

# Essex Thames Gateway Sub-area Profile

East of England Plan > 2031

Scenarios for housing and economic growth



## EAST OF ENGLAND PLAN REVIEW > 2031

### ESSEX THAMES GATEWAY SUB-AREA PROFILE

#### 1. Introduction

- 1.1. A series of sub-area profiles have been prepared to provide more local information about the growth scenarios described in the main consultation document for the East of England Plan review. The sub-areas are based on unitary and district council boundaries, for convenience of data collection, and are broadly based on the groupings used in the draft East of England Implementation Plan.
- 1.2. It is important to recognise that the groupings have been used for reporting purposes only. They do not replace existing sub-regional designations within the Plan (the relationship is described in the relevant sub-areas) nor do they have any implications for local governance arrangements or local government reorganisation.
- 1.3. All the sub-areas and their constituent local authorities are shown in the table below.

<b>Sub-area</b>	<b>Local authority</b>
Bedford	Bedford
Cambridgeshire	Cambridge, East Cambridgeshire, Fenland, Huntingdonshire, South Cambridgeshire
Essex Thames Gateway	Basildon, Castle Point, Rochford, Southend-on-Sea, Thurrock
Greater Norwich	Broadland, Norwich, South Norfolk
Great Yarmouth and Waveney	Great Yarmouth, Waveney
Haven Gateway	Babergh, Colchester, Ipswich, Mid Suffolk, Suffolk Coastal, Tendring
Heart of Essex	Braintree, Brentwood, Chelmsford, Maldon
London Arc East	Broxbourne, East Hertfordshire, Epping Forest, Harlow, Uttlesford,
London Arc West	Dacorum, Hertsmere, North Hertfordshire, St Albans, Stevenage, Three Rivers, Watford, Welwyn Hatfield
Luton and Central Bedfordshire	Luton, Central Bedfordshire
North	Breckland, King's Lynn and West Norfolk, North Norfolk
Peterborough	Peterborough
West Suffolk	Forest Heath, St Edmundsbury

#### 2. Information in each sub-area profile

- 2.1. Each of the profiles has two parts. Part 1 includes:
  - a. a short description of the sub-area;
  - b. an indication of what the four growth scenarios mean in terms of housing numbers for the sub-area. The origin and role of the scenarios are described in part 3 of the main consultation document but in summary are: scenario 1 is the continuation of the current Plan (26,000 new dwellings each year between 2011 and 2031); scenarios 2 and 3 are designed to meet the lower end of the housing range that Government has asked the Assembly to test

(about 30,000 new dwellings each year) with albeit with different distributions of the growth; and scenario 4 is based on the Government's latest household projections (33,700 new dwellings each year);

- c. the population, household, and economic estimates and projections for the sub-area, namely:
- mid-2007 population estimates (Office for National Statistics August 2008);
  - dwelling stock data 2007/08 (Housing Strategy Statistical Appendix Department for Communities and Local Government January 2009)
  - 2006-based population projections (Office for National Statistics June 2008);
  - 2006-based household projections (Department for Communities and Local Government March 2009);
  - 2007 jobs estimates and projections to 2031 - East of England Forecasting Model (Insight East spring 2009 run);

The projections indicate what might happen if existing trends continue. They do not take account of policy, such as dwelling targets or regeneration schemes. However, they do give an indication of likely development pressures that will require policy management. The economic projections show what might happen on the basis of how the economy is anticipated to perform, as well as the level of jobs associated with scenarios 1, 2 and 3.

- d. a summary of the advice the Assembly has already received from county and unitary authorities on, amongst other things, the level and distribution of future dwelling provision and employment targets. Councils were provided with an initial set of growth scenarios for comment and were also invited to provide an alternative scenario if they thought there was one more appropriate. It should be noted that their advice refers to the initial set not to the revised scenarios described in the 'growth scenarios' section in each profile. In preparing their advice, county councils were asked to consult with district and borough councils within the county area. The full advice can be found at <http://www.eera.gov.uk/What-we-do/developing-regional-strategies/east-of-england-plan/east-of-england-plan-review-to-2031/east-of-england-plan-review-to-2031-strategic-advice/>;
- e. the response to a 'call for proposals' made to developers and others. This sought to identify the potential that exists for new small scale sustainable settlements / urban extensions i.e. from 2000 to 10,000 dwellings. It is important to note that this call was made to assist the testing of options for growth and does not confer any special status on the proposals received or any guarantee that they will be considered favourably if / when a planning application is submitted. A summary of the appropriate county / unitary authority's assessment of these proposals is also included and where proposals relate to more than one local authority area this is shown. This does not necessarily represent a comprehensive account of all sites being promoted by developers;
- f. a summary of the specific East of England policies which apply to all or part of each sub-area. The Plan contains a series of 'generic' policies i.e. they apply across the whole region in relation to, for example, the spatial strategy, economic development, housing, transport and the environment, as well as specific policies which apply to the 'key centres for development and change' and to sub-regions. It is the latter that is included here; and

- g. the progress made in preparing local development documents. These are the principle tool for implementing the Plan policies. Details of the local delivery In addition, an indication of progress made in implementing the Plan in term through the local development.
- 2.3. Part 2 provides baseline information for the sub-area using the themes or 'sustainability topics' identified in the Integrated Sustainability Framework's topic papers<sup>1</sup>. It draws on the information sources within the topic papers and additional material that has been published since the topic papers were published in June 2009. A separate paper provides an explanation of the sources used. Scott Wilson, the consultants appointed by the Assembly to carry out the Integrated Sustainability Appraisal, have used the baseline information to assess the likely significant effects of growth for each sub-area. This can be found in the 'Interim Integrated Sustainability Report' available on EERA's website ([www.eera.gov.uk](http://www.eera.gov.uk)).

**We would like to make this evidence base as complete as possible so if you have any further information you think we should include, please submit this in response to supplementary question 7 in the main consultation document.**

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<sup>1</sup> <http://www.eera.gov.uk/What-we-do/developing-regional-strategies/east-of-england-plan/east-of-england-plan-review-to-2031/east-of-england-plan-review-to-2031-integrated-sustainability-appraisal/>

### 3. ESSEX THAMES GATEWAY SUB-AREA – PART 1

- 3.1. The Essex Thames Gateway sub-area covers the five administrative areas of Basildon, Castle Point, Rochford, Southend-on-sea and Thurrock. Most of the sub-area is designated as part of the Thames Gateway Growth Area, a regional and national priority for regeneration and growth which extends into London and the South East (Kent Thames Gateway). Taken together, the Thames Gateway is the largest urban area in the East of England and represents a unique challenge for regeneration.
- 3.2. The sub-area has extensive areas of previously developed land, is close to London and has international transport links and access to continental Europe. It also contains the biggest grouping of port infrastructure in the region, principally the Port of London facilities at Tilbury, and London Southend Airport. A new container ship terminal (London Gateway) is planned on the former oil refinery site at Shellhaven in east Thurrock.
- 3.3. The area has a population of 653,000 living in 284,000 dwellings. The area has approximately 280,000 jobs.

#### Growth scenarios

- 3.4. The growth being tested for this sub-area is between 46680 and 59000 new dwellings between 2011 and 2031 distributed as shown below.

Local authority	New dwellings 2011-2031			
	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Basildon	12,600	12,600	12,600	15,000
Castle Point	4,000	4,000	4,000	6,000
Rochford	5,000	5,000	5,000	8,000
Southend-on Sea	6,080	6,080	11,140	14,000
Thurrock	19,000	19,000	19,000	16,000
Sub-area total	46,680	46,680	51,740	59,000

- 3.5. Scenario 1 shows the consequences of continuing the current Plan rate and the rates are unchanged for scenario 2 as the area is not identified as having the potential for a major new settlement. Scenario 3 - the increase over scenario 1 for Southend-on-Sea reflects its potential for economic growth. Although the economic projections show that a total of about 12,560 fewer dwellings would be needed in other parts of the sub-area, the housing growth is held at the scenario 1 level as it is assumed interventions would be made to raise economic performance. Scenario 4 shows the number of dwellings that would be required if past demographic trends, including migration patterns, continue.

#### Population and economic change

- 3.6. National population projections suggest that if recent trends continue the Essex Thames Gateway sub-area's population will be 753,000 by 2031. This is 106,000 or 16% more people than in 2006. Of this change
- 59,000 is due to natural change (more births than deaths)
  - 48,000 is due to people moving into the area  
(numbers rounded to nearest thousand and do not sum)

- 3.7. Government's household projections, which have been used to develop scenario 4, predict that between 2011 and 2031 there will be an additional 72,000 households in the sub-area.
- 3.8. The economic projections suggest that, on the basis of current economic assumptions, there could be jobs growth of 37,700 with the increased population requiring 39,200 dwellings. Scenarios 1 to 3 suggest the jobs that would need to be created between 2011 and 2031 could vary between 36,500 (scenarios 1 and 2) and 42,000 (scenario 3).

### Views on growth

- 3.9. Essex County Council has advised the Regional Assembly that, for Basildon, Castle Point and Rochford, continuation of the current Plan rate is the most that should be considered and it may be necessary to consider lower rates than this. As far as the distribution of growth is concerned, it advises that urban extensions at Basildon new town, Billericay and Wickford would be needed.
- 3.10. Southend Council has advised that, whilst a proportion of the growth could be accommodated within its current spatial strategy, the growth would require significant Green Belt release in the longer term to meet continuation of the current Plan rate and any further growth would need to consider the role of adjacent land in Rochford District Council.
- 3.11. Thurrock Council has advised that the continuation of the current Plan rate should be regarded as the maximum that could be accommodated within its area and that growth should continue to be focussed on the urban area. It does not wish for a full scale review of the Green Belt but accepts there may need for a partial review for urban extensions.
- 3.12. The submissions received in response to the Assembly's 'call for proposals' are as shown below.

Name	Reference	Number of dwellings
East of Noak Bridge, Basildon (Basildon)	CP11	400-500
West Horndon Strategic Development Area (Thurrock & Brentwood)	CP45	+2000
Basildon East (Basildon)	CP77	7000
Seaside, Southend and Rochford (Southend & Rochford)	CP85	10000
North of Bournes Green (Southend)	CP39	2000
North of Tilbury (Thurrock)	CP47	2300
East Tilbury/Linford Strategic Development Area (Thurrock)	CP55	up to 5000
Land at Aveley (Thurrock)	CP91	2000
Stanford-le-Hope/Corringham (Thurrock)	CP104	2000

- 3.13. Essex County Council has advised the Regional Assembly that it has had broad regard to proposals within its area in its assessment of the scale and distribution of growth.
- 3.14. Southend Council has advised that there are only limited opportunities to increase housing capacity within proposals relating to its area. It notes that

there may be merit in development in a small part of Fossetts Farm Strategic Development Area (part of CP85) but that part lies within Rochford District.

- 3.15. Thurrock Council advises that all its five proposals are either predominantly or entirely Green Belt locations and each conflicts with current local and regional planning policy. It notes that a number of the schemes have been rejected at previous stages of the Thurrock Local Development Framework process.

### **Current Plan policies for the sub-area**

- 3.16. The East of England Plan sets housing and jobs targets relating to the Essex Thames Gateway sub-area as shown below.

<b>Local authority</b>	<b>Number of additional dwellings</b>
Basildon	10,700
Castle Point	4,000
Rochford	4,600
Southend-on-Sea	6,500
Thurrock	18,500
Sub-area total	44,300

<b>Area</b>	<b>Indicative jobs target 2001-21</b>
Thames Gateway South Essex*	55,000

- Equates to the sub-area

- 3.17. The sub-area includes the Essex Thames Gateway sub-region which broadly encompasses the areas south of the A13 in Thurrock and A127 in Basildon together with Castle Point, Southend-on-Sea and London Southend Airport in Rochford.
- 3.18. The East of England Plan has a specific policy (policy ETG1) which sets out the strategy for the whole of the Essex Thames Gateway sub-region which aims to achieve its transformation through urban regeneration and environmental enhancement.
- 3.19. The Plan and, in particular, its Essex Thames Gateway sub-regional policies seek to address firstly the job deficit and then maintain a balance with housing growth in the future. Hence the job target figure is far greater than the housing provision targets. Both the East of England Plan and the Regional Economic Strategy acknowledge that major interventions are needed in economic development (rather than housing development) to redress this deficit. That is why the area is a regeneration priority. A similar policy approach will be required in any revised Plan.
- 3.20. Within the sub-area, the Plan identifies Basildon, Southend-on-Sea and the Thurrock urban area as 'key centres for development and change', with the emphasis being on strengthening the roles of those centres. All three are identified as 'regional transport nodes'. Basildon and Southend are identified as 'regional centres' in relation to retail and other town centre purposes, while the status of Thurrock Lakeside Basin is currently subject to a separate regional review. Essex Thames Gateway is identified as a priority area for regeneration.

- 3.21. The Plan also includes specific policies for the following centres:
- Thurrock (policy ETG2) where the strategy aims to, among other things, achieve an urban renaissance and upgrade the image of the area as a leading centre for logistics. It also highlights the need for the Regional Assembly to undertake a review with the aim of developing a framework to guide the regeneration and redevelopment of Lakeside Basin. That review has just been through an examination in public (July 2009);
  - Basildon (policy ETG3) where the strategy aims to, among other things, facilitate the physical, economic and social regeneration of the original new town together with expansion to create a sustainable and balanced community; and
  - Southend-on-Sea (policy ETG4) where the strategy aims to facilitate the physical, economic and social regeneration of the urban area and achieve an urban renaissance of the town centre;
- 3.22. In addition, policy ETG6 indicates that proposals for transport infrastructure improvements should reflect the priorities of the Thames Gateway South Essex Partnership Transport Board's Business Plan.
- 3.23. The Plan gives flexibility to local councils to determine how much development is needed to support other settlements and villages within the rest of the sub-area.

### **Implementation**

- 3.24. As of August 2009, Southend has an adopted core strategy. Castle Point and Rochford anticipate that their 'submission' document will be published before the year end. Thurrock's 'submission' document is due in early 2010 and Basildon is working on its evidence base, which will help inform its 'issues and options' document (due in 2011).
- 3.25. The Essex Thames Gateway sub-area has a complicated geography; it covers three planning regions, two county councils, three unitary authorities, eight London boroughs and five districts. This complexity presents challenges for delivery and the Thames Gateway executive, board and strategic partnership are all working to balance direct national influences, as well as unitary, local and partnership agendas.

#### 4. **ESSEX THAMES GATEWAY SUB-AREA - PART 2**

##### **Air Quality**

- 4.1. There are 15 Air Quality Management Areas (where levels of specified air pollutants are predicted to be above limits set through the National Air Quality Strategy) in the sub-area, all within Thurrock. The council intends to introduce traffic engineering and management schemes, actions to reduce road vehicle emissions, actions to reduce traffic volumes, raise public awareness and education. These measures alone, however, will not be sufficient to meet air quality objectives in all of the areas.
- 4.2. Six Air Quality Management Areas are caused by traffic on 'strategic roads' and therefore are regulated by the Highways Agency. In addition, 'background roads', including roads outside the council boundary, contribute to poor air quality in the Air Quality Management Areas. The remaining nine Air Quality Management Areas are caused by traffic on roads managed by Thurrock Council and are being addressed.

##### **Biodiversity**

- 4.3. Across Essex as a whole, 58% of Sites of Special Scientific Interest (SSSIs) are in a 'favourable' or 'unfavourable recovering' condition which means that a significant proportion are in a relatively poor, 'unfavourable', condition. The reasons for their unfavourable conditions include: water pollution, agricultural run-off, water pollution and discharge, coastal squeeze, public access and disturbance and overgrazing.
- 4.4. Essex has sensitive coastal areas, with an extensive chain of estuarine habitats of international significance for overwintering wildfowl and waders. Sites of nature conservation interest around the coast are typically in adverse condition. The Essex Coast Environmentally Sensitive Area extends over 28,600 hectares of coastal grassland and associated arable areas bordering the estuaries and creek systems of the Thames (in the vicinity of Canvey Island).
- 4.5. Essex coastal grazing marshes have declined by 64% since the 1930s.
- 4.6. Thames Gateway is particularly important for biodiversity-rich brownfield land, especially for invertebrates.
- 4.7. There are three Sites of Special Scientific Interest in Southend-on-Sea, with only one in 'favourable' condition. The reasons for the others unfavourable conditions include coastal squeeze, and water pollution and discharge.
- 4.8. The entire southern (coastal) edge of Southend-on-Sea, as well as its easternmost side, is internationally designated - the Benfleet and Southend Marshes Ramsar site. The Essex Estuaries Special Area of Conservation covers the south-eastern edge of the authority. This unitary authority includes the Leigh National Nature Reserve, and two local nature reserves: Belton Hills and Southend on Sea Foreshore.

- 4.9. There are ten Sites of Special Scientific Interest in Thurrock. On average 60% are in an 'unfavourable recovering' or 'favourable' condition. The reasons given for their unfavourable conditions include inappropriate scrub control, forest management and coastal squeeze.
- 4.10. International sites in Thurrock include the Thames Estuary and Marshes Ramsar site and Special Protection Area, and there are areas of biodiversity rich former industrial land.
- 4.11. The RSPB is working to transform a large area of arable farmland at Wallasea Island back into coastal marshland, in the heart of an internationally important estuary. This will create a wetland mosaic of mudflats, saltmarshes, shallow lagoons and pastures. The project aims to restore this landscape, helping adaptation to the challenges of climate change, and sea level rise.
- 4.12. Biodiversity Action Plan priority habitats in this sub-area include:
- grassland – there are extensive areas of grazing marsh of national or international importance behind the sea walls along much of the coastline, particularly around the Essex Estuaries;
  - freshwater – there are areas of purple moor-grass and rush pasture, which is rare regionally, east of Southend-on-Sea; and
  - coastal - mudflats at the Blackwater estuary, and maritime cliff / slope habitat at Southend-on-Sea.
- 4.13. Important national and internationally designated salt marsh habitat is under threat from sea level rise and coastal squeeze. New salt marsh can be created by setting back tidal defences in appropriate locations.

### Climate change and flood risk

- 4.14. **Carbon emissions** - estimates of carbon emissions and sectoral source for 2006<sup>2</sup> are shown below.

Local authority	Industry and commercial (% total CO <sub>2</sub> )	Domestic (% total CO <sub>2</sub> )	Road transport (% total CO <sub>2</sub> )	Land use and land use change (% total CO <sub>2</sub> )	Total (k tonnes CO <sub>2</sub> )	Per capita emissions (tonnes)
Basildon	46	33	21	0	1,221	7.24
Rochford	28	48	23	1	448	5.53
Castle Point	22	56	22	0	407	4.59
Southend-on-Sea	41	45	14	0	972	6.08
Thurrock	133	43	50	0	1,797	12.07

- 4.15. The per capita carbon emissions are lower than the national and East of England averages (8.78 and 8.09 respectively) except in Thurrock. The proportion of emissions from transport is generally lower than the national and regional averages (25% and 31% respectively). Transport emissions in Thurrock are particularly high, particularly due to the M25 and A13.

<sup>2</sup>Data published by Defra:

<http://www.defra.gov.uk/environment/statistics/globalatmos/galocalghg.htm>

- 4.16. **Renewable energy** - approx 762 giga watt hours (GWH) of renewable energy is currently generated in Essex, including the Essex Thames Gateway sub-area, mainly from landfill gas and biomass. The main source of biomass generated electricity in Essex is from the biomass co-firing at the Tilbury power station (Thurrock). There are currently three on-shore wind projects, one with planning approval, and two in the planning process.
- 4.17. **Current flood risk** - this sub-area is within the South Essex Catchment Flood Risk Management Plan area. The current risks are:
- fluvial flooding from the rivers Mardyke, Crouch, Roach and their tributaries and other small coastal streams. 2,500 properties are affected by a 1 in 100 years flood event, predominantly located in Wickford, Eastwood, Stanford-le-Hope and Purfleet. Important infrastructure is also at risk;
  - tidal flooding – the lower reaches of the rivers Crouch, Horndon, Mardyke and Roach are tidally influenced affecting South Woodham Ferrers, North Fambridge, South Fambridge, Burnham on Crouch, Foulness and Wallasea, Rochford, Southend-on-Sea, Canvey Island, Tilbury, Grays, West Thurrock and Purfleet. However, the coastal areas of South Essex are relatively well defended and disruption is generally low;
  - coastal flooding from the North Sea and estuaries affects several coastal and estuarine towns such as Burnham-on-Crouch, North and South Fambridge, South Woodham Ferrers, Purfleet, Tilbury and Canvey Island;
  - surface water flooding in South Essex is mainly attributed to under-capacity culverts, inadequate highway drainage, blocked pipes, and overgrown watercourses. The urban areas of Southend-on-Sea, Basildon, Wickford and Grays are particularly affected;
  - run-off from fields also occurs in Hawkwell and Rayleigh due to steeper slopes and impermeable clay soils; and
  - sewer flooding is a significant issue in Stanford-le-Hope, Southend-on-Sea, Purfleet, Tilbury, Basildon and Canvey Island owing to inadequate capacity of the sewer system and blockages.
- 4.18. **Future flood risk** - climate change will cause the largest increase in flood risk due to higher peak river flows and more extreme tides. 5,500 properties will be at risk from a 1 in 100 years flood event (an increase of 120%) with Wickford expected to see the greatest increase in the number of properties flooded. Critical infrastructure will also be at greater risk, particularly in the River Roach catchment. There will also be increased flood risk issues related to sea level rise and storm surges leading to an increased risk of overtopping in the outer reaches of the Thames estuary.
- 4.19. **Flood defences** range from embankments, flood relief channels, and pumped tidal outfalls. The condition of defences ranges from poor to good. A significant number of properties are at risk in Rochford and Hawkwell from the overtopping or breaching of raised defences.
- 4.20. **Inappropriate development on the flood plain** - one minor scheme<sup>3</sup> was granted permission in Castle Point in 2007/8, contrary to the advice of the Environment Agency. Particular tensions are experienced in Southend which has a densely developed coastal area in flood zone 3 that is identified for growth and regeneration.

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<sup>3</sup> Minor schemes – less than 10 dwellings or less than 1000 sq m floorspace or 1 hectare

- 4.21. **Coastal erosion and flooding** - the second Harwich to Canvey Island Shoreline Management Plan is currently in development and will provide policies to manage the risk of flooding and erosion over the next 100 years. The existing Shoreline Management Plan did not consider the Essex Estuaries, or address climate change issues, so there is potential for it to change substantially during the current review.
- 4.22. This sub-area is also covered by the Thames Estuary 2100 Project which has recently completed a consultation on the Environment Agency's plans to manage flood risk in the Thames Estuary to 2100. The plan includes proposals for habitat recreation schemes that will replace habitats lost to coastal squeeze at a number of sites within this sub-area.

### Community wellbeing

- 4.23. **Deprivation and social inclusion** – within the sub-area, Southend-on-Sea is among the third most deprived districts in England, and, together with Basildon and Thurrock, among the most deprived in the East of England. Parts of Basildon, Southend and Thurrock are ranked among the highest 10% in England in terms of their deprivation.
- 4.24. The table below shows the ranking of districts within the sub-area in the national and regional context (where 1 is the most deprived)

Local authority	England ranking 2007 (out of 354)	East of England ranking 2007 (out of 48)
Basildon	136	11
Castle Point	249	25
Rochford	314	42
Southend-on Sea	111	7
Thurrock	124	10

- 4.25. **Health** - the health of people in this sub-area is generally similar or better to the England average. However, a relatively high proportion of the population are at increased risk of poor health due to smoking, obesity or poor diet especially in Basildon, Castle Point and Thurrock.
- 4.26. Compared to the regional average, Southend is relatively deprived, and health inequalities exist by gender, ethnicity, location and deprivation. Men in the least deprived areas can expect to live almost 9 years longer than men in the most deprived areas. The proportion of children living in poverty and the rate of teenage pregnancy are worse than the national average, however there are encouraging signs of recent improvement in the latter.
- 4.27. **Public perception** – according to the 2008 Place Survey levels of satisfaction within the sub-area as a place to live were similar to, or below, regional and national averages, as were perceptions of community cohesion. The only part of the sub-area which exceeded regional averages was Rochford.

## **Economy and employment**

- 4.28. The sub area has made slow progress in moving to become a modern knowledge-based, primarily service sector-driven, economy. Deindustrialisation has left a significant economic, social and environmental legacy. Large areas of former industrial land are vacant, and these underutilised resources present huge opportunities for development and growth.
- 4.29. Economic projections for the area suggest an increase in jobs of 37,700 or 14% between 2011 and 2031. This is below the regional average which is an 18% increase in jobs.
- 4.30. Consultants were asked to look at the strategic employment provision required to meet the region's economic needs and aspirations, at a regional and sub-regional level and compare it with current provision. Further work is to be undertaken to assess the implications of the study but, among other things, it identified the following regional or sub-regional significant sites in this sub-area:
- Basildon - A127 Enterprise Corridor, Basildon and Southend (262 ha);
  - Castle Point- South West Canvey, Charfleets Extension and Northwick Road, Canvey Island (18 ha);
  - Southend-on-Sea - London Southend Airport and & environs (10 ha);
  - Thurrock - Lakeside Basin (365 ha), London Gateway Port Development, and Port of Tilbury (11.3 ha).

## **Historic environment**

- 4.31. The sub-area includes smaller market towns, such as Rochford and Ongar, which still have historic cores. Where mediaeval villages survive e.g. Horndon on the Hill, their settings are very important, however the built heritage of Thames Gateway South Essex has been substantially overlain and damaged by industrialisation and urban sprawl. Basildon is increasingly valued for its architectural and town planning innovation.
- 4.32. Southend has a strong visual identity resulting from its waterside location and growth as a mainly Victorian and Edwardian resort. The conservation areas include the centre of older settlements such as Prittlewell with considerable archaeological features. The regeneration proposals, including the Pier area, aim to restore the vibrancy of the town but require special attention to their context. There are 13 conservation areas in the borough which are at present undergoing conservation area appraisals. There is also Fossetts Farm ancient monument, the Garrison and the burial site of a Saxon King at Priory Crescent.
- 4.33. There are seven conservation areas within Thurrock. Historic features, such as Tilbury Fort, emphasise the historic strategic importance of the area in the Thames Estuary. Later developments, like the Bata village at East Tilbury and Tilbury Port Riverside, are important to the heritage and cultural development of Thurrock but are affected by current development proposals.
- 4.34. Inland, village conservation areas, such as Horndon on the Hill, rely greatly on their landscape settings for the retention of their character.
- 4.35. The table below shows the number of historic features in the sub-area.

Local authority	Listed buildings	Scheduled monuments	Heritage features at risk <sup>4</sup>	Registered parks and gardens
Basildon	126	3	0	0
Castle Point	34	7	0	0
Rochford	327	5	0	0
Southend-on-Sea	95	6	1	0
Thurrock	241	17	5	1

4.36. Natural England's National Landscape Character Assessment also describes historic features within the Joint Characterisation Areas that cover this sub-area:

- the Northern Thames Basin – notable medieval and later historic homes are a feature here. The Countryside Quality Counts assessment comments that 52% of the historic parkland here has been lost during the 20<sup>th</sup> century, and suggests about 73% of historic farm buildings remain unconverted, with about 93% intact structurally. The data suggests that important aspects of the historic resource remain neglected; and
- the Greater Thames Estuary has a distinctive military heritage, such as Napoleonic military defences and 20<sup>th</sup> century pillboxes on the coastline.

### Housing

4.37. The sub-area as a whole delivered a build rate of 77% against its East of England Plan target over the period 2001 to 2008. The resulting shortfall means that the residual annual target over the remaining Plan period has increased by 12% to 2,485 dwellings required per year to reach the overall target figure of 44,300 dwelling completions by 2021. At local authority level there was significant disparity with Southend-on-Sea achieving a build rate of 123%, while Basildon achieved only 46% against its target.

4.38. The sub-area is characterised by a large degree of variation in affordability. Using the 2008 lower quartile house price to earnings ratio as a measure, Castle Point, (at 10.16), and Rochford, (at 10.07), are relatively expensive while Thurrock, (at 7.53), is one of the most affordable in the region.

4.39. Affordable housing completions accounted for 16% of all completions in 2007/08, representing a significant improvement over the 7% achieved over the seven years from 2001-2008. This compares to the Plan's regional target for monitoring purposes of 'some 35%' which applies to permissions granted since May 2008.

### Land

4.40. The sub-area covers 52,900 hectares, of which 35,050 hectares (66%) is Green Belt mostly within Rochford and Thurrock districts.

<sup>4</sup> As listed in Heritage at Risk in the East of England 2009, English Heritage:  
[http://www.english-heritage.org.uk/upload/pdf/190609east\\_of\\_england\\_2009\\_har\\_register.pdf](http://www.english-heritage.org.uk/upload/pdf/190609east_of_england_2009_har_register.pdf)

4.41. **Previously developed land** - the East of England Plan gives priority to the re-use of previously developed land in and around urban areas and sets a target of 60% of development to be located on such land.

4.42. The latest information on development on previously developed land and its availability is shown below. As the table indicates not all the available previously developed land will be physically suitable for housing and even where it is, it may not be in an appropriate location.

Local authority	Percentage of dwellings completed on previously developed land 2001-08	Area of previously developed land unused or available	
		Total at 2007 (hectares)	Suitable for housing 2007 (hectares)
Basildon	61%	108	97
Castle Point	90%	139	26
Rochford	63%	15	6
Southend-on Sea	97%	9	9
Thurrock*	91%	208	110

- 2005 data

4.43. **Agricultural land** is divided into five grades of which grades 1, 2 and 3a are defined as the best and most versatile for crop production. Much of the sub-area is built-up but outside the urban areas land is mostly grade 3 with a pocket of grade 1 just to the north of Southend.

## Landscape

4.44. Natural England's National Landscape Character Assessment provides a consistent and comprehensive understanding of what gives England's landscape its character. This sub area is covered by the following Joint Character Areas (JCA):

- the Northern Thames Basin, along the south of Essex, includes the Essex wooded hills and ridges. This is an area of transitional countryside where rural areas merge into the northern London suburbs; and
- the Greater Thames Estuary where the low lying coastal landscape extends, fingerlike, into inner London. It is a landscape of shallow creeks, drowned estuaries, mudflats and broad tracts of tidal salt-marsh with sand and shingle beaches along the coastal edge.

4.45. The Countryside Quality Counts project was developed as a national indicator of how the countryside is changing. This shows that the Northern Thames Basin is showing changes resulting in the erosion of its distinctive characteristics. This is a continuation of a trend that has been recognised since 1990. The assessment states that the continued erosion of the character of the farmed landscape, together with the pressures from development, suggests that overall the character of the area continues to transform. Woodland has however, been maintained or strengthened locally.

4.46. The landscape character of the Greater Thames Estuary is described as "maintained"; however, the diverging nature of settlements are reported as weakening local character.

- 4.47. Southend-on-Sea has been the site of much urban and industrial development and there is limited countryside separating it from nearby settlements. It has 8½ miles of accessible foreshore and 500 hectares of mature parks, woodlands and gardens.
- 4.48. Thurrock's landscape divides roughly into industrial/urban land south of the A13 and mixed urban, village and rural land to the north. 60% of the borough is open countryside which is varied in character and contrasts with the built up and industrialised areas of Thurrock. There are two 'special landscape areas' and just over half of the borough (58%) is identified as a landscape improvement area.
- 4.49. The Regional Landscape Partnership has developed the Integrated Landscape Framework which will provide more detail of landscape character and its sensitivity to inform the latter stages of the East of England Plan review.

### **Rural and coastal areas**

- 4.50. The rural and urban typology map<sup>5</sup> in the rural topic paper shows that this sub-area is mainly urban, with some rural areas in Rochford.
- 4.51. Rural areas in the south of the East of England generally experience higher income levels than in the north east rural areas of the region. However, in rural areas of Rochford, 20-24% of households are on below 60% of the national average income. High house prices in rural areas here are thought to be related to proximity to London rather than just rural location.
- 4.52. In general, rural locations are linked to poor access to services including public transport, poor provision of affordable homes, increased likelihood of needing more than one vehicle, and an increased occurrence of vulnerable households living in non-decent homes.

### **The coast**

- 4.53. Southend is the principal driver of this part of the region's coast. It is a key centre for development and change and part of the largest urban area in the whole East of England. The sub-area is heavily dominated by the economic hub of the Thames.
- 4.54. In general, the coastal areas of the East of England are associated with:
- more working-age adults who are economically inactive than the regional average (although this can be through choice e.g. early retirement) as well as more claiming benefits;
  - lower than average qualifications;
  - a concentration of deprived areas, including on the Essex coast;
  - a high percentage of tourism-related jobs, and industry relating to the ports;
  - out-commuting to work, as there are generally more residents than jobs; and
  - those living on the coast earning more than those working on the coast.

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<sup>5</sup> See the Integrated Sustainability Appraisal Scoping Report, Topic Paper 10 – Rural Areas and the Coast

- 4.55. The environmental assets of the coastline, and flooding and erosion issues, are described under other headings.

## **Transport**

- 4.56. The Essex Thames Gateway sub-area contains two of the region's six radial road routes into London (A13 and A127).
- 4.57. In the morning peak period, traffic flows on the A127 already exceed capacity in the westbound direction approaching the junction with the A1015 from Southend, and on the majority of the route from the A132 (north of Basildon) to the M25. This is expected to become worse by 2031, with the majority of the A127 being in excess of 90% of its volume-capacity ratio during the morning peak.
- 4.58. Traffic flows already exceed capacity on several sections of the A13 in the morning peak period, and are forecast to increase further. By 2031, the vast majority of the A13 (A130 to Junction 30) will have a volume-capacity ratio of over 90%.
- 4.59. The congestion on these strategic corridors has a knock-on effect on the local road networks of Basildon, Southend and Thurrock. Transport modelling suggests that by 2021 there will be severe congestion on the north-western and western approaches to Basildon, whilst the routes to the south range between moderate congestion and over capacity. Modelling also suggests that the northern and western strategic approach roads to Southend-on-Sea range between severely congested and over-capacity. There is also some congestion on the eastern approach. During the morning peak hour in 2021, the A13 within Thurrock will be over capacity to the east and severely congested to the west. Generally, the northern approaches to Thurrock are not congested, however the volume-capacity ratio increases with proximity to the urban area.
- 4.60. As a consequence the Thames Gateway South Essex: Business Plan for Transport outlines a prioritised, long-term implementation programme containing a combination of public transport improvements and associated projects designed to ensure travel demands are met. The bus-based rapid transit (SERT) is designed to offer existing and future residents of south Essex an alternative to driving to existing and new key attractors and planned Thames Gateway development areas. This scheme will be backed by a comprehensive information and telematics system with the aim of encouraging significant changes in travel behaviour.
- 4.61. The Essex Thames Gateway sub-area is served by two rail routes (London Fenchurch Street – Shoeburyness and London Liverpool Street to Southend Victoria). The London Tilbury to Southend route (LTS) carries over 25 million passengers per annum linking central and east London, (including the Docklands) with the Essex Thames Gateway sub-area. It is largely a commuter railway serving the City of London and Docklands, although the Tilbury Loop carries significant volumes of freight as it serves a number of major freight terminals, including Tilbury Port. The new container port at Shellhaven will place significant additional demands for new freight paths over the LTS line.

- 4.62. The East of England Plan supports the aspiration of Thurrock Council to become a leading logistics hub and this will require improved capability from the railway in terms its ability to handle more and larger freight trains.
- 4.63. The concentration of peak travel demand into London together with limits on capacity causes on-train crowding on morning peak arrivals, particularly between Barking and Fenchurch Street. This along with limited platform capacity at Fenchurch Street (where capacity is limited to 20 trains per hour) limits further capacity being provided. The Tilbury Loop presently has limitations on train length and in providing additional stations, although opportunities to deliver the former with longer platforms are being progressed.
- 4.64. London Southend Airport is a long-established regional airport for the Essex Thames Gateway sub-area. A new airport railway station is being constructed to provide fast and frequent train services direct to Stratford and London Liverpool Street. Passenger numbers may increase by 2031 as a multi-million development scheme is currently being progressed to extend the range of passenger services.

### **Waste**

- 4.65. The dense urban nature of this sub-area makes the achievement of high recycling rates of household waste traditionally difficult. However, new collection and education schemes are begin steadily introduced in these waste collection authorities and the figures in the table below will show significant improvement in the next year when data becomes available.

**Household and composting rates 2007/8**

<b>Local authority</b>	<b>Dry recycling %</b>	<b>Green recycling %</b>	<b>Combined recycling &amp; composting rate %</b>
Basildon	22.87	9.18	32.06
Castle Point	17.81	9.25	27.06
Rochford	16.70	2.30	19.00
Southend-on-Sea	23.79	9.88	33.67
Thurrock	20.14	7.47	27.61

- 4.66. The table above shows Rochford District Council as a relatively poorly performing authority. However, in 2008/9, Rochford introduced “The Maximise Recycling Scheme” and since this time recycling rates have risen to over 60%. This has been achieved through the use of a three bin system including one for compostable material.
- 4.67. There is considerable scope to increase the recycling of organic material including both garden waste and food waste in all of the remaining districts of this sub-area. This requires the development of the infrastructure for collection of this material as well as facilities for its treatment such as composting and anaerobic digestion plant.

### **Water**

- 4.68. This sub-region is considered an area of serious water stress, as is most of the East of England.

- 4.69. This sub-area is covered by the Essex water resource zone run by Essex and Suffolk Water. Less than 40% of households have a water meter. Water resource plans will be finalised later in 2009, which will show how the water companies intend to manage the supply and demand of water over the next 25 years.
- 4.70. A recent study by the Environment Agency<sup>6</sup> shows that the current surplus / deficit balance in the Essex water zone shows a current deficit of -50 to -20 mega litres per day. Projections, which take account of planned improvements, show that the deficit could be increased to a surplus of 5-20 mega litres per day, if the East of England continues to grow and per capita water consumption remains at current rates.
- 4.71. Initial scoping work for the Thames Gateway South Essex Strategic Flood Risk Assessment and Water Cycle study indicates that unless the supply of water and related infrastructure is improved, it will be a barrier to development from 2015.
- 4.72. There were significant improvements in river quality in Essex in the early 1990s. However, the improvements could not always be sustained and in parts started to deteriorate in 2000. The main rivers that are of poor quality within Essex are the Blackwater, Crouch and Colne.

### **Habitats assessment**

- 4.73. The Habitats Directive requires EU Member States to create a network of protected wildlife areas, known as Natura 2000, across the European Union. This network consists of Special Areas of Conservation, Special Protection Areas and Ramsar Sites (wetlands of international importance, designated under the Ramsar Convention). These sites are part of a range of measures aimed at conserving important or threatened habitats and species. As such, the Habitats Directive applies the precautionary principle to protected areas and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question.
- 4.74. Special Areas of Conservation, Special Protection Areas or Ramsar sites in this sub-area are summarised below:
- Essex Estuaries (SAC) - a large estuarine site which is a typical, undeveloped, coastal plain estuarine system with associated open coast mudflats and sandbanks. The site comprises the major estuaries of the rivers Colne, Blackwater, Crouch and Roach, and is important as an extensive area of contiguous estuarine habitat. Essex Estuaries contains a very wide range of characteristic marine and estuarine sediment communities and some diverse and unusual marine species, a very rich invertebrate fauna and crustaceans. The site also has large areas of mudflats, saltmarsh, salt meadows and marshes.
  - The open coast areas of Maplin Sands and Dengie Flats have very extensive mudflats and an unusually undisturbed nature. Maplin Sands is particularly important for its large, nationally-important beds of dwarf eelgrass and associated animal communities;

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<sup>6</sup> The Impact of Housing and Water Efficiency policies on Water Supplies to the East of England. Environment Agency, March 2009

- Crouch and Roach Estuaries (SPA) – this intertidal zone along the rivers Crouch and Roach is 'squeezed' between the sea walls along both banks and the river channel. Unlike more extensive estuaries elsewhere in Essex, this leaves a relatively narrow strip of tidal mud which is used by significant numbers of birds. The site is of importance for wintering waterbirds, especially the Dark-bellied Brent Goose;
- Foulness (SPA) has a diversity of high quality, coastal habitats which support important populations of breeding, migratory and wintering waterbirds, notably very important concentrations of Dark-bellied Brent Goose;
- Benfleet and Southend Marshes (SPA and Ramsar) - these productive mud-flats, cockleshell banks and diverse saltmarsh communities provide a wide range of feeding and roosting opportunities for internationally important numbers of wintering wildfowl and waders.