford	20.60%	6.95%	6.95%
Tendring	4.30%	4.12%	4.12%
Uttlesford	9.50%	62.07%	61.82%
Essex CC Area	20.54%	30.18%	29.63%

Source: Audit Commission/Sport England 2007 (http://www.areaprofiles.audit-commission.gov.uk)

- The proportion of residents within 20 minutes of 3 sporting facilities in Rochford currently stands at 6.95%. This is the same figure as December 2006 and down from the 20.60% reported in December 2005.
- The main driver for a proportion to fall in this case is the removal of a quality mark from a facility.
- Rochford District is the 4th lowest performing authority in Essex. At 0% and 0.25% respectively, Harlow and Castle Point were the two lowest performing local authorities in June 2007.

G. Public Perceptions of Facilities in Their Local Area

This section is concerned with how the residents of a local area perceive the range of facilities that are on offer to them. Examined here are the availability of sport and leisure facilities, scope for activity provision for teenagers and the availability of open space. Residents were asked if they felt that these had improved or stayed the same over the last 3 years.

Table 53: Proportion of the Adult Population Who Are Satisfied or Very Satisfied with Sports Provision in Their Local Area October 2005-2006 to October 2007-2008

	Male		Female		16-34		35-54		55+		White		Non-White		Limiting Disability		No Limiting Disability	
	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08	Oct 05-06	Oct 07-08
Basildon	22.5	25.0	13.9	16.5	25.6	26.2	19.8	23.4	9.3	12.7	17.8	20.2	21.8	29.9	7.6	8.9	19.8	22.2
Braintree	21.8	21.1	21.0	15.8	30.1	23.5	23.3	18.8	12.7	14.0	21.4	18.3	19.0	23.7	11.3	5.3	22.9	20.5
Brentwood	23.0	30.0	23.1	15.7	28.7	35.7	25.5	24.3	17.2	12.0	23.1	22.6	21.5	20.5	9.1	9.1	25.1	24.7
Castle Point	24.3	18.9	14.0	15.5	30.4	23.5	21.3	19.8	10.5	11.4	18.7	17.4	32.1	0.0	8.5	4.4	20.9	20.2
Chelmsford	22.2	26.4	20.1	22.7	31.3	35.3	19.2	24.1	14.6	16.0	21.4	25.2	15.1	8.2	6.9	4.3	23.0	27.4
Colchester	23.8	23.1	23.4	24.5	31.5	30.6	28.1	23.4	11.4	16.7	23.4	24.8	27.8	8.5	15.0	8.6	25.0	26.3
Epping Forest	23.5	21.1	19.1	23.5	30.9	33.0	22.4	22.1	13.1	15.0	21.1	22.5	22.4	20.9	8.6	10.4	23.0	24.2
Harlow	23.2	23.4	15.8	19.9	28.4	31.4	18.6	23.7	11.0	9.5	19.0	21.1	23.0	28.4	8.5	10.3	21.4	23.6
Maldon	23.7	30.2	18.9	22.0	31.0	43.0	23.9	24.3	13.4	18.0	21.4	25.9	14.8	37.7	6.2	14.3	23.9	28.2
Rochford	22.9	24.6	17.8	17.8	32.3	37.2	23.7	18.2	10.2	13.8	20.6	20.8	4.7%	40.9	10.5	12.1	21.9	22.9
Tendring	17.7	21.4	15.4	19.4	29.0	32.7	17.9	22.5	10.5	14.1	16.5	20.5	13.2	8.0	5.5	4.7	19.2	24.0
Uttlesford	23.1	26.9	23.2	25.7	35.6	41.0	23.5	25.8	14.9	17.8	23.6	26.3	0.0%	21.8	5.8	5.7	25.9	30.1
Southend	26.7	22.2	17.3	16.9	32.4	28.5	21.5	19.0	14.4	13.3	22.0	19.7	18.4	10.8	7.3	8.7	24.6	21.4
Thurrock	19.5	17.5	14.7	14.6	22.4	17.8	19.2	19.0	8.8	10.7	17.5	16.3	12.2	13.3	9.7	10.0	18.4	17.2
Essex	22.4	23.9	18.6	20.0	30.0	31.4	22.1	22.5	12.1	14.3	20.5	22.0	20.3	18.0	8.7	7.6	22.5	24.4

Source: Sport England Active People Survey 3, 2009 (http://www.sportengland.org)

- 73.6% of male Rochford residents were satisfied or very satisfied with sports provision in their local area. This is above the Essex average of 68.2% and an increase of 2.6% from previous figures. Similarly, 73.4% of females were satisfied or very satisfied with sports provision in their local area, above the county average of 68.9%.
- 16 – 34 year olds within the district are more satisfied than those aged 35 – 54 and both these demographics less satisfied than those aged 55+. Figures for all ages within the district are higher than the Essex County average.
- Those with a limiting disability in the district have become more satisfied with sports provision in their local area over the period 2005/2006 to 2007/2008, rising from 63.4% to 76.3%. This was below the Essex average of 66.1% in 2005/2006, but well above the Essex average of 66.0% in 2007/2008.

Table 54: Proportion of Residents Who Think That the Availability of Parks and Open Spaces Have Got Better or Stayed the Same in the Last 3 Years in Their Local Area

Local Authority	Percentage
Basildon	87.06%
Braintree	85.62%
Brentwood	90.19%
Castle Point	80.63%
Chelmsford	93.77%
Colchester	92.31%
Epping Forest	90.00%
Harlow	77.30%
Maldon	90.20%
Rochford	90.29%
Tendring	85.12%
Uttlesford	91.74%
Essex CC Area	88.60%

Source: Audit Commission 2007 (http://www.areaprofiles.audit-commission.gov.uk)

- The public perception of the changing state of parks and open spaces has been largely positive with over 75% of people in each Local Authority feeling that the availability of this facility has either got better or stayed the same over the last 3 years.
- 90.29% of Rochford District residents gave positive responses in this area, placing them 4th in Essex. Chelmsford Borough achieved the highest score, 93.77%, with Harlow District's score of 77.3% being the lowest.

Table 55: Proportion of Residents Who Feel That Activities for Teenagers Have Got Better or Stayed the Same over the Last 3 Years

Local Authority	Percentage
Basildon	55.42%
Braintree	70.39%
Brentwood	50.11%
Castle Point	46.68%
Chelmsford	67.03%
Colchester	60.02%
Epping Forest	49.07%
Harlow	49.26%
Maldon	64.90%
Rochford	54.26%
Tendring	55.59%
Uttlesford	62.41%
Essex CC Area	56.72%

Source: Audit Commission 2007 (http://www.areaprofiles.audit-commission.gov.uk)

- Rochford's performance in this field is 54.26%, below the Essex average of 56.72%. Figures show that residents do not feel as though there are sufficient facilities for teenagers in many of their respective Local Authorities.

10.3 Health Summary

- In 2007, 39.92 people per 100,000 could be expected to die from circulatory diseases within the district. This is significantly lower than the rates of 74.40 in England, 63.01 in the East of England and 62.63 in Essex.
- In 2007 Rochford reported a DSMR of 93.64 for deaths relating to cancer in people aged under 75. This is a lower mortality rate than England (114.07), the East of England (106.53) and Essex (107.65).
- By January 2005 – December 2007, life expectancy in the district increased to 79.6 years for males and 84.4 years for females. This is above the life expectancy for the East of England and nationally.
- The rate of teenage pregnancies in Rochford District has fallen since 2005, contrary to the regional average.
- There are a smaller percentage of people claiming benefits in the district (2.33%) then the East of England (3.13%) and England (4.09%).
- Between November 2002 and November 2008, Rochford has shown an increase in claimants who have claimed for a period of over 5 years of 8.67%. This is higher than the increases regionally and nationally, which were 6.18% and 7.91% respectively.
- At 24.6% the proportion of male adults participating in sport in the district is above the Essex average of 23.9%. At 17.8% the proportion of female adults participating in sport in the district is below the Essex average of 20%.
- Male participation across all age groups except those aged 55+ is above the Essex average, whilst female participation is below the average for all ages except those aged 16-34. Participation from those with a limiting long term disability at 12.1% in

2007-2008 is above the Essex average of 7.6% and is the second highest percentage of all districts, boroughs and unitaries in the county.

- Rochford district is the 4th lowest performing authority in Essex in regards to residents living within 20 minutes travelling time of 3 different types of sporting facility of which at least one has been awarded a quality mark.
- 73.6% of male Rochford residents were satisfied or very satisfied with sports provision in their local area. This is above the Essex average of 68.2% and an increase of 2.6% from previous figures. Similarly, 73.4% of females were satisfied or very satisfied with sports provision in their local area, above the county average of 68.9%.
- Those with a limiting disability in the district have become more satisfied with sports provision in their local area over the period 2005/2006 to 2007/2008, rising from 63.4% to 76.3%. This was below the Essex average of 66.1% in 2005/2006, but well above the Essex average of 66.0% in 2007/2008.
- 90.29% of Rochford District residents believe that the state of parks and open spaces has either got better or stayed the same over the last 3 years, placing them 4th in Essex.

11 POPULATION AND SOCIAL

11.1 Introduction

This section focuses on population and social indicators within the district of Rochford. It contains data on population structure, estimates and forecasts, the number of pupils attending schools and their achievements, crime and indices of multiple deprivation.

11.2 Baseline Information

This chapter incorporates data and analysis on population, education, crime and deprivation within the district of Rochford. Population data will include ONS mid-year estimates to 2008, ONS projections and EERA forecasts from 2001 to 2021 with a comparison between the two. Education data will detail school attendances and capacity within the district as well as GCSE and equivalent qualifications for the school-year 2007/2008. Deprivation data includes Rochford's average rank within the Essex County Council area as well as a more detailed breakdown of the character of deprivation throughout the county.

A. Population Change since 2001

The ONS publishes annual mid year population estimates and biannual projections. Consideration of these figures is important in many facets of sustainable planning because they indicate the number of people likely to be living in an area and provide a base for estimating activity levels.

This sub-section looks at population change from 2001 in the form of the ONS' latest mid year estimates and the ONS projections to 2021.

Table 56: ONS Mid-Year Estimates 2001/2008

	2001	2008	Difference	Percentage Change
Rochford District	78,700	83,200	4,500	5.72%
Essex	1,312,600	1,396,400	83,800	6.38%
East of England	5,400,500	5,728,700	328,200	6.08%
England	49,449,700	51,446,200	1,996,500	4.04%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- Population growth in Rochford at 5.72% is lower than that of the county and the East of England region at 6.38% and 6.08% respectively but higher than the national figure of 4.04%.

Table 57: ONS Mid-Year Estimates Population Structure 2001-2008

	Rochford		East of England		England	
	Mid 2001	Mid 2008	Mid 2001	Mid 2008	Mid 2001	Mid 2008
All Persons; 0-4	5.72%	5.17%	5.95%	5.98%	5.91%	6.08%
All Persons; 5-14	12.83%	12.26%	12.87%	11.75%	12.86%	11.48%
All Persons; 15-19	5.59%	6.25%	5.89%	6.29%	6.16%	6.48%
All Persons; 20-44	31.64%	30.41%	34.29%	33.37%	35.52%	34.89%
All Persons; 45-64	26.43%	27.52%	24.54%	25.67%	23.71%	24.97%
All Persons; 65+	17.53%	18.87%	16.46%	16.94%	15.85%	16.10%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- Rochford District has a similar proportion of the population aged 0-14 than the East of England average and national figures.
- There is a lower percentage aged 15-44 in the district (36.66%) than regionally (39.66%) and nationally (41.37%).
- Within Rochford, there are higher percentages of the overall population of the ages 45-65 (27.52%) than regionally (25.67%) and nationally (24.97%).

i) Office for National Statistics Projections

The ONS projections for 2021 are trend based projections. Generally this means that future populations are based on assumptions that births, deaths and migration will continue observed trends over the previous five years. They show what the future population of an area will be if these trends continue. They do not reflect any future policy intentions. The currently available ONS population projections are 2006-based projections published by ONS on 12th June 2008.

Table 58: ONS Revised 2006-Based Population Projections

	2009	2021	Difference	Percentage Change
Rochford District	82,900	89,800	6,900	8.32%
Essex County Council Area	1,400,100	1,562,200	162,100	11.58%
East of England Region	5,773,000	6,471,000	698,000	12.09%
England	51,888,400	56,757,000	4,868,600	9.38%

Source: Office for National Statistics 2008 (http://www.statistics.gov.uk)

- The Rochford District population will rise by 8.32% to 89,800 in 2021. This percentage increase is lower than the county average of 11.58%, the regional average of 12.09%, and the nationwide average of 9.38%.

Table 59: ONS Revised 2006-Based Population Projections – Natural Change and Migration Summaries

		Population	Natural Change	Births	Deaths	All Migration Net	Internal Migration In	Internal Migration Out	International & Cross Border Migration In	International & Cross Border Migration Out
Rochford District	2009	82.9	0.1	0.8	0.8	0.5	3.9	3.3	0.3	0.4
	2021	89.8	0.1	0.9	0.8	0.5	4.2	3.6	0.3	0.4
Essex County Council Area	2009	1,400.1	3.4	16.2	12.8	10.0	45.9	38.5	12.8	10.2
	2021	1,562.2	4.4	17.5	13.2	9.2	49.1	41.8	12.8	10.9
East of England Region	2009	5,773.0	18.4	70.4	52.0	39.4	141.1	120.5	64.3	45.5
	2021	6,471.0	21.8	75.2	53.5	36.2	150.2	129.8	64.4	48.6
England	2009	51,888.4	198.2	664.2	466.0	202.2	0.0	0.0	693.4	491.2
	2021	56,757.0	231.2	690.3	459.1	171.2	0.0	0.0	694.4	523.2

All figures in thousands

Source: Office for National Statistics 2008 (http://www.statistics.gov.uk)

- These natural change and migration summaries are trend based projections, which means assumptions for future levels of births, deaths and migration are based on a continuation of observed levels mainly over the previous five years.
- Rochford's population is projected to increase by 6,900 people over the period 2009 to 2021. This is mainly due to an increase in internal migration in which is not matched by internal out-migration.

ii) Chelmer Forecasts

In December 2006 EERA commissioned population forecasts from the Population and Housing Research Group (PHRG) at Anglia Ruskin University (ARU). The forecasts illustrate the population consequences of the housing provisions (Policy H1) of the East of England Plan.

Table 60: EERA Population Forecasts – Based on the East of England Plan

	2001	2021	Difference	Percentage Change
Rochford District	78,400	81,400	3,000	3.83%
Essex County Council Area	1,614,400	1,718,900	104,500	6.47%
East of England Region	5,400,100	5,973,100	573,000	10.61%

Source: EERA, East of England Plan 2006

- Data shows that Rochford's population would rise to 81,400, an increase of 3.83%. Essex's overall population is expected to rise by 6.47% to 1,718,900 and the regional population by 10.61% to 5,973,100.

iii) Comparison of ONS Projections and Chelmer Forecasts

The differences between the ONS projections and the EERA forecasts are largely due to the difference in approach between the two datasets. The ONS projections reflect continuations of recent trends into the future. The EERA forecasts reflect future policy in respect of housing provision.

Table 61: Comparison of Population at 2021

		Ages				
		0-14	15-44	45-64	65+	Total
Rochford District	ONS	15,200	29,000	24,300	21,000	89,800
	EERA	12,700	24,000	21,600	23,200	81,400
Essex County Council Area	ONS	277,700	559,000	399,100	326,500	1,562,200
	EERA	277,900	596,600	453,,500	390,900	1,718,900
East of England Region	ONS	1,161,200	2,362,800	1,633,800	1,313,300	6,471,000
	EERA	975,000	2,129,500	1,571,000	1,297,500	5,973,100

Source: ONS 2009 (http://www.statistics.gov.uk) and EERA 2006

- The ONS figures indicate a higher district population in Rochford than the Chelmer figures across all ages apart from the 65+ age group.

- In the county as a whole, the Chelmer figures forecast a higher population than the ONS figures project across all ages, particularly in the 65+ year old category with a difference of approximately 65,000.
- Regionally, the ONS data projects a higher population in 2021 than the Chelmer figures forecast.

B. Education

Table 62: Number Attending and Capacity of Schools in Rochford District

	2004	2005	2006	2007	2008	2008 Capacity
Primary	7,143	7,046	6,883	6,728	6,671	7,156
Secondary	5,522	5,617	5,724	5,694	5,700	5,660
Special	0	0	0	0	0	0
Total	12,665	12,663	12,607	12,422	12,371	12,816

Source: Essex School Organisation Plan 2008-2013, Essex County Council 2009 (http://www.essexcc.gov.uk)

- The numbers attending and the capacity of schools is important in light of the population age profile estimates previously mentioned.
- The number of those attending primary schools has decreased annually over the period 2004/2008.
- The numbers attending secondary schools have risen annually between 2004 and 2006 by 202 pupils but decreased by 24 pupils between 2006 and 2008.
- Capacity figures for 2008 indicate that on a district wide basis there are enough primary school places for the current year. There is however a deficit of 40 pupils in secondary school capacity. For capacity figures of individual schools please refer to the full Essex School Organisational Plan 2008-2013.

Table 63: GCSE and Equivalent Results for Young People in Rochford– Referenced by Location of Educational Institution 2006/2007 - 2007/2008

	Rochford		East of England		England	
	September '06 - August '07	September '07 - August '08	September '06 - August '07	September '07 - August '08	September '06 - August '07	September '07 - August '08
All Pupils at the end of KS4	1,032	1,070	66,073	66,294	649,159	653,045
All Pupils at the end of KS4 achieving 5+ A* - C	78.7%	72.5%	61.2%	64.7%	62.0%	65.3%
All Pupils at the end of KS4 achieving 5+ A* - G	94.7%	95.0%	92.3%	92.9%	91.7%	91.6%
All Pupils at the end of KS4 achieving 5+ A* - C Including English and Mathematics	55.6%	55.0%	48.4%	50.3%	46.7%	47.6%
All Pupils at the end of KS4 achieving 5+ A* - G Including English and Mathematics	n/a	94.5%	n/a	91.7%	n/a	87.4%
All Pupils at the end of KS4 with any passes	98.9%	99.4%	97.9%	98.4%	98.9%	98.6%
All Pupils at the end of KS4 with no passes	1.1%	0.6%	2.1%	1.6%	1.1%	1.4%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- The above table shows that the number of those taking GCSEs and equivalent qualifications in the district had risen by 38 pupils between 2006/2007-2007/2008, a trend matched regionally and nationally.
- The figures show that the district is performing above the East of England region and nationally in the attainment of 5+ A*-C grades but is showing a percentage decline between 2006/2007-2007/2008, a trend not matched by regional and national percentage increases.
- The number of pupils receiving no passes is lower at 0.6% than the wider region at 1.6% and the country as a whole at 1.4%. This percentage decreased over the period 2006/2007-2007/2008, a trend matched regionally but not nationally.

C. Crime

Table 64: Offences in Rochford District

	Rochford District		Essex average		England and Wales average	
	2007/08	Increase from 2006/07 (%)	2007/08	Increase from 2006/07 (%)	2007/08	Increase from 2006/07 (%)
Population	81,000	n/a	1,670,000	n/a	53,729,000	n/a
Households	33,000	n/a	696,000	n/a	22,310,000	n/a
Violence against the person offences recorded	572	-5	23,145	1	944,642	-8
Sexual offences recorded	31	-6	1,146	-6	52,683	-7
Robbery offences recorded	14	-18	1,310	-14	83,660	-16
Burglary dwelling offences recorded	119	-17	6,144	0	280,696	-4
Theft of a motor vehicle offences recorded	133	-5	5,041	-10	169,724	-12
Theft from a vehicle offences recorded	316	1	10,247	-20	428,980	-14
Recorded crime BCS comparator offences recorded	1,875	-10	69,883	-9	2,885,979	-11

Source: Home Office 2009 (http://www.homeoffice.gov.uk)

- Rochford District has seen a percentage reduction in crime figures across all of the indicators listed with the exception of recorded theft from a vehicle offences which has experienced an increase of 1%. This is not representative of Essex and England where recorded theft from a vehicle offences have fallen by 20% and 14% from the previous year's figures.
- Robbery and Burglary dwelling offences have decreased by 18% and 17% respectively from 2006/2007 to 2007/2008. This is a better performance than in Essex as a whole and nationally for both indicators.

D. Deprivation

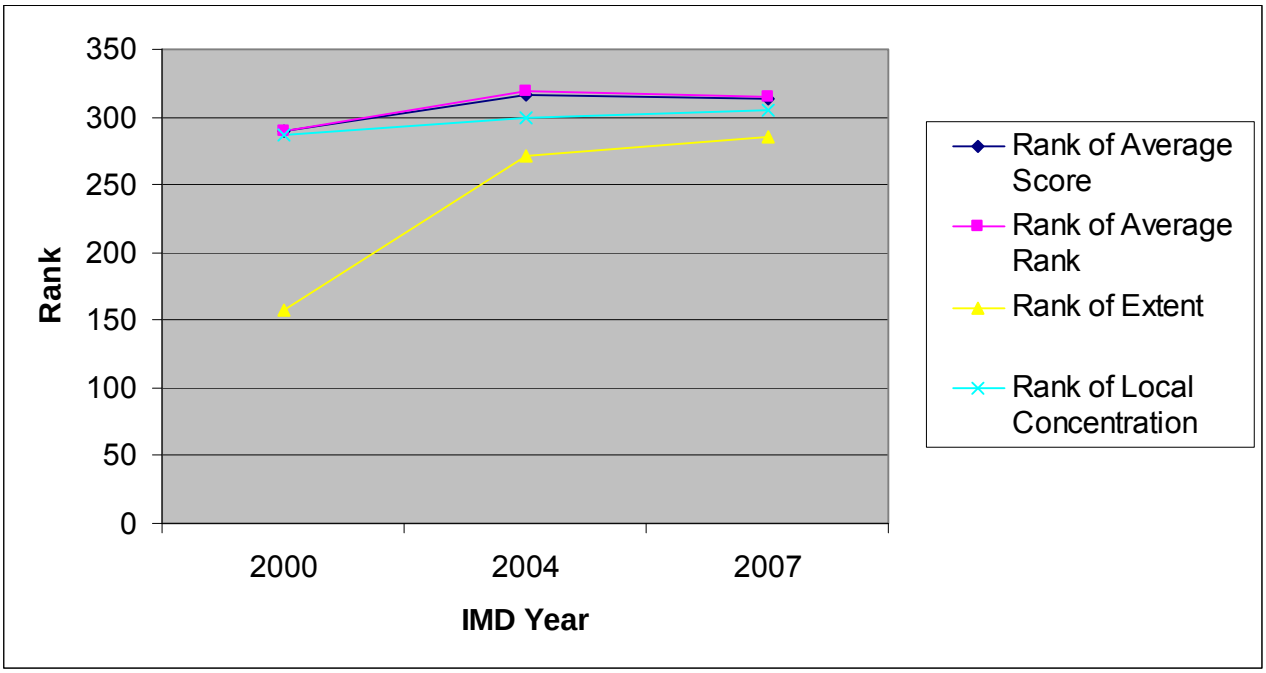
Table 65: Essex Boroughs/Districts/Unitaries Ranking on IMD2007 Measures

Rank Essex	Average Score	Average Rank	Extent	Local Concentration
1	Tendring 103	Tendring 91	Southend 107	Southend 83
2	Southend 111	Harlow 105	Basildon 114	Thurrock 107
3	Harlow 121	Southend 124	Thurrock 123	Tendring 109
4	Thurrock 124	Thurrock 131	Tendring 126	Basildon 134
5	Basildon 136	Basildon 151	Harlow 186	Colchester 200
6	Colchester 224	Epping Forest 220	Colchester 202	Harlow 207
7	Epping Forest 229	Colchester 224	Epping Forest 247	Epping Forest 246
8	Braintree 239	Braintree 232	Castle Point 263	Braintree 252
9	Castle Point 249	Castle Point 246	Braintree 265	Castle Point 261
10	Maldon 255	Maldon 252	Chelmsford 270	Chelmsford 276
11	Chelmsford 312	Brentwood 312	Rochford 285	Brentwood 293
12	Rochford 314	Chelmsford 314	Brentwood 295	Maldon 294
13	Brentwood 315	Rochford 315	Maldon 309=	Rochford 305
14	Uttlesford 347	Uttlesford 347	Uttlesford 309=	Uttlesford 352

Source: Communities and Local Government 2008 (http://www.communities.gov.uk)

- The above table shows the national ranking of Essex districts, boroughs and unitaries for four measures from the IMD. The number alongside each authority's name is that authority's national rank for that measure. A lower rank means a greater incidence of deprivation within the authority.
- Rochford District is the 3rd best ranked authority out of 14 in the County.

Figure 49: Index of Multiple Deprivation Trend Analysis



Source: Communities and Local Government 2008 (http://www.communities.gov.uk)

- Rochford's average score rank has fluctuated year on year, from 290 in 2000, to 316 in 2004 and 314 in 2007.
- This has also been the case for the average rank, changing from 289 in 2000 to 319 in 2004 and 315 in 2007.
- Rochford's rank of extent has risen from 158 in 2000 to 271 in 2004 and 285 in 2007.
- The rank of local concentration in Rochford has successfully increased from 287 in 2000 to 299 in 2004, and to 305 in 2007.

Table 66: Character of Deprivation

	IMD	Income	Employment	Health & Disability	Education, Skills & Training	Barriers to Housing & Services	Living Environment	Crime
Essex CC	14.04	0.11	0.07	-0.53	20.15	21.85	9.75	-0.37
Basildon	20.62	0.16	0.09	-0.02	31.83	20.29	6.28	0.17
Braintree	13.71	0.11	0.07	-0.56	21.04	25.99	9.40	-0.58
Brentwood	9.30	0.08	0.06	-1.10	9.10	21.41	9.13	-0.33
Castle Point	13.03	0.11	0.07	-0.57	24.11	12.80	11.01	-0.41
Chelmsford	9.26	0.09	0.06	-0.97	11.94	17.36	11.05	-0.49
Colchester	14.81	0.11	0.07	-0.31	19.07	26.90	11.42	-0.41
Epping Forest	14.15	0.11	0.07	-0.62	17.52	26.24	11.92	0.01
Harlow	21.67	0.16	0.10	0.15	31.85	24.56	6.97	0.37
Maldon	12.20	0.10	0.06	-0.49	18.67	23.07	8.68	-0.73
Rochford	9.35	0.09	0.06	-0.81	15.66	13.09	8.52	-0.65
Tendring	23.32	0.16	0.12	0.21	33.78	24.81	14.72	-0.27
Uttlesford	7.05	0.07	0.04	1.27	7.19	24.84	7.87	-1.08
Southend	22.51	0.18	0.11	0.22	23.57	15.50	20.75	0.24
Thurrock	21.99	0.15	0.10	-0.13	35.64	19.47	13.10	0.53

Source: Communities and Local Government 2008 (http://www.communities.gov.uk)

- Rochford is less deprived than the county average in all of the listed categories, showing a good performance.

Table 67: Deprivation Character by Sub-Domain

	Child Poverty (IDACI)	Older People Poverty (IDAOPI)	Education Sub-Domain: Children & Young People	Education Sub-Domain: Working Age Skills	Barriers Sub-Domain: Geographical Barriers to Services	Barriers Sub-Domain: Wider Barriers to Housing	Environment Sub-Domain: 'Indoors'	Environment Sub-Domain: 'Outdoors'
Essex CC	0.15	0.15	18.79	21.48	0.31	-0.20	8.28	12.68
Basildon	0.23	0.20	30.12	33.54	0.21	-0.12	3.15	12.56
Braintree	0.13	0.16	19.57	22.51	0.48	0.02	9.07	10.05
Brentwood	0.11	0.12	7.96	10.24	0.34	-0.23	8.38	10.62
Castle Point	0.15	0.16	18.47	29.47	0.03	-0.49	4.47	24.09
Chelmsford	0.12	0.12	11.18	12.70	0.26	-0.48	9.93	13.30
Colchester	0.16	0.16	20.60	17.53	0.16	0.34	9.18	15.89
Epping Forest	0.15	0.14	15.39	19.66	0.30	0.21	9.68	16.40
Harlow	0.24	0.19	33.12	30.59	0.00	0.34	4.49	11.92
Maldon	0.13	0.15	17.30	19.99	0.63	-0.48	9.79	6.45
Rochford	0.11	0.13	11.30	20.02	0.18	-0.72	5.72	14.12
Tendring	0.21	0.17	35.21	32.34	0.18	-0.16	15.41	13.36
Uttlesford	0.08	0.11	5.25	9.13	0.93	-0.96	10.12	3.35
Southend	0.24	0.21	23.39	23.75	-0.33	0.01	16.74	28.77
Thurrock	0.21	0.19	33.23	38.05	-0.02	0.04	11.91	15.49

Source: Communities for Local Government 2008 (http://www.communities.gov.uk)

- The district performs poorly in the Environment outdoors sub-domain at 14.12 which is above the county average of 12. This sub-domain contains two criteria consisting of air quality and road traffic accidents.
- The district performs well and below the county average in all other sub-domains, most notably in the education sub-domain: children and young people, where a score of 11.30 is significantly below the county's 18.79 average.

11.3 Population and Social Summary

- ONS 2008 Mid Year Estimates show that population growth in Rochford at 5.72% is lower than that of the county and the East of England region at 6.38% and 6.08% respectively but higher than the national figure of 4.04%.
- There is a lower percentage of residents aged 15-44 in the district at 36.66% than that seen regionally (39.66%) and nationally (41.37%).
- Within Rochford, there are higher percentages of the overall population being between the ages of 45 and 65 in the district (27.52%) than regionally (25.67%) and nationally (24.97%).
- ONS Population projections show that the Rochford District population will rise by 8.32% to 89,800 in 2021. This percentage increase is lower than the county average of 11.58%, the regional average of 12.09%, and the nationwide average of 9.38%.
- Chelmer Forecasts show that Rochford's population would rise to 81,400, an increase of 3.83%. Essex's overall population is expected to rise by 6.47% to 1,718,900 and the regional population by 10.61% to 5,973,100.
- The ONS figures indicate a higher district population in Rochford than the Chelmer figures across all ages apart from the 65+ age group.
- The number of those attending primary schools has decreased annually over the period 2004-2008.
- Capacity figures for 2008 indicate that on a district wide basis there are enough primary school places for the current year. There is however a deficit of 40 pupils in secondary school capacity.
- The figures show that the district is performing above the East of England region and nationally in the attainment of 5+ A*-C grades but is showing a percentage decline between 2006/2007 to 2007/2008, a trend not matched by regional and national percentage increases.
- The number of pupils receiving no passes is lower at 0.6% than the wider region at 1.6% and the country as a whole at 1.4%. This percentage decreased over the period 2006/2007-2007/2008, a trend matched regionally but not nationally.
- Rochford District has seen a percentage reduction in crime figures across all of the indicators listed with the exception of recorded theft from a vehicle offences which has experienced an increase of 1%. This is not representative of Essex and England where recorded theft from a vehicle offences have fallen by 20% and 14% from the previous year's figures.
- Robbery and Burglary dwelling offences have decreased by 18% and 17% respectively from 2006/2007 to 2007/2008. This is a better performance than in Essex as a whole and nationally for both indicators.
- Rochford District is the 3rd best ranked authority out of 14 in the county for deprivation.
- The district performs poorly in the IMD2007 Environment outdoors sub-domain at 14.12 which is above the county average of 12. This sub-domain contains two criteria consisting of air quality and road traffic accidents.

- The district performs well and below the county average in all other sub-domains, most notably in the education sub-domain: children and young people, where a score of 11.30 is significantly below the county's 18.79 average.

12 ECONOMY

12.1 Introduction

For an area to be sustainable, it must be able to attract industry and commerce in order that its citizens may gain employment and contribute to a successful local economy. This chapter presents information on the types of industry and commerce in Rochford District, as well as the economic status of its residents.

12.2 Baseline Information

The following list covers all the information which will be contained within this chapter of the report:

- Count of VAT paying businesses by people employed
- Count of VAT paying businesses by urban / rural location
- New business registration rate
- Small business growth
- Count of VAT businesses by industry type and rateable value
- Count of floorspace used by bulk industry
- Proportion of Commercial and Industrial Land lying vacant
- Proportion of VAT paying businesses by employment size
- Job Density
- Proportion of employment by industry class
- Proportion of employment by occupation type
- Economic activity of residents, both economically active and inactive
- Proportion of residents self employed
- Wage Comparisons
- Planning Permissions implemented and unimplemented by use class

Please note:

- The Office for National Statistics frequently round data in order to protect confidentiality and therefore it is possible that unit counts may not equate across data sets.
- Reference is made to both Local Units and Enterprises in this chapter. A local unit is defined as a statistical unit in an enterprise, being an individual site in a geographically identifiable place. This will often take the form of a factory or a shop. An enterprise is defined as a group of local units which have a certain degree of autonomy or control and essentially this can be defined as a business, often taking the form of a head office or main operating site.
- Some data released by NOMIS prior to the period April 2005 to March 2006 has not been reweighted in line with the latest ONS estimates as these were not available at the time of this report. Consequently some historical data prior to this date has had to be removed for the purpose of this report but will subsequently be reinstated as it becomes available. All data prior to April 2005 included within this section has been reweighted and therefore trend analysis is valid. For more information please go to https://www.nomisweb.co.uk

A. Count of VAT and PAYE Based Local Units

Please note that ONS have changed the way that this information is reported. As of March 2008, size of business statistics are presented by VAT and / or PAYE-based local units

rather than by VAT-based enterprises. Historic information has been repeated separately for convenience but is not directly comparable.

Table 68: Count of VAT and PAYE Based Local Units in Rochford March 2008

	Rochford		East of England		England	
All VAT and/or PAYE Based Local Units	3,430	100.00%	259,055	100.00%	2,244,290	100.00%
All 0 to 4 Persons Employed	2,580	75.22%	183,370	70.78%	1,553,900	69.24%
All 5 to 9 Persons Employed	450	13.12%	34,825	13.44%	313,530	20.18%
All 10 to 19 Persons Employed	210	6.12%	19,830	7.65%	183,105	58.40%
All 20 or More Persons Employed	190	5.54%	21,030	8.12%	193,755	105.82%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- In each case, businesses which employ 0 to 4 persons are the most prevalent, at 75.22% in the District, 70.78% in the East of England and 69.24% in England.
- The District has a higher proportion of local based units which employ 0 – 4 people and a lower proportion of units which employ 20 or more persons than both the East of England and England.

Table 69: Count of VAT Based Enterprises in Rochford 2005 – 2007

	Rochford District			East of England			England		
	Mar-05	Mar-06	Mar-07	Mar-05	Mar-06	Mar-07	Mar-05	Mar-06	Mar-07
All VAT Registered Local Units	2,660	2,640	2,655	201,520	203,435	206,245	1,741,870	1,758,270	1,788,670
0 to 4 Persons Employed	73.87%	73.11%	74.01%	68.49%	68.66%	68.71%	66.83%	66.97%	67.12%
5 to 9 Persons Employed	13.91%	14.39%	13.75%	14.64%	14.37%	14.09%	15.20%	15.05%	14.77%
10 to 19 Persons Employed	6.39%	6.63%	6.59%	8.10%	8.12%	8.35%	8.52%	8.52%	8.76%
20 or More Persons Employed	5.83%	5.68%	5.65%	8.78%	8.85%	8.85%	9.46%	9.46%	9.35%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- Businesses which employ between 0 and 4 people have been by far the most prevalent at all geographical hierarchies during the period of study.
- Regionally and nationally there has been a decline in those employed in businesses with 5 to 9 persons across the period 2005/2007. In the East of England the percentage decreased from 14.64% to 14.09% and in England the change was from 15.20% to 14.77%.
- At 74.01% in 2007, Rochford District had a higher percentage of Local Based Units with 0 to 4 persons employed than both the region and nation with 68.71% and 67.12%. The District is relatively underrepresented in all other employment bands when compared to the regional and national average.

B. VAT Based Units by Location

Table 70: VAT and PAYE Based Units by Location March 2008

	Rochford	East of England	England	Rochford	East of England	England
	Urban			Rural		
All VAT and/or PAYE Based Local Units	2,665	162,835	1,673,220	765	96,215	571,065
Agriculture	45	1,880	14,805	60	11,740	92,525
Production	225	10,570	106,875	50	6,875	37,465
Construction	480	18,655	155,380	170	12,485	63,000
Motor Trades	80	5,495	50,930	35	3,555	19,640
Wholesale	130	8,400	86,380	20	4,700	26,465
Retail	250	19,485	208,990	65	6,715	40,210
Hotels & Catering	100	9,790	111,930	45	4,795	33,135
Transport	110	5,645	51,270	35	3,285	18,620
Post & Telecommunications	20	1,870	17,715	5	980	4,410
Finance	55	4,075	46,230	5	1,170	6,780
Property & Business Services	770	50,340	528,280	175	26,980	151,765
Education	55	3,940	40,200	15	2,190	13,515
Health	110	8,880	96,425	20	3,410	20,065
Public Admin & Other Services	235	13,810	157,810	65	7,335	43,470

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

Table 71: VAT and PAYE Based Units by Location March 2008 (percentages)

	Rochford	East of England	England	Rochford	East of England	England
	Urban			Rural		
All VAT and/or PAYE Based Local Units	77.70%	62.86%	74.55%	22.30%	37.14%	25.45%
Agriculture	1.69%	1.15%	0.88%	7.84%	12.20%	16.20%
Production	8.44%	6.49%	6.39%	6.54%	7.15%	6.56%
Construction	18.01%	11.46%	9.29%	22.22%	12.98%	11.03%
Motor Trades	3.00%	3.37%	3.04%	4.58%	3.69%	3.44%
Wholesale	4.88%	5.16%	5.16%	2.61%	4.88%	4.63%
Retail	9.38%	11.97%	12.49%	8.50%	6.98%	7.04%
Hotels & Catering	3.75%	6.01%	6.69%	5.88%	4.98%	5.80%
Transport	4.13%	3.47%	3.06%	4.58%	3.41%	3.26%
Post & Telecommunications	0.75%	1.15%	1.06%	0.65%	1.02%	0.77%
Finance	2.06%	2.50%	2.76%	0.65%	1.22%	1.19%
Property & Business Services	28.89%	30.91%	31.57%	22.88%	28.04%	26.58%
Education	2.06%	2.42%	2.40%	1.96%	2.28%	2.37%
Health	4.13%	5.45%	5.76%	2.61%	3.54%	3.51%
Public Admin & Other Services	8.82%	8.48%	9.43%	8.50%	7.62%	7.61%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- Rochford District has a lower proportion of local units in rural locations than both the East of England and England. Within Rochford this proportion is 22.3% compared to a regional value of 37.14% and national value of 25.45%.
- The highest proportion of workers in the district can be found in the Property and Business Services sector at 28.89% of all urban local units and 22.88% of all rural based units. This sector also displays the highest proportion of workers at both regional and national level. Both the East of England and England have a greater incidence than the district of property and business services units as a proportion of total rural and urban units.

C. New Business Registration Rate

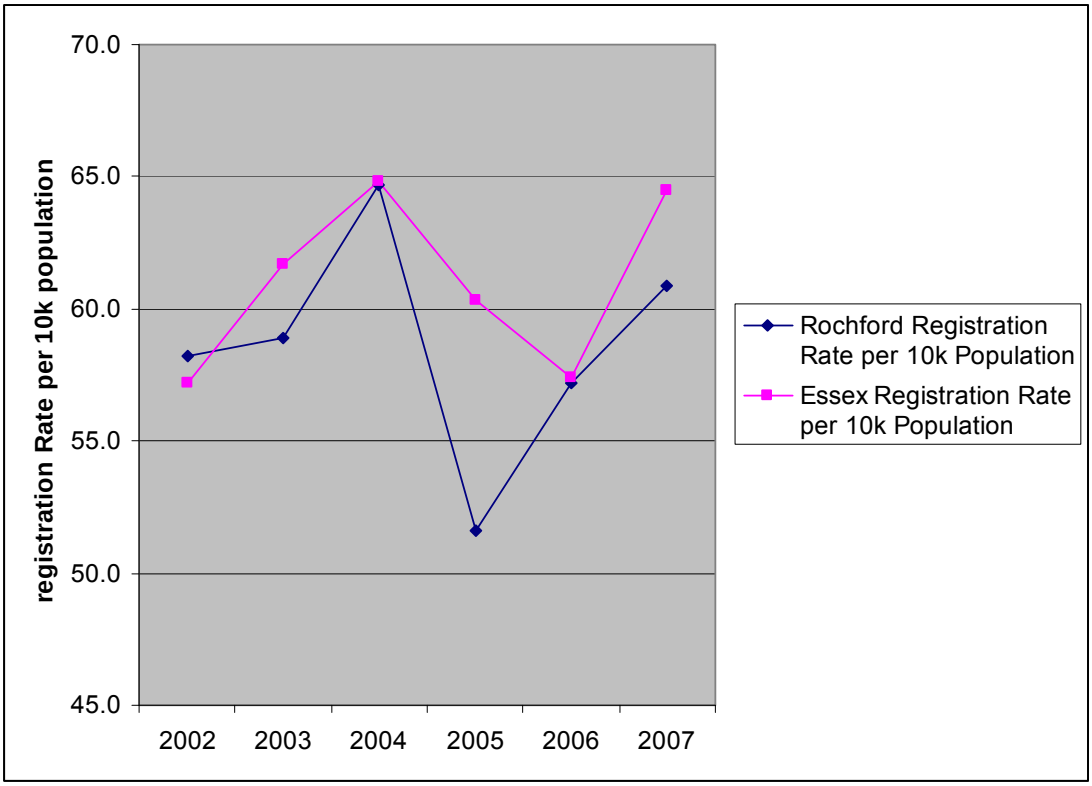
The data within this section relates to the proportion of business registrations per 10,000 resident population aged 16 and above. The higher the outcome, the better the performance. It is beneficial for local economies to have vibrant start up markets as this creates competitiveness, increases the range of goods and services available and increases business performance.

Table 72: New Business Registration Rate in Rochford and Essex 2002 – 2007

Year	Business Births	Adult Population (aged 16+) / 10,000	Rochford Registration Rate per 10k Population	Essex Registration Rate per 10k Population
2002	370	6.4	58.2	57.2
2003	375	6.4	58.9	61.7
2004	415	6.4	64.7	64.8
2005	335	6.5	51.6	60.3
2006	375	6.6	57.2	57.4
2007	405	6.7	60.9	64.5

Source: Department for Business Innovation and Skills (BIS) (formerly the Department of Business, Enterprise and Regulatory Reform (BERR)) 2009 (http://stats.berr.gov.uk)

Figure 50: New Business Registration Rate in Rochford and Essex 2002 – 2007



Source: Department for Business Innovation and Skills (BIS) (formerly the Department of Business, Enterprise and Regulatory Reform (BERR)) 2009 (http://stats.berr.gov.uk)

- The registration rate of new businesses in Rochford per 10,000 population has been lower than that recorded in Essex since 2003.
- The business formation rate in Rochford has increased from 58.2 to 60.9 over the period of study. Within Essex the rate increased from 57.2 to 64.5. Increases have not been year-on-year at either hierarchy.
- The business formation rate per 10,000 population peaked in Rochford in 2004 at 64.7 whilst in Essex it peaked in the same year at 64.8.

D. Small Business Growth

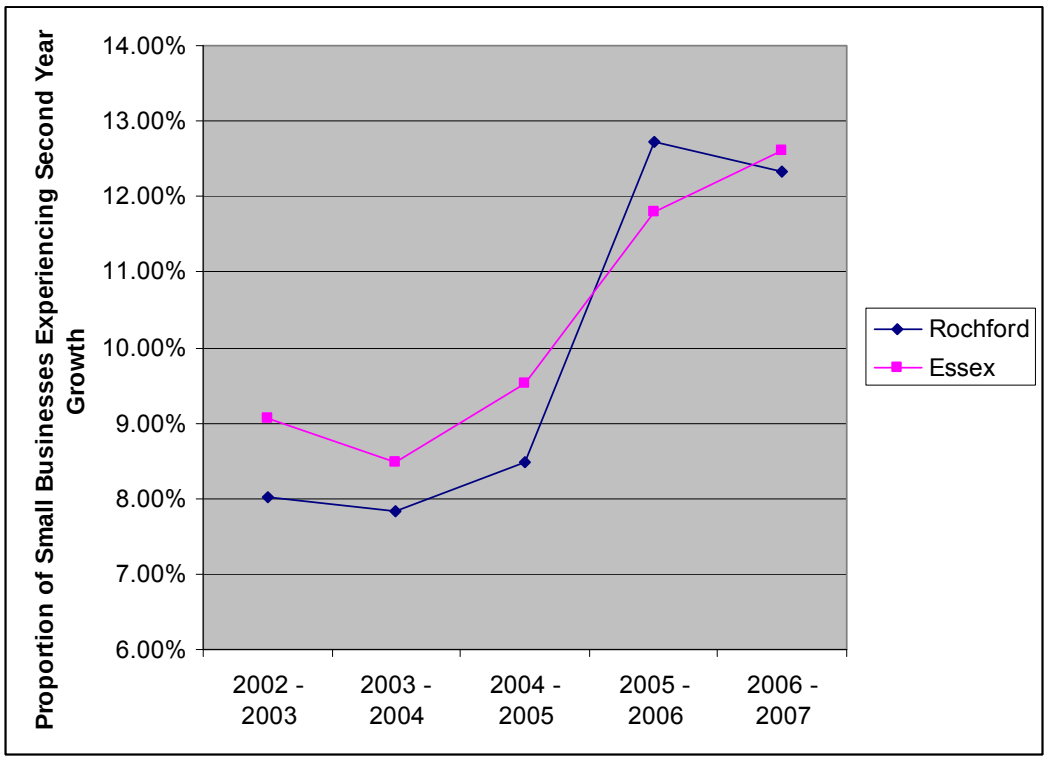
This section analyses the proportion of small businesses that show a year-on-year growth. For the purpose of this study, a small business is defined as one which employs less than 50 people.

Table 73: Small Business Growth in Rochford and Essex 2002 – 2007

	Rochford			Essex		
Year	Registered Enterprises with Employment <50	Number of Enterprises with an Increase in Employment in Second Year	Proportion of Small Businesses Showing Growth	Registered Enterprises with Employment <50	Number of Enterprises with an Increase in Employment in Second Year	Proportion of Small Businesses Showing Growth
2002 - 2003	2,995	240	8.01%	51,525	4,670	9.06%
2003 - 2004	3,065	240	7.83%	52,795	4,475	8.48%
2004 - 2005	3,185	270	8.48%	53,710	5,110	9.51%
2005 - 2006	3,185	405	12.72%	54,298	6,405	11.80%
2006 - 2007	3,245	400	12.33%	55,005	6,940	12.62%

Source: Department for Business Innovation and Skills (BIS) (formerly the Department of Business, Enterprise and Regulatory Reform (BERR)) 2009 (http://stats.berr.gov.uk)

Figure 51: Small Business Growth in Rochford and Essex 2002 – 2007



Source: Department for Business Innovation and Skills (BIS) (formerly the Department of Business, Enterprise and Regulatory Reform (BERR)) 2009 (http://stats.berr.gov.uk)

- Across the period of study, the proportion of small businesses experiencing growth has increased in both Rochford and Essex. Within Rochford the proportion

increased from 8.01% to 12.33% whilst in Essex it increased from 9.06% to 12.62%.

- Between 2005/2006 and 2006/2007, the proportion of small businesses which showed a year-on-year growth reduced from 12.72% (the highest recorded by either hierarchy) to 8.01%.
- The proportion of small businesses experiencing a year-on-year growth has typically been higher in Essex than Rochford across the period of study although this wasn't the case in 2005/2006.

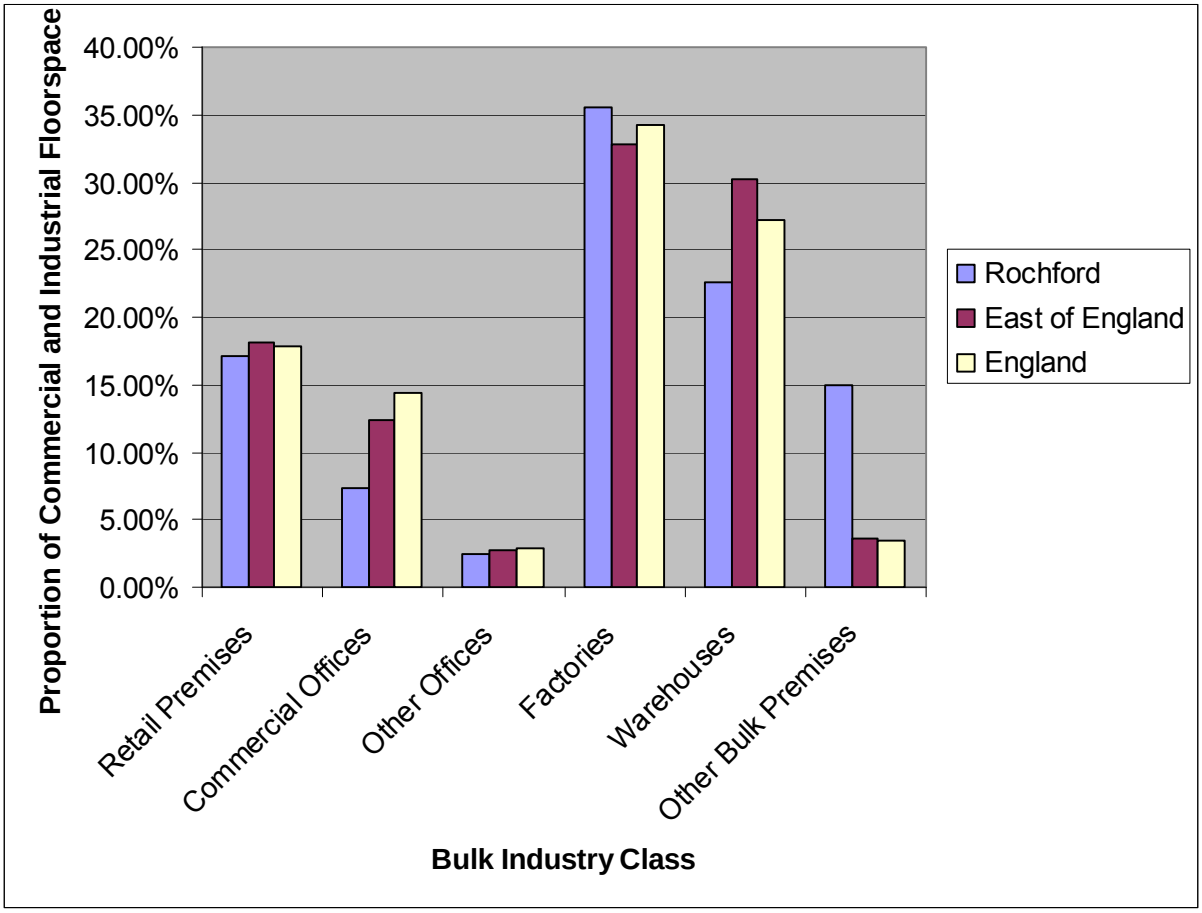
E. Industrial and Commercial Floorspace Composition and Rateable Value

Table 74: Industrial and Commercial Floorspace Composition by Bulk Industry Class in m^2 April 2008

	Rochford		East of England		England	
All Bulk Classes	495	100.00%	56,904	100.00%	561,777	100.00%
Retail Premises	85	17.17%	10,287	18.08%	100,208	17.84%
Commercial Offices	36	7.27%	7,081	12.44%	81,203	14.45%
Other Offices	12	2.42%	1,583	2.78%	16,362	2.91%
Factories	176	35.56%	18,704	32.87%	192,322	34.23%
Warehouses	112	22.63%	17,186	30.20%	152,485	27.14%
Other Bulk Premises	74	14.95%	2,062	3.62%	19,196	3.42%

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

Figure 52: Industrial and Commercial Floorspace Composition by Bulk Industry Class in m^2 April 2008



Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

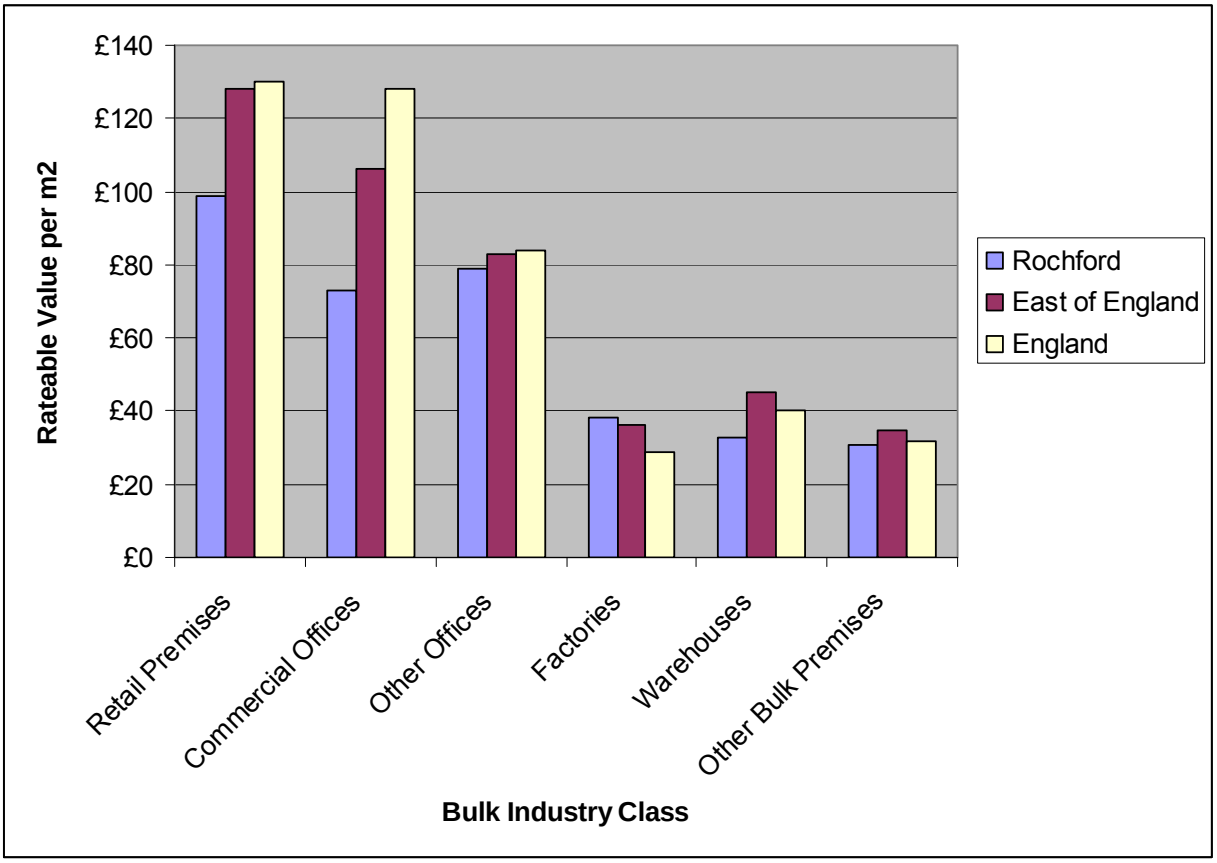
- Factories and warehouses account for the majority of industrial floorspace at all geographical hierarchies. The floorspace allocated to factories in the district, at 35.36%, is above that found in the East of England (32.87%) and England (34.23%).
- The largest relative under-representation within the district can be found within the amount of commercial and industrial floorspace being utilised by commercial offices. At 7.27% it is below that in the East of England (12.44%) and nearly half of that found in England (14.45%).
- The district also has the smallest proportion of retail, warehouse and non-commercial office floorspace across the three hierarchies.

Table 75: Rateable Values of Commercial and Industrial Floorspace per m^2 April 2008

	Rochford	East of England	England
All Bulk Classes	£50	£65	£66
Retail Premises	£99	£128	£130
Commercial Offices	£73	£106	£128
Other Offices	£79	£83	£84
Factories	£38	£36	£29
Warehouses	£33	£45	£40
Other Bulk Premises	£31	£35	£32

Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

Figure 53: Rateable Values of Commercial and Industrial Floorspace per m^2 April 2008



Source: Office for National Statistics 2009 (http://neighbourhood.statistics.gov.uk)

- At £38 per m^2, rateable values for factory floorspace are higher in the district than at any other hierarchy.
- Rateable values per m^2 are lower in the district for all bulk industry classes other than factories. The disparity is most pronounced in the retail premises and commercial offices classes.

F. Commercial and Industrial Property Vacancies

Table 76: Vacant Employment Sites within Rochford District by Ward 2008

Ward/Parish	Address	Proposed Use Code Description	Development Plan	PDL	Site Area (h)	Permission Details	Area with Permission (h)	Vacant Land (h)
Downhall and Rawreth Ward	Adjacent Superstore, Rawreth Industrial Estate	B1, B2, B8	Y	N	0.44		0	0.44
Downhall and Rawreth Ward	Rawreth Industrial Estate. Opposite Stirling Close	B1, B2, B8	Y	N	0.09		0	0.09
Rochford Ward	Plot G, Aviation Way Industrial Estate	B1, B2, B8	Y	N	0.57		0	0.57
Rochford Ward	Plot B, Sutton Wharf	B1, B2, B8	Y	N	1.4		0	1.4
					2.5		0	2.5

Sites Granted Planning Permission 2009								
Ward/Parish	**Address**	**Proposed Use Code Description**	**Development Plan**	**PDL**	**Site Area (h)**	**Permission Details**	**Area with Permission (h)**	**Vacant Land (h)**
Rochford Ward	Plot B, Land East B1013, Aviation Way Industrial Estate	B1, B2, B8	Y	N	1.38	Now covered by ROC/0670/08 (22027) for Hotel and 2 Office Buildings (4250 sq m) on 3.03 Ha	3.03	0
Rochford Ward	Plot C, Aviation Way Industrial Estate	B1, B2, B8	Y	N	1.08	Now covered by ROC/0670/08 (22027) for Hotel and 2 Office Buildings (4250 sq m) on 3.03 Ha	as above	0
Rochford Ward	Plot H, Aviation Way Industrial Estate	B1, B2, B8	Y	N	0.57	Now covered by ROC/0670/08 (22027) for Hotel and 2 Office Buildings (4250 sq m) on 3.03 Ha	as above	0
					3.03		3.03	0

Source: Essex County Council, 2009

G. Job Density

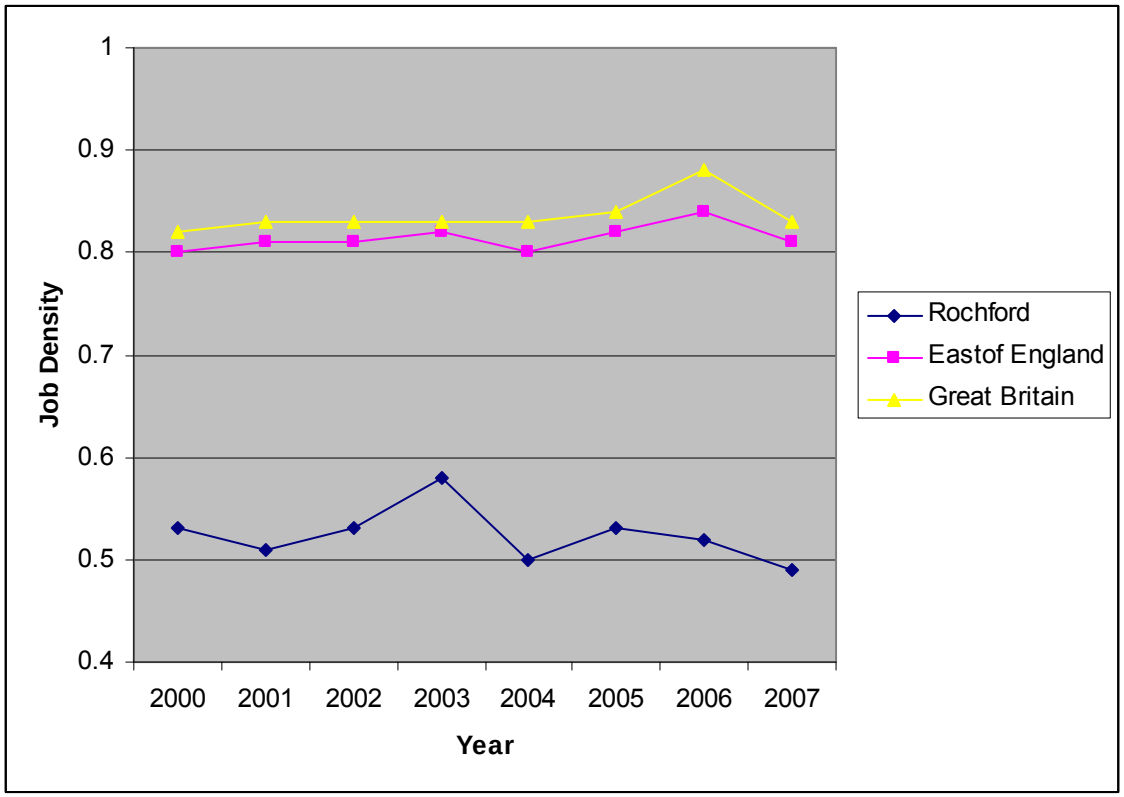
'Job density' is the term given to represent the number of jobs available for a single person of working age over a given area. For example, a job density of 1 would represent the fact that there is a single job available for every person of working age.

Table 77: Job Density 2000 – 2007

Year	Rochford	East of England	Great Britain
2000	0.53	0.80	0.82
2001	0.51	0.81	0.83
2002	0.53	0.81	0.83
2003	0.58	0.82	0.83
2004	0.5	0.80	0.83
2005	0.53	0.82	0.84
2006	0.52	0.84	0.88
2007	0.49	0.81	0.83

Source: NOMIS 2009 (https://www.nomisweb.co.uk?)

Figure 54: Job Density 2000 – 2007



Source: NOMIS 2009
(https://www.nomisweb.co.uk/reports/lmp/la/2038431775/subreports/jd_time_series/report.aspx?)

- Across the period of study, Rochford District can be seen to have a lower job density than that found in the Eastern Region or Great Britain.

- Between 2000 and 2007, job density in Rochford District has decreased from 0.53 to 0.49 whilst peaking in 2003 at 0.58. This figure is still below that seen in the Eastern Region and Great Britain across the study.
- Job Density in the Eastern Region and Great Britain has increased across the study, from 0.8 to 0.81 and 0.82 to 0.83 respectively.
- In comparison to the previous year of study, namely 2006, the job density in Rochford decreased from 0.52 to 0.49 whilst also decreasing in the East of England (0.84 to 0.81) and Great Britain (0.88 to 0.83).

H. Employment by Industry Class

Table 78: Employment by Industry Class 2007

	Rochford		East of England	Great Britain
Total employee jobs	19,100	100.0%	100.0%	100.0%
Full-time	12,600	65.9%	68.3%	69.0%
Part-time	6,500	34.1%	31.7%	31.0%
Employee jobs by industry				
Manufacturing	2,500	13.0%	10.7%	10.6%
Construction	1,300	7.0%	5.5%	4.9%
Services	14,700	77.2%	81.8%	83.0%
- Distribution, hotels & restaurants	4,800	25.0%	24.7%	23.3%
- Transport & communications	1,100	5.5%	6.1%	5.9%
- Finance, IT, other business activities	2,900	15.1%	20.7%	21.6%
- Public admin, education & health	4,700	24.4%	25.5%	26.9%
- Other services	1,400	7.2%	4.8%	5.2%
Tourism-related†	1,800	9.4%	7.6%	8.2%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

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'. Rochford District can be seen to have an above average proportion of people employed in the 'Manufacturing' and 'Construction' sectors and a deficit in 'Services'.
- 'Manufacturing' is the service with the biggest relative overrepresentation from the Regional and National picture, standing at 13% (13.3% in 2006) in the District, 10.7%% (11% in 2006) in the Eastern Region and 10.6% (10.9% in 2006) in Great Britain.
- 77.2% of the District's workforce work within the services sector compared to 81.8% regionally and 83% nationally. The biggest relative deficit in the Services sub-group

can be seen within the 'Finance, IT and other business services' sub-group, with 15.1% (down from 15.9% in 2006) of Rochford District's workforce being employed in this sector, compared to 20.7% regionally and 21.6% nationally.

- The general proportion of full-time to part time jobs, at approximately 2:1, is in line with regional and national averages.
- The Borough can be seen to be providing a range of employment opportunities, in line with Policy E3 of the draft East of England Plan. Policy E5 of the same plan states the need to support the growth of a variety of economic sectors

I. Employment by Occupation

A Standard Occupational Classification (SOC) scheme has been devised in order to be able to classify workers into occupational categories. The 9 Major SOC categories are summarised in Table 13. SOC Major Categories are amalgamated into 4 distinct groups, as also shown.

Table 79: SOC Classification

SOC Group	Occupation
1	Managers and Senior Professionals
2	Professional Occupations
3	Associate Professional and Technical
4	Administrative and Secretarial
5	Skilled Trades Occupations
6	Personal Service Occupations
7	Sales and Customer Service Occupations
8	Process Plant and Machine Operatives
9	Elementary Occupations

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Table 80: Employment by Occupation January – December 2008

	Rochford		East of England	Great Britain
Soc 2000 major group 1-3	18,800	48.9%	44.5%	43.4%
1 Managers and senior officials	5,900	15.3%	16.9%	15.7%
2 Professional occupations	5,800	15.1%	13.1%	13.0%
3 Associate professional & technical	7,100	18.5%	14.3%	14.5%
Soc 2000 major group 4-5	11,200	29.2%	22.5%	22.3%
4 Administrative & secretarial	4,500	11.7%	11.2%	11.4%
5 Skilled trades occupations	6,700	17.5%	11.3%	10.8%
Soc 2000 major group 6-7	4,500	11.7%	15.0%	15.8%
6 Personal service occupations	#	#	8.0%	8.2%
7 Sales and customer service occs	#	#	7.0%	7.6%
Soc 2000 major group 8-9	3,900	10.2%	18.0%	18.5%
8 Process plant & machine operatives	#	#	7.1%	7.1%
9 Elementary occupations	#	#	10.9%	11.4%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Notes: # Sample size is too small for reliable estimate

- The 'Associate professional and technical' SOC group is the group with the largest proportion of workers in Rochford at 18.5%. 'Managers and senior officials' show the highest proportion of workers in the East of England (16.9%) and Great Britain (15.7%). In Rochford this proportion is 15.3% which is the second highest proportion found in the district.
- The SOC group within Rochford which shows the most deviation from the regional and national picture is that of 'skilled trade occupations'. At 17.5%, the district has a higher proportion of people occupied in this type of role than the Eastern Region and England, who report 11.3% and 10.8% respectively.

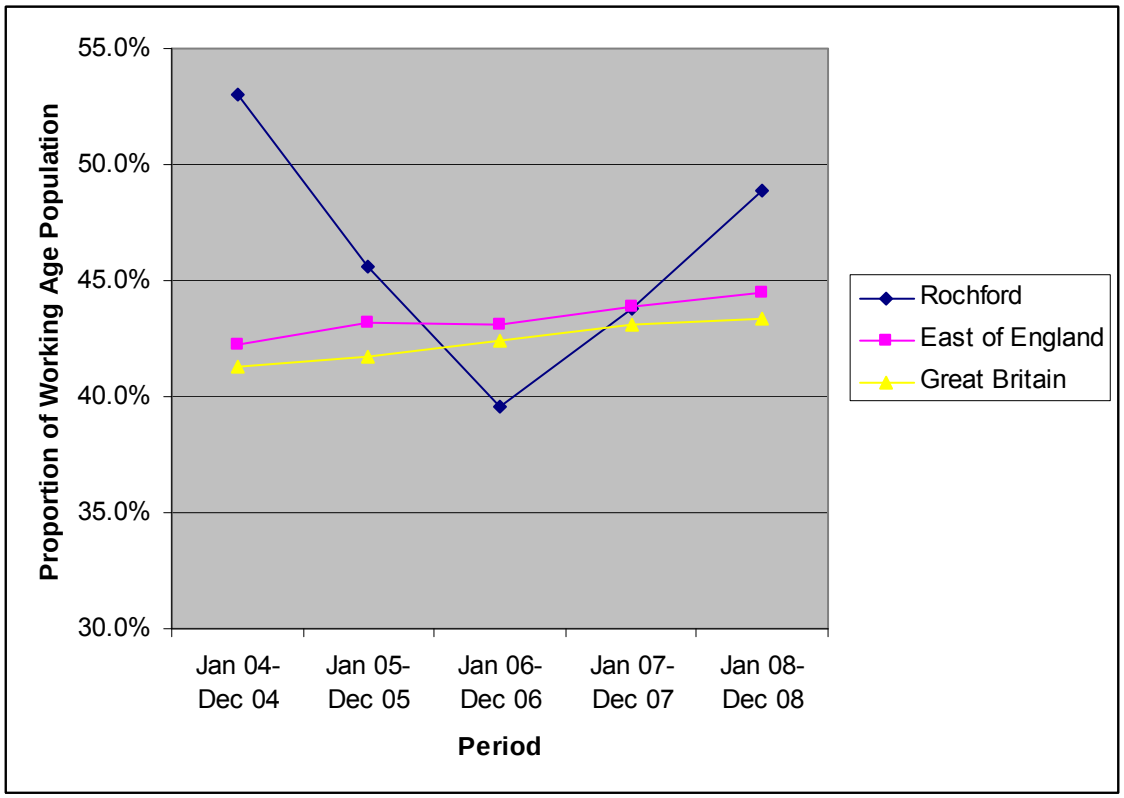
The following set of tables and figures analyse the proportion of workers in Rochford District, the East of England and Great Britain who work in each of the four Major SOC Groups over the period January 2004 to December 2008.

Table 81: Proportion of Workers Present in SOC Major Group 1 – 3 January 2004 – December 2008

Date	Rochford		East of England	Great Britain
Jan 04-Dec 04	20,400	53.0%	42.2%	41.3%
Jan 05-Dec 05	18,600	45.6%	43.2%	41.7%
Jan 06-Dec 06	15,900	39.6%	43.1%	42.4%
Jan 07-Dec 07	17,000	43.8%	43.9%	43.1%
Jan 08-Dec 08	18,800	48.9%	44.5%	43.4%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Figure 55: Proportion of Workers Present in SOC Major Group 1 – 3 January 2004 – December 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

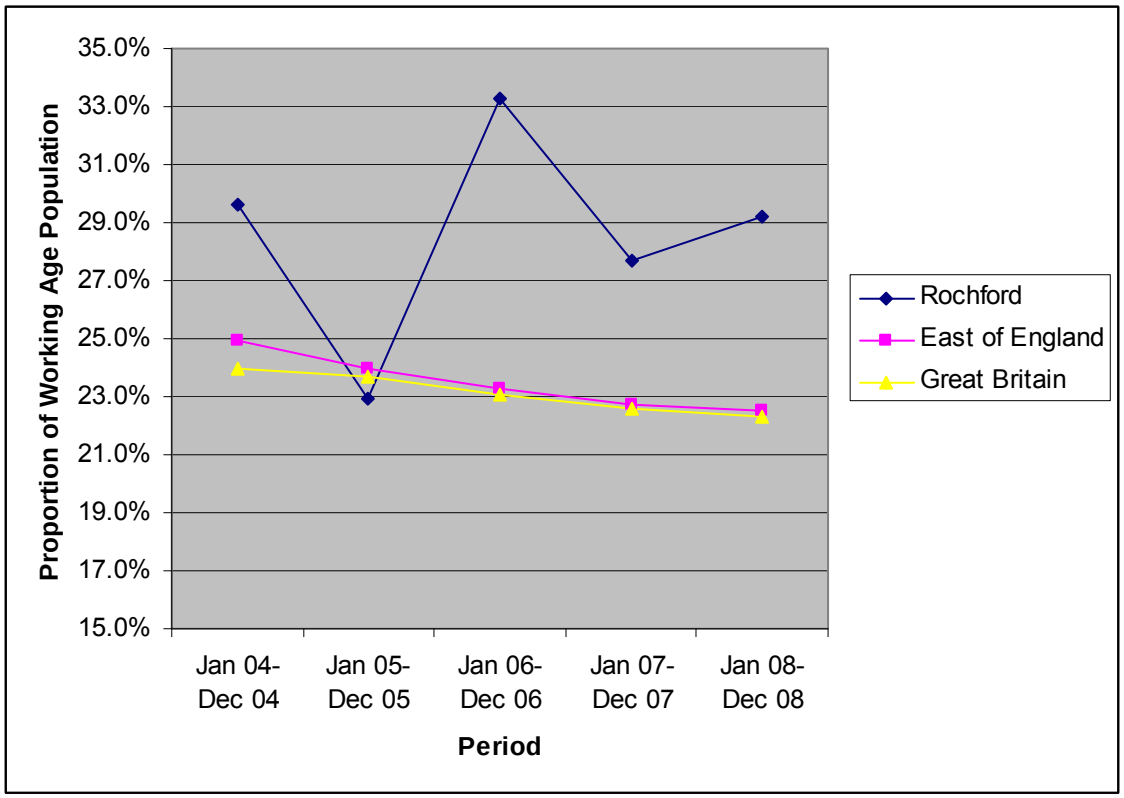
- The proportion of Rochford District employees working in SOC Major Group 1-3 has generally been higher than that seen in the Eastern Region and Great Britain across the period of study. Other than for the period January – December 2006, the district return has been above that of the regional and national.
- Across the study, the proportion of Rochford District workers in this SOC group has decreased from 53% to 48.9%. Both the Eastern Region and Great Britain display a year on year increase, from 42.2% to 44.5% and 41.3% to 43.4% respectively.

Table 82: Proportion of Workers Present in SOC Major Group 4- 5 January 2004 – December 2008

Date	Rochford		East of England	Great Britain
Jan 04-Dec 04	11,400	29.6%	42.2%	41.3%
Jan 05-Dec 05	9,300	22.9%	43.2%	41.7%
Jan 06-Dec 06	13,400	33.3%	43.1%	42.4%
Jan 07-Dec 07	10,700	27.7%	43.9%	43.1%
Jan 08-Dec 08	11,200	29.2%	44.5%	43.4%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Figure 56: Proportion of Workers Present in SOC Major Group 4 – 5 January 2004 – December 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- The proportion of workers in this SOC grouping has decreased in the district, Eastern Region and Great Britain across the period of study although it has been highest in the district for each year other than January – December 2005.
- There is no obvious direction of travel within the district across the period of study although between January 2004 and December 2008 the proportion of workers in this SOC Major Group has decreased from 29.6% to 29.2%.
- Both the Eastern Region and Great Britain have seen a year-on-year fall in the proportion of workers employed within this SOC group. In the Eastern Region this reduction has been from 24.9% to 22.5% whilst in England the proportion has been even lower, from 24% to 22.3%.
- Rochford District shows an opposite direction of travel to the East of England and Great Britain between January 2007 and December 2008.

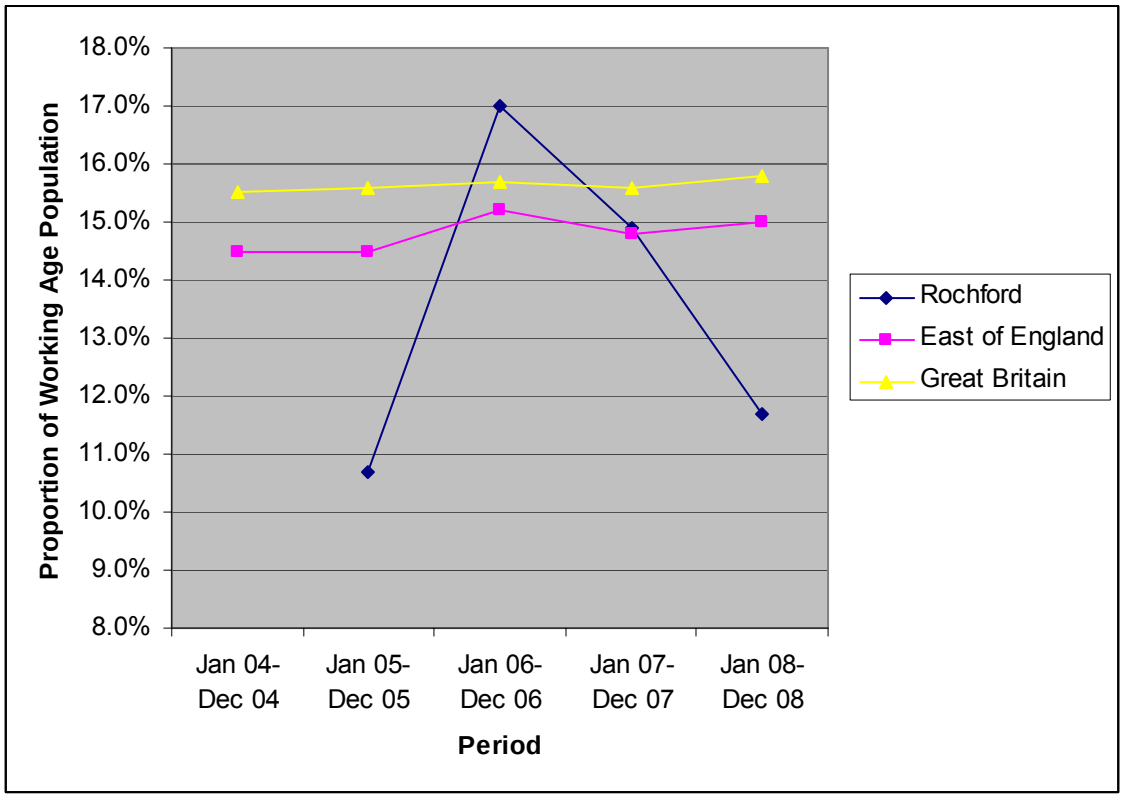
Table 83: Proportion of Workers Present in SOC Major Group 6 – 7 January 2004 – December 2008

Date	Rochford		East of England	Great Britain
Jan 04-Dec 04	#	#	42.2%	41.3%
Jan 05-Dec 05	4,400	10.7%	43.2%	41.7%
Jan 06-Dec 06	6,800	17.0%	43.1%	42.4%
Jan 07-Dec 07	5,800	14.9%	43.9%	43.1%
Jan 08-Dec 08	4,500	11.7%	44.5%	43.4%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Notes: # Sample size is too small for reliable estimate

Figure 57: Proportion of Workers Present in SOC Major Group 6 – 7 January 2004 – December 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- The proportion of people employed within this SOC group has increased in the District, from 10.7% in January – December 2005 to 11.7% in January – December 2008. The proportion peaked in January – December 2006 at 14.9%.
- January – December 2006 was the only period in which the proportion of workers in the district employed within this SOC group was above that seen nationally and regionally. The figure of 14.9% is also the highest in any one period across the study at all hierarchies.
- The Eastern Region reported an increase in the proportions of people employed within this SOC group. Across the study, the proportion has risen from 14.5% to

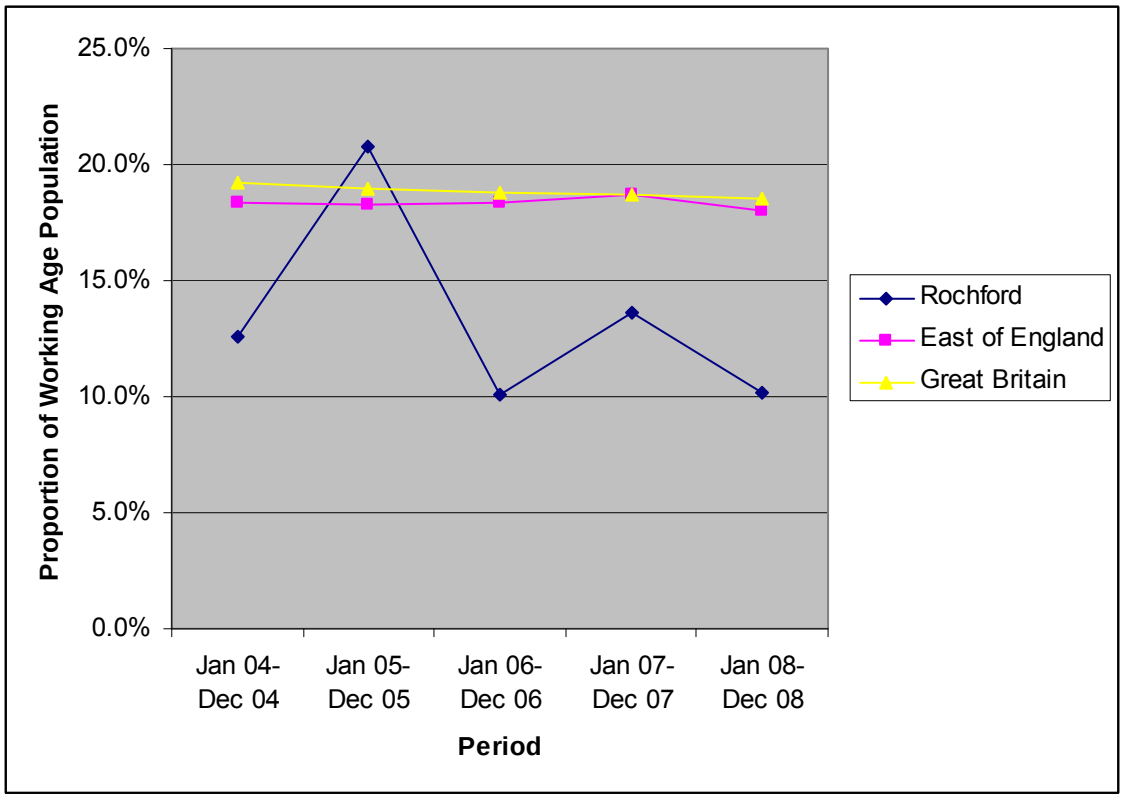
15%. Great Britain recorded a proportion of 15.5% in January – December 2004 and ended 2008 at 15.8%. However, both the region and nation show a decrease in proportion from 2007, along with Rochford District.

Table 84: Proportion of Workers Present in SOC Major Group 8 – 9 January 2004 – December 2008

Date	Rochford		East of England	Great Britain
Jan 04-Dec 04	4,900	12.6%	42.2%	41.3%
Jan 05-Dec 05	8,500	20.8%	43.2%	41.7%
Jan 06-Dec 06	4,000	10.1%	43.1%	42.4%
Jan 07-Dec 07	5,300	13.6%	43.9%	43.1%
Jan 08-Dec 08	3,900	10.2%	44.5%	43.4%

Source: NOMIS 2009 (Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Figure 58: Proportion of Workers Present in SOC Major Group 8 – 9 January 2004 – December 2008



Source: NOMIS 2009 (Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- Across the period of study, the proportion of people employed in SOC groups 8 and 9 within the district has decreased from 12.6% to 10.2%. January – December 2005 is the only period in the above study in which the district proportion was above the proportion at the other hierarchies.
- Both the East of England and Great Britain show a decrease in this SOC Major Group over the period of study. Between January 2004 and December 2008, the East of England has reported a decrease of 18% from 18.4% and Great Britain from 19.2% to 18.5%

J. Economic Activity of Residents

Table 85: Economic Activity of Residents January – December 2008

	Rochford		East of England	Great Britain
All people				
Economically active†	40,600	80.2%	81.3%	78.8%
In employment†	38,400	75.7%	77.2%	74.2%
Employees†	31,000	60.9%	66.4%	64.5%
Self employed†	7,500	14.8%	10.4%	9.2%
Unemployed (model-based)§	1,600	3.9%	4.9%	5.7%
Males				
Economically active†	21,700	83.0%	85.8%	83.2%
In employment†	20,300	77.7%	81.3%	78.0%
Employees†	14,000	53.9%	66.2%	64.7%
Self employed†	6,300	23.8%	14.7%	12.9%
Unemployed§	#	#	5.1%	6.1%
Females				
Economically active†	18,900	77.1%	76.2%	74.0%
In employment†	18,100	73.5%	72.6%	69.9%
Employees†	17,000	68.6%	66.5%	64.4%
Self employed†	#	#	5.7%	5.1%
Unemployed§	!	#	4.6%	5.3%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Notes: # Sample size is too small for reliable estimate

! Estimate not available as sample size is disclosive

† Numbers are those aged 16 and over, % for those of working age

§ Numbers and % for those ages 16 or over. % proportion of those economically active

- At 80.2%, the proportion of economically active working age people in the district is below that reported in the Eastern Region (81.3%) but above that in Great Britain (78.8%). The district also reports a lower percentage of people in employment (73.8%) than the East of England as well as a lower proportion being employees (63%) than both the East of England and Great Britain. Self employment, at 14.8%, is higher than the East of England (10.4%) and Great Britain (9.2%)
- 3.9% of people in Rochford are unemployed. This is a lower proportion than what is found regionally and nationally. At 5.7% Great Britain reports a higher unemployment rate than the Eastern Region which records 4.9%.
- At 83% there are proportionally less economically active males in Rochford than there is in Great Britain (83.2%) although less than in the East of England (85.8%). 77.7% of male residents are in employment, below the national proportion of 78% and Eastern Region proportion of 81.3%. There is a higher instance of male self-

employment in the district than Great Britain. The Rochford value of 23.8% is above Great Britain but below the East of England, at 12.9% and 14.7% respectively.

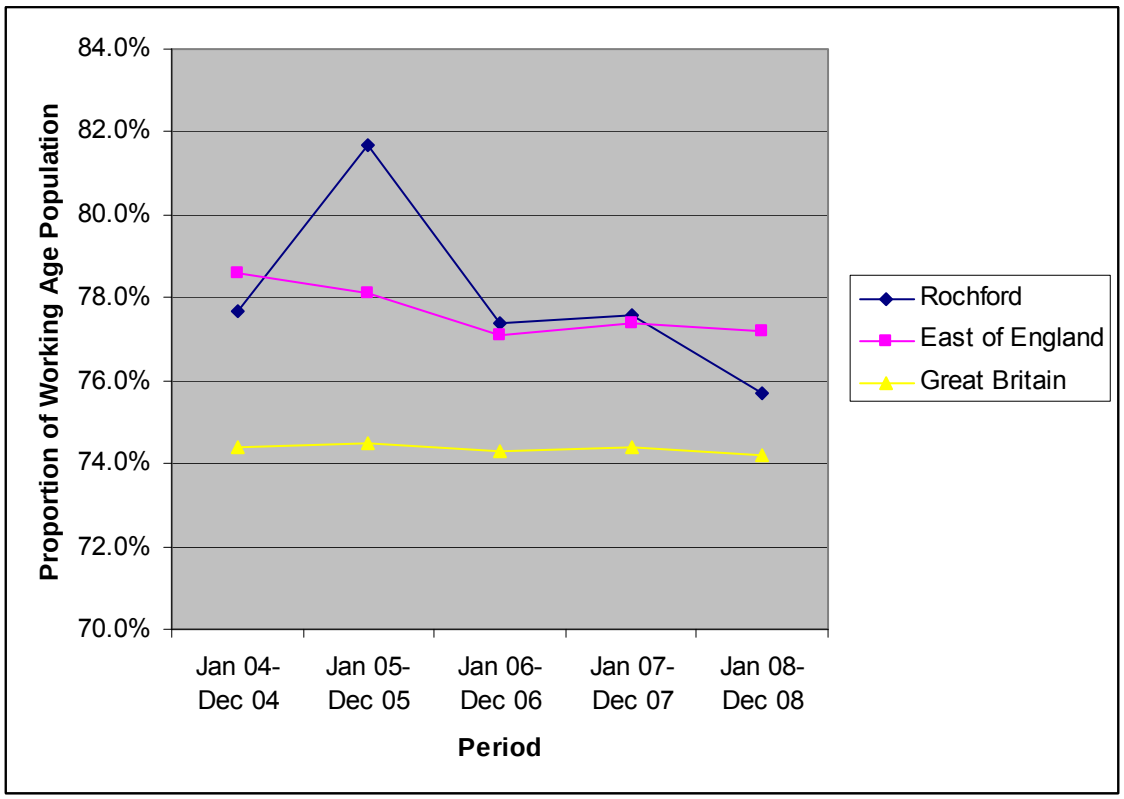
- Rochford has a higher proportion of economically active females, at 77.1%, than Great Britain (74%) and the East of England (76.2%). Rochford District also has a higher proportion of females in employment (73.5%) as well as higher proportions of those who are employees (68.6%).

Table 86: Proportion of Working Age Population in Employment between January 2004 – December 2008

Date	Rochford		East of England	Great Britain
Jan 04-Dec 04	38,300	77.7%	78.6%	74.4%
Jan 05-Dec 05	40,700	81.7%	78.1%	74.5%
Jan 06-Dec 06	40,100	77.4%	77.1%	74.3%
Jan 07-Dec 07	39,200	77.6%	77.4%	74.4%
Jan 08-Dec 08	38,400	75.7%	77.2%	74.2%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Figure 59: Proportion of Working Age Population in Employment between January 2004 – December 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- Across the period of study, the proportion of working age population in employment within the district has fallen from 77.6% to 73.8%. The proportion has been reducing since January – December 2006.
- The proportion of the working age population who have been in employment in the district was above that seen in the East of England and Great Britain between

January 2005 and December 2007. The latest set of figures report that 73.8% of the working age population are in employment, a figure below the regional total of 77.2% and national figure of 74.2%. This the first year where the district total has been below that of the national.

- The proportion of working age population employed has also decreased in the region across the years of study, from 78.6% to 77.2%. Nationally the figure was recorded as 74.4% in January – December 2004, reducing to 74.2% in January – December 2008.

Table 87: Proportion of Working Age Population who were Economically Inactive between January and December 2008

	Rochford		East of England	Great Britain
All people				
Economically inactive	9,500	19.8%	18.7%	21.2%
Wanting a job	#	#	4.8%	5.6%
Not wanting a job	7,600	15.7%	13.9%	15.6%
Males				
Economically inactive	4,300	17.0%	14.2%	16.8%
Wanting a job	#	#	3.8%	4.7%
Not wanting a job	#	#	10.4%	12.1%
Females				
Economically inactive	5,300	22.9%	23.8%	26.0%
Wanting a job	!	#	6.0%	6.6%
Not wanting a job	4,400	19.4%	17.8%	19.4%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Notes: Numbers and % are for those of working age

Sample size is too small for reliable estimate

% is a proportion of total working age population

- At 19.8% there is a higher instance of economically inactive people in Rochford District than what is reported in the Eastern Region (18.7%) although the value is lower in Great Britain (21.2%). Of those economically inactive in Rochford but wanting a job, there is too small a figure for a reliable estimate. The East of England reported a figure of 4.8% and 5.6% was reported in Great Britain.

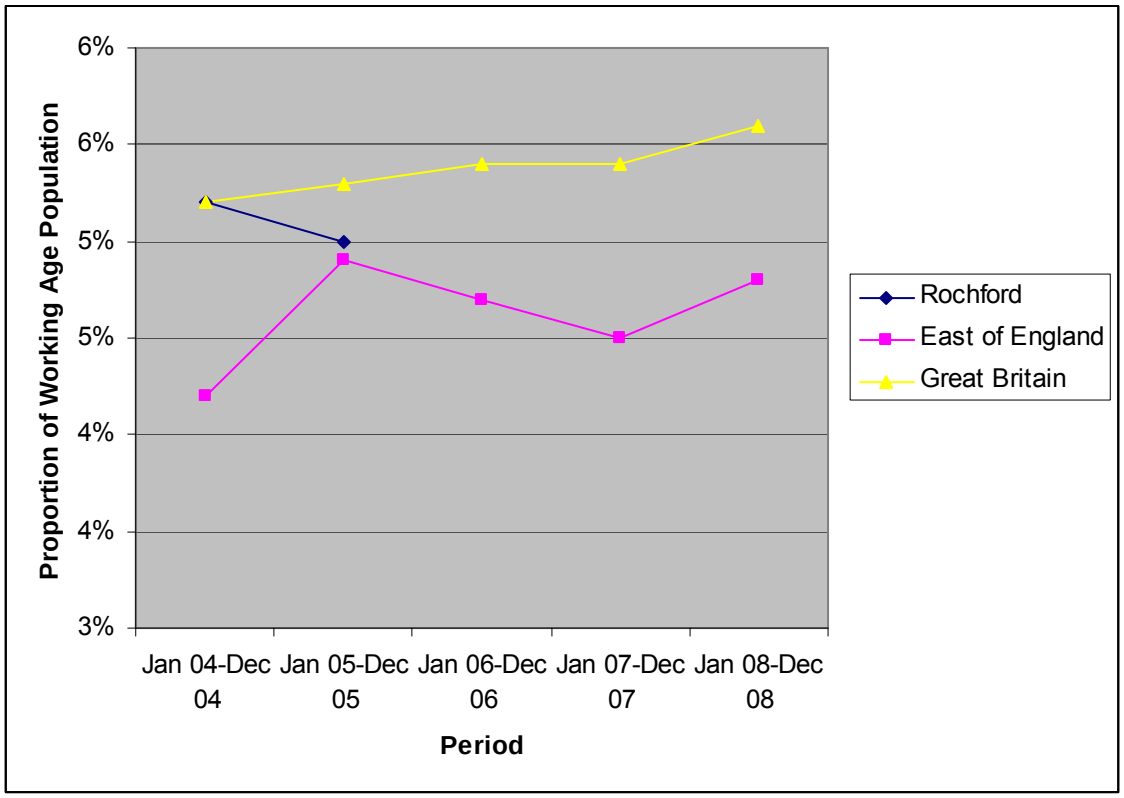
Table 88: Proportion of Working Age Population who were Economically Inactive and Wanting a Job January 2004 – December 2008

Date	Rochford		East of England	Great Britain
Jan 04-Dec 04	6,000	5%	4.2%	5.2%
Jan 05-Dec 05	5,500	5%	4.9%	5.3%
Jan 06-Dec 06	6,600	#	4.7%	5.4%
Jan 07-Dec 07	7,300	#	4.5%	5.4%
Jan 08-Dec 08	7,600	#	4.8%	5.6%

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Notes: # Sample size is too small for reliable estimate

Figure 60: Proportion of Working Age Population who were Economically Inactive and Wanting a Job January 2004 – December 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- The data set available for Rochford District is too small to allow for a reliable estimate.
- Both the East of England and Great Britain have reported increases in the proportion of people who are economically inactive but wanting a job, from 4.2% to 4.8%, and 5.2% to 5.6% respectively.
- The East of England reported its first upturn in this field in January – December 2008 since January – December 2005.

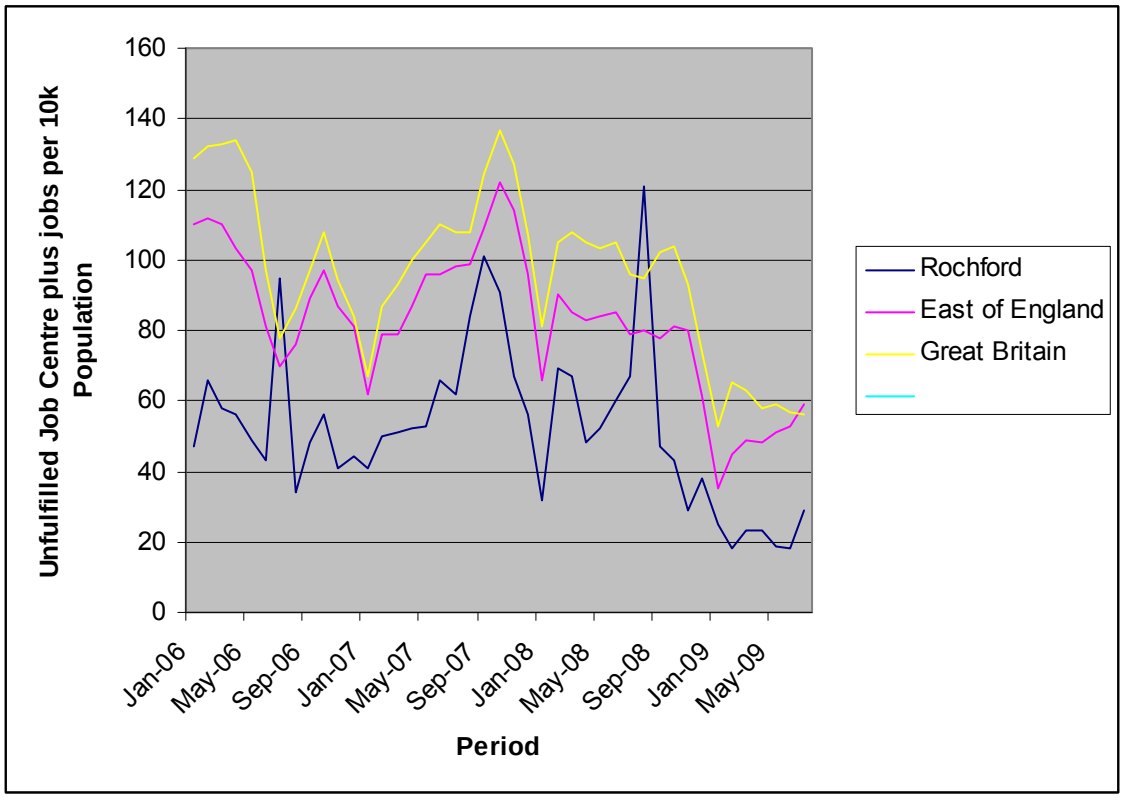
Please note that in the following table, results from January and July are shown for each year but the accompanying graph has been constructed using data reported at monthly intervals.

Table 89: Unfilled Job Centre Plus Vacancies per 10k Working Age Population January 2006–July 2009

Date	Rochford	East of England	Great Britain
Jan-06	47	110	129
Jul-06	95	70	78
Jan-07	41	62	67
Jul-07	62	98	108
Jan-08	32	66	81
Jul-08	67	79	96
Jan-09	25	35	53
Jul-09	29	59	56

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Figure 61: Unfilled Job Centre Plus Vacancies per 10k Working Age Population January 2006–July 2009



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- The number of unfulfilled Job Centre Plus jobs per 10,000 population has decreased at all hierarchies. Across the period of study, the number of Job Centre Plus vacancies per 10k population in the district has reduced from 47 in January

2006 to 29 in July 2009. Over the same period of study, the East of England shows a reduction from 110 to 59 and Great Britain 129 to 56.

- Across the period of study, Great Britain has tended to have a higher number of Job Centre Plus vacancies per 10k population than Rochford and the East of England.

K. Comparison of Average Weekly Wage Earned by Residents and Workers

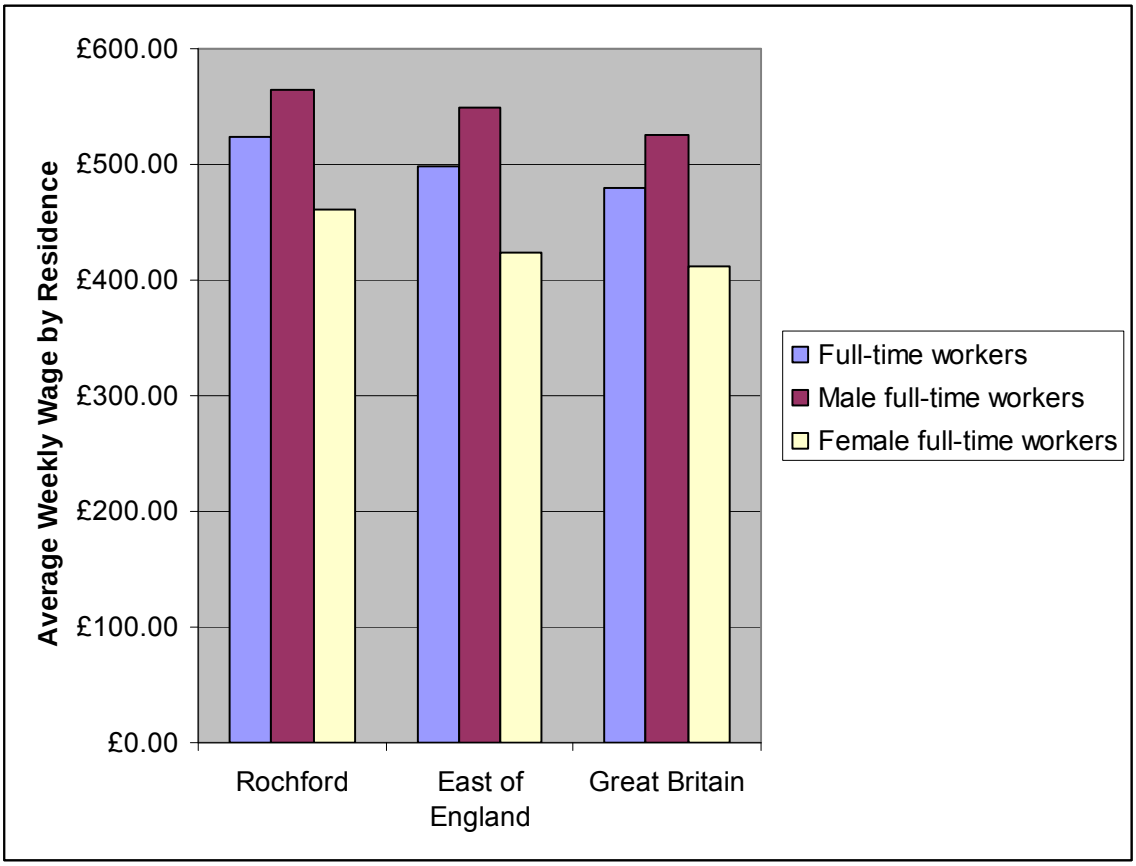
The Tables and Figures in this section analyse the average wage of people who reside in Rochford, the Eastern Region and Great Britain irrespective of where they are employed, and those employed in Rochford, the Eastern Region and Great Britain irrespective of where they live. Please note that in 2006 there were a number of methodological changes made to the calculations of statistics reported in this section. For more information, please go to http://www.nomisweb.co.uk

Table 90: Comparison of Average Weekly Wages by Residence in 2008

	Rochford	East of England	Great Britain
Gross weekly pay			
Full-time workers	£524.00	£498.70	£479.30
Male full-time workers	£565.20	£550.00	£525.00
Female full-time workers	£461.50	£423.70	£412.70
Hourly pay			
Full-time workers	£12.97	£12.44	£12.01
Male full-time workers	£13.03	£13.27	£12.72
Female full-time workers	£12.31	£11.26	£10.96

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Figure 62: Comparison of Average Wages by Residence in 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

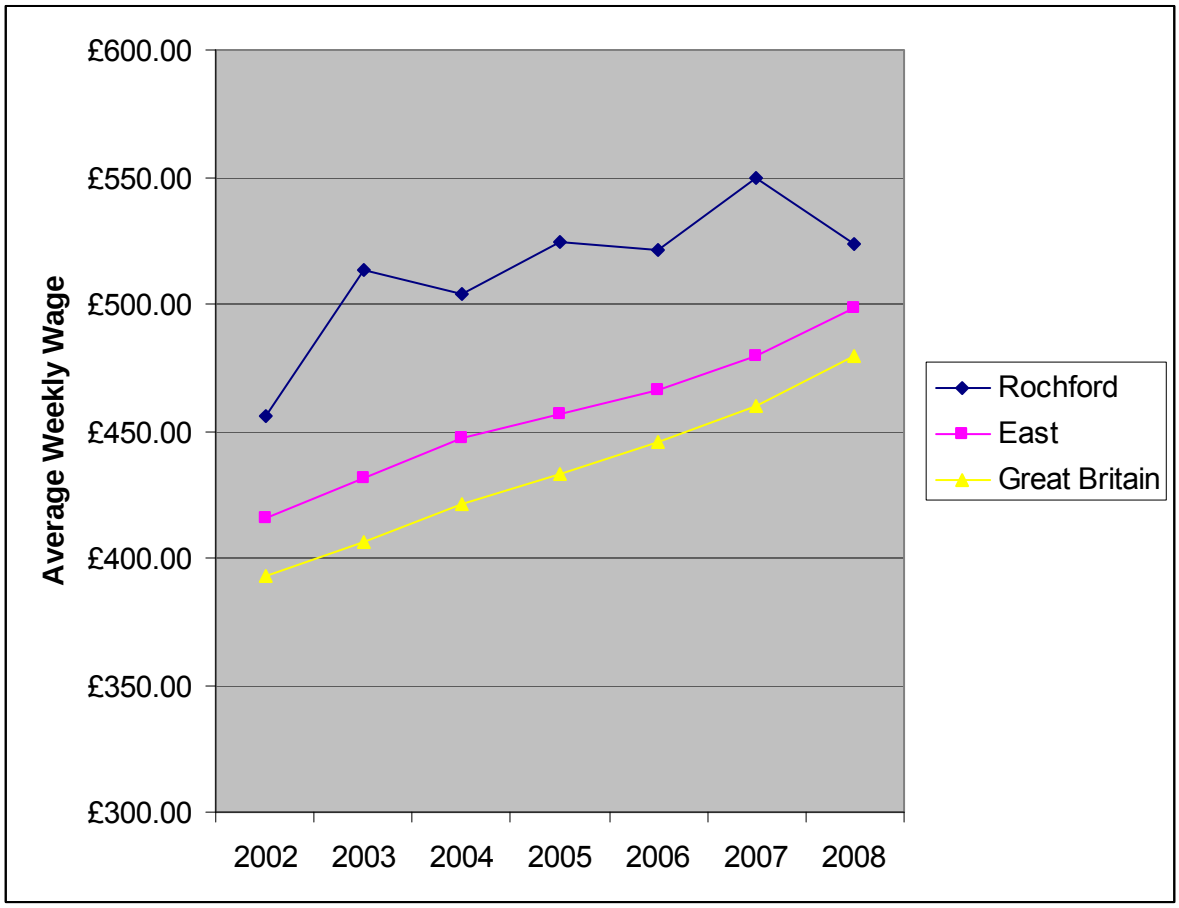
- Average gross weekly pay for people residing in Rochford District stood at £524.00 in 2008. This is £25.30 above that received by workers in the Eastern Region and £44.70 above that seen in Great Britain as a whole.
- Average weekly male wages in Rochford District are £565.20. This is above the regional amount of £550 and the national value of £525.
- Average female wages in the District are recorded as £461.50 per week. This is above both regional and national values, standing at £423.70 regionally and £412.70 nationally.

Table 91: Trend Analysis of Average Weekly Wage by Residence 2002–2008

Year	Rochford	East of England	Great Britain
2002	£456.10	£415.90	£392.70
2003	£513.50	£431.70	£406.20
2004	£504.00	£447.60	£421.30
2005	£524.60	£456.70	£432.80
2006	£521.20	£466.00	£445.90
2007	£549.50	£479.90	£460.00
2008	£524.00	£498.70	£479.30

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Figure 63: Trend Analysis of Average Weekly Wage by Residence 2002–2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- Between 2002 and 2008, the Rochford average weekly wage has been above that of the Eastern Region and Great Britain across the 7 year period covered by the above analysis.
- The average weekly wage paid in the Eastern Region has been above that found in Great Britain across the study although the 2008 figures show the smallest disparity between the two averaged weekly wages.
- The average weekly wage across all hierarchies shows an annual increase between 2002 and 2008. Within Rochford District, this increase has been from £456.10 in 2002 to £524 in 2008. The district last witnessed a drop in average weekly wage between 2007 and 2008. Average weekly wage by residence peaked in Rochford at £549.50 in 2007.

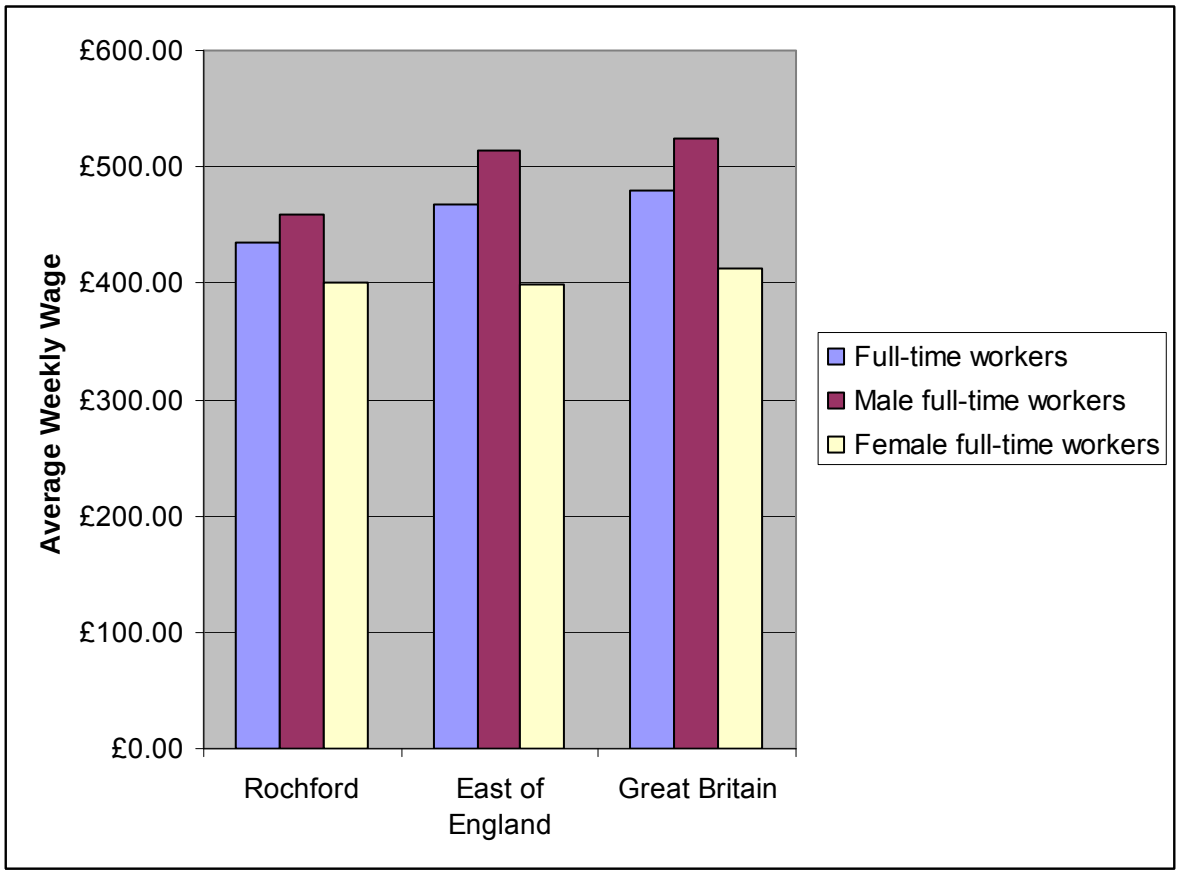
Table 92: Comparison of Average Weekly Wage by Place of Work in 2008

	Rochford	East of England	Great Britain
Gross weekly pay			
Full-time workers	£434.30	£468.10	£479.10
Male full-time workers	£458.70	£513.80	£523.50
Female full-time workers	£400.90	£398.50	£412.40
Hourly pay			
Full-time workers	£10.57	£11.62	£12.00
Male full-time workers	£10.89	£12.33	£12.69
Female full-time workers	#	£10.43	£10.95

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

Notes: # Sample size is too small for reliable estimate

Figure 64: Comparison of Average Weekly Wage by Place of Work in 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- The average weekly wage on offer within Rochford District is below that in the East of England and Great Britain. The district value of £434.30 compares to £468.10 regionally and £479.10 nationally.
- Males who work in Rochford District earn less on average than their counterparts in the Eastern Region and Great Britain. Male wages, with the average district wage

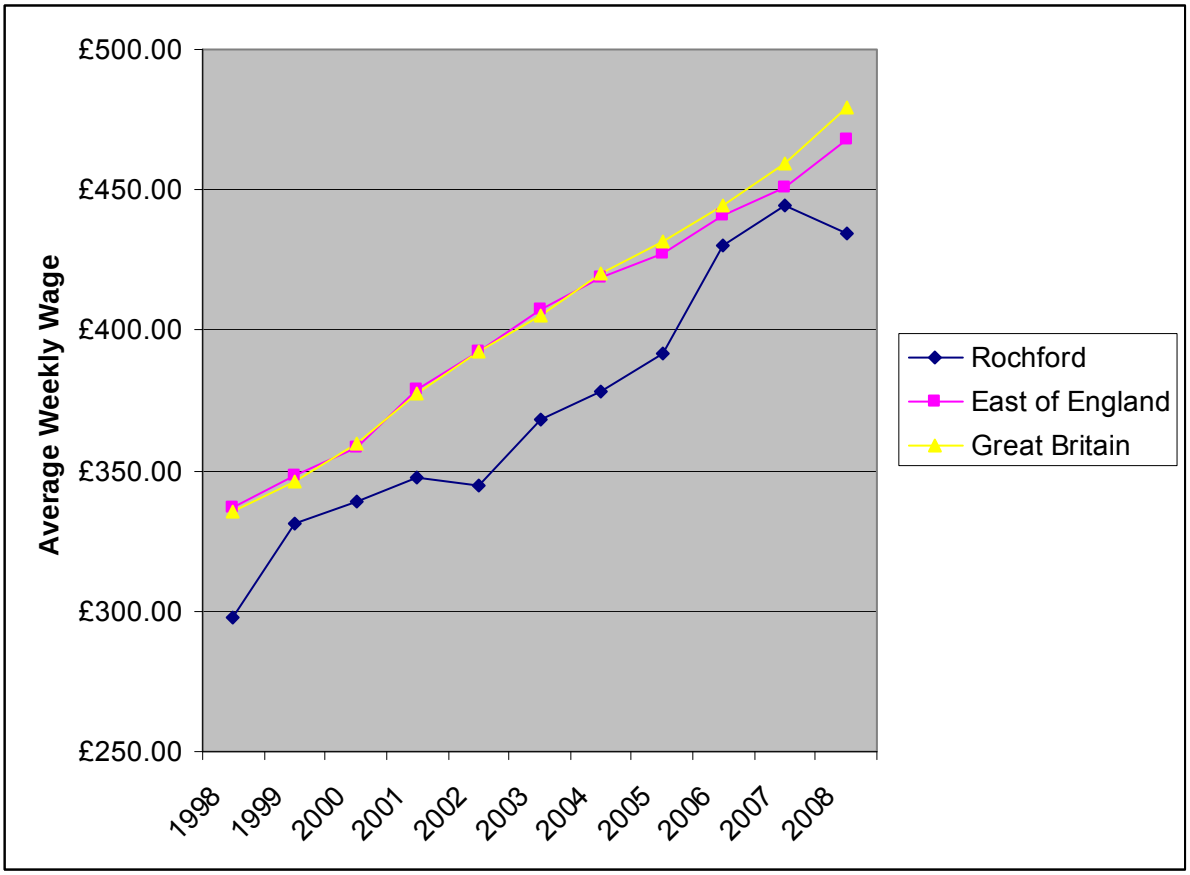
being £458.70, is £55.10 less than the Eastern Region and £64.80 below the national average.

Table 93: Trend Analysis of Average Weekly Wage by Place of Work 1998 – 2008

Year	Rochford	East of England	Great Britain
1998	£297.80	£337.00	£335.80
1999	£331.40	£348.30	£346.30
2000	£339.20	£358.10	£360.00
2001	£347.90	£379.10	£377.40
2002	£344.50	£392.60	£392.20
2003	£368.10	£407.60	£405.20
2004	£378.40	£419.10	£420.30
2005	£391.50	£427.70	£431.70
2006	£430.10	£440.60	£444.80
2007	£444.50	£450.50	£459.30
2008	£434.30	£468.10	£479.10

Source: NOMIS 2009 (https://www.nomisweb.co.uk)

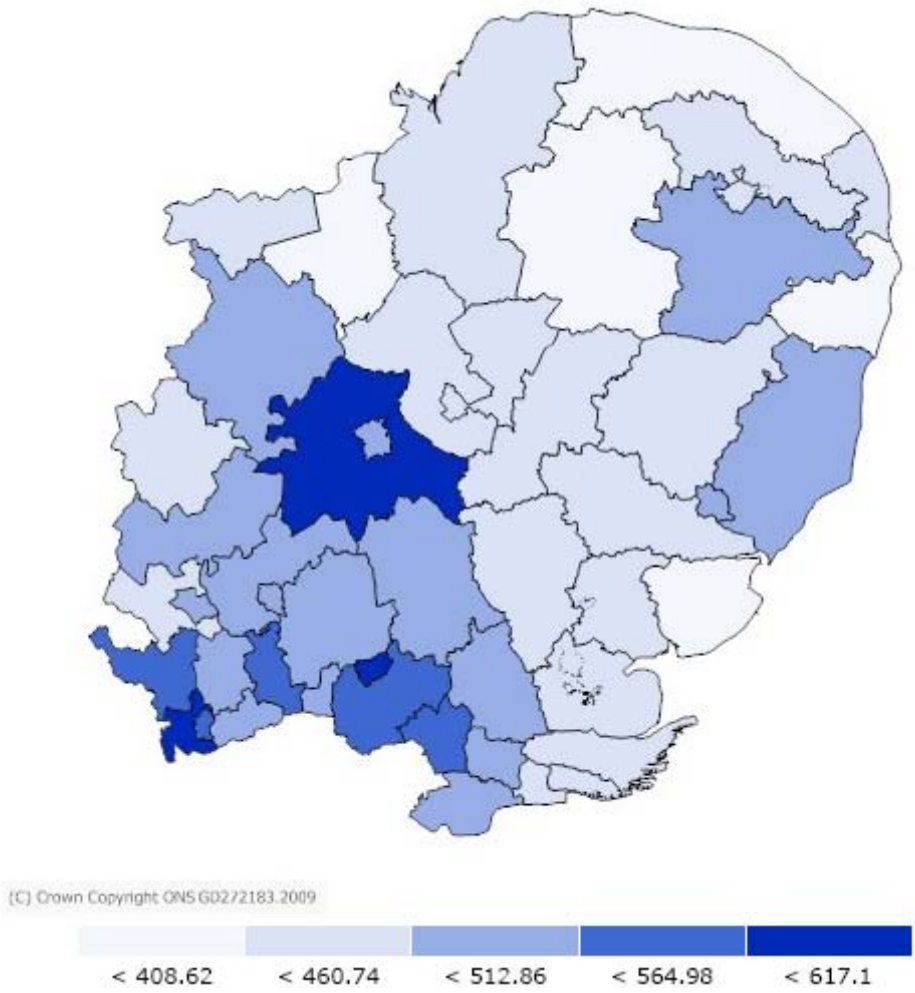
Figure 65: Trend Analysis of Average Weekly Wage by Place of Work 1998 – 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- The average weekly wage available within Rochford District has been below that seen in the Eastern Region and Great Britain between 1998 and 2008.
- The average wage offered within Rochford District in 2008, at £434.30, is below that found in 2007 where average wages were recorded at £444.50. 2007 and 2008 were the highest wages were reported across the period of study.
- Between 2006 and 2007, the wages on offer within Rochford showed the least disparity between themselves and those on offer in the East of England and Great Britain.
- Since 2004, averages wages in Great Britain have exceeded those on offer from jobs located within the Eastern Region.

Figure 66: Average Weekly Wage by Workplace across the Eastern Region 2008



Source: NOMIS 2009 (https://www.nomisweb.co.uk)

- At £434.30, Rochford District offers the 32nd highest wage of the 48 local authorities covered in this analysis. Harlow houses the highest paid jobs with an average weekly wage of £617.10 with North Norfolk the least at £356.50.
- The overriding pattern in weekly earnings by workplace is that of an increase in earnings being witnessed as the proximity of the Local Authority to London increases.

L. Planning Permissions Implemented and Outstanding

The following tables detail planning permissions that have been implemented over the period April 2008 to March 2009 as well as those which are currently outstanding at the end of March 2009. Retail (A1 and A2), Offices (B1) and General Industry (B1 – B8) are covered in this section.

Please note that there were no completed A1 – A2 planning permissions in Rochford District over the period April 2008 – March 2009.

Table 94: Outstanding Planning Permissions for A1 – A2 Use as of March 2009

Ward	Outstanding A1 - A2 Floorspace (Gross m2)	Potential Floorspace Loss (m2)	Outstanding A1 - A2 Floorspace (Net m2)	To be completed on PDL (m2)	To be completed on Greenfield (m2)
Rochford CP	382	0	382	382	0
Downhall & Rawreth	870	0	870	0	870
TOTAL	1,252	0	1,252	382	870

Source: Essex County Council 2009

- There are outstanding permissions equating to 1252m^2 net A1 – A2 floorspace spread over 2 wards. 870m^2 (69.49%) of this is intended to be completed on Greenfield land within the Ward of Downhall and Rawreth.

Please note that there were no completed B1 planning permissions in Rochford District over the period April 2008 – March 2009.

Table 95: Outstanding Planning Permissions for B1 Use as of April 2008–March 2009

Ward	Outstanding B1 Floorspace (Gross m2)	Potential Floorspace Loss (m2)	Outstanding B1 Floorspace (Net m2)	To be completed on PDL (m2)	To be completed on Greenfield (m2)
Rochford CP	8,219	0	8,219	3,969	4,250

Source: Essex County Council 2009

- There are outstanding permissions equating to 8219m^2 net B1 floorspace within Rochford Civil Parish. 4250m^2 (51.71%) of this is intended to be completed on Greenfield land.

Table 96: Implemented Planning Permissions for B1 – B8 between April 2008–March 2009

Ward	Completed B1 - B8 Floorspace (Gross m2)	Potential Floorspace Loss (m2)	Completed B1 - B8 Floorspace (Net m2)	To be completed on PDL (m2)	To be completed on Greenfield (m2)
Hawkwell West	1,472	1,472	0	1,472	0
Hockley Central	0	2,900	-2,900	0	0
Downhall & Rawreth	181	0	181	181	0
TOTAL	1,653	4,372	-2,719	1,653	0

Source: Essex County Council 2009

- Implemented planning permissions for B1 – B8 use amounted to the creation of 1653m^2 of B1 – B8 floorspace although this resulted in a net loss of 2719m^2 of B1 – B8 land.
- All gross floorspace completions occurred on previously developed land.
- Hockley Central lost 2900m^2 of B1 – B8 land between April 2008 – 2009 to non-residential uses.

Table 97: Outstanding Planning Permissions for B1 – B8 Use as of April 2008–March 2009

Ward	Outstanding B1 - B8 Floorspace (Gross m2)	Potential Floorspace Loss (m2)	Outstanding B1 - B8 Floorspace (Net m2)	To be completed on PDL (m2)	To be completed on Greenfield (m2)
Hockley Central	1,184	350	834	1,184	0
Rochford CP	4,867	0	4,867	140	4,727
Downhall & Rawreth	1,785	1,032	753	1,785	0
Whitehouse Ward	616	331	285	616	0
TOTAL	8,452	1,713	6,739	3,725	4,727

Source: Essex County Council 2009

- Outstanding planning permissions for B1 – B8 totalled 8452m^2 gross in April 2008 – March 2009, equating to 6739m^2 of potential net gain.
- Rochford Central Parish is set to receive the highest proportion at 4867m^2 (55.93%). This is all earmarked for Greenfield land, and equates to the total outstanding permissions for Greenfield B1 – B8 development in the district.
- Downhall and Rawreth Ward is set to lose the biggest amount of B1 – B8 land following planning implementations, equating to 1032m^2, or 60.25% of the total potential loss.

12.3 Economy Summary

- Businesses which employ 0 – 4 people are the most prevalent in Rochford (75.22%), the East of England (70.78%) and England (69.24%).

- Rochford District has a lower proportion of local units in rural locations than both the East of England and England. Within Rochford this proportion is 22.3% compared to a regional value of 37.14% and national value of 25.45%.
- The registration rate of new businesses per 10k population has been higher in Rochford than Essex between 2002 and 2007. The business formation rate in Rochford has increased from 58.2 to 60.9 over the period of study. Within Essex the rate increased from 57.2 to 64.5.
- Between 2002/2003 and 2006/2007, the proportion of small businesses experiencing growth has increased in both Rochford and Essex. Within Rochford the proportion increased from 8.01% to 12.33% whilst in Essex it increased from 9.06% to 12.62%.
- Factories and warehouses account for the majority of industrial floorspace at all geographical hierarchies. The floorspace allocated to factories in the District, at 35.36%, is above that found in the East of England (32.87%) and England (34.23%).
- Between 2000 and 2007, job density in Rochford District decreased from 0.53 to 0.49. In 2007, the East of England reported a value of 0.81 whilst Great Britain reported the highest job density at 0.83.
- The highest proportion of people at all hierarchies work in the Services industry. The proportion is the lowest in Rochford at 77.2%, compared to 81.8% in the East of England and 83% in Great Britain.
- The 'Associate professional and technical' SOC group is the group with the largest proportion of workers in Rochford at 18.5%. 'Managers and senior officials' show the highest proportion of workers in the East of England (16.9%) and Great Britain (15.7%). In Rochford this proportion is 15.3% which is the second highest proportion found in the district.
- At 80.2%, the proportion of economically active working age people in the district is below that reported in the Eastern Region (81.3%) but above that in Great Britain (78.8%).
- Between January 2004 and December 2008, the proportion of working age population in employment within the district has fallen from 77.6% to 73.8%. The proportion has been reducing since January – December 2006.
- Both the East of England and Great Britain have reported increases in the proportion of people who are economically inactive but wanting a job, from 4.2% to 4.8%, and 5.2% to 5.6% respectively. The data set in Rochford District is too small to allow for a reliable estimate.
- Across the period of study, the number of Job Centre Plus vacancies per 10k population in the district has reduced from 47 in January 2006 to 29 in July 2009. Over the same period of study, the East of England shows a reduction from 110 to 59 and Great Britain 129 to 56.
- Average gross weekly pay for people residing in Rochford District stood at £524.00 in 2008, an increase from the £456.10 in 2002. In 2008, the East of England recorded £498.70 and Great Britain £479.30.
- The average weekly wage on offer within Rochford District was below that in the East of England and Great Britain in 2008. The district value of £434.30 compares to £468.10 regionally and £479.10 nationally.
- The average wage offered within Rochford District in 2008, at £434.30, is below that found in 2007 where average wages were recorded at £444.50.
- At £434.40, Rochford District offers the 39th highest wage of the 48 local authorities in the East of England. Harlow houses the highest paid jobs with an average weekly wage of £617.10 with North Norfolk the least at £356.50.

13 HOUSING

13.1 Introduction

The provision of decent, affordable housing is a key priority for achieving sustainable communities. Not only should there be sufficient housing to meet the rising demand of an increasing population, there should also be suitable housing to meet a wide range of needs and reduce the proportion of homelessness.

13.2 Baseline Information

A. Housing Completions and Housing Trajectory

Local Planning Authorities are required to monitor housing completions on a regular and frequent basis. Regional Spatial Strategies set the level of overall housing provision, broadly illustrating a housing delivery trajectory for a period of at least 15 years.

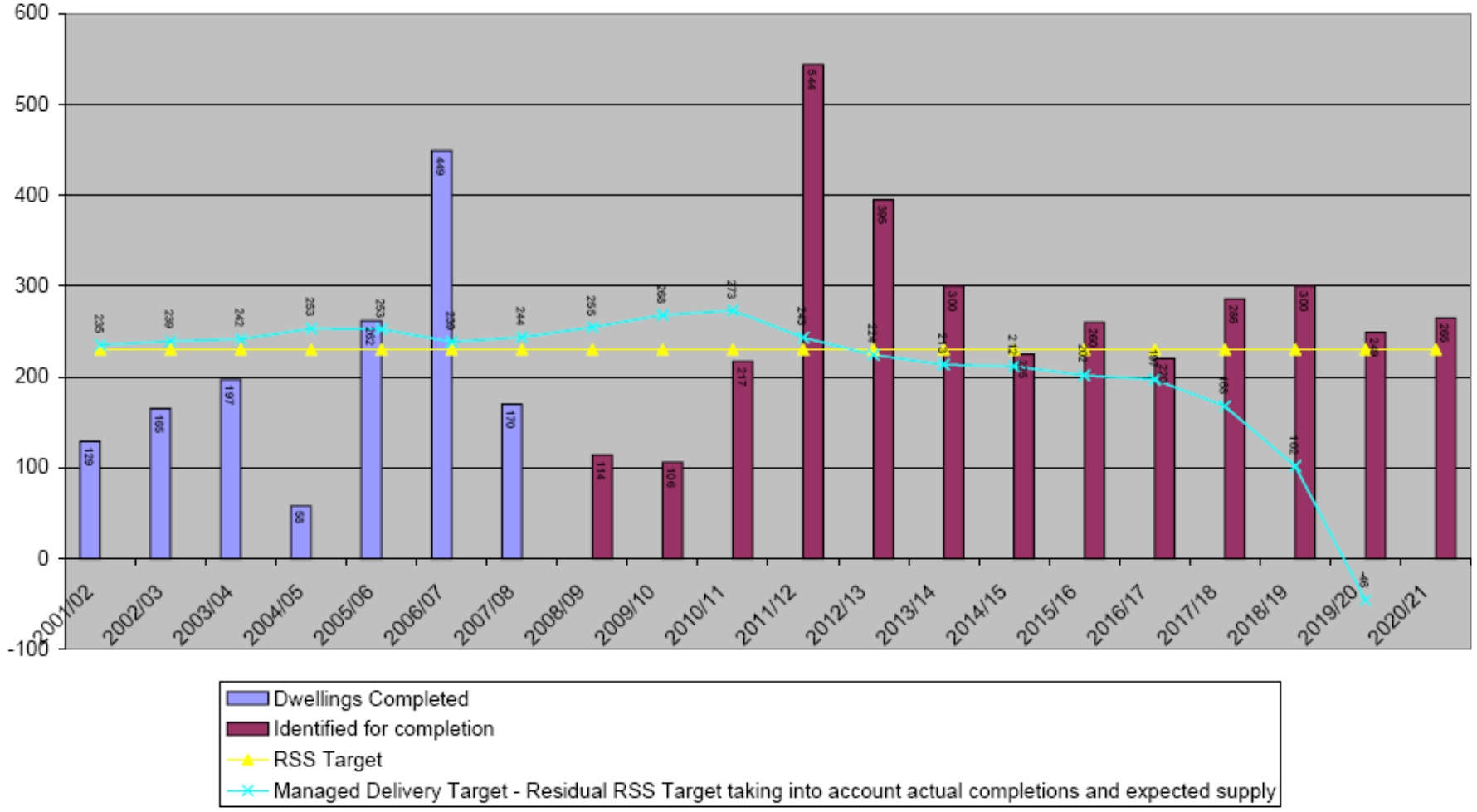
Table 98: Housing Completions in Rochford District

	Gross Dwelling Completions (units)	Net Dwelling Completions (units)
2004/2005	84	58
2005/2006	276	262
2006/2007	473	449
2007/2008	201	169
2008/2009	135	102

Source: Essex County Council, 2009

In 2008/2009 there were 135 dwelling completions which equated to 102 net additional dwellings (taking into account losses/demolitions) in Rochford District. There has been a significant drop in the number of dwelling completions since 2006/2007 to 2008/2009.

Figure 67: Housing Trajectory in Rochford District



Source: East of England Annual Monitoring Report 2007/2008 (March 2009) (http://www.eera.gov.uk)

- The annual numbers of net completed dwellings between 2001/02 and 2007/08 have fluctuated considerably with only two years exceeding the annual RSS target of 230. In 2004/2005 Rochford District was significantly below the target with only 58 completed dwellings.
- The total RSS minimum target for Rochford District is 4,600 new dwellings by 2021. To achieve this, the number of dwellings identified for completion for each year between 2008/2009 and 2020/2021 varies considerably. The minimum number is 106 dwellings in 2009/2010 whilst the highest number is 544 dwellings in 2011/2012 which is significantly above the yearly RSS target.

B. Housing Completions on Previously Developed Land

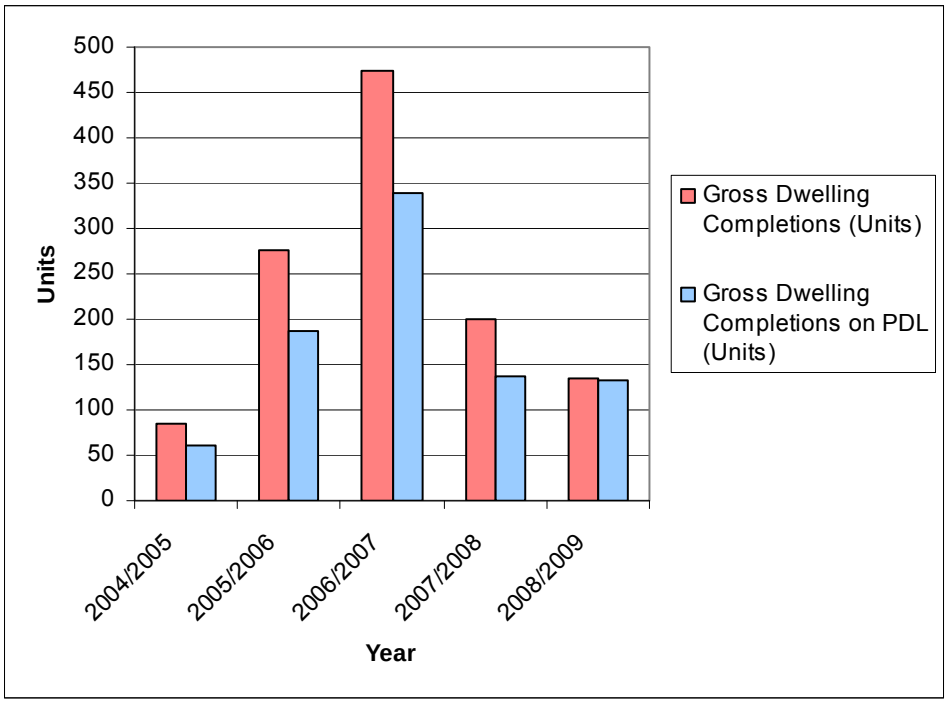
PPS3 defines Previously Developed Land (PDL) as land which is or was occupied by a permanent structure, including the curtilage of the developed land and any associated fixed surface infrastructure.

Table 99: Proportion of Housing Completions on Previously Developed Land in Rochford District

	Gross Dwelling Completions on PDL (units)	Proportion of Gross Dwelling Completions on PDL (%)
2004/2005	61	72.62
2005/2006	188	68.12
2006/2007	339	71.67
2007/2008	136	67.66
2008/2009	132	97.80

Source: Essex County Council, 2009

Figure 68: Housing Completions on Previously Developed Land in Rochford District



Source: Essex County Council, 2009

- The number of gross dwelling completions on previously developed land (PDL) within Rochford District has declined since 2006/2007 from 339 units to 132 units in 2008/2009.
- The most recent period, 2008/2009 recorded the second lowest number of dwellings completed on PDL during the study period. However, when considered proportionately to the total number of dwelling completions per year, the 132 dwellings completed on PDL in 2008/2009 accounted for 97.8% which is the highest proportion in the period of study.

C. Affordable Housing Supply

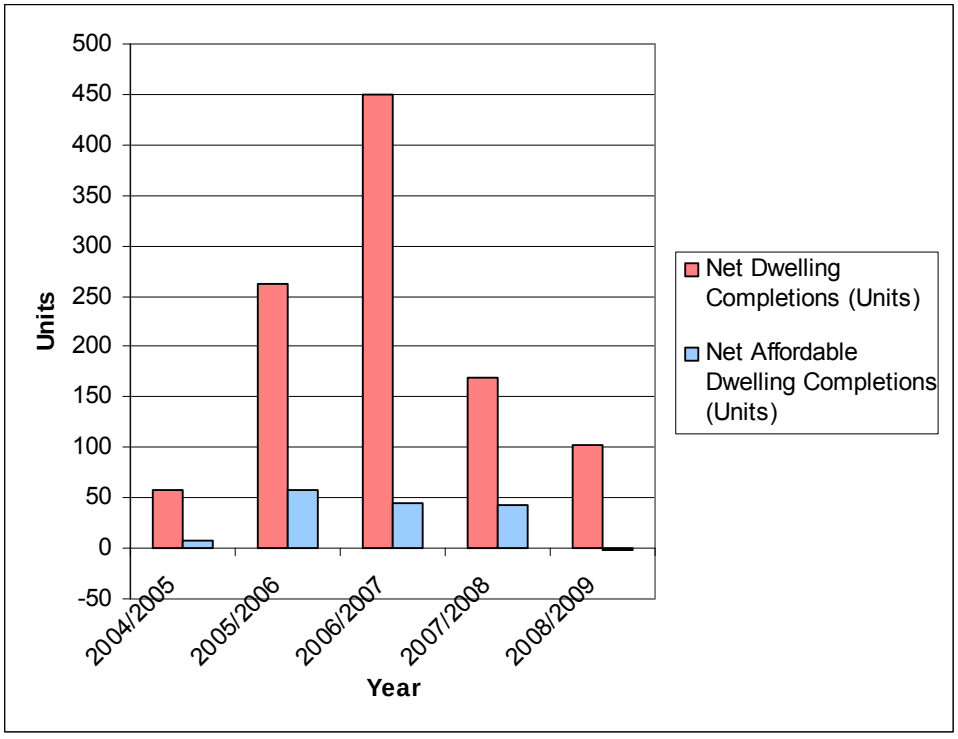
PPS3 provides the definition for affordable housing as including social rented and intermediate housing provided to specified eligible households whose needs are not met by the market.

Table 100: Proportion of Net Affordable Housing Completions in Rochford District

	Net Affordable Dwelling Completions (units)	Proportion of Net Affordable Dwelling Completions (%)
2004/2005	7	12.07
2005/2006	57	21.76
2006/2007	44	9.80
2007/2008	43	25.44
2008/2009	-1	-0.90

Source: Essex County Council, 2009

Figure 69: Net Affordable Housing Completions in Rochford District



Source: Essex County Council, 2009

- The number of net dwelling completions classified as affordable peaked in the period of study at 57 units in 2005/2006. After this date the number of affordable dwelling completions fell annually.
- In 2008/2009 there was a loss in the number of net completed affordable dwellings by 1 unit. This resulted in affordable dwelling completions accounting for a negative proportion of the total number of dwellings completed in 2008/2009. In contrast affordable dwelling completions accounted for 25.44% of the total number of dwelling completions in the previous year, 2007/2008.

D. Dwelling Prices and Property Sales

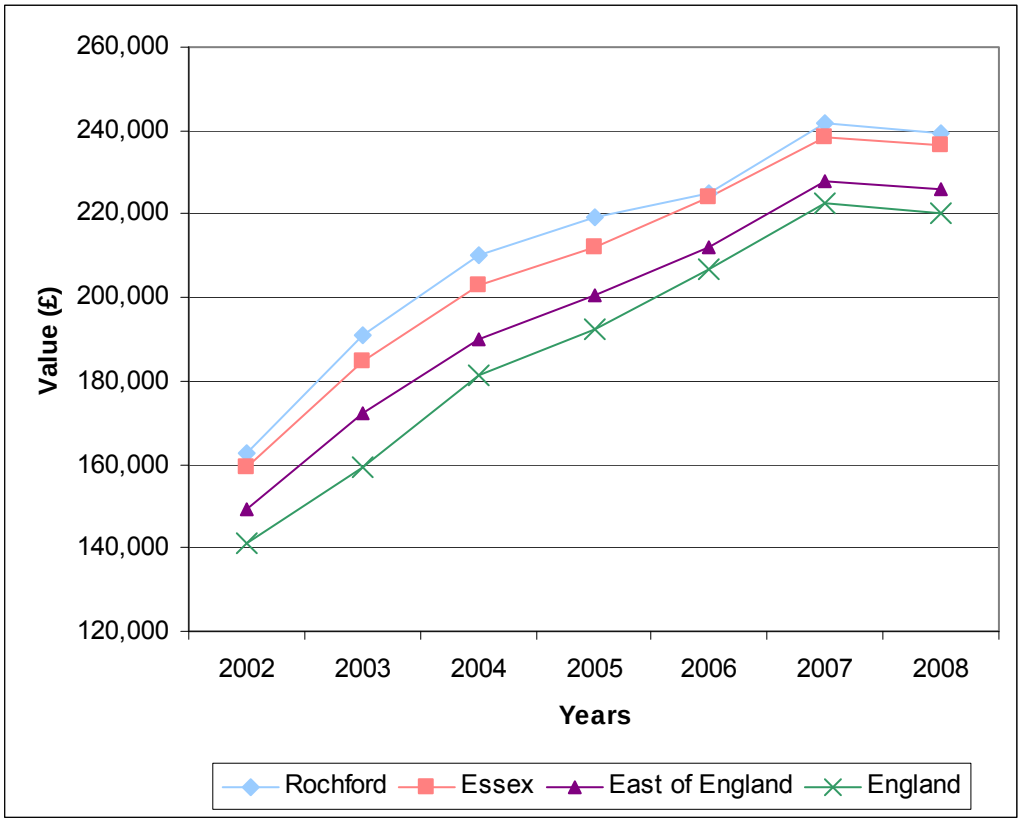
When determining housing provision Local Planning Authorities and Regional Planning Bodies should take into account relevant information such as long term house prices.

Table 101: Mean Dwelling Prices Based on Land Registry Data in Pounds Sterling

	2002	2003	2004	2005	2006	2007	2008
Rochford	162,500	190,956	209,911	219,172	224,839	241,841	239,440
Essex	159,327	184,960	202,812	212,094	224,038	238,311	236,656
East of England	149,299	172,257	190,218	200,501	212,186	227,766	225,967
England	141,108	159,357	181,330	192,247	206,715	222,619	220,310

Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

Figure 70: Mean Dwelling Prices Based on Land Registry Data in Pounds Sterling



Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

- In 2008 Rochford District had a comparatively higher mean dwelling price of £239,196 than the county, regional and national values of £236,656, £225,967 and

£220,310 respectively. Since 2002 the mean dwelling prices in Rochford District have been consistently above that of county, regional and national values.

- The mean annual dwelling prices in Rochford District follow the same trend as county, regional and national dwelling prices with an increase during the period of 2002 to 2007 followed by a decrease in 2008.

Table 102: Property Sales Based on Land Registry Data

	2002	2003	2004	2005	2006	2007	2008
Rochford	1,837	1,643	1,664	1,401	1,896	1,971	974
Essex	35,305	31,437	33,112	27,179	34,286	34,061	16,871
East of England	148,074	131,460	136,449	114,582	144,583	140,515	70,729
England	1,261,536	1,148,600	1,170,327	974,340	1,223,129	1,190,311	609,840

Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

The annual number of property sales between 2002 and 2008 has fluctuated for all geographical area showing a similar pattern with peaks in 2004 and 2006. After 2006 the number of property sales declined with a significant decrease occurring between 2007 and 2008. In Rochford District this accounted for 997 fewer sales with only 974 property sales taking place in 2008.

E. Dwelling Stock by Tenure and Condition

Planning for housing policy objectives should ensure that there is a mix of housing types and tenures.

Table 103: Dwelling Stock by Tenure and Condition 2008

	Rochford		Essex		East of England		England	
	Count	%	Count	%	Count	%	Count	%
Total Dwelling Stock	34,195	100.0	590,897	100.0	2,464,469	100.0	22,493,857	100.0
LA Dwelling Stock	1	0.0	45,056	7.6	164,316	6.7	1,870,365	8.3
RSL Dwelling Stock	2,789	8.2	41,812	7.1	223,273	9.1	2,142,297	9.5
Other Public Sector Dwelling Stock	170	0.5	6,102	1.0	13,025	0.5	74,134	0.3
Owner Occupied and Private Rented Dwelling Stock	31,235	91.3	497,927	84.3	2,063,855	83.7	18,407,061	81.8
Energy Efficiency of Private Sector Housing: Average SAP Rating	56	..	55	..	..	..	..	..
LA Dwellings that Fall Below the 'Decent Home Standard'	..	..	..	13.7	..	17.0	..	26.2
LA Dwellings Requiring Investment	..	..	13,593	30	45,518	27.7	892,369	47.7
Total Cost of Investment Required (,000s)	..	..	230,959	..	527,546	..	8,435,249	..

Source: Office for National Statistics (original source Communities and Local Government) March 2009 (http://neighbourhood.statistics.gov.uk)

Note: .. information not available

- Owner occupied and private rented dwellings accounted for 91.3% of the total dwelling stock within Rochford District in 2008 while 8.2% of dwelling stock in the district was Registered Social Landlord (RSL) dwellings and 0.5% was other public sector dwellings.
- There are no Local Authority (LA) owned dwellings in the district At county, regional and national level there are 7.6%, 6.7% and 8.3% respectively
- There were no results given as to the percentage of LA dwellings falling below the ‘decent home standard’ and the LA dwellings requiring investment for Rochford District. On a countywide level 13.7% of LA dwelling didn’t meet the ‘decent home standard’ which is below that of regional and national figures and 30% of LA dwellings in Essex required investment.

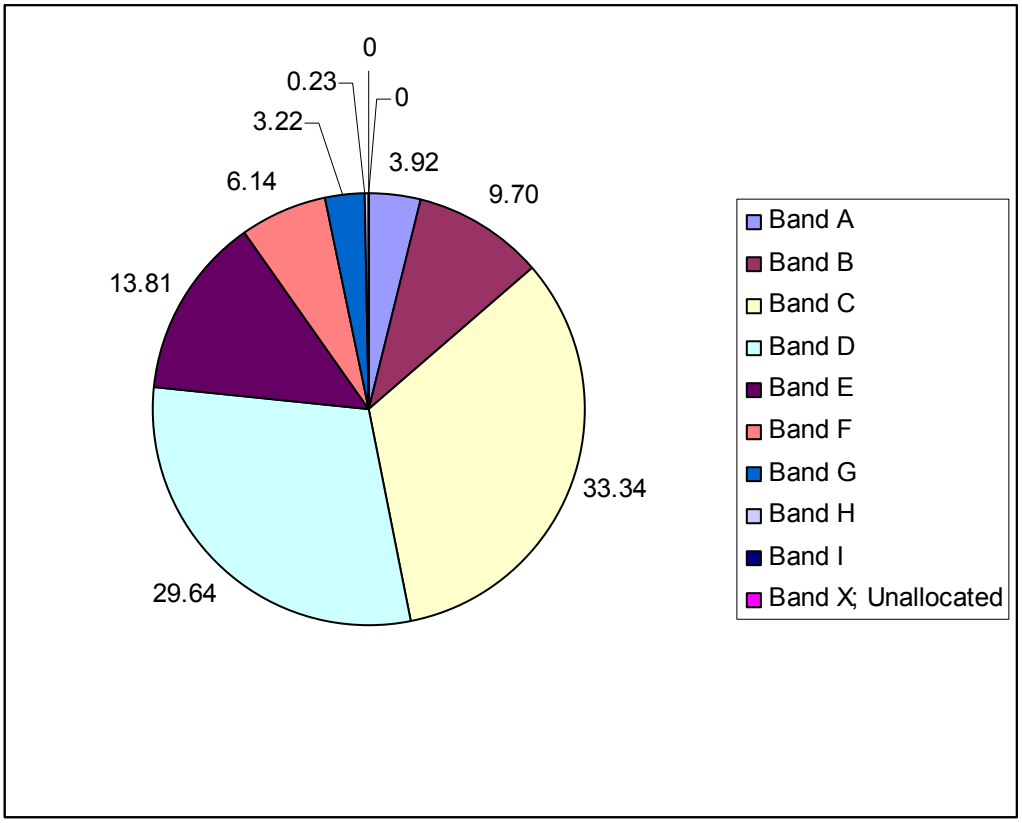
F. Dwelling Stock by Council Tax Band

Table 104: Dwelling Stock by Council Tax Band 2007

	Rochford		East of England		England	
	Count	%	Count	%	Count	%
Total	34,057	100.00	2,442,884	100.00	22,289,256	100.00
Band A	1,334	3.92	349,781	14.32	5,608,566	25.16
Band B	3,305	9.70	517,383	21.18	4,314,757	19.36
Band C	11,354	33.34	641,731	26.27	4,825,402	21.65
Band D	10,093	29.64	426,478	17.46	3,393,630	15.23
Band E	4,704	13.81	259,065	10.60	2,112,189	9.48
Band F	2,091	6.14	140,976	5.77	1,116,768	5.01
Band G	1,098	3.22	95,905	3.93	793,269	3.56
Band H	78	0.23	11,565	0.47	124,667	0.56
Band I	0	0.00	0	0.00	8	0.00
Band X; Unallocated	0	0.00	0	0.00	0	0.00

Source: Office for National Statistics (original source Communities for Local Government) January 2009 (http://neighbourhood.statistics.gov.uk)

Figure 71: Dwelling Stock by Council Tax Band in 2007



Source: Office for National Statistics (original source Communities for Local Government) January 2009 (http://neighbourhood.statistics.gov.uk)

- In 2007 tax band C had the largest proportion of dwelling stock within Rochford District and the East of England region with 33.34% and 26.27% respectively. In England as a whole the largest proportion of dwelling stock was in tax band A. Tax band D had the next largest proportion of the dwelling stock within the district at 29.64%.

G. Homelessness

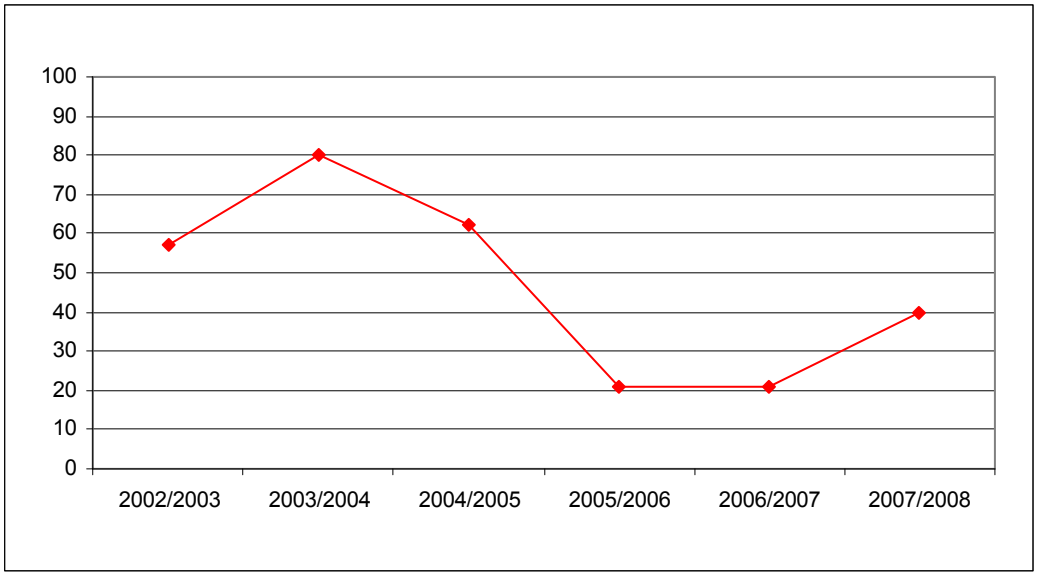
Part of the policy process is identifying the accommodation requirements of specific groups such as the homeless.

Table 105: Total Number of Homeless Acceptances in Priority Need

	Rochford	East of England	England
2002/2003	57	11,060	129,700
2003/2004	80	11,230	137,000
2004/2005	62	10,150	120,860
2005/2006	21	16,700	213,290
2006/2007	21	6,890	73,360
2007/2008	40	5,900	63,170

Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

Figure 72: Total Number of Homeless Acceptances in Priority Need in Rochford District



Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

- Between 2002/2003 and 2007/2008 the district, regional and national levels have all experienced fluctuations in numbers of homeless acceptances in priority need.
- In 2005/2006 both the East of England region and England as a whole reported the highest levels of homeless acceptances in priority need with 16,700 and 213,290 people respectively. Rochford District recorded the highest level of homeless acceptances in priority need in 2003/2004 with 80 people.
- The number of homeless acceptance in priority need in Rochford District increased in the most recent year from 21 people in 2006/2007 to 40 people in 2007/2008. In

contrast, the numbers have fallen during the same time period at regional and national levels.

Table 106: Ethnicity of Homeless Acceptances in Priority Need 2007/2008

	Rochford		Essex		East of England	
	Count	%	Count	%	Count	%
Total	40	100.00	1,746	100.00	5,900	100.00
White	38	95.00	1,632	93.47	5,130	86.95
African Caribbean	1	2.50	51	2.92	240	4.07
Indian/ Pakistani/ Bangladesh	0	0.00	14	0.80	210	3.56
Other Ethnic Origin	1	2.50	25	1.43	150	2.54
Ethnic Origin (Not Known)	0	0.00	24	1.37	200	3.39

Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

- In Rochford District there were 40 people accepted as being homeless and in priority need in 2007/2008, and similar to county and regional levels the higher proportion of homeless acceptances were of white ethnicity.
- In the district, one homeless acceptance in priority need was of African Caribbean ethnicity, one was categorised as 'other ethnic origin' whilst there were no homeless acceptances of Indian/Pakistani/ Bangladeshi ethnicity.

Table 107: Homeless Households Accommodated by the Authority in Rochford District 2007/2008

	Total	%
Temporary Accommodation	37	100.00
Bed and Breakfast Accommodation	13	35.14
Hostels (including women's refuges)	6	16.22
Local Authority/ Housing Association Dwelling	17	45.95
Private Sector Lease	0	0.00
Other Accommodation	1	2.70

Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

- There were 37 homeless households accommodated by the authority in Rochford District during 2007/2008. Of those, 17 households were accommodated in local authority/housing association dwellings, 13 were placed in bed and breakfast accommodation, six in hostels which included womens refuges and one household stayed in 'other' accommodation.
- The number of people "homeless at home" awaiting accommodation at end of March 2009 in Rochford District was two compared to 26 in Braintree District which was the highest number of all administrative areas in Essex.

H. Gypsy and Traveller Sites

Circular 01/2006 sets out planning guidance for gypsy and traveller sites; it outlines the Governments commitment to ensure an adequate supply of land.

Table 108: Count of Gypsy and Traveller Caravans 21st January 2008

		Authorised sites (with planning permission)		Unauthorised sites (without planning permission)				Total All Caravans
				No. of Caravans on Sites on Gypsies own land		No. of Caravans on Sites on land not owned by Gypsies		
Region	Count	No. of Caravans Socially Rented	No. of Caravans Private	"Tolerated"	"Not tolerated"	"Tolerated"	"Not tolerated"	
Rochford	Jan 2009	0	7	0	14	0	2	23
	Jul 2008	0	7	0	15	0	0	22
	Jan 2008	0	5	0	16	0	5	26
	Jul 2007	0	6	0	15	0	5	26
	Jan 2007	0	3	0	16	0	6	25
Essex	Jan 2009	225	549	53	264	3	8	1,102
	Jul 2008	228	497	54	194	2	16	991
	Jan 2008	183	498	51	296	2	9	1,039
	Jul 2007	222	434	61	199	6	16	938
	Jan 2007	239	411	43	269	2	13	977
East of England	Jan 2009	1,415	1,990	360	404	144	65	4,378
	Jul 2008	1,373	2,032	277	312	160	168	4,322
	Jan 2008	1,333	2,126	237	491	97	105	4,389
	Jul 2007	1,410	1,879	259	396	109	176	4,229
	Jan 2007	1,419	1,750	228	571	62	133	4,163

Source: Communities and Local Government 2009 (http://www.communities.gov.uk)

- In January 2009 there were a total of 23 caravans sited within the district, of which 7 were located on authorised sites and 16 on unauthorised sites. All caravans on unauthorised sites were not tolerated with 14 caravans situated on land owned by gypsies and the remaining 2 caravans were sited on land not owned by gypsies. All 7 caravans on authorised sites were privately owned.
- The total number of caravans has fluctuated over the last 5 counts since January 2007 for the district, county and region with an increase in numbers between the most recent counts of July 2008 and January 2009.
- There were no gypsy and traveller sites provided by the local authority and RSLs in Rochford District as of January 2009. In Essex as a whole there were 169 pitches in use in January 2009, of which 168 were residential and one was transit.

13.3 Housing Summary

- There were 135 dwelling completions in Rochford District in 2008/2009, which equated to 102 net additional dwellings (taking into account losses/demolitions).
- The annual numbers of net completed dwellings between 2001/02 and 2007/08 have fluctuated considerably with only two years being above the annual RSS target of 230. The total RSS minimum target for Rochford District is 4,600 new dwellings by 2021.
- The number of gross dwelling completions on previously developed land (PDL) within Rochford District has declined since 2006/2007 from 339 units to 132 units in 2008/2009. However, when considered proportionately to the total number of dwelling completions, the 132 dwellings completed on PDL in 2008/2009 accounted for 97.8% which is the highest proportion in the period of study.
- After 2006/2007 the number of dwelling completions classified as affordable fell annually in Rochford District and in 2008/2009 there was a net loss in the number of completed affordable dwellings by 1 unit.
- The mean dwelling prices in Rochford District have been consistently above that of county, regional and national values. In 2008 the district had a comparatively higher mean dwelling price of £239,196. This compares to the county, regional and national values of £236,656, £225,967 and £220,310 respectively.
- The number of property sales has declined annually since 2006 with a significant decrease occurring between 2007 and 2008. In Rochford District this accounted for 997 fewer sales with only 974 property sales taking place in 2008.
- Owner occupied and private rented dwellings accounted for 91.3% of the total dwelling stock within Rochford District in 2008 while 8.2% of dwelling stock was Registered Social Landlord (RSL) dwellings and 0.5% was other public sector dwellings. There was no Local Authority (LA) owned dwellings in the district compared to county, regional and national proportions of 7.6%, 6.7% and 8.3% respectively.
- The number of homeless acceptances in priority need in Rochford District increased in the most recent year from 21 people in 2006/2007 to 40 people in 2007/2008. In contrast, the numbers have fallen during the same time period at regional and national levels.
- The majority of homeless acceptances in priority need in Rochford District in 2007/2008 were of white ethnicity.
- There were 37 homeless households accommodated by the authority in Rochford District during 2007/2008. Of those, 17 households were accommodated in local authority/housing association dwellings, 13 were placed in bed and breakfast accommodation, six in hostels which included womens refuges and one household stayed in ‘other’ accommodation.

- In January 2009 there were a total of 23 caravans sited within the district, of which 7 were located on authorised sites and 16 were ‘not tolerated’ on unauthorised sites.
- There were no gypsy and traveller sites provided by the local authority and RSLs in Rochford District as of January 2009.

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14 TRANSPORT

14.1 Introduction

Essex is located in the East of England and lies to the north east of London, the nation's capital and major employment centre. As a result of its proximity to London, there is a large commuter population. Essex has a large rural area, similar in size to Suffolk, whilst also being the site of key international gateways such as Stansted, Harwich, Shell Haven, and Tilbury. The county also has major national routes including the M25 and the M11 running through it. As a result the transport demands faced by the county are uniquely complex.

14.2 Baseline Information

The chapter begins with an examination of vehicle ownership and use within the district followed by a series of maps showing accessibility to a number of services in the district. Areas of congestion on the road network within Essex are detailed and an analysis of both travel to work and travel to school is provided. The chapter concludes with an examination of road safety in the district.

A. Vehicle Use

Table 109: Car Ownership within Essex County 2001

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
Basildon	69,207	23.18%	44.91%	25.33%	5.05%	1.53%	81,269
Braintree	54,332	17.56%	41.74%	31.15%	7.05%	2.49%	74,065
Brentwood	28,767	15.97%	43.85%	31.26%	6.67%	2.25%	39,199
Castle Point	35,280	17.69%	42.77%	30.07%	7.15%	2.32%	47,487
Chelmsford	64,564	16.18%	43.38%	31.29%	6.81%	2.33%	88,287
Colchester	63,706	21.09%	44.91%	26.71%	5.55%	1.75%	78,229
Epping Forest	50,590	16.99%	42.20%	30.72%	7.37%	2.73%	69,757
Harlow	33,183	25.07%	45.65%	23.56%	4.45%	1.27%	37,023
Maldon	24,190	13.82%	38.95%	34.76%	8.86%	3.61%	36,611
Rochford	31,952	16.40%	42.18%	31.56%	7.27%	2.59%	44,291
Tendring	61,409	26.08%	46.16%	21.60%	4.63%	1.54%	67,694
Uttlesford	27,519	12.17%	36.55%	37.70%	9.58%	3.99%	43,670
Essex	544,699	19.31%	43.30%	28.78%	6.40%	2.21%	707,582
East of England	2,231,974	19.80%	44.10%	28.31%	5.86%	1.93%	2,831,718
England	20,451,427	26.84%	43.69%	23.56%	4.52%	1.39%	22,607,629

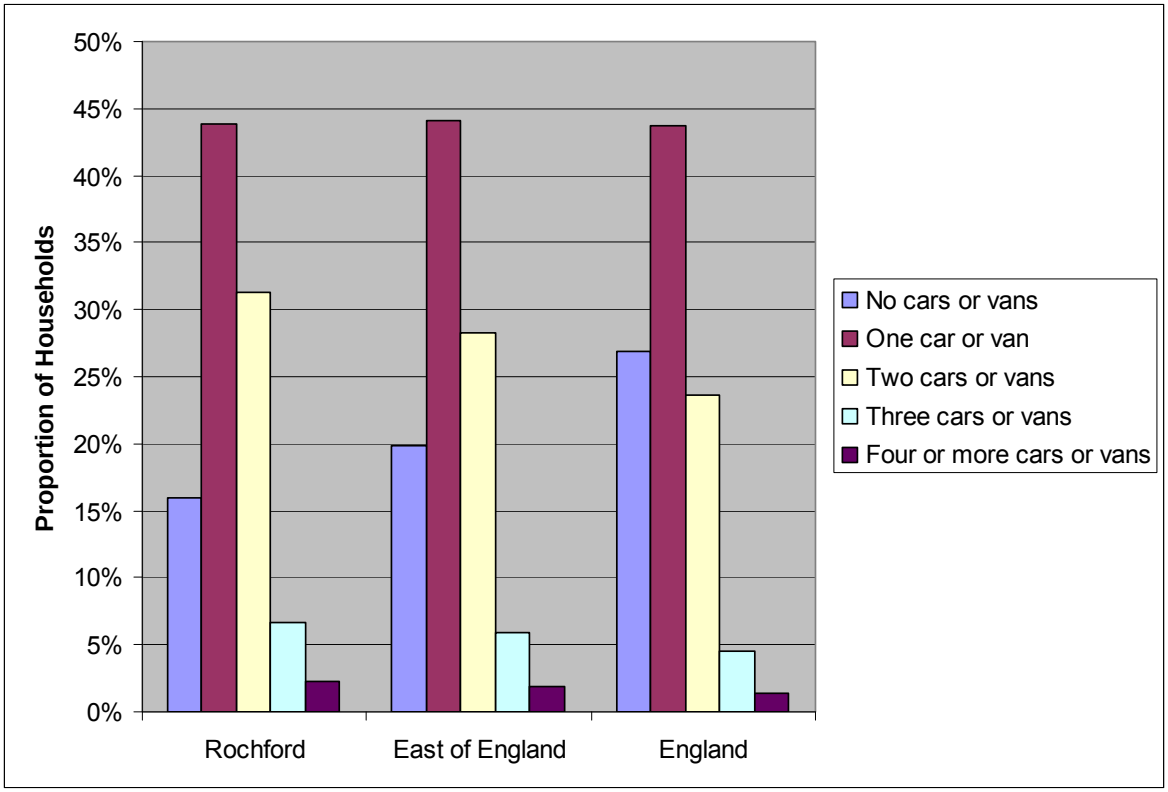
Source: National Statistics 2009, Census 2001 (http://neighbourhood.statistics.gov.uk)

Table 110: Census of Car Ownership in Rochford 2001

	Rochford		East of England		England	
	Count	Percentage	Count	Percentage	Count	Percentage
All Households	31,952	100.00%	2,231,974	100.00%	20,451,427	100.00%
Households with no cars or vans	5,240	16.40%	441,915	19.80%	5,488,386	26.84%
Households with one car or van	13,476	42.18%	984,244	44.10%	8,935,718	43.69%
Households with two cars or vans	10,085	31.56%	631,976	28.31%	4,818,581	23.56%
Households with three cars or vans	2,324	7.27%	130,736	5.86%	924,289	4.52%
Households with four or more cars or vans	827	2.59%	43,103	1.93%	284,453	1.39%
All cars or vans in the area	44,291	N/A	2,831,718	N/A	22,607,629	N/A

Source: National Statistics 2009, Census 2001 (http://neighbourhood.statistics.gov.uk)

Figure 73: Census of Car Ownership in Rochford 2001



Source: National Statistics 2009, Census 2001 (http://neighbourhood.statistics.gov.uk)

- 16.4% of the residents of Rochford do not own a car or van. This is considerably lower than the national figure of 26.84% and slightly lower than the regional figure of 19.8%.
- 42.18% of the households in Rochford own 1 car or van, which is slightly lower than in the East of England (44.10%) and England (43.69%).

- A higher percentage (31.56%) of households within Rochford own 2 cars or vans than can be seen in the East of England and England, which are 28.31% and 23.56%.
- More households in Rochford District (9.86%) own 3 or more cars or vans than regionally (7.79%) and nationally (5.91%).
- In general, Rochford District has a higher number of cars or vans per household compared to regional and national levels.

Table 111: Bus Statistics for Essex 2006 – 2008

LTP2 Indicators for Public Transport	2006/2007	2007/2008	2007/2008 LTP2 target
The total number of passenger journey made annually on all local buses within Essex	39.47m	43.28m	39.5m
Overall number of bus passengers on selected journeys	4.05	4.14	4.01
Number of passenger journeys by Community Transport	531,899	536,710	500,000

Source: Essex Transport Monitoring Report 2007

- The total number of passenger journeys made annually on all local buses in Essex increased from 39,470,000 to 43,280,000 over the period studied. This represents a 9.6% increase. The number of journeys recorded in 2007/2008 satisfies the LTP2 target of 38,500,000 for that year.
- Both the number of passengers on selected journeys and the number of passenger journeys by Community Transport saw an increase in 2007/2008 over those values recorded in 2006/2007. These two indicator returns both satisfied their respective target in the LTP2.

Table 112: Satisfaction with Public Transport Provision in Essex 2006 – 2008

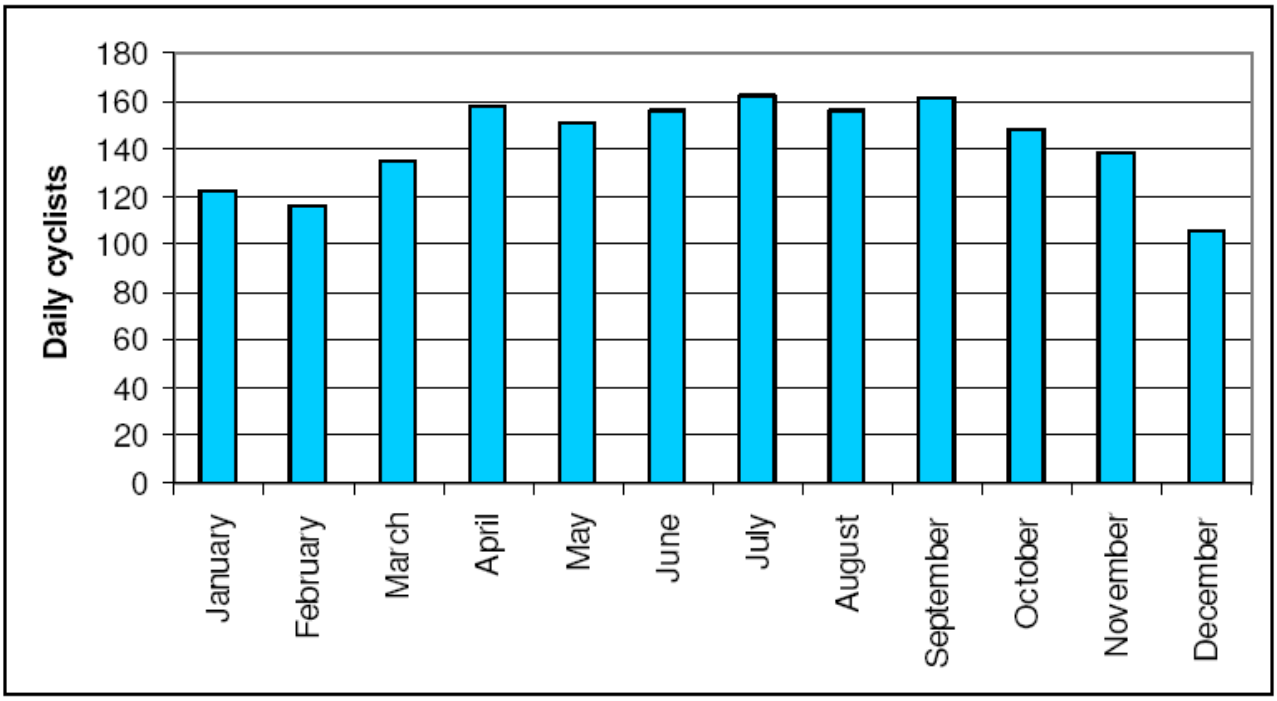
LTP2 Indicator for Passenger Satisfaction	2006/2007	2007/2008	2007/2008 LTP2 target
Percentage of users satisfied with the local bus service	73%	76%	75%
Percentage of users satisfied with the provision of public transport information	75%	73%	75%

Source: Essex Transport Monitoring Report 2007

- The percentage of users satisfied with the local bus service increased from 73% in 2006/2007 to 76% in 2007/2008. The 2007/2008 return satisfied the 2007/2008 LTP2 target of 75%.
- The percentage of users satisfied with the provision of public transport information decreased from 75% in 2006/2007 to 73% in 2007/2008. The 2007/2008 return failed to reach the LTP2 target of 75%.

B. Cycling

Figure 74: Seasonal Variation in Cycle Flows within Essex 2007



Source: Essex Transport Monitoring Report 2007

- There is a clear seasonal pattern with higher volumes of cyclists in Essex during the summer months and lower volumes during the winter.
- August flows are affected by the summer holiday period and are slightly lower than adjacent months.

C. Accessibility

This section includes 5 A4 maps, found overleaf. The accessibility maps detail the minimum amount of time it takes to access primary schools, secondary schools, retail centres, GPs and employment sites by walking or public transport. Travel times were calculated on Mondays either between 7am and 9am or 9:30am – 5pm as stated. Further aspects of accessibility conclude the chapter.

Figure 75: Accessibility of Primary Schools in Rochford District Monday 0700 – 0900 July 2009

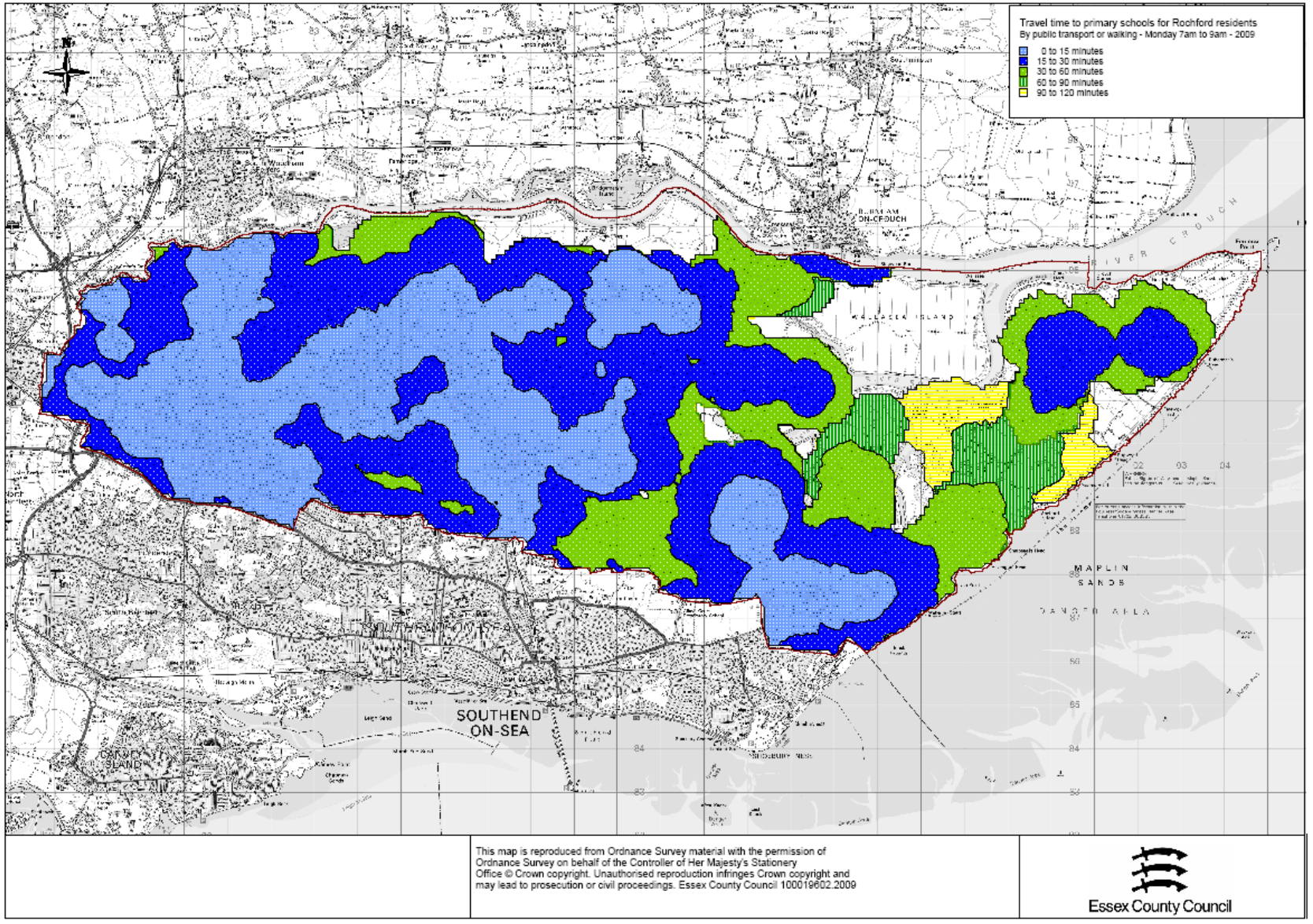


Figure 76: Accessibility of Secondary Schools in Rochford District Monday 0700 – 0900 July 2009

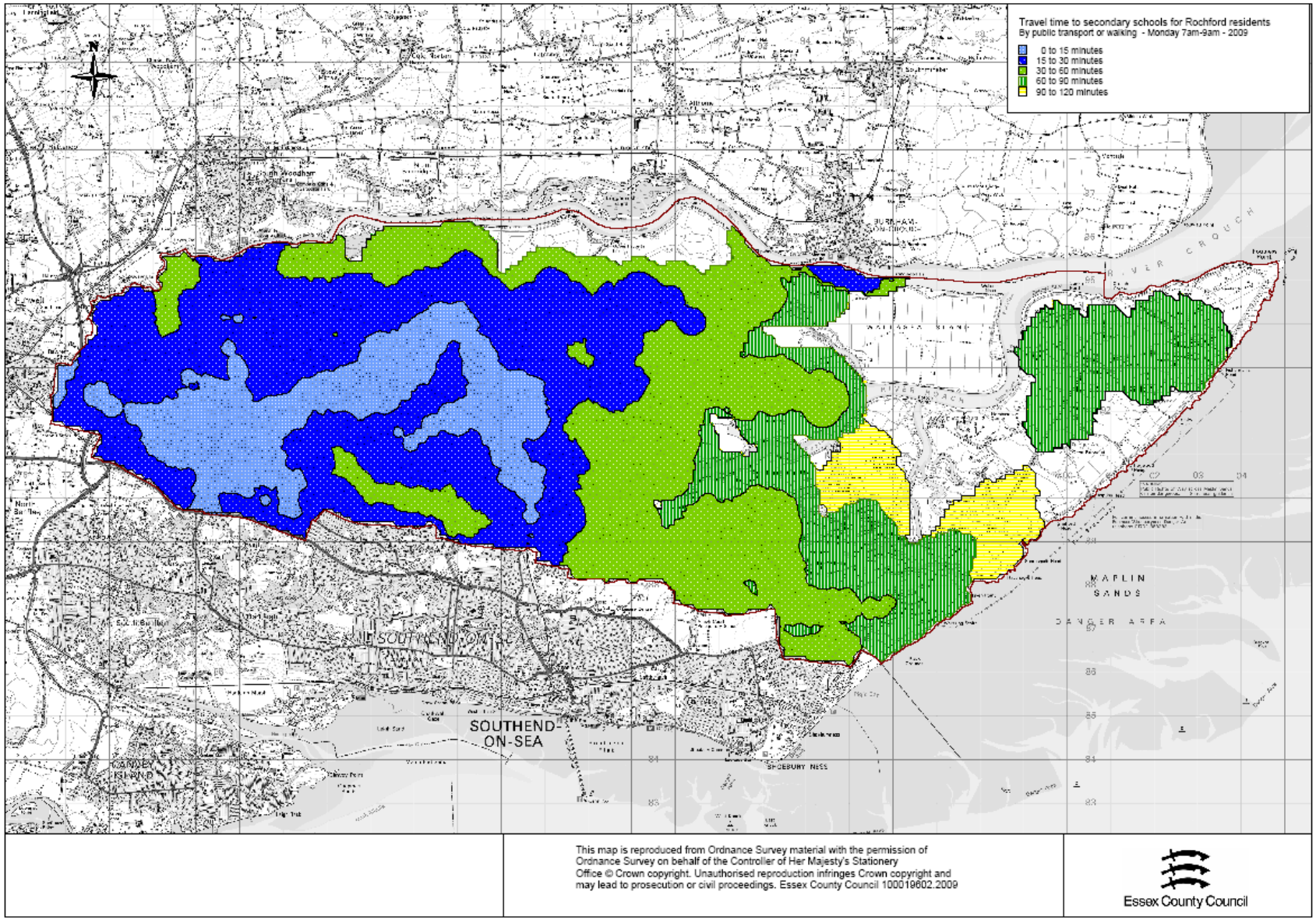


Figure 77: Accessibility of Retail Centres in Rochford District Monday 0930 – 1700 July 2009

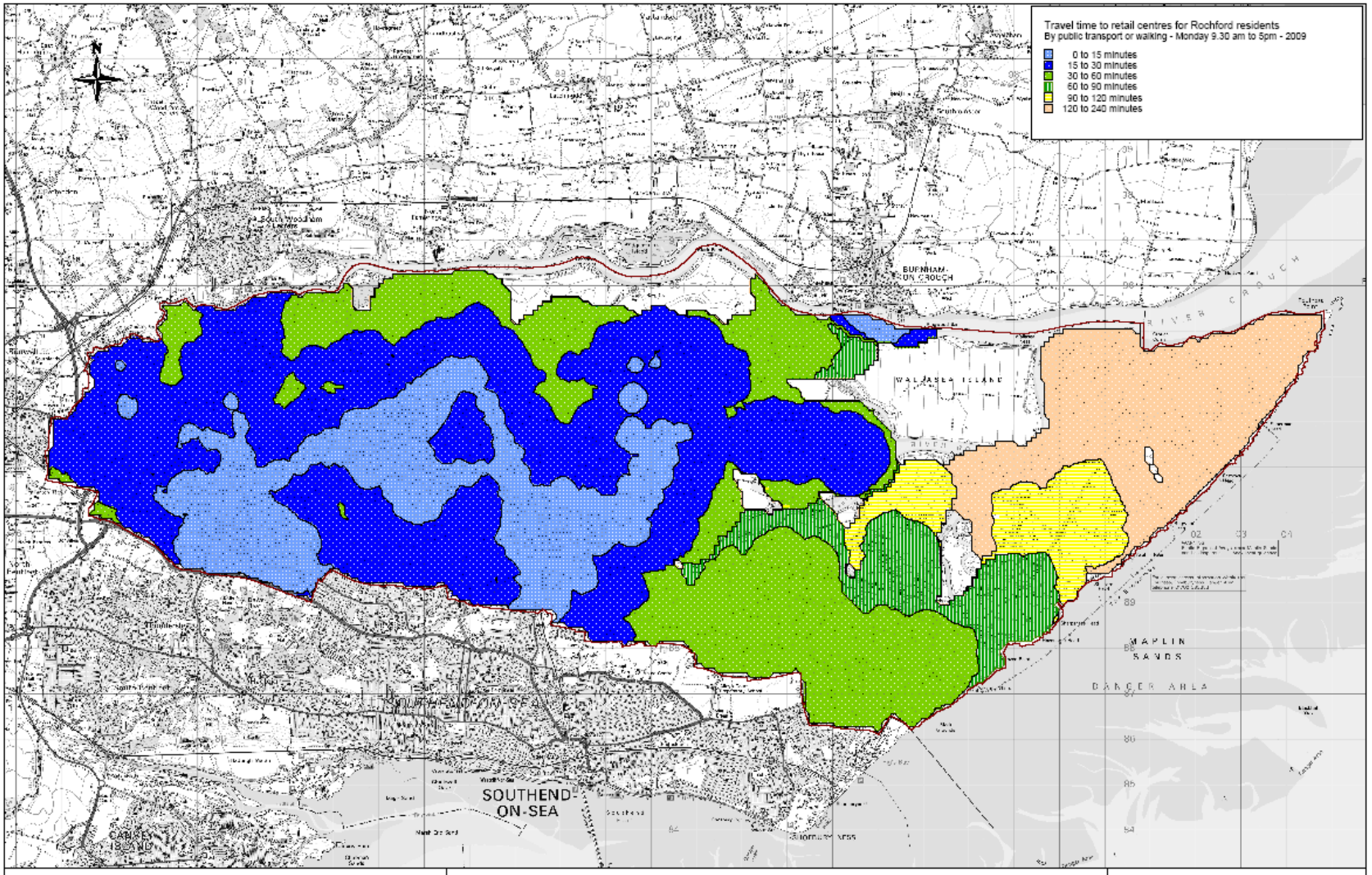


Figure 78: Accessibility of GP Surgeries in Rochford District Monday 0930 – 1700 July 2009

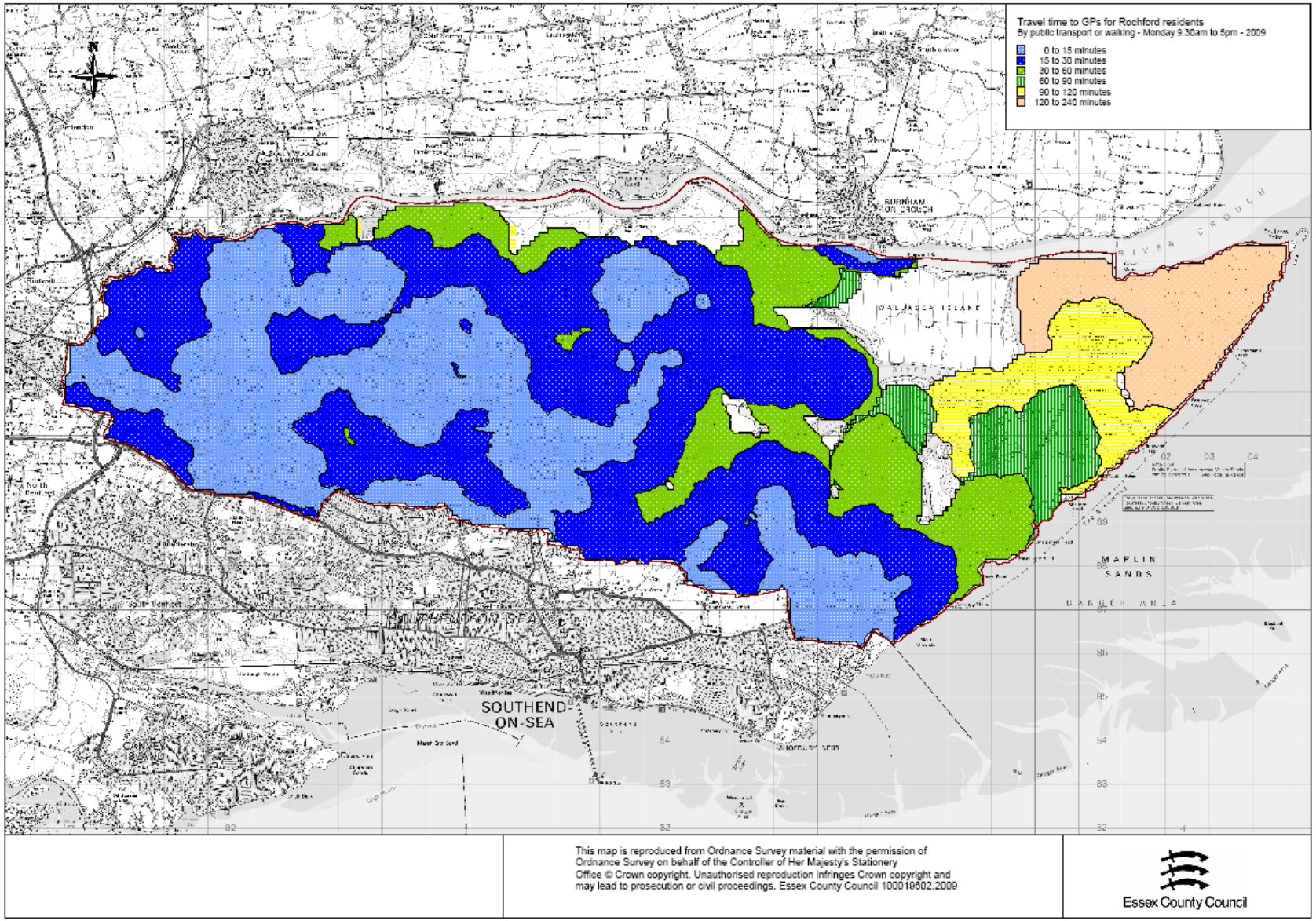


Figure 79: Accessibility of Employment Centres in Rochford District Monday 0930 – 1700 July 2009

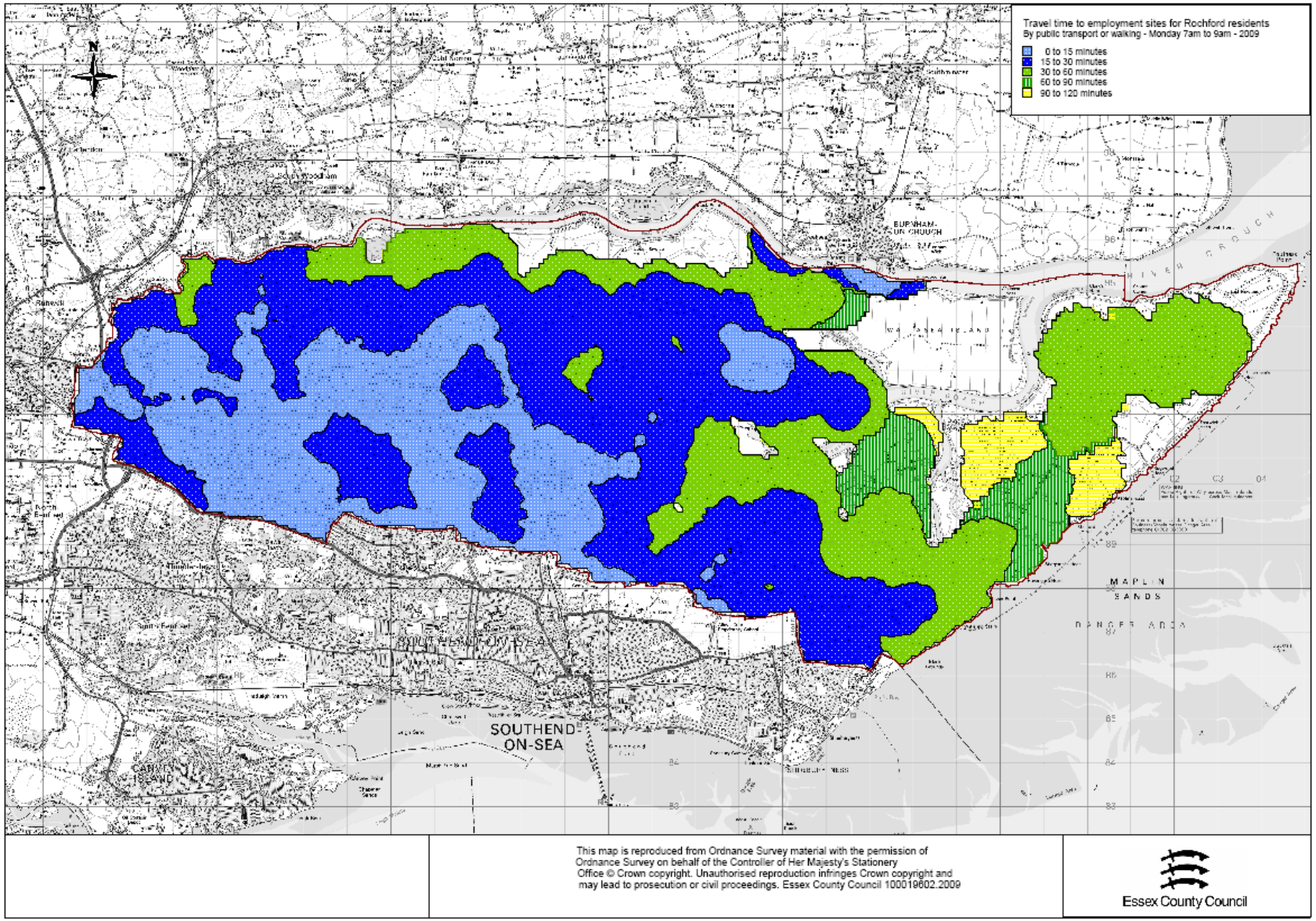


Table 113: Proportion of Rochford Residents with Access to Services within 15 minutes and 30 minutes July 2009

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	90%	98%
Secondary school	62%	88%
Employment site	70%	97%
Retail centre	65%	89%
GP	90%	98%

Source: Essex County Council 2009

- Over four fifths of the population of Rochford District live within 30 minutes of each of the 5 highlighted services.
- 90% of the population of Rochford District live within 15 minutes access of a primary school and GP. This proportion drops when accessibility to the remaining four services are analysed.

D. Congestion

The Congestion Reference Flow (CRF) of a link is an estimate of the Annual Average Daily Traffic (AADT) flow at which the carriageway is likely to be congested at peak periods on an average day.

For the purposes of calculating the CRF, 'congestion' is defined as the situation where the hourly traffic demand exceeds the maximum sustainable hourly throughput of the link. At this point the effect on traffic is likely to be one or more of the following:

- flow breaks down with speeds varying considerably,
- average speeds drop significantly,
- the sustainable throughput is reduced and queues are likely to form

This critical flow level can vary significantly from day to day and from site to site and it is important that this is considered as an average.

The ratio of AADT to CRF is defined as the level of 'stress' and provides an indication of the level of congestion and reliability for a particular link. Any ratio equal to or greater than 1 indicates that the CRF has been reached or exceeded. Those link roads with an AADT / CRF ratio above 1 are shown in the following table.

Table 114: Road Links with an Annual Average Daily Traffic / Congestion Reference Flow Ratio Greater than One in 2007

Road Link	Borough / District	2007 AADT to CRF Ratio
A12 Junction 17-18	Chelmsford	1.05
A12 Junction 20a-21	Chelmsford	1.03
A12 Junction 24-25	Braintree / Colchester	1.14
A127 Childerditch	Brentwood	1.02
A127 East of Fairglen Roundabout	Rochford	1.09
A127 Daws Heath	Castle Point	1.01
A130 Canvey Way	Castle Point	1.21
A414 Hastingwood Harlow	Harlow	1.15
A414 West of Danbury	Chelmsford	1.00
A132 South Woodham Ferrers	Chelmsford	1.35
A132 Wickford	Basildon	1.12
A1168 Chigwell	Epping Forest	1.02

Source: Essex Transport Monitoring Report 2007

- 12 road links were assessed as having exceeded their Congestion Reference Flow in 2007. Of these, one can be found in Rochford District. This is the A127 east of Fairglen Roundabout.

E. Travel to Work

Table 115: Travel to Work Flows for Rochford District

	Work in Rochford		Live in Rochford		Net Flow
	Count	Percentage	Count	Percentage	
Rochford	13,596	59.5%	13,596	36.0%	0
Greater London	334	1.5%	6,743	17.9%	-6,409
Southend	4,336	19.0%	8,620	22.8%	-4,284
Basildon	1,107	4.8%	3,638	9.6%	-2,531
Castle Point	1,684	7.4%	1,373	3.6%	311
Chelmsford	605	2.6%	1,076	2.8%	-471
Sub-Total	21,662	94.7%	35,046	92.8%	-13,384
Other Areas	1,201	5.3%	2,725	7.2%	-1,524
TOTAL	22,863	100.0%	37,771	100.0%	-14,908

Source: Census 2001

- The District of Rochford was recorded in the 2001 National Census as having 37,771 residents in employment, of which only 13,596 lived and worked within the district. There were 22,863 recorded jobs in the district and therefore more residents than there were jobs. This results in people travelling out of the district to work.

- The percentage of Rochford jobs that are filled by residents in Rochford District is 59.5%.
- The major employment destination outside of the district for Rochford residents was Southend, with 8,620, or 22.8% of Rochford District residents travelling to that destination for work. Greater London also attracts significant numbers of Rochford District residents, with 6,743 people commuting there to work (17.9%).
- The next most popular destinations for employment were the adjoining Essex authorities of Basildon (3,638 or 9.6%), Castle Point (1,373 or 3.6%), and Chelmsford (1,076 or 2.8%).
- The geographic origin of those working in Rochford District shows a broadly similar pattern, though with some variation in detail. The largest flows of people travelling to the district to work come from Southend (4,336 or 19.0%), Castle Point (1,684 or 7.4%) and Basildon (1,107 or 4.8%). In total these three external sources provided workers for 7,127, or 31.2%, of jobs in Rochford. Together with those who live and work in the district, these areas met 90.7% of the employee needs of Rochford businesses.
- In net terms, there were 6,409 more Rochford residents working in Greater London than residents of London working in the district. Similarly, there is also a significant net outflow of Rochford residents working in the neighbouring sub-regional centres of Southend (4,284) and Basildon (2,531). Generally, Rochford supplied more workers than it attracted from all other areas. The only significant exception is a net inflow of 311 workers to Rochford from Castle Point.

Table 116: Travel to Work Methods for the Residential Population of Rochford District

	Rochford		East of England		England	
	Count	%	Count	%	Count	%
All People	56,720	100.00%	3,884,104	100.00%	35,532,091	100.00%
Works mainly at or from home	3,355	5.92%	243,485	6.27%	2,055,224	5.78%
Underground, metro, light rail or tram	64	0.11%	21,688	0.56%	709,386	2.00%
Train	5,755	10.15%	156,054	4.02%	950,023	2.67%
Bus, minibus or coach	1,454	2.56%	102,838	2.65%	1,685,361	4.74%
Taxi or minicab	139	0.25%	11,693	0.30%	116,503	0.33%
Driving a car or van	22,104	38.97%	1,518,613	39.10%	12,324,166	34.68%
Passenger in a car or van	1,845	3.25%	150,642	3.88%	1,370,685	3.86%
Motorcycle, scooter or moped	399	0.70%	28,637	0.74%	249,456	0.70%
Bicycle	505	0.89%	100,193	2.58%	634,588	1.79%
On foot	2,055	3.62%	233,737	6.02%	2,241,901	6.31%
Other	117	0.21%	11,798	0.30%	104,205	0.29%
Not currently working	18,928	33.37%	1,304,726	33.59%	13,090,593	36.84%

Source: National Statistics 2009, Census 2001 (http://neighbourhood.statistics.gov.uk)

- Rochford District has a similar proportion of the number of residents driving either by car or van to work when compared to regional levels, Rochford recorded 38.97% while the East of England region recorded 39.10%.

- Rochford District residents' use of public transport compares well to both the East of England and the national level. Rochford District had a significantly higher proportion of residents travelling to work by train with 10.15% compared to both regional and national levels of 4.02% and 2.67% respectively. Also a similar proportion of Rochford residents travel to work by bus, minibus or coach (2.56%) than within the East of England region as a whole (2.65%).
- Fewer people travel to work on foot within the district than at the regional and national levels, and an even smaller proportion cycle.

It is difficult to draw conclusions from direct comparison between data for the district, the region and nationally as many factors will influence these figures, such as the geographic location, ease of access, and supply of public transport.

F. Road Safety

This section includes an analysis of those Killed or Seriously Injured Casualties (KSI) on the District's roads. The section includes a table of KSIs across Essex for 2007, followed by an examination of both all KSIs and Child KSIs from 1994 to 2007. In the data tables which accompany this, a distinction is made between KSIs reported both before and after the Public Service Agreement (PSA) which was entered into in 2004. This PSA stated that a 40% reduction of the 1994 – 1998 baseline was needed in KSI causalities by 2010, and a 50% reduction in child casualties by the same year.

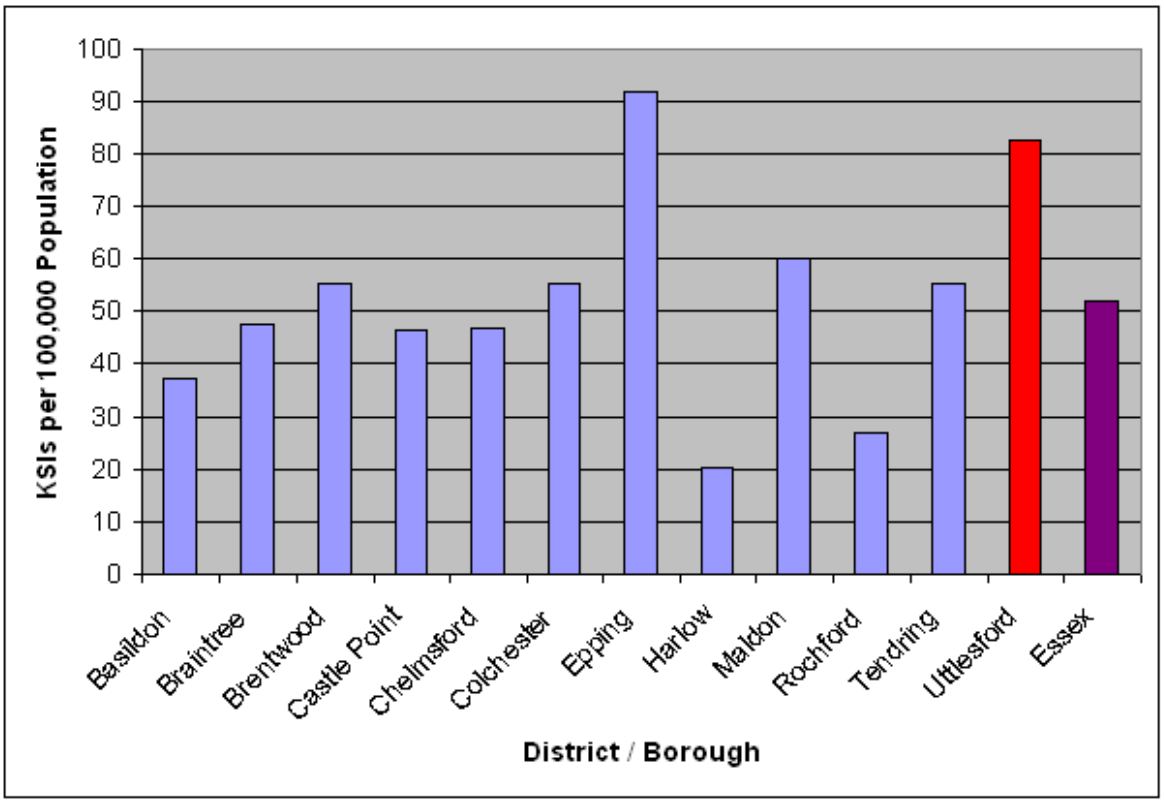
Table 117: Killed or Seriously Injured Casualties across Essex in 2008

	Population	All	Drink Drive	Motorcycles	Speeding	Young Drivers	KSI per 100,000 population
Basildon	168,600	63	4	19	8	12	37.37
Braintree	139,700	66	5	15	13	18	47.24
Brentwood	70,900	39	0	7	4	12	55.01
Castle Point	88,600	41	2	8	3	11	46.28
Chelmsford	162,800	76	5	24	10	16	46.68
Colchester	170,800	94	4	30	19	20	55.04
Epping Forest	122,900	113	7	27	22	21	91.94
Harlow	78,100	16	1	4	1	3	20.49
Maldon	61,700	37	4	7	6	9	59.97
Rochford	81,100	22	4	6	3	7	27.13
Tendring	144,600	80	6	19	7	13	55.33
Uttlesford	71,400	57	2	12	14	13	82.63
Essex	1,361,200	706	44	178	110	155	51.87

Source: Essex County Council 2009

Note: The 4 causes of KSIs in the table above is not an exhaustive list and a KSI can be accounted for in more than one column. As such these columns are not intended to be totalled and simply represent the most common reasons for a KSI incident.
Speeding refers to any KSI casualties resulting from a collision where a vehicle has been deemed to be travelling too fast for the conditions or being careless, reckless or in a hurry.
A KSI recorded under the Young Drivers column relates to an incident involving a 17 – 25 year old car driver in Vehicle 1 (defined as the driver most likely to be at fault)

Figure 80: Killed or Seriously Injured Casualties per 100,000 Population across Essex in 2008



Source: Essex County Council 2009

- At 27.13 KSIs per 100,000 population, Rochford District has the lowest KSI rate in Essex and is therefore below the Essex average of 51.87 KSIs per 100,000 population. Epping Forest has the highest total of KSIs per 100,000 population at 91.94 KSIs.
- Accidents involving young drivers were responsible for the highest proportion of KSIs within Rochford District with 7 KSIs recorded. The second most common reason was that of motorcyclists, resulting in 6 incidents.
- Young drivers and motorcycle riders were the two highest contributors to KSIs in 9 of the 12 districts and boroughs in the county.

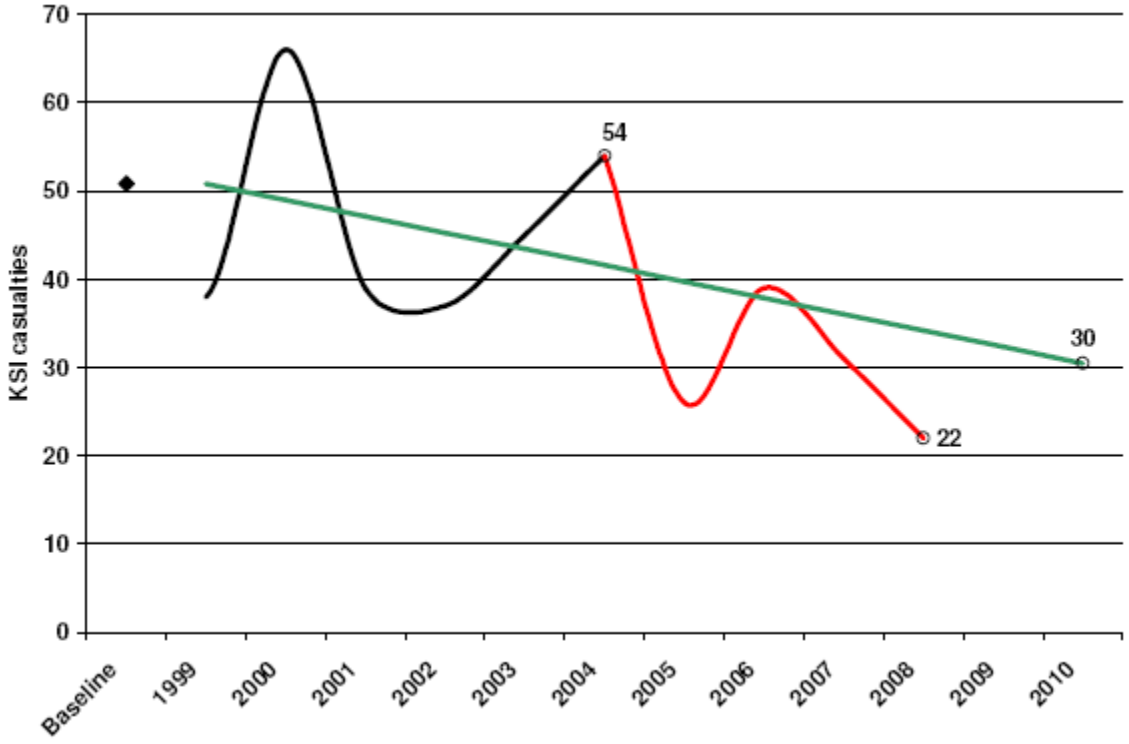
Table 118: All Killed or Seriously Injured Casualties in Rochford District 1994–2008

Year	Pre PSA	PSA	Indicator	Interim Indicator
1994	52	N/A	N/A	N/A
1995	41	N/A	N/A	N/A
1996	45	N/A	N/A	N/A
1997	54	N/A	N/A	N/A
1998	62	N/A	N/A	N/A
Baseline	50.8	N/A	N/A	N/A
1999	38	N/A	51	51
2000	66	N/A	N/A	49
2001	39	N/A	N/A	47
2002	37	N/A	N/A	45
2003	45	N/A	N/A	43
2004	54	54	N/A	42
2005	N/A	26	N/A	40
2006	N/A	39	N/A	38
2007	N/A	31	N/A	36
2008	N/A	22	N/A	34
2009	N/A	N/A	N/A	32
2010	N/A	N/A	30	30

Source: Essex County Council 2009

In the following graph, the black line denotes recorded KSIs before the PSA was entered into, the red line charts KSIs following the PSA whilst the green line represents a linear yearly indicator from the 1994 – 1998 baseline to a 40% reduction of this baseline in 2010 as stipulated by the PSA.

Figure 81: All Killed or Seriously Injured Casualties in Rochford District 1994–2008



Source: Driving Casualties Down 2009 (http://www.drivingcasualtiesdown.org)

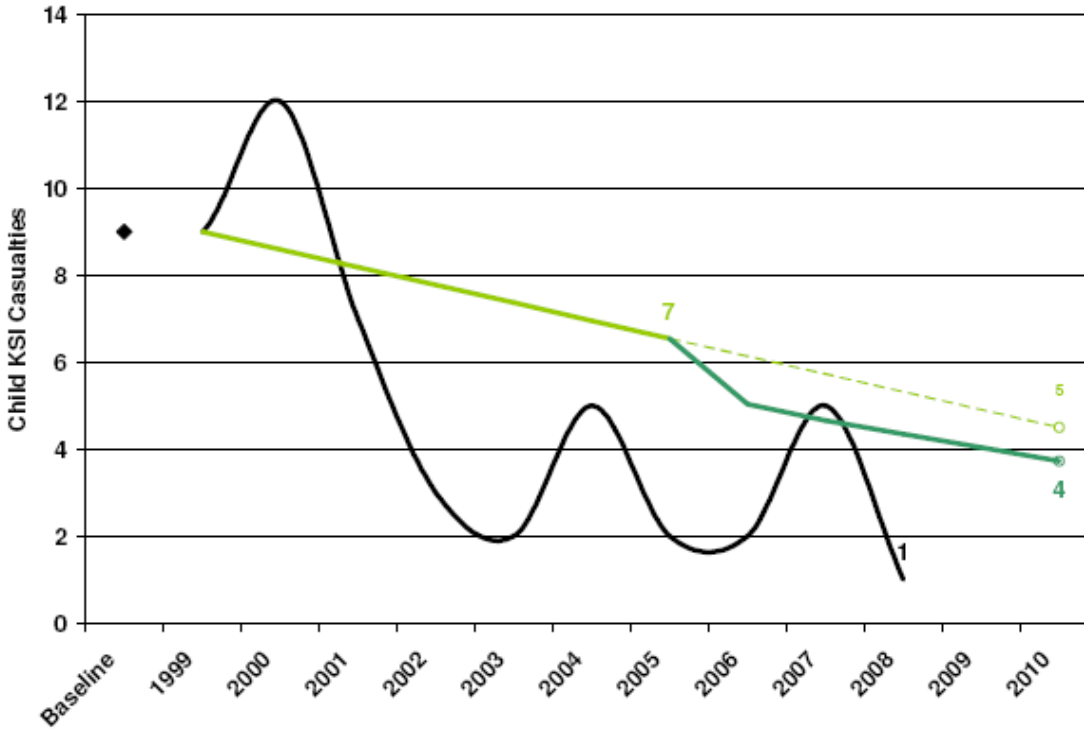
- KSIs peaked in the District at 66 in 2000. Since the introduction of the PSA agreement in 2004, KSIs have reduced from 54 in 2004 to 22 in 2008 although there was a period of increase between 2005 (26) and 2006 (39)
- Current performance satisfies the 2008 interim indicator of 34. Current performance also satisfies the 2010 indicator.

Table 119: Killed or Seriously Injured Child Casualties - Rochford District 1994–2008

Year	Child KSIs	DFT target	Interim DFT Target	LTP2 target
1994	8	N/A	N/A	N/A
1995	7	N/A	N/A	N/A
1996	12	N/A	N/A	N/A
1997	8	N/A	N/A	N/A
1998	10	N/A	N/A	N/A
Baseline	9	N/A	N/A	N/A
1999	9	9	9.00	N/A
2000	12	N/A	8.59	N/A
2001	7	N/A	8.18	N/A
2002	3	N/A	7.77	N/A
2003	2	N/A	7.36	N/A
2004	5	N/A	6.95	N/A
2005	2	N/A	6.55	N/A
2006	2	N/A	6.14	5.03
2007	5	N/A	5.73	4.66
2008	5	N/A	5.32	4.34
2009	N/A	N/A	4.91	4.03
2010	N/A	4.5	4.50	3.72

Source: Essex County Council 2009

Figure 82: Killed or Seriously Injured Child Casualties - Rochford District 1994–2008



Source: Driving Casualties Down 2009 (http://www.drivingcasualtiesdown.org)

- Between 1994 and 2008, the number of reported child KSIs has reduced from 8 to 5 in Rochford District.
- The 2008 performance both satisfies the DfT indicator of 5.32 but exceeds the LTP2 indicator of 4.34.
- Current performance exceeds both the DfT and LTP2 indicators for 2010.

14.3 Transport Summary

- 16.4% of the residents of Rochford do not own a car or van. This is considerably lower than the national figure of 26.84% and slightly lower than the regional figure of 19.8%.
- 42.18% of the households in Rochford own 1 car or van, which is slightly lower than in the East of England (44.10%) and England (43.69%).
- The total number of passenger journeys made annually on all local buses in Essex increased from 39,470,000 to 43,280,000 between 2006/2007 and 2007/2008. This represents a 9.6% increase. The number of journeys recorded in 2007/2008 satisfies the LTP2 target of 38,500,000 for that year.
- The percentage of users satisfied with the local bus service in Essex increased from 73% in 2006/2007 to 76% in 2007/2008. The 2007/2008 return satisfied the 2007/2008 LTP2 target of 75%.
- There is a clear seasonal pattern with higher volumes of cyclists in Essex during the summer months and lower volumes during the winter.
- Over four fifths of the population of Rochford District live within 30 minutes of a primary school, secondary school, retail centre, GP surgery and / or employment centre.
- 12 road links were assessed as having exceeded their Congestion Reference Flow in 2007. Of these, one can be found in Rochford District. This is the A127 east of Fairglen Roundabout.

- The district of Rochford was recorded in the 2001 National Census as having 37,771 residents in employment, of which only 13,596 lived and worked within the district. There were 22,863 recorded jobs in the district and therefore more residents than there were jobs. This results in people travelling out of the district to work.
- Rochford District has a similar proportion in the number of residents driving either by car or van to work when compared to regional levels, Rochford had 39.97% while the East of England region had 39.10%.
- Rochford District residents' use of public transport compares well to both the East of England and the national level. Rochford District had a significantly higher proportion of residents travelling to work by train with 10.15% compared to both regional and national levels of 4.02% and 2.67% respectively. Also a similar proportion of Rochford residents travel to work by bus, minibus or coach (2.56%) than within the East of England region as a whole (2.65%).
- At 27.13 per 100,000 population, Rochford District has the lowest KSI rate in Essex and therefore below the Essex average of 51.87 per 100,000 population. Epping Forest has the highest total of KSIs per 100,000 population at 91.94.
- Motorcyclists and young drivers were the top 2 causes of KSIs in all the districts and boroughs in Essex
- Since the introduction of the PSA agreement in 2004, KSIs have reduced from 54 in 2004 to 22 in 2008. Current performance satisfies the 2008 interim indicators of 34. Current performance also satisfies the 2010 indicator.
- Between 1994 and 2008, the number of reported child KSIs has reduced from 8 to 5 in Rochford District. The 2008 performance both satisfies the DfT indicator of 5.32 but exceeds the LTP2 indicator of 4.34.

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