



# **SA/SEA Scoping Report**

**September 2012**

**Revised**

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This is a Sustainability Appraisal scoping report, encompassing the requirements of the SEA directive.

## **Purpose of this report**

**Sustainability Appraisal (SA)** involves the identification, consideration and reporting of the likely impacts of planning proposals on social, environmental and economic interests. It is a required process by virtue of the Planning and Compulsory Purchase Act 2004.

**Directive 2001/42/EC [1]** on the assessment of the effects of certain plans and programmes on the environment or Strategic Environmental Assessment (SEA) was transposed into domestic law in 2004. The SEA Directive requires that certain plans and programmes are subject to environmental assessment; this process includes the drawing up of an environmental report in which the likely significant effects on the environment and the reasonable alternatives are identified, and the carrying out of consultations. The environmental report and the results of the consultations are taken into account before adoption.

There is significant overlap in the requirements of SA and SEA and for this reason they are undertaken within the same process, and one report and set of recommendations are produced. The parts of this report where the requirements of the SEA Directive have been fulfilled are highlighted in Appendix A.

This report updates the 2005 Scoping Report that formed the basis for assessing Reigate & Banstead's Core Strategy. It is considered appropriate to review the original Scoping Report to ensure it provides an up to date and relevant framework for the assessment of forthcoming plan making. It takes account of the National Planning Policy Framework (NPPF) published in March 2012 and the emphasis it places on achieving sustainable development.

This scoping report requires the completion of the following 5 steps:

- A1: Identifying other relevant plans, programmes and sustainability objectives;
- A2: Collecting baseline information;
- A3: Identifying sustainability issues;
- A4: Developing the SA framework;
- A5: Consulting on the scope of the SA.

## Methodology

The first step of appraisal is to set out a detailed description of the three elements of sustainability: the social, environmental and economic conditions within and affecting the Borough. By considering reports, studies and data on various aspects of these topics a broad picture can be established with respect to sustainability issues.

The next step of appraisal is to identify the development needs of the Borough and to consider the regulations and guidance that set the context and parameters for delivering those needs. For the Reigate and Banstead Local Development Framework (LDF) this is predominantly through a borough wide evidence base and the requirements of the National Planning Policy Framework (NPPF).

The objective of Sustainability Appraisal is achieved by bringing these two strands together: by considering the development needs of the Borough, given the legislative parameters, within the context of current social, environmental and economic conditions, it is possible to identify the most sustainable type and pattern of development for the Borough.

## Process

The process of undertaking SA involves progressive stages as illustrated in Diagram 1, below.

**Diagram 1**

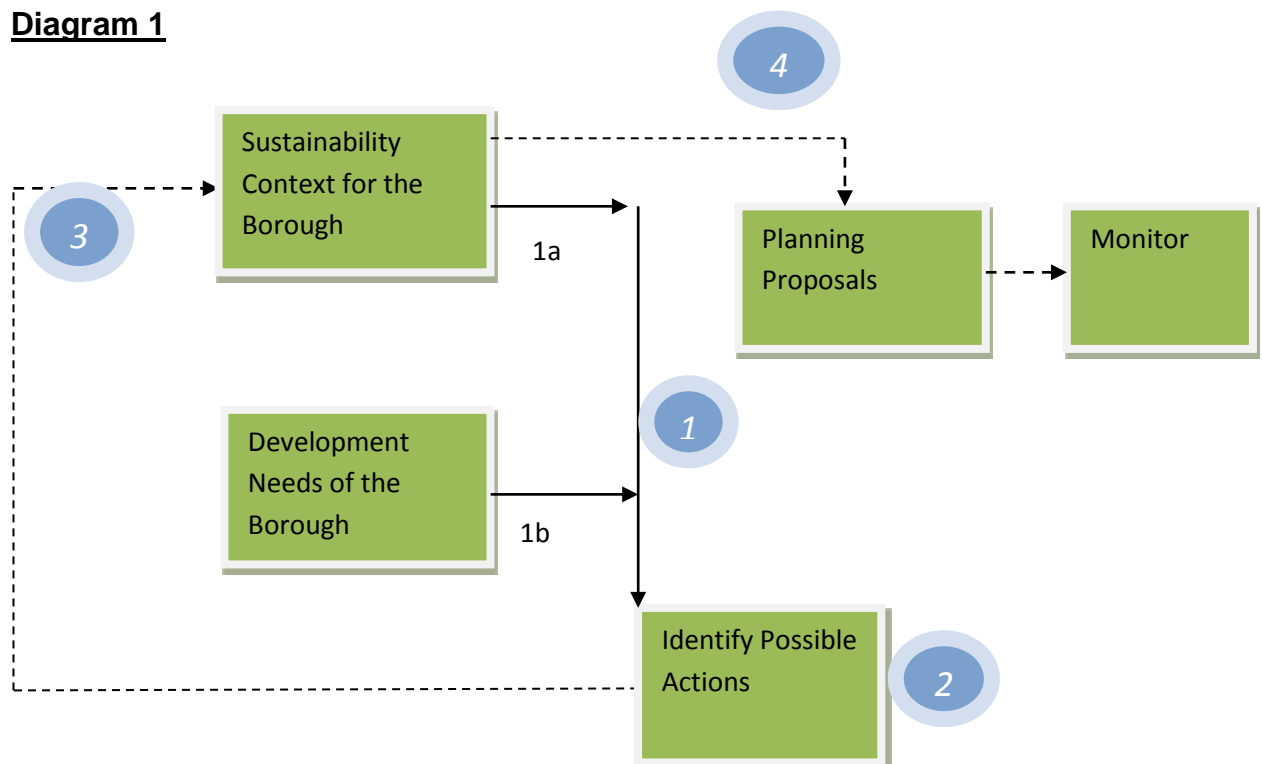


Diagram 1 illustrates how SA begins by describing the social, environmental and economic conditions for the Borough and considering development needs in this context (1). In this way, different strategies, policies and allocations can be identified whereby development needs can then be met (2). These are then considered, more formally, in the context of a Sustainability Appraisal Framework (3).

Formal Appraisal itself (3) involves the use of a Sustainability Appraisal Framework against which options for development (2) are considered. The SA Framework comprises a set of sustainability objectives (SA Objectives) that are based on the key sustainability issues. They are derived from a consideration of the sustainability baseline for the Borough and the social, environmental and economic objectives and parameters set by legislation. The SA Framework is set out in section C.

SA Objectives within the SA Framework cover broad subjects such as 'housing' and 'pollution'. In order that the key issues can be examined in detail, each of these objectives is supplemented by decision aiding questions. The decision aiding questions pick up on the principle issues that need to be addressed in sustainability appraisal for the subject in question. For housing this might be to ask whether the proposal is likely to support the delivery of affordable properties for key workers. By answering the questions for each SA Objective the predicted impact of proposed strategies, policies, sites and actions can be recorded for further consideration. The use of decision aiding questions also helps to ensure predictions are objective and to ensure consistency in the process. The decision aiding questions are set out in Appendix C. In this way appraisal can be used to inform the choices of which strategy, policy, site or action is to be taken forward.

Following this initial appraisal, actions for meeting the development needs can be proposed (4). This might provide details of the overall planning strategy for the Borough, planning policies for judging development proposals, potential development sites, and detailed advice on specific subjects such as how planning contributions can be used to help fund infrastructure.

Appraisal does not end here, however, since the adopted plan is then monitored with respect to the achievement of their stated objectives and with respect to the impacts that result from their implementation. Monitoring, in turn, informs the need to amend policy to improve performance.

## **Scope of Sustainability Appraisal**

## Scoping Process

Setting the scope for Sustainability Appraisal (SA) begins with a description of the social, environmental and economic conditions of the Borough (1a in Diagram 1). This is achieved by reviewing reports, studies and data from a variety of sources. Some reports and data are produced by the Council, but many are the responsibility of external agencies such as Natural England, the Surrey Wildlife Trust and Government departments. Reports and studies produced by the Council and other Government Agencies include the Borough Wide Character Assessment, Strategic Flood Risk Assessment, Accessibility Mapping and the National Statistics<sup>1</sup>. A full list of documents referred to is listed in Appendix B to the Scoping Report.

The information collated from these documents is complemented by a detailed baseline comprising data for the sustainability indicators. The subjects covered by the indicators range from the proportion of affordable housing provided in the Borough to the accessibility of different services by public transport as well as statistical information about the condition and size of important habitats. This baseline of largely empirical data is derived from internal and external sources. This mixture of reports and empirical data provides a detailed picture about the sustainability attributes of the Borough as well as identifying the wider context for sustainability at the national level. Whilst the documents and databases are available to read in full, the role of scoping (this Report) in the appraisal process is to summarise this information so that key trends and sensitivities can be identified for further consideration. The review has included European, national and regional legislation, strategies, programmes and guidelines. These documents provide additional information about sustainability, but more importantly these documents set requirements and parameters for development. The documents reviewed range from EU Directives that are required to be adhered to by law, such as the Water Framework Directive (2000/60/EC) which provides the basis for laws to protect against water pollution; through to the National Planning Policy Framework, which aims to promote sustainable growth; to guidance such as the Code for Sustainable Homes which advises developers with respect to sustainable design practices. A full list of these documents is provided as Appendix B to the Scoping Report.

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<sup>1</sup> [www.nomisweb.co.uk](http://www.nomisweb.co.uk)

Through consideration of the baseline conditions and requirements of other plans, programmes and strategies, the Scoping Report is able to describe the context for sustainability and begins to identify the key issues to be addressed in planning policy documents. A fundamental role of the Scoping Report is to establish the Sustainability Appraisal Framework. This reflects the context of sustainability and provides a standard methodology for considering the impacts of proposed actions. It is against this SA Framework and on the basis of the key issues identified, that proposed actions will be judged and, consequently, predictions made about the likely significant social, environmental and economic impacts.

### **Process so far**

The SA framework and methodology was designed and implemented through joint working with the East Surrey working group, including Tandridge DC, Mole Valley DC, Epsom & Ewell BC, Elmbridge BC and Reigate & Banstead BC. An initial framework including sustainability objectives and decision aiding questions was established in 2005. The statutory consultees were involved in the process through attendance at workshops and then through further consultation. The SA objectives and decision aiding questions were revised in 2012 through an SA workshop between the 5 authorities; these revised SA objectives were consulted on with a number of bodies including the statutory consultees. It is considered that this method of joint working through the process facilitates proper consideration of sustainability issues beyond administrative and subject boundaries. It also represents an efficient and effective use of resources. A further strength is to build upon local knowledge and provide mutual verification of the process. The revised 19 SA objectives can be seen below.

### **Social progress that recognises the needs of everyone**

1. To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford.
2. To facilitate the improved health and wellbeing of the whole population.
3. To reduce poverty, crime and social exclusion.
4. To minimise the harm from flooding.
5. To improve accessibility to all services, facilities and greenspace.

### **Effective protection of the environment**



6. To make the best use of previously developed land and existing buildings.
7. To reduce land contamination and safeguard soil quality and quantity.
8. To ensure air quality continues to improve.
9. To reduce noise pollution.
10. To reduce light pollution.
11. To improve the water quality of rivers and groundwater, and maintain an adequate supply of water.
12. To conserve and enhance biodiversity and networks of natural habitat.
13. To conserve and enhance landscape character and feature, the historic environment and cultural assets and their setting.
14. To reduce the need to travel, encourage sustainable transport options and make the best use of existing transport infrastructure.
15. To ensure that the borough adapts to the impacts of the changing climate.

### **Achieving a sustainable economy**

16. Provide for employment opportunities to meet the needs of the local economy.
17. Support economic growth which is inclusive, innovative and sustainable

### **Prudent use of natural resources**

18. To achieve sustainable production and use of resources
19. To increase energy efficiency and the production of energy from low carbon technologies, renewable sources and decentralised generation systems.

### **Consultation**

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This scoping report was consulted on for 6 weeks between July and September 2012. For a list of consultees and responses received please see the separate consultation statement. This report has been revised in line with the responses received.

The Sustainability objectives set the framework against which the development plan can be appraised in references to the issues highlighted in this report. To allow for consistency in the appraisal process decision aiding questions have been established for each SA objective, these can be seen in Appendix C. The appraisal objectives were tested to determine whether there was any internal incompatibility between them; whether in achieving one objective another would be compromised. Conflicts were identified between objective 1 and a number of other objectives due to the potential impact on the environment from housing delivery. Conversely conflicts were found between minimising harm from flooding and achieving housing delivery and possibly economic objectives. A conflict was also identified between protecting heritage and townscape and renewable energy infrastructure.

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1	Black																		
2	Green	Black																	
3	Green	Green	Black																
4	Red	Green	Green	Black															
5	Green	Green	Green	Green	Black														
6	?	Green	Green	Green	Green	Black													
7	Yellow	Green	Green	Green	Green	Green	Black												
8	Red	Green	Green	Green	Green	Green	Green	Black											
9	Red	Green	Green	Green	Green	Green	Green	Green	Black										
10	Red	Green	Green	Green	Green	Green	Green	Green	Green	Black									
11	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Black								
12	Red	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Black							
13	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Black						
14	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Black					
15	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Black				
16	Red	Green	Green	Red	Green	Green	Yellow	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow	Black			
17	Green	Green	Green	Red	Green	Green	Yellow	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow	Green	Black		
18	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Black	
19	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Red	Red	Green	Black

## Overview and Summary of the Likely Significant Impacts

The Borough of Reigate and Banstead comprises a number of towns and villages set within attractive countryside stretching either side of the North Downs escarpment. The North Downs forms part of the Surrey Hills Area of Outstanding Natural Beauty, which is a landscape of national importance; this area also includes the internationally recognized Mole Gap to Reigate Escarpment Special Area of Conservation. Banstead Woods, Chipstead Valley, and Walton and Reigate Heaths are also areas of notable landscape and wildlife value. The majority of Reigate town centre is recognised for its historic and architectural qualities as a designated Conservation Area, as are the older village centres such as Merstham and Walton-on-the-Hill.

With close proximity to Greater London to the north and Gatwick Airport to the south and with the Borough crossed by the M25 and M23 motorways, the Borough experiences heavy traffic and some areas suffer from congestion and, consequently, poor air quality. Due to the location of the Borough considerable development pressures exist.

Agriculture is the predominant land use in the Borough's countryside, although golf courses and horse keeping now occupy some areas previously used for farming. The countryside contains large areas of open commons and woodlands to which the public have access, alongside a variety of institutions in large grounds together with scattered commercial, recreational and residential properties.

In addition to major landscape and habitat restrictions, the countryside has areas that are liable to flood. Flooding presents a more significant problem in urban areas, particularly at Redhill and Horley.

With substantial environmental constraints and a problem with traffic congestion in urban areas, a key issue for sustainability appraisal is to examine how to balance the provision of housing at potentially higher densities in accessible locations without exacerbating congestion and air pollution, and avoiding adverse impacts on the quality and character of the built environment. A key sustainability aim is to ensure that development brings with it a strategic network of green infrastructure that provides a raft sustainability benefits including: health/ well being, biodiversity, flooding, and climate change.

## **Baseline data and sustainability issues**

### **Housing**

**SA objective:** To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford.

#### **Summary of issues facing Reigate & Banstead**

- **Housing affordability, particularly for young households, and the provision of affordable housing**
- **Homelessness**
- **Shortage of pitches for Gypsies and Travellers**

#### **Overview**

This Sustainability Objective is a priority at both a national and local level. The principle policies and strategies (below) set out comprehensive aims and goals for a range of housing issues. The principle documents relevant to the local context are:

#### **National policies & strategies**

The National Planning Policy Framework (NPPF) states that LPAs should significantly boost the supply of housing and that they should use their evidence base to ensure that needs in the housing market area are fully met. LPAs need to identify a 5 year supply of specific deliverable sites, plus a 5% buffer, and for years 6 to 10 and if possible 10-15 they should demonstrate a supply of developable sites and broad locations for development. Housing applications should be considered in the context of the presumption in favour of sustainable development and LPAs should be delivering a wide choice of high quality homes, and widen opportunities for home ownership and be creating sustainable, inclusive and mixed communities. It also requires that local authorities plan for the provision of affordable housing where there is an identified need.

Planning Policy for Traveller Sites (March 2012) requires LPAs to make their own assessment of need and that fair and effective strategies are developed in order to meet the need through identification of land for sites. This planning policy requires that LPAs

increase the number of traveller sites in appropriate locations with planning permission, to address under provision and maintain an appropriate level of supply. R&BBC is currently undertaking a Gypsy, Traveller and Travelling Showpeople study to assess local need.

### **Regional and sub-regional policies & strategies**

At the time of writing the South East Plan (SEP) still forms part of the development plan for the borough, however, the Government has made its intention to abolish the SEP clear.

Gatwick Diamond Local Strategic Statement identifies the focus for new housing as the developments already planned at Crawley, Horley and Horsham, in the existing urban areas and at other accessible locations around the Diamond. The statement states that authorities should take into account the need to provide affordable housing for those who can not readily access the general housing market and the need to provide market housing of a type which meets the needs and expectations of an increasingly skilled workforce.

### **Local policies & strategies**

East Surrey Housing Strategy 2009-2013 states that although around 1,000 affordable homes were built across East Surrey between 2008 and 2011 there is an annual shortfall of 2,410 affordable homes each year. Three priority policy areas have been agreed across East Surrey: Creating Housing Opportunities, Improving Housing Standards, and Improving Housing and Support for Vulnerable People.

The Council's Homelessness Strategy 2011-2016 seeks to develop the Housing Options approach, strengthen partnership working, engage the private rented sector, increase the supply of and maximise the use of existing affordable housing, and deliver efficient customer focused services.

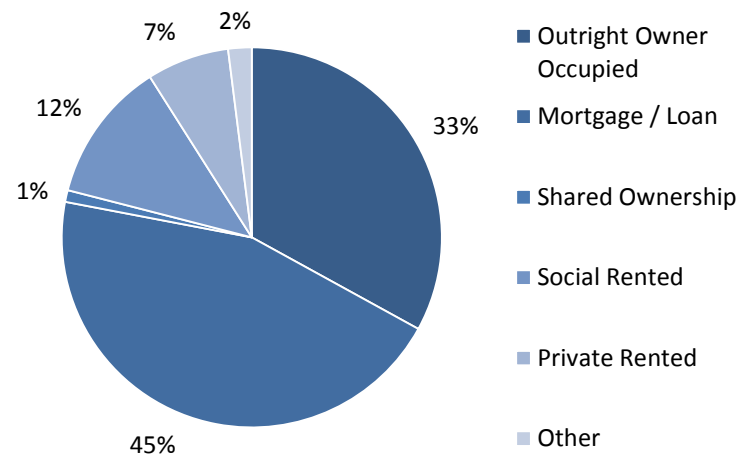
The Surrey Community Strategy 2008 (Surrey LAA) contains Surrey-wide targets for the delivery of 2375 affordable homes in 2008/09 – 2010/11.

## Local Factors

There are around 51,700 homes in the borough<sup>2</sup>. The level of owner occupation in the borough is high at 78% compared to a national average of 68%. Outright ownership of homes is 33% compared to the England average of 29%. Social rented accommodation accounts for 12% of all tenures and private rented just 7%. In 2002 the Council transferred its housing stock (10% of all homes) to the Raven Housing Trust.

The single largest social housing provider in the borough is Raven Housing Trust; other providers include Hyde Housing Association, London & Quadrant Housing Trust, Mount Green Housing Association, Amicus Horizon, Guinness Trust, Southern Housing Group and Thames Valley Housing Association.

## Borough housing tenure



Source: Census 2001

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<sup>2</sup> Census 2001

Levels of homeownership vary across the borough. The Nork / Tattenhams<sup>3</sup> area contains the highest proportion of owner occupied homes at 91% as well the highest proportion of homes owned outright at 45%. In contrast, the Preston / Tattenhams<sup>4</sup> area has the lowest level of owner occupation at 63%, the lowest proportion of outright owned homes at 20% and the highest proportion of social rented homes at 33%.

Reigate and Banstead has the most number of properties of all the Surrey councils. The distribution of properties across Council Tax bands is similar to the Surrey average with concentration of property in bands C and D. Compared to other Surrey districts the borough has a slightly higher proportion of homes in band B, one of the least expensive bands, and has a lower proportion homes in the most expensive G and H band

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<sup>3</sup> Census 2001 MSOA 003

<sup>4</sup> Census 2001 MSOA 005

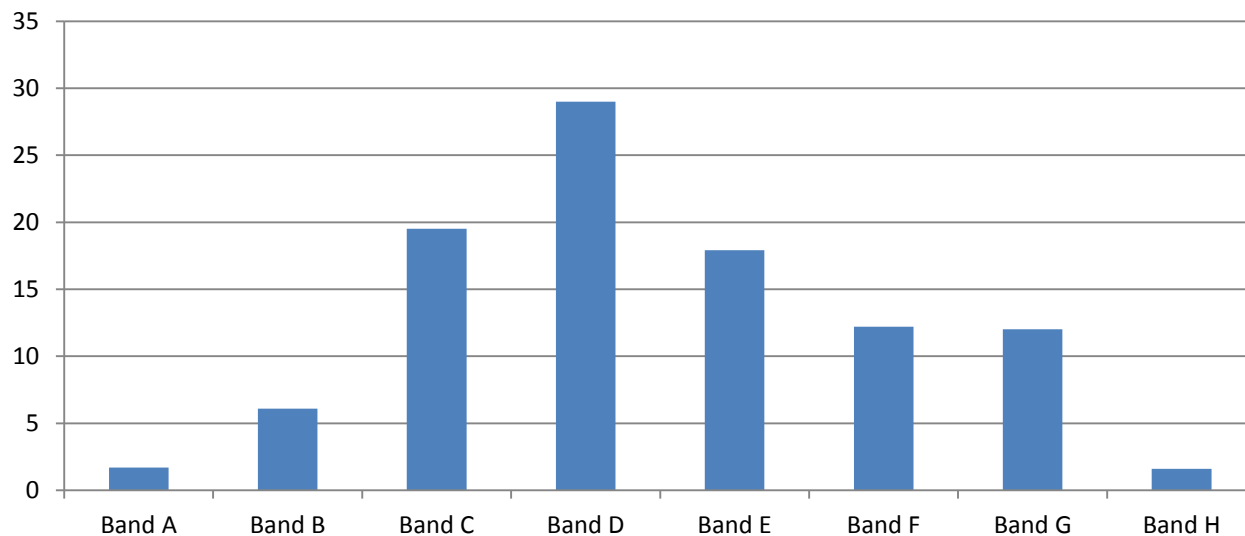
Proportion (%) of dwellings in each Council Tax band by area 2011

Council Tax Band	A	B	C	D	E	F	G	H	Total Properties
Elmbridge	0.5	3.3	12.9	23.7	19.4	13.8	19.9	6.4	55,408
Epsom & Ewell	0.5	3.7	15.8	27.4	25.1	14.6	12.5	0.5	30,319
Guildford	1.47	6.01	20.55	27.93	17.16	11.2	12.87	2.81	56,056
Mole Valley	4.4	6.3	10.3	21.4	18.8	16.3	19.8	2.6	36,684
Reigate & Banstead	<b>1.7</b>	<b>6.2</b>	<b>19.7</b>	<b>28.8</b>	<b>17.9</b>	<b>12</b>	<b>12.1</b>	<b>1.6</b>	<b>57,197</b>
Runnymede	4.3	3.8	18.2	32.1	19	11.2	8.5	2.9	34,160
Spelthorne	1	3.9	20.5	34.6	23.9	10.9	4.9	0.3	40,792
Surrey Heath	1.6	5.7	16	26.7	18.8	16.1	13.7	1.3	34,820
Tandridge	2.5	5.8	13.8	24	20.4	13	17.1	3.2	34,870
Waverley	1.7	6.2	18.3	23.7	17.9	13	15.4	3.7	51,079
Woking	0.8	7.9	24.6	28	14.8	10.1	12.1	1.7	40,498
Surrey	1.8	5.4	17.5	27	19.1	12.9	13.7	2.6	471,883
England	25	20	22	15	9	5	4	1	22,947,500

Source: ONS Council Tax Bands 2011



Percentage of borough properties by Council Tax band 2011



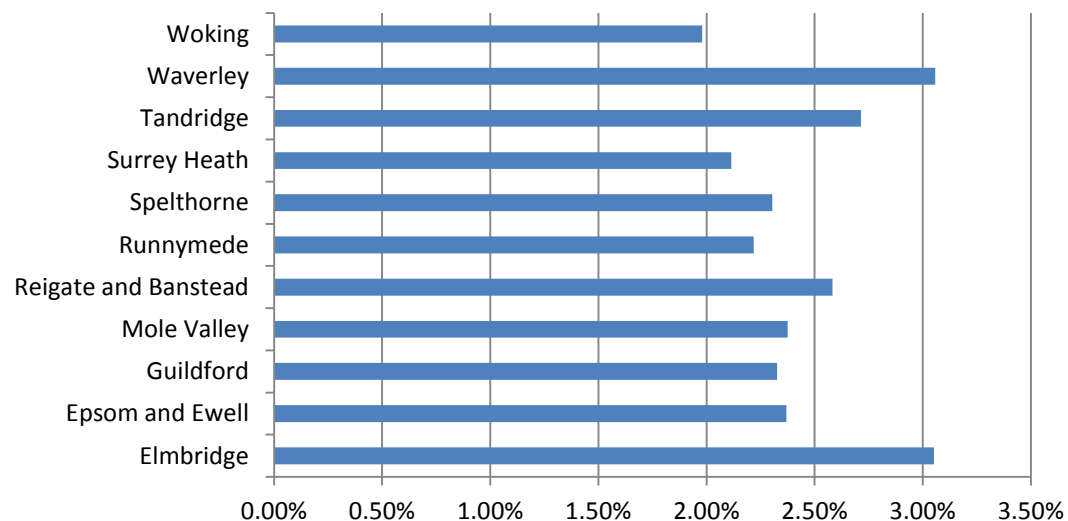
Source: ONS Council Tax Bands 2011

The borough housing stock as identified by council tax figures has increased by 7% since 2004 and now stands at 57,880 of which 2.58% are vacant<sup>5</sup>. This vacancy rate is similar to the rest of Surrey as shown in the graph below.

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<sup>5</sup> DCLG Live Tables 615 and 125

All vacant properties in 2011 as a proportion of total dwelling stock



Source: DCLG Live Tables 615 and 125

Compared to the rest of Surrey, under occupation and overcrowding levels in the borough are similar. Within the borough levels of under occupation vary greatly. 73% of homes in the Tadworth and Walton area<sup>6</sup> at least two more rooms than needed compared to 34% in the Preston / Tattenhams area. The most overcrowded households are located in Redhill East where 2.8% of households are short of 2 or more rooms, followed by 2.5% of households in the Reigate Central / Meadvale St Johns area<sup>7</sup>.

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<sup>6</sup> Census 2001 MSOA 006

<sup>7</sup> Census 2001 MSOA 012

Strategic Housing Market Assessment update 2012<sup>8</sup> states that the total affordable housing need annually is for 828 units a year. After re-let and resale supply there is a net need prior to new delivery for 366 new affordable units a year, based on dealing with the backlog over 16 years to 2027; The scale of need continues to justify an affordable housing target of 40%, subject to site viability; it identifies that a tenure mix of 40% rented and 60% intermediate affordable housing should be provided., The assessment also recommends addressing the significant under occupation within the existing 3 and 4 bedroom social housing stock to assist in resolving over crowding and making best use of the stock should be a housing priority.

This report builds on the 2008 Strategic Housing Market Assessment for East Surrey, and 2009 Update Study, which concluded that the concentration and ultimate over supply of flats does create a difficulty in the short term which may be addressed by public sector funding support. The report further concludes that housing waiting lists have been rising for some time, and that this is caused both by rising prices and the inability of social tenants to move out of the sector. The impact of unemployment and repossession will further add to the pressure on the need for social and affordable housing.

### **Gypsies, Travellers, & Travelling Show People**

Gypsies and Travellers are a large ethnic minority in the borough and have a different housing need to other residents. Gypsies and Travellers require pitches, both as transit sites and to permanently reside on so that they can gain access to services and facilities such as health care and education. There are currently 12 authorised pitches within the borough, plus 1 travelling show people site, but the most recent study shows a shortfall of pitches which are needed in order to prevent overcrowding and unauthorised encampments occurring from a demand created by local family groups. Work is underway to ascertain the level of need for additional pitches/plots.

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<sup>8</sup> [http://www.reigate-banstead.gov.uk/planning/planning\\_policies/local\\_development\\_framework/ldf\\_evidence\\_base/shma/index.asp](http://www.reigate-banstead.gov.uk/planning/planning_policies/local_development_framework/ldf_evidence_base/shma/index.asp)

## Indicators

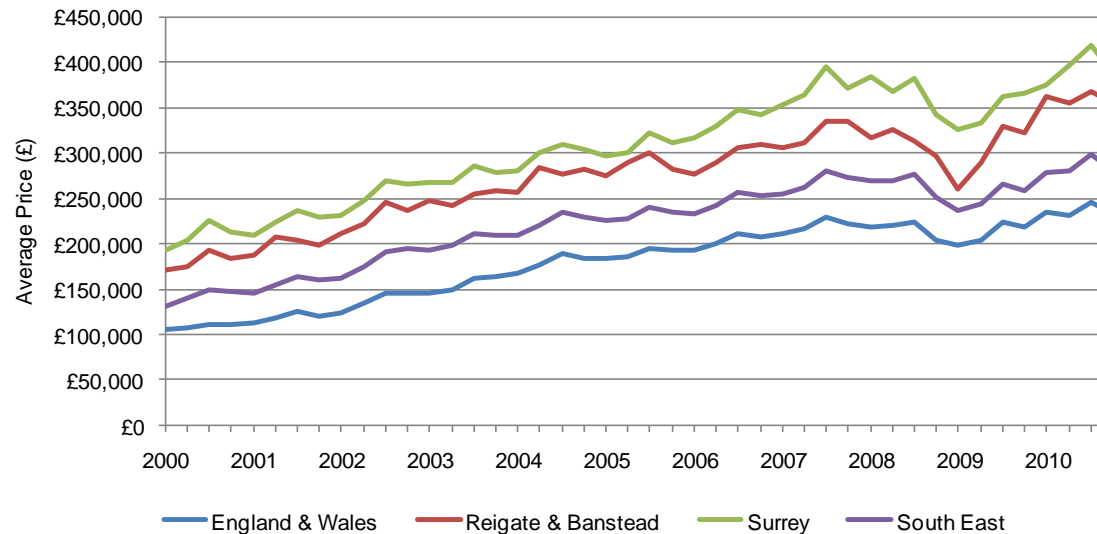
INDICATOR	Quantified data (For RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
Housing Completions	2010-11 net completions 439	South East		Net completions over the past year are down by 33%.	This may be a result of weak economic conditions	Housing Monitor
Affordable housing as a percentage of housing completions	2010-11: 31.6% On sites of 15 or more units: 44%		Set locally at 30% on schemes of 15 units or more. There is a move towards a contribution on schemes of less than 15 in the emerging CS but this is not in place at present.	The number of new affordable housing units this year is broadly on line with the level experienced over recent years. Completions peaked in 2009 in line with a very high level of overall completions and dipped in 2010; largely as a result of the wider economic conditions.	Not all affordable housing is delivered through the planning system. Calculation of total affordable housing figures will change from 2008/09 (NI 155 rather than HSSA)	Housing Monitor
Average property price	December 2010: Average property price £355,000	December 2010: Surrey Average property price £387,000 R&B £75,000 over SE average, and £122,000 over England & Wales average.	Stabilise the average property price (see below) by increasing the number of affordable units and the percentage of smaller properties built	Average property price in Borough is less than Surrey average; Affordability gap is increasing. Affordability ratio in R&B has risen by more than that elsewhere in the county, up from 7.90 to 9.52, but remains 5th most affordable in the county.		Housing monitor
Gypsy & Traveller provision	Overcrowded pitches = awaiting data	Other East Surrey authorities = awaiting data	Reduce number of overcrowded pitches	Need is rising.	Planning applications outstanding	Gypsy, traveller and travelling show people assessment 2012-2013 (in progress)

**Sustainability issues/problems/opportunities:**

**House Prices & Affordability**

Average house prices in the borough increased from just over £320,000 in December 2009 to just below £355,000 in December 2010<sup>9</sup>. House prices in the borough are below the Surrey average of £387,000 but almost £75,000 above the South East average and £122,000 more than the England & Wales average.

**Average Housing Price Trend 2001-2011**



Source: Land Registry/DCLG, 2011

<sup>9</sup> DCLG Live Tables – House Prices: Land Registry data

Nationally, the affordability ratio at the end of 2010 had risen from 6.27 to 7.01. Surrey remains one of the areas with the highest affordability ratio, with median house price more than 10 times the median earnings across the county, up from 8.53 at the end of 2009. Over the past year, the affordability ratio in Reigate & Banstead has risen by more than that of the county, up from 7.90 to 9.52. Median earnings here stand at £28,675. Despite this, the borough remains the fifth most affordable a high cost county<sup>10</sup>.

For many first time buyers (FTB) high house prices are one part of the housing picture, a real difficulty is saving the deposit needed to secure a mortgage. The average FTB deposit in the first six months of 2011 was £27,719; more than double the average of £12,874 in 2001. The average age of a first time buyer is 29. The Council for Mortgage Lenders estimates that 84% of FTB under 30 had help with their deposit in 2010 compared to 38% in 2005. According to a report commissioned by the Halifax<sup>11</sup> 64% of non-homeowners believe they have no prospects of buying a home therefore creating a generation of renters. Private rented accommodation is an alternative tenure for households unable to afford to purchase homes. Private rental costs vary across the borough. Overall borough wide rents have increased by 9% but the cheapest properties such as flats and terraces have increased at a higher level with rises of up to 13% since March 2009. The cheapest one bedroom flats range from £625 per month in Horley rising to £695 in the Banstead area. The cheapest three bedroom semi-detached homes range from £950 in Reigate to £1,250 per month in the Banstead area. A household income of between £30,000 and £40,000 is needed to afford to rent the cheapest one to two bedroom homes in the borough<sup>12</sup>. The 2011 Residents Survey shows that 33% of the boroughs residents feel that the availability of affordable decent housing is an important factor in making somewhere a good place to live. 23% feel that this is something which is in need of improvement in Reigate & Banstead. The perceived importance of affordable housing rises significantly amongst the youngest age groups with almost 65% of respondents in this age group highlighting its importance.

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<sup>10</sup> DCLG Affordability Ratio Live Tables

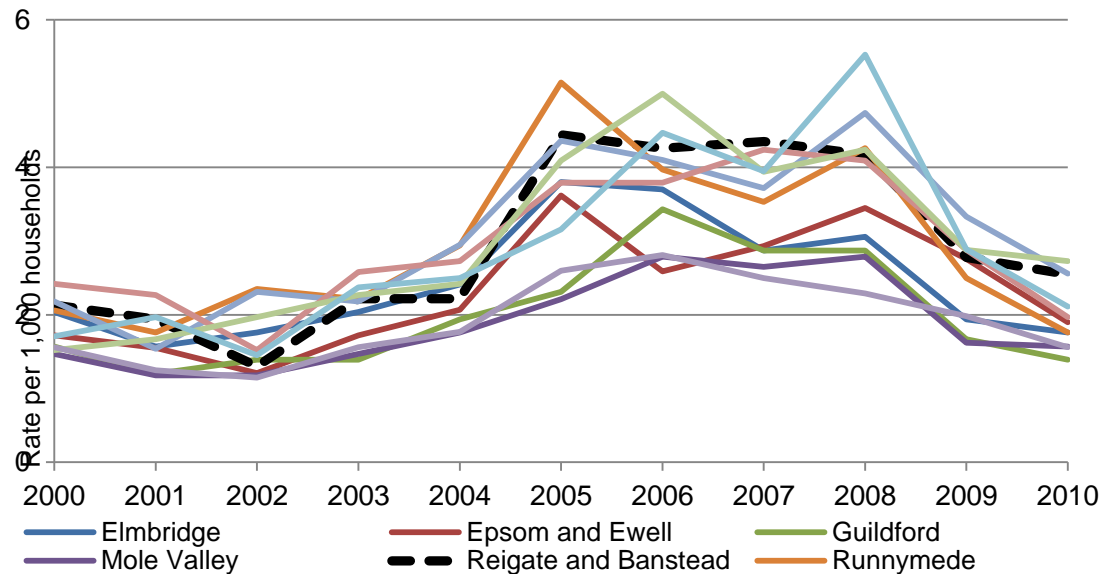
<sup>11</sup> Halifax First Time Buyer Review 2011

<sup>12</sup> SHMA Update 2012

### Repossessions

Claims for repossession are one measure of economic health. Although not all County Court claims for repossession orders result in a home being repossessed, they provide an indicator of the economic pressures facing households in the borough. Annual mortgage claims increased in 2004 reflecting a short-lived downturn in the wider UK economic market in 2005. Claims declined markedly in 2008, and within the context of the current economic recession have not risen significantly. Overall, despite high housing costs the level of claims for repossessions in the borough remain low in comparison to other parts of England. Within Surrey, the borough has higher levels of repossession orders than many districts but has not experienced the very sharp increases found in Spelthorne and Woking.

### Annual mortgage claims per 1,000 households



Source: Ministry of Justice 2010

### Housing Delivery

At the time of writing the South East Plan requires Reigate & Banstead to provide an additional 10,000 homes between 2006 and 2026 of which approximately 3,000 are to be located in the Gatwick Area and the remaining 7,000 in the London Fringe sub-region. The South East Plan will be abolished shortly and local authorities will set their own targets based on a robust local evidence base. It is likely that the borough target will be lower than the South East Plan one. Since 2006 the borough has completed 3,138 new dwellings, averaging 628 per year. During 2010/11, a total of 488 homes were built in the borough, giving a net addition of 439 dwellings.

Of these, 154 were affordable homes, with a further 17 created as a result of schemes such as Homebuy Direct; taking total delivery to 171. 60% of affordable homes built over the past year were social rented.<sup>13</sup>

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<sup>13</sup> RBBC Housing Delivery Monitor 2010/11



## Net additional dwellings by ward (2006-11)



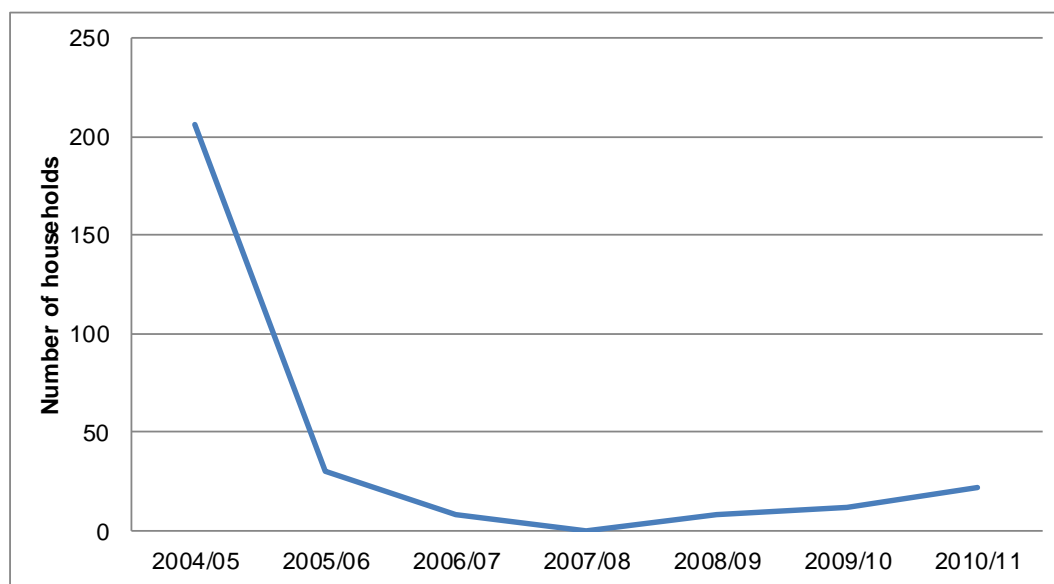
Source: Internal Monitoring [Map: Crown Copyright Licence: 100019405]

## Housing Need

Homelessness is the most extreme form of housing need. Within the borough the number of households accepted as homeless by the council following a homelessness assessment has reduced significantly from a peak in 2005/06. This swift decline reflected a

change in the homelessness service from a reactive to a preventive service. Since 2008/09 the number of households accepted as homeless has risen. This increase is linked to the downturn in the wider economy. The relatively low number of homeless households masks the large number of households seeking advice and assistance from the Council's Housing Options Service. On average around 200 households contact the Council for advice each month.

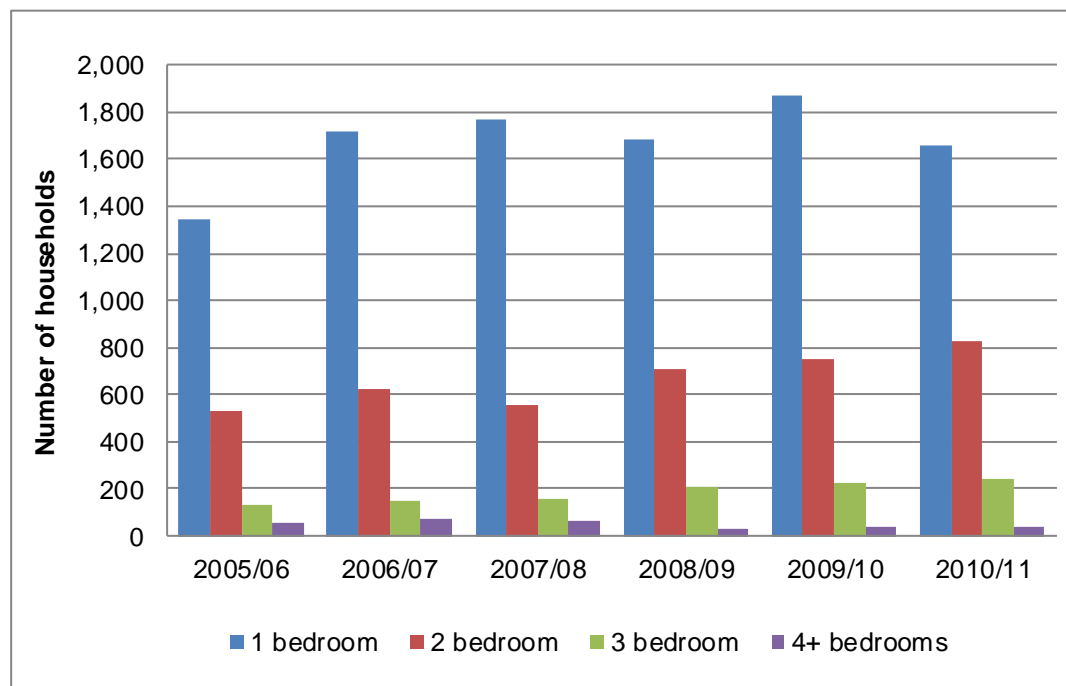
Number of households accepted as homeless in the borough:



Source: DCLG PIE Statistics

The housing register provides another indication of the level of housing need in the borough. The number of households on the register has increased steadily since 2004/05. This increase is linked to changes in the economy, and to the introduction of choice based lettings in 2008. One bedroom properties are in the greatest demand followed by two bedroom homes.

## Number of households on the Council's housing register 2005 – 2011



### Key Decision Aiding Questions:

- Will the option help provide a supply of affordable homes to meet identified needs?
- Will the option increase the rate of provision of affordable housing?
- Will the option help to maintain the reduction in the number of homeless?
- Will the option increase the amount of affordable extra-care?
- Will the option have a significant detrimental effect on the financial viability of delivering future housing?

## **Community, health and wellbeing**

**SA Objectives:** 'To facilitate the improved health and wellbeing of the whole population' and 'to reduce poverty, crime and social exclusion'.

### **Summary of Reigate & Banstead**

- Reigate and Banstead have high levels of good health relative to the South East and UK.
- Reigate and Banstead has a relatively old population profile. Life expectancy is above the England average for males and similar to the England average for females. Life expectancy is increasing for both males and females.
- Deprivation is lower than the national average; however, 3,100 children live in poverty.
- Life expectancy is 7.4 years lower in the most deprived areas than in the least deprived areas.
- The rate of violent crime is higher than the Surrey average.

### **Overview**

Individual, as well as combinations of circumstances and behaviour, affect the health and well being of the population. Whilst the LDF cannot influence all factors directly, there are core issues that are sensitive to spatial planning and development control decisions. These include access to health care, leisure and recreation; the impact of traffic and energy use on air quality and climate; the general quality of the environment and the fostering by design of community meeting and interaction. As part of national Health Reforms, the Government intends to shift the focus of healthcare delivery from curative interventions to preventative measures and promoting healthy living. Local Government will have an important role in this, in line with the Council's Self Reliant & Thriving Communities Corporate Plan Theme. In addition, the latest resident's survey found that our residents see health services as the second most important factor in making somewhere a good place to live, with this figure rising even higher amongst older residents. Understanding health needs across the borough as well as the lifestyle and behavioural choices of our residents will help shape and inform our part in delivering effective health services in the future.

The Localism Act<sup>14</sup> (2011) will have an effect on local communities as the Act's aim is to cut bureaucracy and give more power to Local Government. Part of the Localism Agenda includes the making of neighbourhood plans and the introduction of new rights and

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<sup>14</sup> <http://www.legislation.gov.uk/ukpga/2011/20/contents/enacted>

powers for the individual and communities. The aim of the Act is that a community will be able to make decisions about development in their own neighbourhood, provided it is in line with what has already been set at a Borough wide level within the Local Development Framework.

Underpinning the Big Society vision is an expectation that communities can and will play a bigger part in co-providing services and fostering social capital. The White Paper on Open Public services states “people should be in the driving seat, not politicians and bureaucrats”<sup>15</sup>.

In addition the familiar places of community life – the school gate, places of worship, local shops or post offices – can create opportunities for individual residents and service users to connect with each other as well as more formal governance structures. Community hubs can be places for personal interaction and networking. There is clear evidence that people within social networks are ill less frequently, visit their GPs less often and require less medication to manage their conditions.

### **Life Expectancy**

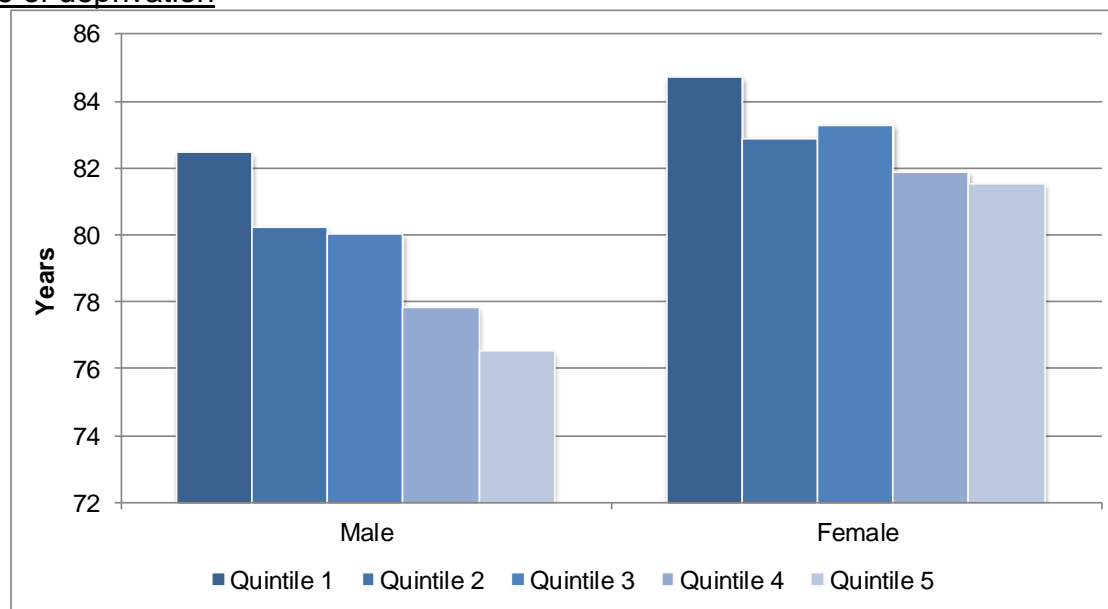
The life expectancy of residents in Reigate & Banstead has improved significantly over the past two decades rising by 3.5 years for females and 4.8 years for males. Current life expectancies at birth in Reigate & Banstead for both males (80.1 years) and females (83.5 years) are above the national averages but below that of Surrey with a similar pattern at age 65 <sup>16</sup>. However, life expectancy varies across the borough and this is correlated strongly with deprivation. The chart below shows how the average life expectancy varies across the borough according to quintiles of deprivation (as established through the Indices of Multiple Deprivation (IMD) ) and demonstrates that the least deprived areas of the borough have a life expectancy which is more than 3 years longer for females and almost 6 years longer for males than in the most deprived areas.

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<sup>15</sup> HM Government (2011) *Open Public Services* London: HM Government p.8

<sup>16</sup> ONS Life Expectancy Statistics (2008-10)

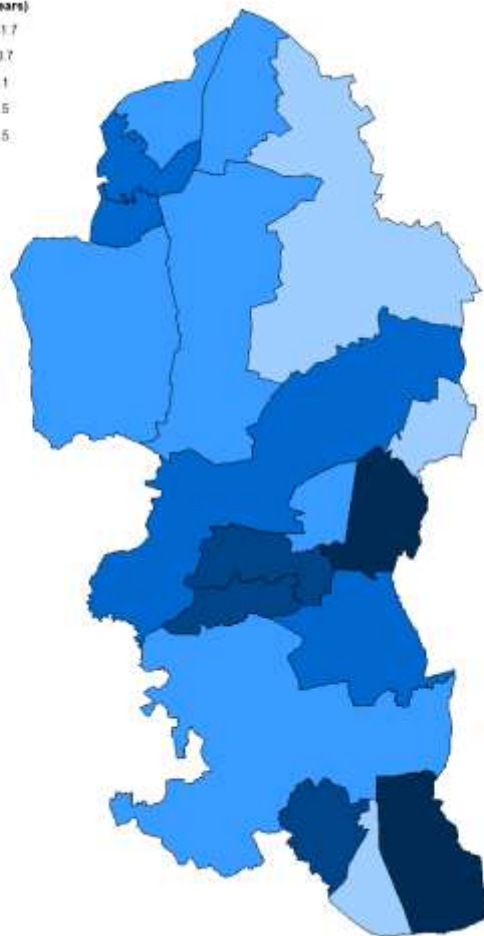
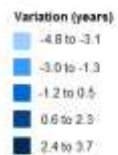
### Life expectancy by quintile of deprivation



Source: ONS, 2010

Estimates of life expectancy are also available at Middle Super Output Area (MSOA) level which allows us to translate this variation into a geographic representation. The maps below show how each MSOA in the borough varies from the borough average for male and female life expectancy at birth. With males, lower life expectancy is clearly correlated to areas of higher deprivation; however, the case is not so apparent with females.

Variation in life expectancy from borough average by MSOA – Left (Males) Right (Females)



## **Obesity**

The issue of obesity has been growing across the nation over recent years. Data from the Health Survey for England shows that since 1993, the prevalence of adults categorised as obese has risen from 13% to 22% in 2009 for men and 16% to 24% for women. By 2050, research by Foresight predicts that obesity could affect 60% of adult males, 54% of adult females and 25% of children<sup>17</sup>. Obesity is likened to smoking in terms of detriment to health, leading to increased risk of heart and liver disease and diabetes. Obesity can also lead to increased cancer risk with 10% of all non-smoker cancer deaths attributable to obesity<sup>18</sup>. Research indicates that obesity cost the NHS £4.2bn in 2007 and the cost the wider economy around £16bn. By 2050, these costs are likely to increase significantly to £9.7bn for the NHS and almost £50bn within the wider economy. Obesity is also correlated with higher welfare benefit payments<sup>19</sup>.

Childhood Obesity: Once established, obesity can be difficult to treat, meaning early prevention and intervention is essential. Overweight or obese children are far more likely to become obese in adulthood. It can also lead to health issues such as higher risk of asthma, eating disorders and type-2 diabetes. However, the emotional and psychological effects of obesity are often seen as the most immediate and serious by children themselves, particularly fear of discrimination and low self-esteem, and this can have a profound impact on educational attainment and future prospects.

Compared to the national picture, the borough has relatively low rates of childhood obesity. In the reception year, 18.3% of children are classed as overweight or obese, broadly similar to the Surrey average but significantly below the national figure of more than 23%. In year 6, prevalence of excess weight increases quite significantly with 28.4% of children classed as overweight or obese in the borough; however, this is still below the national average of 33%.

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<sup>17</sup> Foresight 2007, Tackling Obesities: Future Choices Project Report

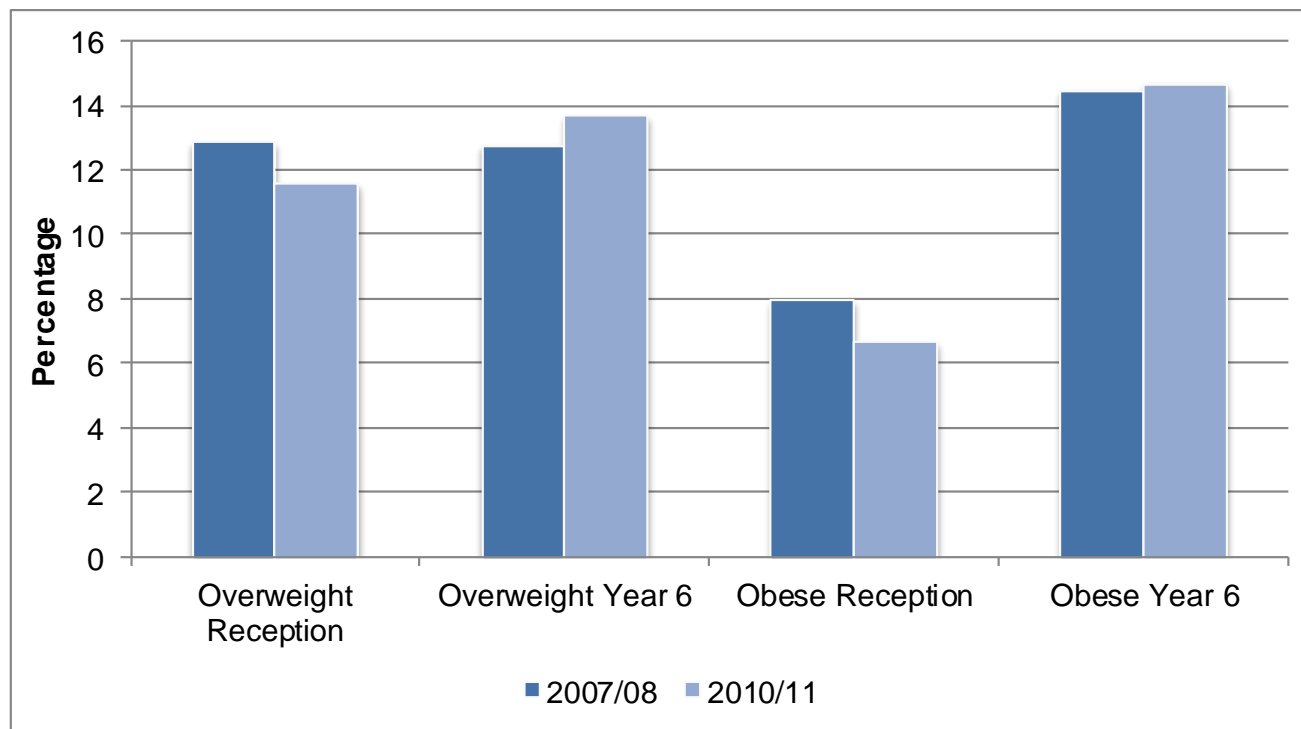
<sup>18</sup> Surrey PCT Joint Strategic Needs Assessment

<sup>19</sup> Foresight, Op cit



Since 2007/08, the percentage of children classed as overweight or obese at reception age in Reigate & Banstead has fallen from almost 21% to the current level of 18.3%. However, at year 6, it has shown a slight increase, up from 27.3%.

Percentage of Overweight & Obese Children – Reception & Year 6

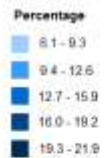
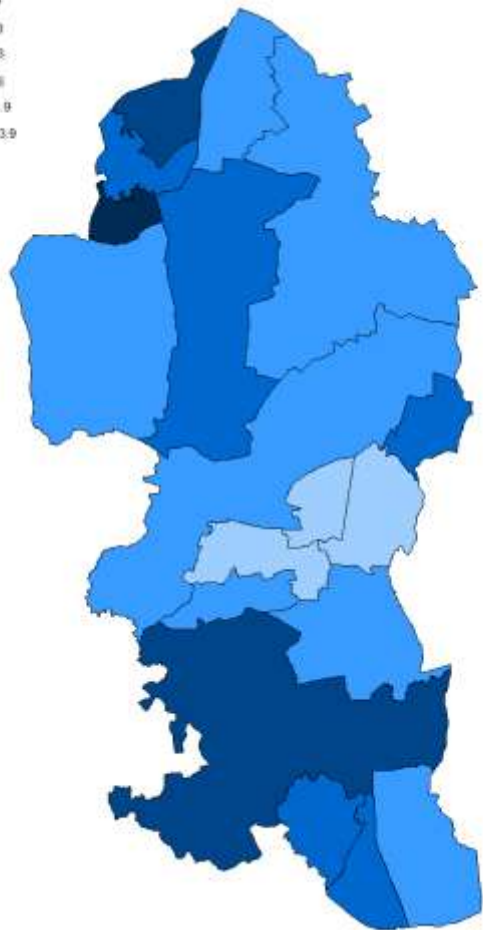


Source: National Child Measurement Programme

At MSOA level there is significant variation in the proportion of children classified as obese. At reception year, the general geographic pattern is that the northern and central areas of the borough have lower rates of obesity, apart from a pocket of particularly high prevalence in the Preston area. Around the Reigate-Redhill town centre areas, childhood obesity rates are notably low at reception year.

At year 6, the picture changes quite significantly. Rates in the northern areas of the borough are now comparatively high. The pocket of very high rates remains in the Preston area but there is also a significant rise in obesity in the Kingswood area between reception and year 6. The east Redhill and Chipstead areas of the borough also experience a significant rise in prevalence between the two age groups. The area to the west of Redhill and south of Reigate continue to have amongst the lowest rates in the borough for year 6 children. Nationally, a clear correlation between deprivation and obesity is identified. Whilst 13% of children attending schools located within the least deprived decile nationally are obese, this rises to almost 24% for those in the most deprived decile.

Prevalence of obesity in children by MSOA – Left (Reception) Right (Year 6)



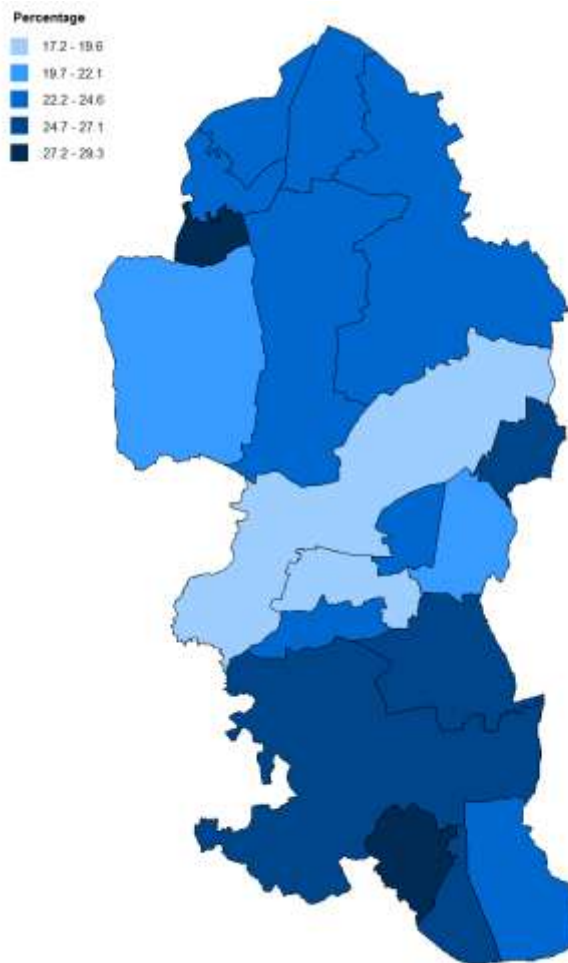
Source: National Child Measurement Programme [Map: Crown Copyright Licence: 100019405]

Adult Obesity: In terms of adult obesity, Reigate & Banstead is only slightly below the national average. Of the borough's adult population, 23.5% are classified as obese compared with 24.2% across England. Within Surrey, Reigate & Banstead has the third highest rates of adult obesity, with Elmbridge lowest at 19.5% and Spelthorne highest at 26.0%.

The pattern of adult obesity across the borough indicates several pockets where prevalence is notably higher. As with childhood obesity, there is a band of lower prevalence across the central part of the borough encompassing the Reigate-Redhill area. However, there is a pocket of higher prevalence in the Merstham area. The south of the borough generally has a higher prevalence of adult obesity whilst most of the northern areas of the borough have average rates with the exception of the Preston area which has the highest proportion of adult obesity in the borough.

National studies also indicate higher prevalence of obesity in certain ethnic groups, particularly men and women of Black Caribbean origin as well as women of both Black African and Pakistani origin.

Prevalence of adult obesity by MSAO



### **Healthy Lifestyles – Physical Activity**

Physical activity can be one of the major factors in reducing obesity. Whilst physical activity levels are increasing nationally, those achieving the recommended guidelines remain in the minority. Adults who participate in physical activity reduce their risk of coronary heart disease by up to 50%, cancers such as colon and breast cancer, type-2 diabetes by between 33-50% as well as improving mental health including depression and dementia<sup>20</sup>. Within children, physical activity is shown to promote healthy growth and development as well as supporting psychological and social development. Furthermore, research conducted by the British Heart Foundation in 2007 suggested that the healthcare cost of physical inactivity to each PCT is around £5m per annum.

The Active People Survey carried out by Sport England provides borough level information on the percentage of adults participating in physical activity or exercise, using 3 sessions per week as a benchmark.

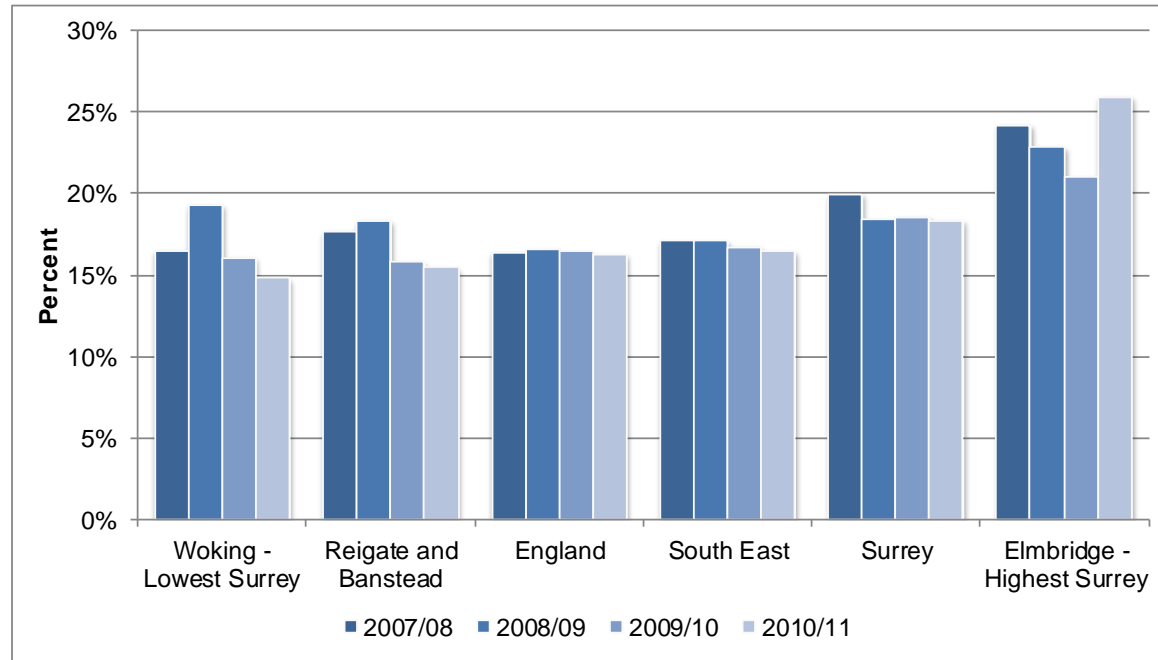
Between 2007/08 and 2010/11, the percentage of adults in Reigate & Banstead participating in at least 3 sessions of moderate physical activity per week has fallen slightly from 17.7% to 15.5%, a change which is not seen to be statistically significant given sample sizes. Compared to national levels, the borough is slightly below average (16.3%) and even further below the Surrey average of 18.4%. The chart below shows how participation rates have changed over the period. Nationally, evidence shows that people from lower income households are less likely to participate in physical activity, as are women of South Asian origin. Information from the Annual User Survey of leisure centres in the borough indicates that almost 47% participate in physical activity more than three times per week; however, as it is a survey of leisure centres users it would perhaps be expected that these figures are higher.<sup>21</sup>

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<sup>20</sup> Department for Health: Be active, Be healthy – A plan for getting the nation moving 2009

<sup>21</sup> Annual User Survey 2011 (GLL)

### Participation in recommended levels of physical activity



Source: Active People Survey (Sport England)

Data from the School Sport Survey also provides information on the proportion of children participating in at least 3 hours of PE and school sport within and beyond the curriculum per week. The latest data (2009/10) shows that nationally, 55.1% of school children achieve this benchmark, up from 49.6% the previous year.

In Surrey, the percentage of children participating in the 3 hours per week benchmark is slightly below the national average at 52.8% with Reigate & Banstead broadly similar at 52.6%, up from 49.5% in 2008.

Mosaic information gives an indication of the sport and exercise preferences of various population groups.

Reigate & Banstead is dominated by groups C, D & E and the Mosaic index indicates that these groups have a higher propensity to engage in activities including Yoga, Pilates, Road Running and Tennis. Additionally, individual sub-types within these groups also have a higher propensity to participate in swimming, squash and golf.

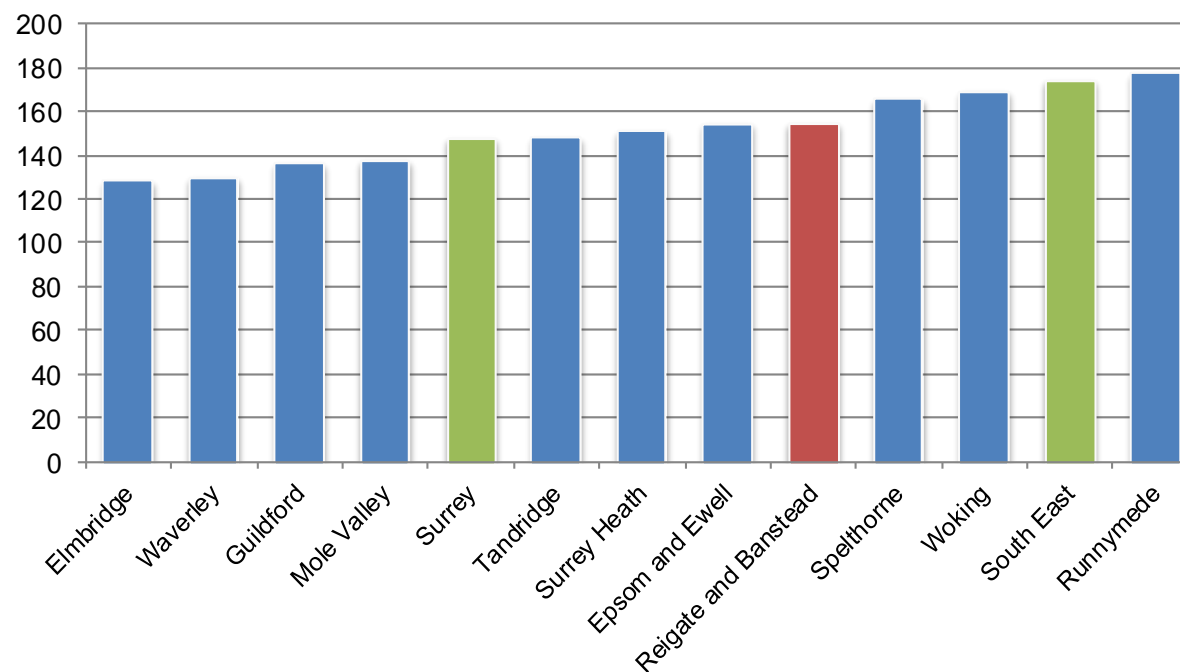
Information from the 2011 Annual User Survey for the borough's leisure centres indicates that a lack of time is the most significant obstacle to physical activity (56% of people) followed by financial issues (10%). However, 16% of respondents stated that they didn't participate in exercise because they were "not bothered".

### **Healthy Lifestyles – Smoking**

Smoking remains the major preventable cause of disability and premature death, meaning reducing smoking is the single most effective means of improving public health. Smoking is a major demand driver within the NHS, accounting for the majority of respiratory diseases, around 30% of cancers and 20% of cardiovascular disease. However, smoking also hinders the effective treatment of other conditions, particularly in relation to operative complications. The chart below shows the mortality attributable to smoking indicator for each of the Surrey districts, demonstrating that Reigate & Banstead has amongst the highest rate in Surrey.



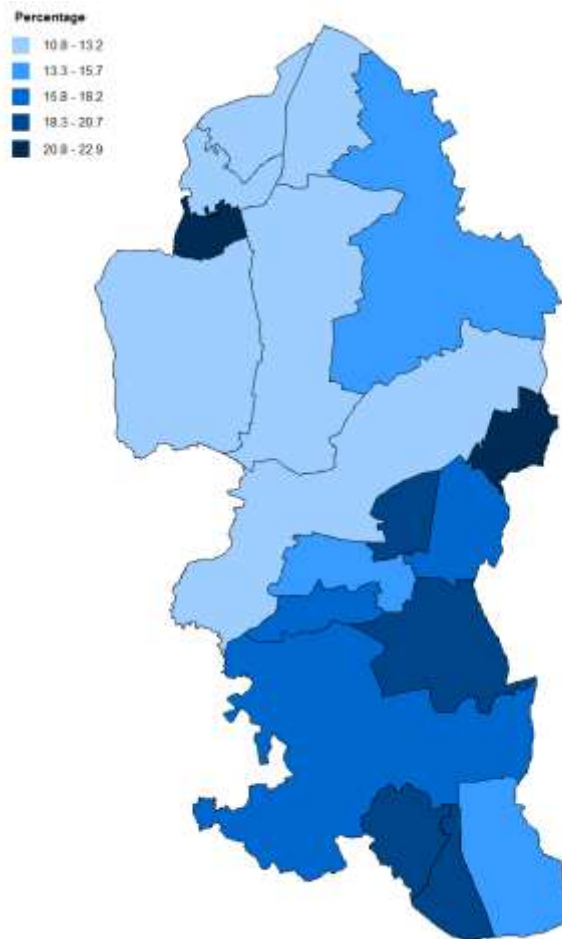
### Mortality attributable to smoking



Source: Surrey PCT

Across England, data from the latest Health Survey for England indicates that 21% of adults class themselves as a 'current smoker', significantly down from the levels seen in the 1980s (39%). Both the county and the borough are significantly below the national average in terms of smoking prevalence at 17.9% and 18.4% respectively. However, data at MSOA level shows that there is significant variation across the borough, ranging from as low as 10.8% to as high as 22.9% with pockets of higher smoking prevalence corresponding closely with more deprived areas.

## Smoking prevalence by MSOA



Source: ONS/APHO Local Health Profiles [Map: Crown Copyright Licence 100019405]

According to the 2007 TellUs2 survey, smoking is less prevalent amongst Surrey children than across the UK. 16% of children from years 6, 8 and 10 in Surrey had smoked a cigarette compared to 21% nationally. Statistics from the 2008 Surrey Children and Young People's Needs Assessment indicates that, amongst children aged 11 to 15; regular smoking is more prevalent amongst girls (10%) than boys (7%). Additionally, children from more deprived households are more likely to be smokers than those in more affluent circumstances.

### **Healthy Lifestyles – Alcohol Consumption**

Irresponsible drinking, especially among young people, is a growing concern in England. Levels of binge drinking are increasing across the country along with associated alcohol-related hospital admissions and negative impacts in relation to crime and disorder.

Excessive alcohol consumption amongst younger people is also linked to higher instances of teenage pregnancy<sup>22</sup>. Estimates suggest that alcohol misuse costs the NHS around £3bn each year, with the costs to the wider economy estimated at in excess of £25bn. Alcohol misuse is also associated with many long term health risks including liver disease, heart and circulatory disease and stroke.

Statistics suggest that like all of the other Surrey districts, binge drinking rates are lower than the national average. In Reigate & Banstead, 17.8% of adults are estimated to binge drink; described as consuming more than 8 units (males) and more than 6 units (females) on their heaviest drinking day. This compares with 20.1% nationally and 18.0% across Surrey<sup>23</sup>. However, there is some variation in levels of binge drinking across the borough. In areas such as Tadworth and Kingswood rates fall to as low as 14% but conversely, more than 20% of adults are estimated to binge drink in parts of Redhill as well as parts of Horley which is a particular pocket of higher instance<sup>24</sup>.

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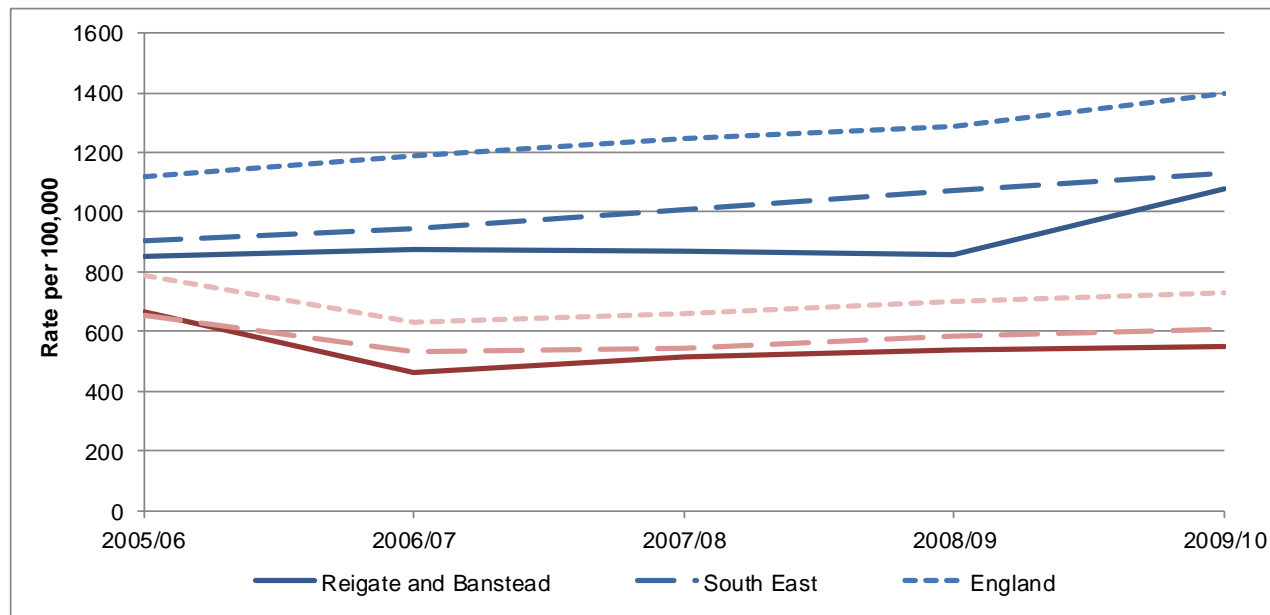
<sup>22</sup> Surrey PCT Joint Strategic Needs Assessment

<sup>23</sup> LAPE – Local Alcohol Profiles for England

<sup>24</sup> ONS/APHO Local Health Profiles 2010

Alcohol is also recognised as the cause of a significant number of hospital admissions within the UK. Whilst statistics on alcohol related hospital stays show that Reigate & Banstead had 2,129 alcohol related hospital admissions during 2009/10, the highest number in the county, in terms of rate per 100,000 people, the borough performs significantly better than the national average for both males and females. However, the borough saw a steep rise in the rate of admissions for males between 2008/09 and 2009/10, a trend repeated across a number of Surrey districts. The chart below shows the trend in rates for both males and females compared to the South East and national levels.

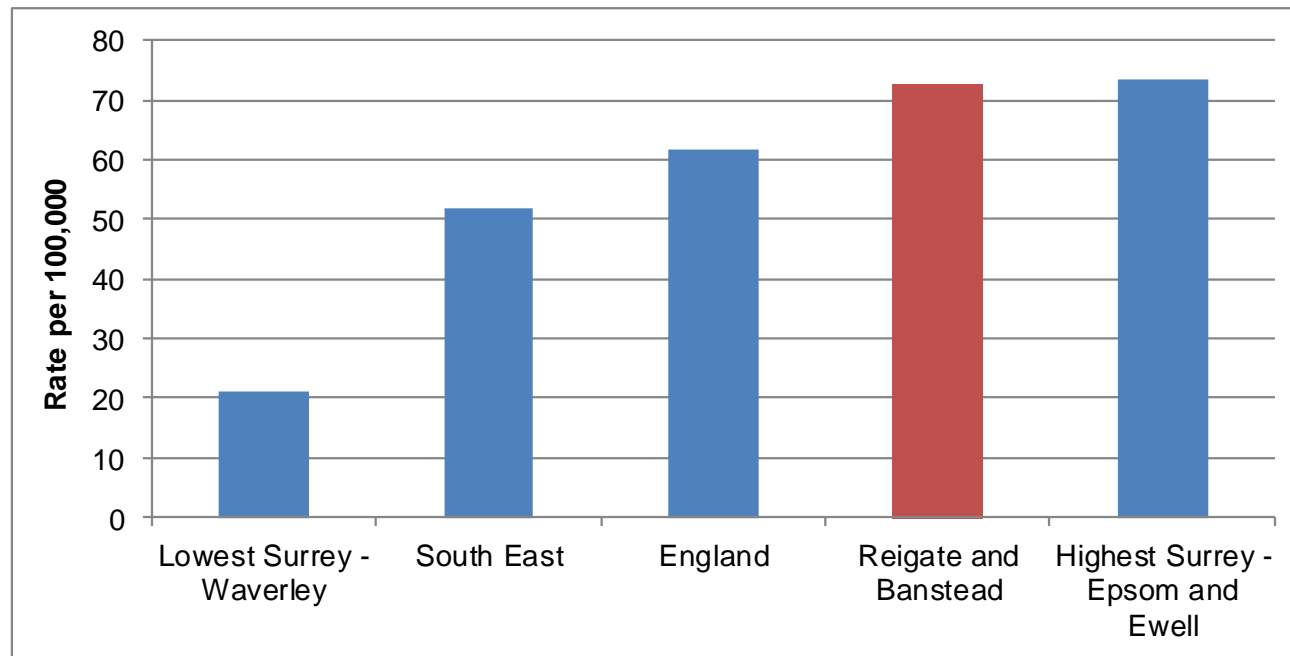
Alcohol related hospital stays (2006 – 2010) (Blue – Male/Red – Female)



Source: LAPE – Local Alcohol Profiles for England

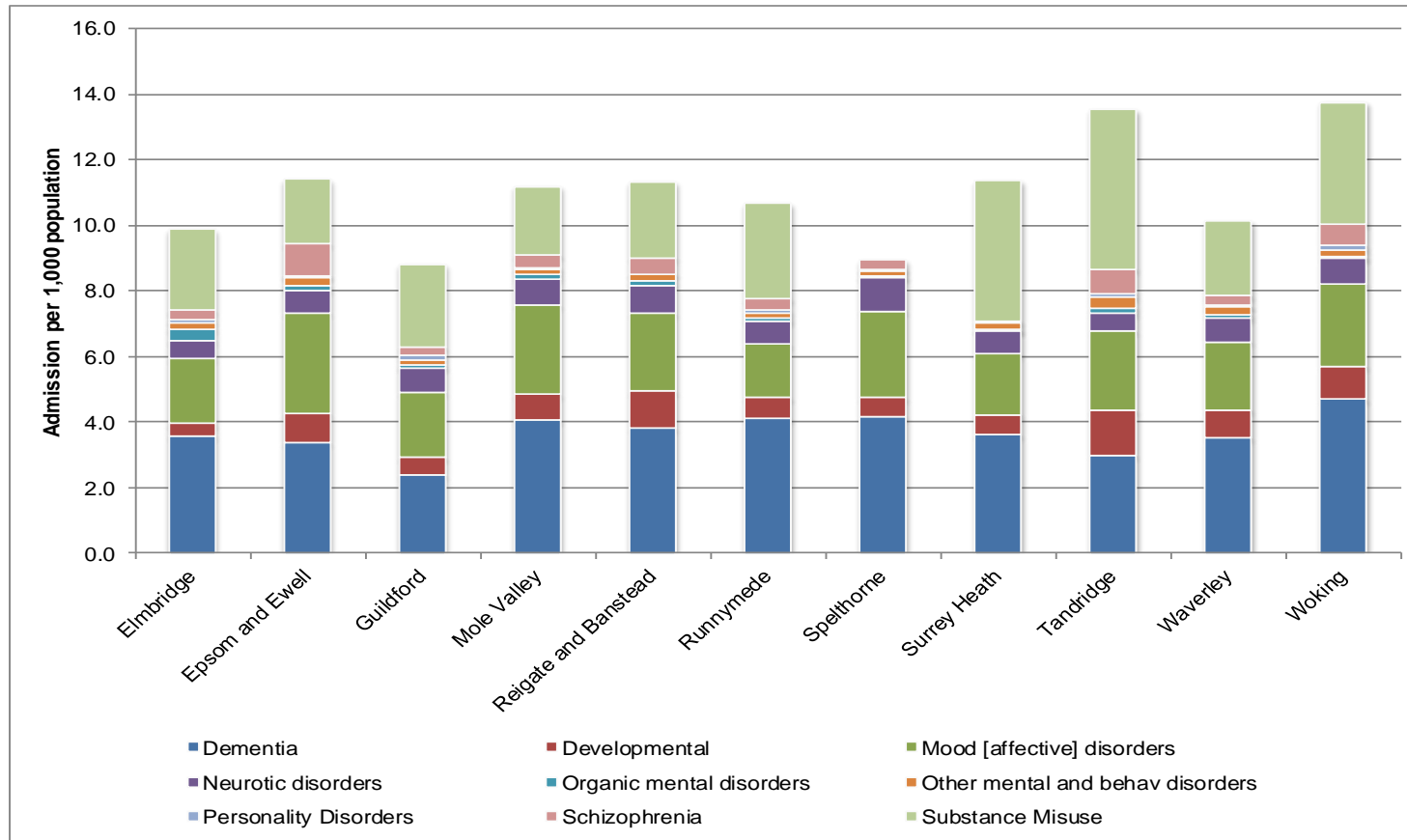
The borough has a particularly high rate of alcohol-specific hospital admissions for under 18s compared to the national average; a situation which is replicated in a number of Surrey districts. However, it should be noted that statistics at borough level are subject to greater margin for error than at national level. The chart below shows the rate of all Surrey districts compared with the national average.

Alcohol specific hospital admissions for Under 18s



Source: LAPE – Local Alcohol Profiles for England

Hospital admissions related to mental health



Source: Surrey PCT Joint Strategic Needs Assessment

## **Mental Health**

Information on mental health hospitalisation shows that the borough has average rates per 1,000 people when compared with other Surrey districts<sup>25</sup>. In Reigate & Banstead, there was a total of 1,544 hospital admissions related to mental health during 2009/10, equating to 11.3 people per 1,000 people. Dementia has the highest hospitalisation rate in the borough at 3.8 per 1,000, broadly comparable to other districts in the County. The chart above shows the breakdown of mental health hospitalisations across the borough compared with other Surrey districts.

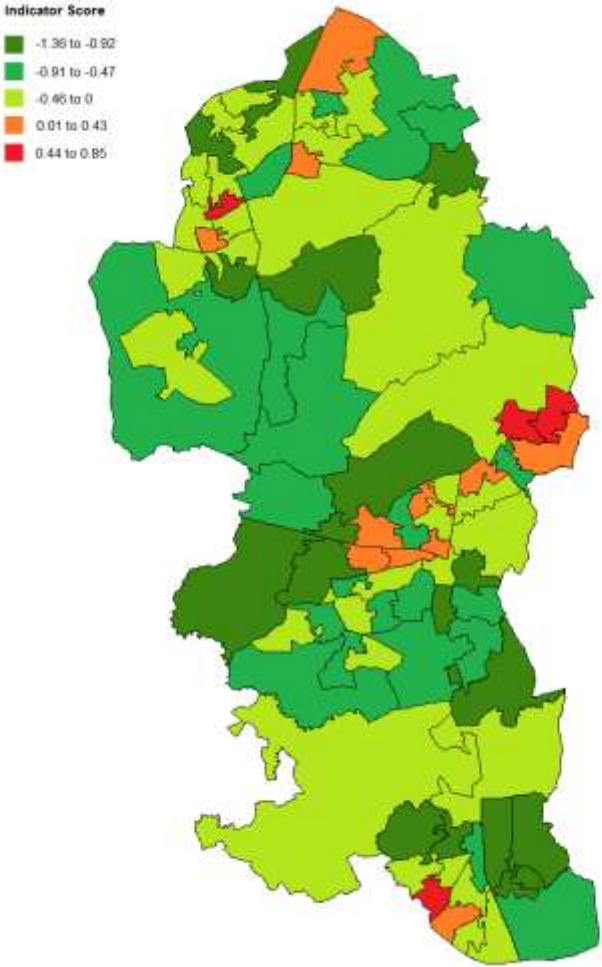
Statistics in the Joint Strategic Needs Assessment (JSNA) indicate that the borough has the highest rate of prevalence of mental health cases (including conditions such as schizophrenia, bi-polar & psychosis) in Surrey at 7.30 per 1,000 GP registered people. However, the borough has the fifth lowest rate of depression in Surrey, with a prevalence rate of 101.6 per 1,000 GP registered people.

There is very little information at below borough level regarding mental health due to disclosure issues. However, the Indices of Multiple Deprivation include a mental health underlying indicator which gives an estimation of prevalence and need within small areas such as LSOAs. A value of zero in the indicator suggests that the area is typical; a value above zero suggests that mental health needs are more prevalent and below zero suggests less prevalence. The map below shows the variation across the borough.

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<sup>25</sup> Surrey PCT Joint Strategic Needs Assessment

Mental health indicator score by LSOA





Source: English Indices of Deprivation Underlying Indicators 2010 [Map: Crown Copyright Licence: 100019405

### **Poverty and social exclusion**

Surrey's affluence can mask pockets of considerable relative deprivation, and the experience of deprivation can be greatly increased when less affluent communities are located close to areas that are substantially better off. Therefore, it is important to look at data for much smaller areas and to make comparisons at local levels in terms of relative need.

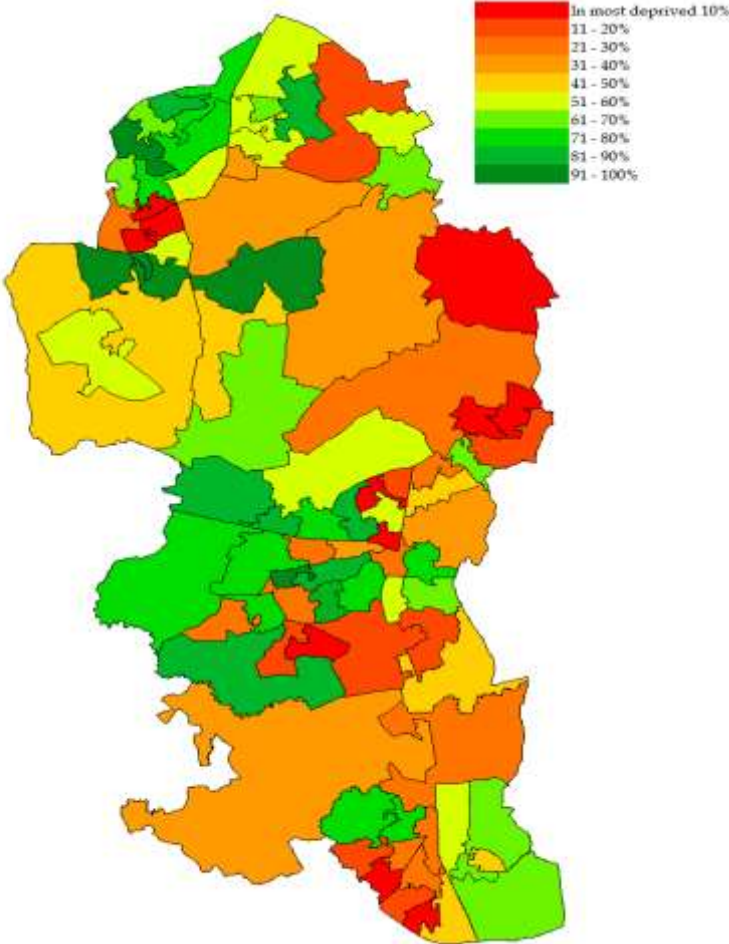
Deprivation covers a broad range of issues and refers to unmet needs caused by a lack of resources of all kinds, not just financial. The Indices of Deprivation are a nationally consistent and official measure of deprivation levels across England. The indices comprise a series of themes; known as domains, and ranks each Lower Super Output Area (LSOA) in the country according to its performance against a number of underlying indicators and statistics. Understanding which areas of the borough experience higher levels of deprivation allows us to identify where particular service needs might arise or where regeneration efforts should be targeted.

### **Indices of Deprivation**

Like much of Surrey and the South East, Reigate & Banstead is a relatively affluent borough and does not suffer significantly from deprivation. Out of the 326 districts and borough's across England, Reigate & Banstead ranks 292nd, falling just outside the least deprived 10% (with 326 being least deprived). In addition, more than one-third of the borough's LSOAs fall within the least deprived 10% in the country and more than half are in the least deprived 20%.

However, when compared to Surrey, the borough suffers from comparably higher levels of deprivation and of the 11 Surrey districts, is the 4th most deprived. Additionally, 11 (13%) of the borough's LSOAs are classified within the most deprived 10% of Surrey LSOAs. The map below shows how each of the borough's LSOA ranks in comparison to Surrey districts. Whilst the map demonstrates that the borough suffers from comparatively higher levels of deprivation in a Surrey context, there are also pockets of significant deprivation in and around Preston, Merstham, Redhill, Woodhatch and the western side of Horley.

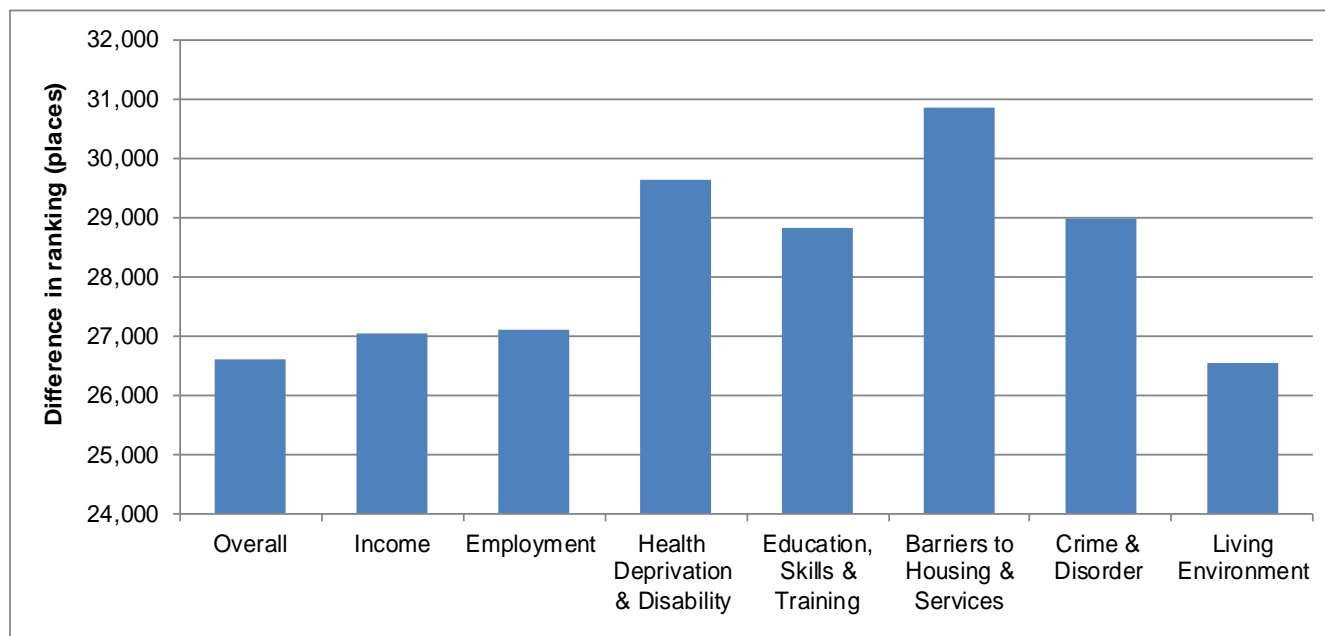
LSOA overall deprivation rank in Surrey



Source: Indices of Deprivation 2010 [Map: Crown Copyright Licence: 100019405]

Domain Variation The Indices of Deprivation are made up of several separate domains, against which each LSOA receives a rank. The chart below compares the best and worst rank achieved by an LSOA in Reigate & Banstead under each domain to identify those themes where variation is most dramatic. What becomes clear is that there is an extremely wide gap between the most and least deprived areas in the borough with more than 26,000 places separating the two areas. This gap widens even further in several domains namely; Barriers to Housing and Services, Health & Disability, Education & Skills and Crime, suggesting significant inequality amongst residents of the borough in these areas.

Comparison of best and worst performing LSOAs in each domain



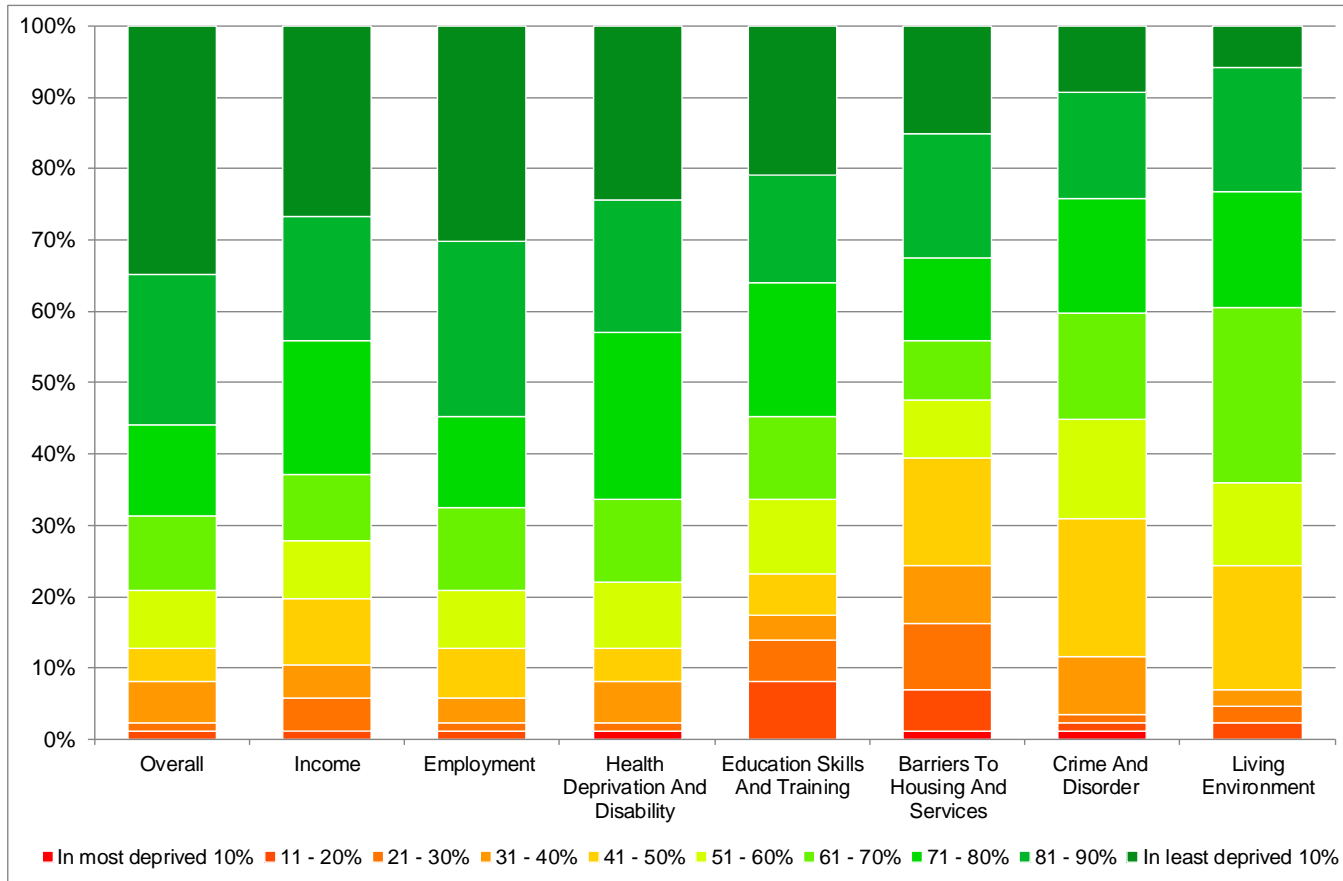
Source: Indices of Deprivation 2010

Whilst overall levels of deprivation across the borough are relatively low with only one LSOA in Merstham falling within the most deprived 20% nationally, there are some areas where more considerable deprivation and inequality is apparent. The chart below shows the percentage of the borough's LSOAs falling within each decile of deprivation nationally across the individual domains, demonstrating that the borough experiences notably higher levels of deprivation in the following domains:

Barriers to Housing and Services domain: 6 of the borough's LSOAs (2 in Chipstead, Hooley & Woodmansterne and 1 each in Salfords, Horley East, Kingswood and Reigate Hill) fall within the most deprived 20% nationally - largely as a result of issues with housing affordability combined with less accessible or more isolated geographic locations.

Education and Skills domain: 7 LSOAs are also in the most deprived 20% nationally including 3 in the Preston area and 1 each in Horley West, Horley Central, Merstham and Woodhatch.

Percentage of LSOAs falling within each decile of deprivation



Source: Indices of deprivation 2010

## **Deprivation – Children**

The latest IMD also includes a domain which specifically considers the extent to which income deprivation affects children in each of the borough's LSOAs. Government literature on child poverty indicates that children who grow up in low income families can lack the experiences and opportunities of their peers. This can lead to unfulfilled talent, lower attainment and health inequalities compared to children from less deprived households, creating not only additional burden and costs on public services but issues with social exclusion and dampened aspirations for children themselves.

Compared to the national situation, there is not a significant issue of income deprivation affecting children in Reigate & Banstead with only two of the borough's LSOAs falling within the most deprived 20% <sup>26</sup>. However, compared to Surrey, the borough does suffer significantly more with 18 (21%) of LSOAs falling within the most deprived 20% in the county, 10 of which are in the most deprived 10%. The rankings demonstrate that the extent of income deprivation affecting children is higher in areas to the west of Redhill, Merstham and Preston.

The Child Wellbeing Index was produced in 2009 by the Department for Communities and Local Government to provide an index of child specific deprivation issues at Lower Super Output Area. According to the overall index, only one of the borough's LSOAs (in the Horley West ward) falls within the worst performing 20% in the country for Child Wellbeing. The domain in which the borough performs worst for child wellbeing is health, which considers issues such as hospital episodes and disability allowance claims for under 16s. In this domain, 6 of the borough's LSOAs are in the worst performing 20%, and three are in the worst performing 10%.

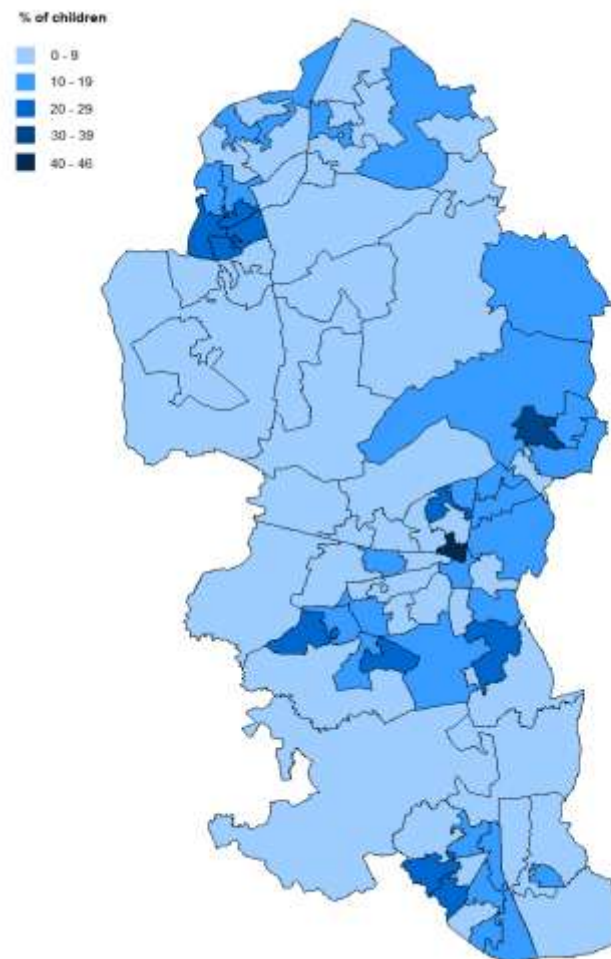
In 2009, HMRC produced figures indicating the number of children considered to be in poverty – that is where their family is in receipt of out of work benefits or tax credits where the household income is less than 60% of the median<sup>27</sup>. In total, 3,425 children in the borough were deemed to be in 'poverty', 75% of which were in lone parent households. However, there is significant variation across the borough; in some LSOAs no children are deemed to be in poverty whilst in others the proportion rises to more than 45%. The map below shows the variation across the borough.

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<sup>26</sup> Indices of Deprivation 2010 DCLG

<sup>27</sup> HMRC Child Poverty Statistics 2009

## Levels of Children in Poverty by LSOA



Source: HMRC 2009 [Map: Crown Copyright Licence: 100019405]

The HMRC statistics have not been updated more recently; however, the Department for Work and Pension has released figures on only those children in households claiming out of work benefits. According to the 2010 statistics, this situation affected more than 1,700 households in the borough and more than 3,330 children<sup>28</sup>. These figures indicate that by and large the north of the borough has a lower instance of 'children in poverty' with the exception of Preston. There is also a clear split in the central area of the borough with the western side having amongst the lowest levels of children in such households whilst numbers rise in the Redhill area, particularly in some neighbourhoods to the west of Redhill. There is also a pocket of high child poverty in Horley. Data from Surrey County Council indicates there are 1,297 Children in Need in Reigate & Banstead. Across Surrey, the majority of Children in Need are identified as such for reasons related to disability/illness or family stress<sup>29</sup>.

### **Deprivation – Older People**

The 2010 IMD also includes an indicator regarding the extent to which income deprivation affects older people. Once again, income deprivation affecting older people is not a significant issue in the borough when compared to the national picture with only one of the borough's LSOAs in Merstham in the worst performing 20% in the country. However, when compared against Surrey, there are apparent pockets of relatively significant deprivation in the borough. In total, thirteen of the borough's LSOA are in the most deprived 20% in Surrey, and eight of these are actually in the most deprived 10% in Surrey. These more deprived areas are predominantly clustered in and around Preston and Merstham; however, there are parts of Horley, Redhill West and Woodhatch which are also deprived in this respect.

Winter Fuel Payments The Winter Fuel Payment (WFP) is an annual tax free payment to help older people with heating costs during the winter. The level of payment depends upon circumstances. In 2010/11, 28,640 of the borough's residents received the Winter Fuel Payment. 45% of these received the lowest rate of £125 whilst 14% received the highest rate of £400.<sup>30</sup>

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<sup>28</sup> Department for Work & Pensions – Children in households claiming out of work benefits

<sup>29</sup> Surrey County Council available through [surreyi.gov.uk](http://surreyi.gov.uk)

<sup>30</sup> Department for Work and Pensions – WFP Caseload statistics



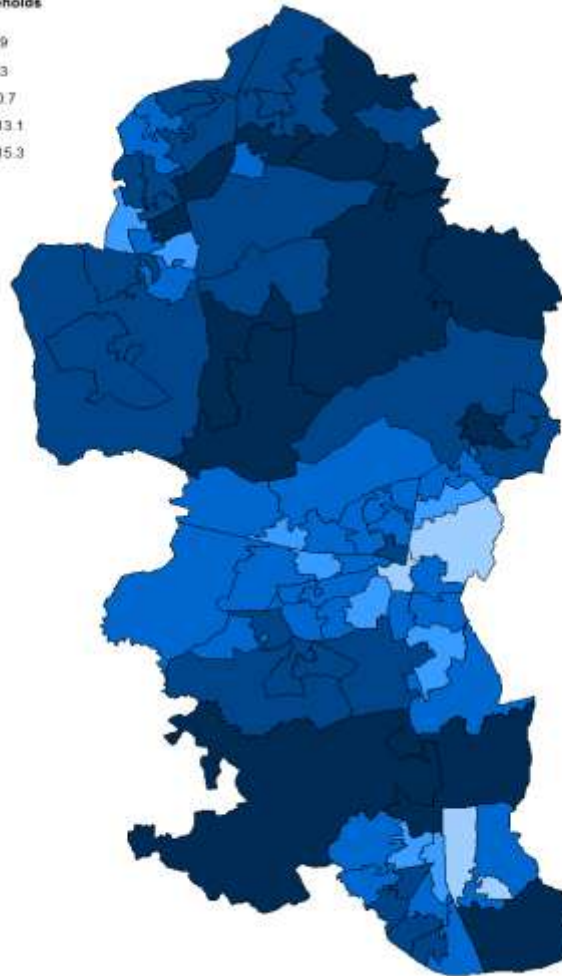
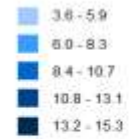
Fuel Poverty: A household is said to be in fuel poverty if it spends more than 10% of its income on fuel to maintain satisfactory heating in the home. The Department for Energy and Climate Change released statistics in 2010 showing estimated levels of fuel poverty at LSOA level across England. Across Surrey, the figures indicate that 10.6% of households are fuel poor. Reigate & Banstead performs slightly better with 5,761 households (10.4%) deemed to be in fuel poverty<sup>31</sup>. The map below shows the variation in fuel poverty across the borough and demonstrates that, with the exception of a few low outliers; fuel poverty is relatively uniform across the borough. However, there is a notably higher prevalence of households experiencing fuel poverty in the more rural areas of the borough; possibly resulting from a combination of retired and more elderly residents living in relatively large houses. Whilst the map suggests that many of the borough's LSOAs have a higher prevalence of fuel poverty, it is important to remember that at 15.3% of households, the highest prevalence of fuel poverty in the borough, are still lower than the national average (18.4% of households).

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<sup>31</sup> Department for Energy and Climate Change 2010

Percentage of households in fuel poverty by LSOA

% of households



## **Community safety**

The 2008 Place Survey showed that Reigate & Banstead residents perceive levels of crime and disorder as the single most important issue influencing quality of life and the attractiveness of the borough as a place to live. Results from the 2011 Resident's survey indicate that this remains the most important factor to the residents of our borough in making somewhere a good place to live and the importance attached to crime levels rises quite significantly for both older and young residents. Understanding the types and locations of crime in the borough will help us target community safety interventions and identify design solutions to minimise crime.

The Borough has 11 Safer Neighbourhood Teams made up of Neighbourhood Specialist Officers (NSOs) and Police Community Support Officers (PCSOs). Drive SMART is Surrey Police's response to the top issue for communities across the County, (anti-social driving which includes speeding and parking). Crime levels across the borough are continuing to fall, with the highest rate of crime recorded in the antisocial behaviour category.

The latest British Crime Survey indicates that crime levels continued to fall across the country with crimes recorded in the year to December 2010 some 6% lower than the previous year.

Information from Surrey Police shows that, across the county a total of 66,674 offences were recorded between April 2010 and March 2011, slightly above the figure for the previous year and equating to a crime rate of 59.1 offenses per 1,000 people. Conversely, Reigate & Banstead saw a 5% fall in crime levels over the same period, to a total of just over 8,000 offences. The chart below shows the trend in total crime offences and the crime rate for the borough.

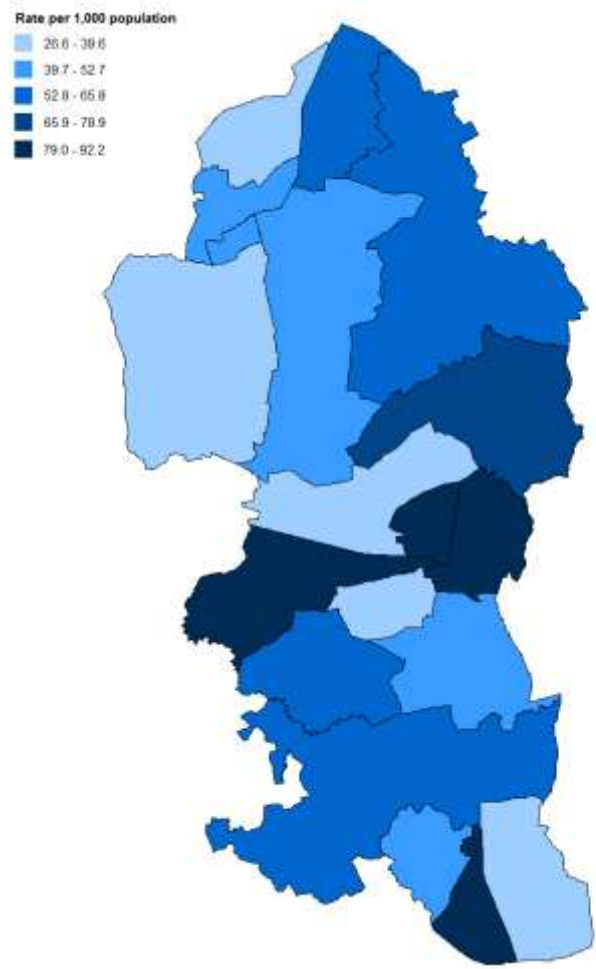
Trend in borough crime rate (2007/08 – 2010/11)

	Total Offences	Rate per 1,000 population
<b>2007/08</b>	8,431	64.3
<b>2008/09</b>	8,378	62.8
<b>2009/10</b>	8,435	62.0
<b>2010/11</b>	8,021	57.9

Source: Surrey Police Crime Data

Ward level statistics show that there is significant variation in the crime rate across the borough. The crime rate is notably higher in and around town centres with wards such as Redhill East and West, Reigate Central and Horley Central having crime rates exceeding 80.0 per 1,000 people. Merstham also has a notably high crime rate at 72.1 offences per 1,000 people. Conversely, the crime rate in wards such as Nork and Reigate Hill is below 30.0 offences per 1,000 people.

Overall crime rate by ward



Source: Surrey Police Crime Data [Map: Crown Copyright Licence: 100019405]

### **Types of Crime**

In terms of types of crime, the four 'volume' crime categories are domestic burglary, violent crime, vehicle crime and criminal damage. The table shows that the borough has experienced a drop in three of the four main crime types between 2009/10 and 2010/11 with a small increase in the number of recorded domestic burglary offences. Compared to the Surrey average, Reigate & Banstead has a slightly higher rate of criminal damage and violent crime but a lower rate of vehicle crime and domestic burglary.

### **Levels of key crime types in Surrey**

	<b>Offences 2009/10</b>	<b>Offences 2010/11</b>	<b>Rate 2010/11</b>	<b>% change in offences</b>
<b>Domestic Burglary</b>	3,405	3,649	7.7	7.2%
<b>Criminal Damage</b>	13,047	12,154	10.8	-6.8%
<b>Violent Crime (Violence with/without injury)</b>	13,880	14,044	12.5	1.2%
<b>Vehicle Crime</b>	7,335	6,801	6.0	-7.3%

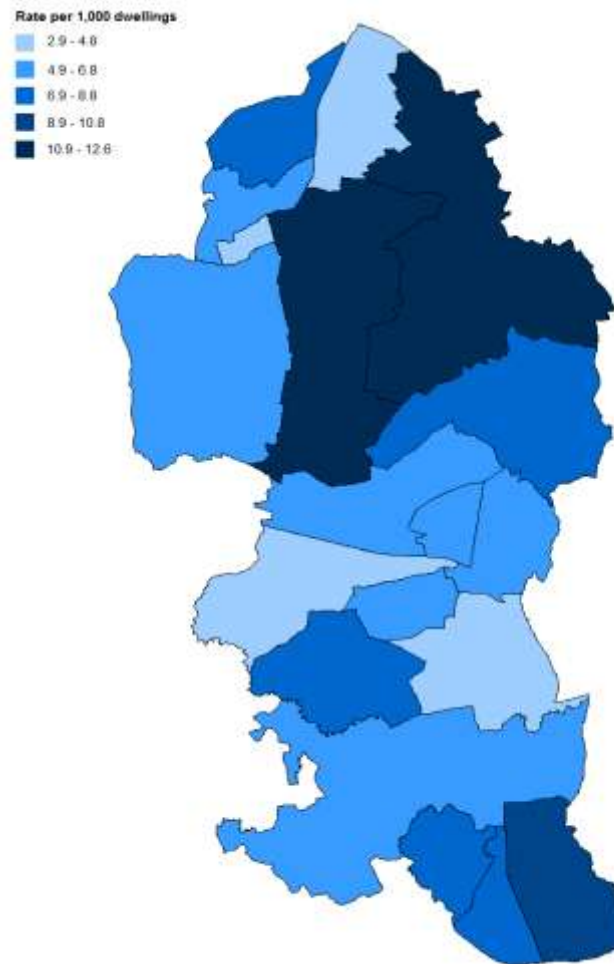
### Levels of key crime types in Reigate & Banstead

	<b>Offences 2009/10</b>	<b>Offences 2010/11</b>	<b>Rate 2010/11</b>	<b>% change in offences</b>
<b>Domestic Burglary</b>	335	354	6.2	5.7%
<b>Criminal Damage</b>	1,654	1,600	11.5	-3.3%
<b>Violent Crime (Violence with/without injury)</b>	2,199	2,142	15.5	-2.6%
<b>Vehicle Crime</b>	1,028	708	5.1	-31.1%

Source: Surrey Police Crime Data

Prevalence of the four main crime types is not uniform across the borough. For example, the domestic burglary rate ranges from as low as 3.0 per 1,000 dwellings in Earlswood & Whitebushes to as high as 10.1 per 1,000 dwellings in Kingswood with Burgh Heath. This crime type appears to correlate relatively strongly with property type and size with areas where large properties are more common, experiencing a higher rate of such crimes.

Prevalence of domestic burglary by ward





Source: Surrey Police Crime Data [Map: Crown Copyright Licence: 100019405]

Rates of criminal damage and violent crime also vary significantly across the borough. Higher rates generally correspond with wards in which main town centres such as Redhill, Horley and Reigate are situated but Merstham also experiences a higher rate of these two types of crime. Whilst there some variation across the borough in terms of vehicle related crime, there is no clear pattern. The highest rate of vehicle related crime is seen in Chipstead, Hooley & Woodmansterne whilst the lowest rate is in Preston.

The 2011 Residents Survey sought to identify perceived levels of personal safety when out and about in the borough. During the day, 89% of residents stated that they feel safe or very safe in their local area with only 2% stating they feel unsafe. At night, perceived safety falls to 63%; however, this is significantly above the 51% scored in the 2008 Place Survey. 19% of residents feel unsafe after dark, but again this is significantly less than the 30% level of 2008; suggesting significant progress has been made in this respect. The survey also indicates that perceptions of safety after dark are lower amongst females (57%), over 65s (53%) and for social housing tenants (36%). Geographically, perceptions of safety after dark are higher amongst residents in the two Reigate wards (83% and 82%) respectively; whilst the highest percentage of residents feeling unsafe occurs in Merstham (36%), Horley Central (36%), Preston (32%) and Earlswood (32%).

### **Anti-Social Behaviour (ASB)**

Consultation findings regularly demonstrate that disorder and anti-social behaviour has a significant impact upon quality of life. Whereas instances of crime often affect a discrete number of victims, anti-social behaviour can impact upon entire communities. During 2011 there were just less than 6,000 recorded instances of anti-social behaviour in Reigate & Banstead. 46% (2,765) of recorded ASB incidents were related to rowdy or inconsiderate behaviour whilst the second highest category is nuisance caused by vehicle use (21%, 1,243).

In terms of geographical variation, reported instances of ASB range from 118 over the course of the year in Salfords and Sidlow to as high as 603 in Redhill East with higher instances again tending to be focused in town centre areas. The 2011 Residents Survey provides an understanding of perceptions of anti-social behaviour across the borough. By and large, residents do not identify significant problems with anti-social behaviour with only 13% seeing it as an issue. However, certain issues are seen to be more

significant. The table below shows how residents perceive specific ASB issues across the borough. Overall, teenagers hanging round on street was the issues which most perceived to be a problem.

How much are the following ASB problems an issue in your local area?

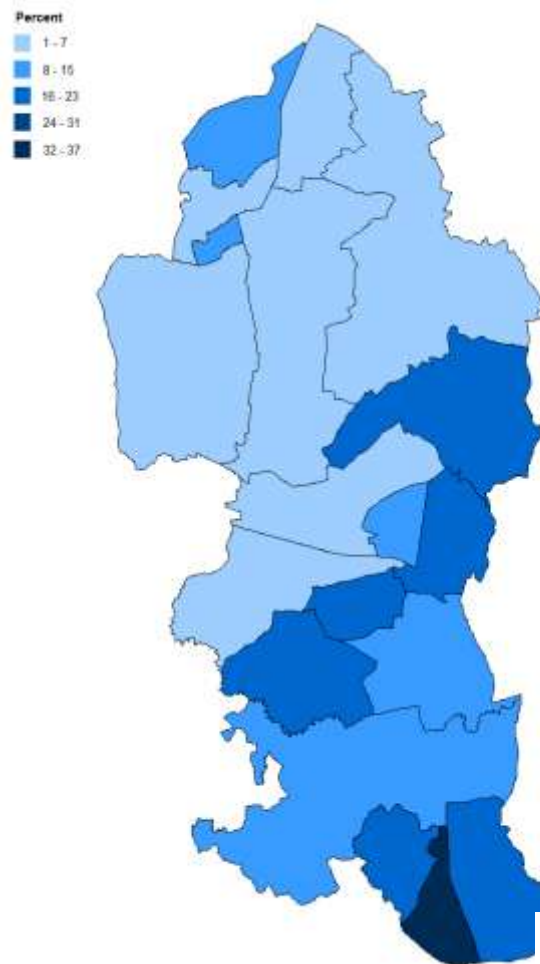
	<b>A very big problem</b>	<b>A fairly big problem</b>	<b>Not a very big problem</b>	<b>Not a problem at all</b>	<b>Summary – a problem</b>
<b>Noisy neighbours or loud parties</b>	4%	9%	41%	47%	13%
<b>Teenagers hanging round in streets</b>	10%	21%	43%	26%	31%
<b>Rubbish or litter</b>	5%	22%	50%	22%	28%
<b>Vandalism, graffiti and other deliberate damage to property</b>	6%	15%	50%	29%	21%
<b>People using or dealing drugs</b>	8%	13%	37%	43%	21%
<b>People being drunk or rowdy in public places</b>	7%	17%	43%	33%	24%
<b>Abandoned or burnt out cars</b>	2%	4%	33%	61%	6%

Source: Residents Survey 2011

Comparing these results to 2008 results suggests that the borough has made significant positive steps in addressing issues with teenagers hanging round (11% drop in people seeing it as a problem) and vandalism/graffiti (5% drop). However, there has been a 3% increase in people who perceive noisy neighbours/parties to be a problem.

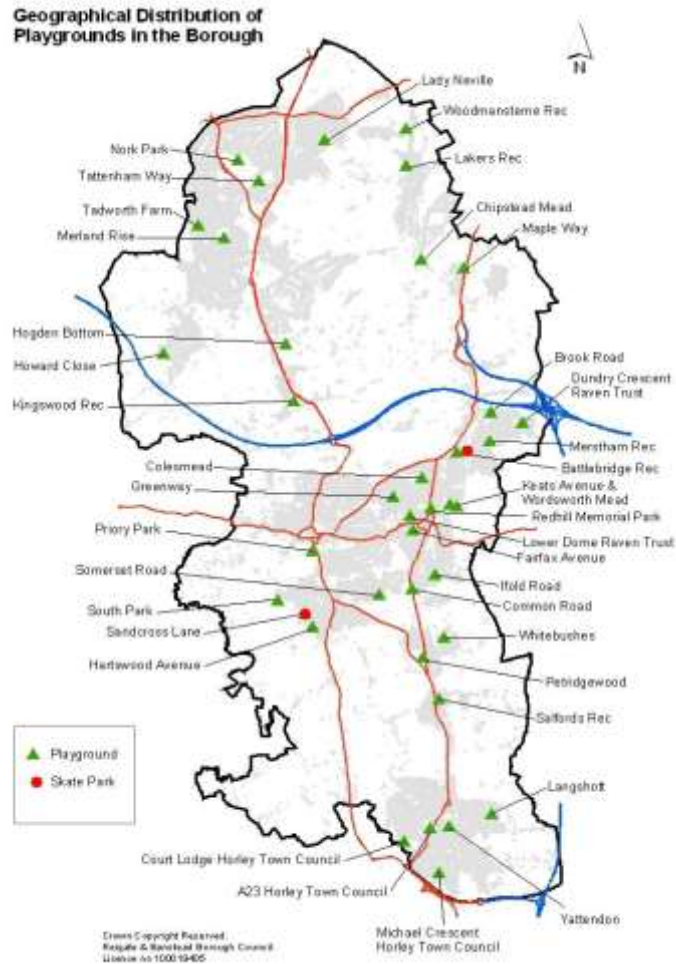
The percentage of people who feel anti-social behaviour is an issue in their area varies significantly across the borough, as demonstrated in the map below. This clearly indicates where future action should be targeted.

Perception of anti-social behaviour being a problem (NI17) by ward



Source: Residents Survey 2011 [Map: Crown Copyright  
Licence: 100019405]

Play area / sports provision



The open space assessment revised report (August 2011) shows that parks and gardens are unevenly distributed across the borough with 98% of the area being located in the central section of the borough, and is a need for a park in the south of the borough. The study shows that there is a good network of public rights of way across the borough. Provision of publically accessible outdoor sport areas is low in comparison with national standards, and a high proportion of these facilities are only available on a restricted basis. The highest deficiencies are in Horley and Redhill West. The study recommends an additional 28Ha of outdoor playing space to enable to projected population increase. The study found that indoor sports provision needs are being met, and there will be sufficient provision to meet the demand of the population in 2027. With regards to amenity green space, taking into account population growth, there would be a quantitative deficiency against this local standard by 2027 were new space not provided. The study also highlights a large shortfall in children and young people's provision against national guidelines and recommends that deficiencies are considered at a local level, consistent with the aspirations of local residents to have locally accessible play facilities. There is a shortage of allotments, especially in the south of the borough and a need for more allotments to satisfy the needs of both the current and the likely future population in the borough.

## Indicators

<b>INDICATOR</b>	<b>Data for Reigate &amp; Banstead</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
Life expectancy in most deprived areas	Males 80.1 females 83.5  In least deprived areas life expectancy 7.4 years longer for males.	Above national average, below Surrey average.	Reduce difference in life expectancy between deprived and non-deprived wards	Increasing		Health profile 2012 <a href="http://www.apho.org.uk/resource/view.aspx?RID=50215&amp;SEARCH=reigate%20and%20banstead&amp;SP EAR=">http://www.apho.org.uk/resource/view.aspx?RID=50215&amp;SEARCH=reigate%20and%20banstead&amp;SP EAR=</a>
Violent crime	Local Value = 15.7	Significantly above England average = 14.8	Reduction year on year	Increasing		Health profile 2012
Physically active children	Local value = 74.1	England average = 85.7	To surpass England average	No data	Significantly below the national average. Links with not enough play areas / outdoor sports areas. Not measured in 2012 health profile.	Health Profile 2008 Reigate & Banstead <a href="http://www.healthprofiles.info">www.healthprofiles.info</a>

### **Sustainability issues/problems/opportunities:**

Delivery of many of the other sustainability objectives will strongly influence the achievement of this objective: the higher incidence of poor health in our more deprived areas, mean that tackling poverty and social exclusion, overcoming homelessness and poor housing, and improving education and access to employment opportunities is a priority.

A more liveable, safer environment can encourage opportunities for daily, exercise in more natural surroundings. High quality open space can also help reduce feelings of insecurity and exclusion and so enable people to become more active, helping to maintain their independence. There is a risk that existing deficiencies in public open space and play space in some urban areas could come under even more pressure due to development and undermine this goal. Children in this borough are less physically active than the England average, which should be addressed in the creation of more play areas and outdoor sports facilities. Health facilities are also important to the continuing health of the community. There is a fear that significant housing growth will push existing health facilities to capacity. The increasing number of elderly residents in particular is creating demands for appropriate healthcare and housing: the provision of extra care housing can help the elderly to maintain their health + independence within their own home..

The number of local shops, post-offices and other facilities in the borough has reduced; good connection of shopping centres, and other services, to residential areas by safe walking/cycling routes and quality public transport is vital. In this context, the predicted extremes of weather in our changing climate (e.g. heat waves) will become an increasingly significant concern, and could prevent, or make difficult, or prevent, access to services and so endanger health. Policies should specifically consider how the mobility of the elderly can be maintained.

### **Key Decision Aiding Questions:**

- ❑ Will the option help to improve the health of the community?
- ❑ Will the option reduce health inequalities?
- ❑ Will the option improve access to health provision?
- ❑ Will the option encourage healthy lifestyles?
- ❑ Will the option help people to remain independent?
- ❑ Will the option enhance access to and quality of recreation space?



## Flooding

**SA Objective:** To minimise the harm from flooding

### **Summary of issues for Reigate & Banstead**

- Redhill Town Centre is an area at particular risk of flooding.
- River flooding is a recognised risk to property in the Horley area
- There is also a risk of river flooding in parts of Earlswood and Merstham
- Flooding is likely to increase as a result of our changing climate
- Localised 'flash flooding' has been reported in many parts of the borough

### **Overview**

Floods are natural occurrences, which can bring great benefits to the natural environment; however flooding can cause significant damage to property and land developments, as well as disrupt business and other services. Flooding can have severe impacts on people in terms of distress, injury and loss of life. Considerable demands are also placed on the emergency and public services during flooding events, particularly in developed areas.

Reigate & Banstead Borough Council has carried out a Strategic Flood Risk Assessment (SFRA) for the whole of the borough.

This is used to guide both planning policy and planning decisions within the borough. The SFRA provides a detailed analysis of the risk of flooding from all sources, flood risk by area and the implications of this for spatial planning. A separate Strategic Flood Risk Assessment has also been carried out for Redhill Town Centre. These documents can be viewed on the Council's website via the following link [http://www.reigate-](http://www.reigate-banstead.gov.uk/planning/planning_policies/local_development_framework/ldf_evidence_base/floodriskevidencebase/index.asp)

[banstead.gov.uk/planning/planning\\_policies/local\\_development\\_framework/ldf\\_evidence\\_base/floodriskevidencebase/index.asp](http://www.reigate-banstead.gov.uk/planning/planning_policies/local_development_framework/ldf_evidence_base/floodriskevidencebase/index.asp)

The main findings of the SFRA in relation to flood risk affecting different parts of the borough are as follows:

The risk of flooding within the north of the borough is relatively limited. There is no risk of flooding from rivers; however surface water flooding and flooding from other sources, such as blocked drainage systems can be a problem in this area. Flooding can also occur away from the flood plain as a result of development where off site sewerage infrastructure is not in place ahead of development.

- Redhill Town Centre is an area at particular risk. Redhill Brook is culverted beneath the town. This culvert system is limited in its capacity, and is susceptible to blockage. During particularly wet weather, the culvert is surcharged, resulting in overland flooding and consequently ponding within the natural 'low spots' within the town centre.
- River flooding is a recognised risk to property in the Horley area. Horley is situated at the confluence of the River Mole and Gatwick Stream, and a short distance downstream is the confluence of the River Mole and Burstow Stream. All three rivers flow through the town in open channel, and all pose a risk of flooding to homes and businesses in events of varying magnitude and return period.
- There is also a risk of river flooding in parts of Earlswood and Merstham.
- The River Mole and its tributaries are key characteristics of the countryside of the borough. These areas retain their rural character, and development has not been permitted to encroach upon the natural floodplain of the river corridors. The future protection of these areas is imperative to retain essential flood storage away from the built up areas of the borough.
- There is a risk of flooding along all river valleys throughout the borough, and it should be noted that some rivers and water courses are culverted and therefore their route is not always immediately apparent. There is also a risk of overland flow down any valley in the borough.
- Localised flooding, arising from sewer flooding, the blockage or limited capacity of culverts, or rapid runoff during intense rainfall, often referred to as 'flash flooding', has been reported in many parts of the borough.

The Environment Agency has produced indicative maps areas at risk of fluvial flooding from an event occurring once in one hundred years (1:100) and once in one thousand years (1:1000) and these form the basis of the maps published alongside the Council's Strategic Flood Risk Assessment.

The NPPF states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. -

Many existing buildings already fall within the flood risk zone; if candidates for redevelopment, proposals will need to be assessed carefully, having regard to the Sequential Test, and if necessary, the Exception Test.

It should be noted that by their very nature water and sewage treatment works are located close or adjacent to rivers (to abstract water for treatment and supply or to discharge treated effluent). It is likely that these existing works will need to be upgraded or extended to provide the increase in treatment capacity required to service new development.

### **Sustainability problems/issues/opportunities:**

Reigate & Banstead Borough Council have set a housing figure of 460 homes per year over the period of the Core Strategy; such development should only take place in an appropriate and sustainable manner. The current and future risk of flooding to the development must be taken into account, including the possible effect of Climate Change. Any developments must also not increase the risk of flooding to other areas.

A 'Risk Based Approach' is required to avoid inappropriate development. Flood Risk Assessments need to be carried out, to the appropriate level, to assess the risk of all forms of flooding to and from proposed developments. A Sequential Approach is also required to steer development to areas at the lowest probability of flooding. Guidance on these matters can be found in paragraphs 100 -104 of the NPPF, the Technical Guidance to the NPPF and the Council's SFRA. Flooding can damage infrastructure and disrupt services. Energy centres/sub-stations, water supply, sewers, and communication networks (including transport infrastructure) are all critical services which should be protected. To address these challenges, sufficient "climate headroom" needs to be built into new and existing buildings, and infrastructure, that are at risk.

Building solutions such as flood-proofing houses and raising roads (and other highway infrastructure) may be an appropriate response. However the use of traditional flood defences can cause problems elsewhere in the catchment. The natural function of undeveloped parts of flood plains needs to be exploited to mitigate the risks of flooding in developed areas. Opportunities exist to gain multiple benefits by creating new (and expanding existing) wetland habitats to achieve this aim, while at the same time enhancing biodiversity. Similarly, the creation of flood plain woodland can have an important role in attenuating flood peaks (as a result of their significantly higher water retention capacity) as well as providing other environmental benefits. A number of flood storage and similar projects are in progress / nearing completion as part of the Upper River Mole Flood Alleviation Scheme. The combined pressures of new housing in the Borough and climate change, if not dealt with appropriately, could act together to increase flood risks. Changes of weather pattern associated with climate change, in particular hotter, drier summers will decrease soil permeability, which when combined with the predicted increase in storms and intensity of rainfall will tend to aggravate the volume and rate of run-off. Any additional hard surfacing within the catchment, when allied to these predicted changes, will have a cumulative effect which could also cause increased flood risk elsewhere. Hard standings and other hard surfacing should be

minimised and should use porous material to reduce the rate of run-off. Limiting the loss of existing gardens to hard surfacing could minimise flood risk to adjacent areas.

The drainage system of all developments should be designed to minimise both the rate of surface water run-off and the total run-off discharged from the site. To ensure that flooding is not caused or increased downstream of a development, the rate of discharge into the sewers and/or watercourses should be limited to no more than discharged before the development was constructed. Ideally the rate of discharge should be reduced. Similarly the total discharge should be reduced by making maximum opportunity for infiltration of rainwater into the soil, where appropriate. This not only reduces the risk of flooding but also helps to recharge the aquifer that is used as a main source of drink water supply in the area. Sustainable Drainage Systems (SuDS) should be promoted widely so that there is a net improvement to the management of run-off across the catchment as a whole. Approval of SUDS will need to be obtained from the Sustainable Drainage Approval Body (Surrey County Council). Building at higher densities may necessitate moving towards communal SuDS. In areas outside of the River Mole catchment, the use of soakaways and other methods of infiltration designed to recharge groundwater should be encouraged. However, most of the subsoil within the River Mole Catchment is clay or other soils with low permeability and for much of the area soakaways will not provide a satisfactory means of surface water disposal. Within these areas other means to reduce the rate of flow into drains and watercourses should be considered. A variety of attenuation measures can be introduced at the level of the individual dwelling including “green roofs”, permeable driveways, etc. Water-saving devices such as water-butts on new houses and extensions and rainwater harvesting (collecting rainwater for flushing toilets etc.) can help to meet other sustainability objectives (biodiversity, minimising water use, affordability), however their attenuation benefit is limited as there is no guarantee that they will have any available capacity at times of storms.

Many developments are built with ground floor levels lower than adjacent highways. This creates a situation of vulnerability. This can be the case in flat, low lying areas where the highway construction thickness results in the finished surface of the highway becoming elevated above adjacent building plots. This can be avoided at the design phase.

On larger developments a wider range of SuDS methods can be considered, including ponds, soakage lagoons, swales, filter strips, permeable roads and parking areas, and filter drains, etc. The use of underground tanks and oversized pipes should only be considered as a last resort, as they are generally not sustainable, they do not recharge the aquifer, or make use of infiltration or evaporation methods to reduce run-off. Foul sewer flooding is particularly hazardous and distressing for those affected. The risk of foul flooding needs to be minimised both for new and existing developments, by ensuring that sewers are designed to cope with the

likely future demand. Wherever possible, rainwater must be directed away from all sewers carrying foul sewage, including combined sewers, and water companies should upgrade existing combined sewers. In this context, the separation of foul and surface water, and the use of sustainable drainage systems, will help to reduce the risk of foul sewage flooding during periods of high rainfall.

### **Council's performance 2010-2011**

In total, there were 91 planning applications across 83 separate sites potentially liable to flooding. In most cases, applications on areas liable to flooding were deemed to suitably address flooding issues or have little impact on the flooding situation. Whilst 29 of these applications were refused by the Council only two were refused directly due to flooding concerns. A total of 5 dwellings (3 net increase) were permitted in areas potentially at risk of flooding over the past year. Off-site flood compensation measures were also approved for 8 dwellings in Horley.

During the period 1 April 2010 to 31 March 2011, the Environment Agency raised objections to one application submitted to the Council, a reserved matters submission for Horley North East Sector Phase 2 (04/01778/RM13). The objection was based upon the submission of an unsatisfactory Flood Risk Assessment and was subsequently withdrawn following resubmission.

The application by Tesco to develop a food store and flats at Reading Arch Road (09/00606/F) was refused in February 2011, with flood risk cited as one of the reasons for refusal. The Environment Agency had also objected to the application on the basis of an insufficiently clear explanation of the flood modelling upon which the scheme had been designed.

## Indicators

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Number of properties at risk from flooding	Not collected at present	Eng. & Wales 2004: 5 million people face flooding risk	Prevent all inappropriate development in the flood plain.	The effects of Climate Change will increase the risk of flooding to properties.		
b. Number of new properties linked to sustainable drainage systems	Not collected at present				This will be easier to monitor through SUDS approval process	
c. Residential dwellings granted in areas of flood risk (flood zone 2 and 3)	5			Increase of 3 over the last year		

## Summary

- Large areas of the Borough are prone to flooding
- Flooding is likely to increase as a result of our changing climate
- All new developments require a flood risk assessments, to an appropriate level
- Opportunities to attenuate flood risk exist at the micro and macro level
- All development should use SuDS so as to achieve no net increase in run-off, and recharge the aquifer, where possible
- Sustainable construction principles can reduce the risk of flooding and help meet other sustainability objectives.
- Infrastructure associated with utilities and other services need to be “flood-proofed”. The likely consequences of climate change need to be evaluated and acted upon to limit disruption and harm to human health.

**Key Decision Aiding Questions:**

- ❑ Will the option reduce the risk of flooding to the development?
- ❑ Will the option reduce the risk of flooding to adjacent development and others downstream?
- ❑ Will the option help to reduce the rate of run-off?
- ❑ Will the option reduce the amount of hard-surfacing?
- ❑ Will the option ensure that climate change extremes can be withstood?

## Previously Developed Land

**SA Objective:** To make the best use of previously developed land and existing buildings.

### Summary of issues for Reigate & Banstead

- Development on (PDL) exceeds the current monitoring target, but has been lower than previously due to the new Horley neighbourhoods (on greenfield land)
- Housing density is significantly above the current monitoring target of 40 dph

### Overview

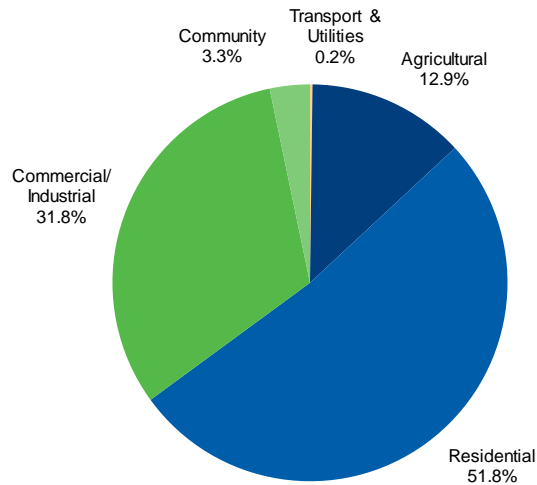
During the period from 1 April 2010 to 31 March 2011, the number of new dwellings (new build, change of use and conversions) built on previously developed land (PDL) was 425 (87%). This exceeds the current monitoring target of 60%. Whilst this is a slight improvement on the previous year, it remains below the levels seen prior to 2010 as a result of the Horley North East Sector development which is on greenfield land. When completions at the Horley New Neighbourhood are excluded, the percentage on PDL rises to 100% (425 of 425).

### Dwellings on Previously Developed Land

	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Number of dwellings on PDL</b>	374	394	429	627	617	614	836	632	425
<b>% on PDL</b>	93.8	96.7	87.6	99.4	98.9	99.4	99.9	83.9	87.1

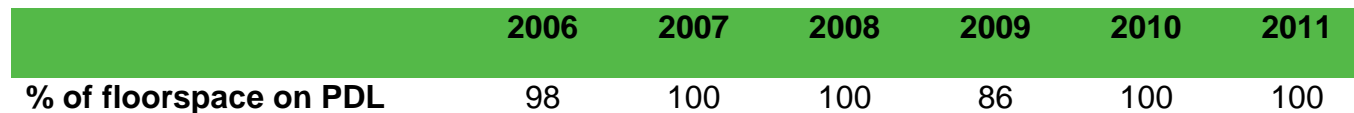


Previous land use of completed dwellings



All (100%) of the employment floorspace (B1, B2 & B8 use classes) completed during the period 1 April 2010 to 31 March 2011 was located on previously developed land (PDL). As such, the target of 80% has been exceeded. Reigate & Banstead has continually met the target since monitoring began in 2005-06, largely due to the fact that the majority of commercial development occurs in either town centres or designated business areas.

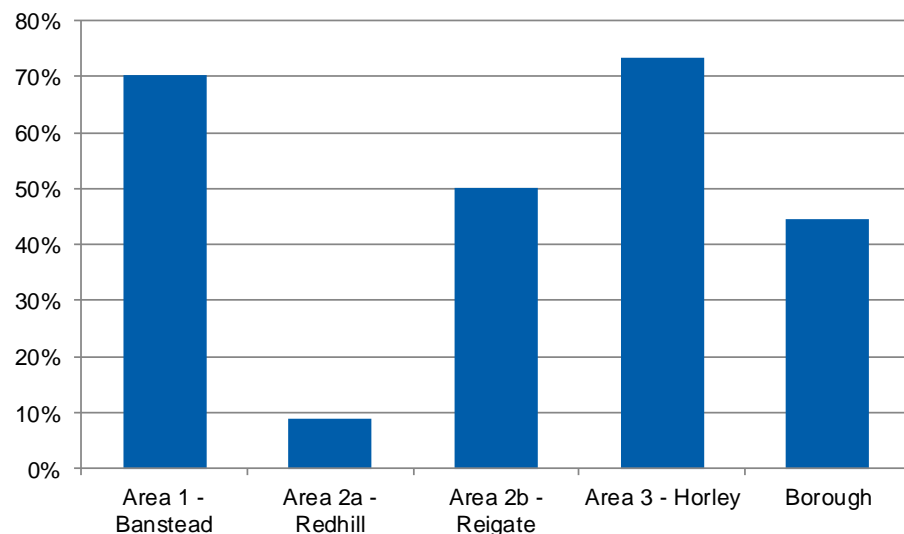
Commercial completions on PDL



## Housing density

The average density of completed dwellings over the monitoring period was 83dph, significantly above the 40dph monitoring target. This was largely due to some particularly high density development such as Queensway House (now Nobel House) in Redhill. Despite this, 45% of completions were below the 40 dwellings per hectare target, with this percentage climbing to 58% on small sites. However, Policy CS9 of the draft Core Strategy seeks to ensure development is at an appropriate density in respect of the existing character of the borough's urban areas and many of these lower density developments occurred within the Banstead area of the borough which is recognised for its low density suburban character. This is reflected in the chart below which shows the average density of completions within each area of the borough.

### Percentage of completions below 40dph



## **Indicators**

<b>INDICATOR</b>	<b>Quantified data (for RBBC)</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
a. Percentage of dwellings built on previously developed land	87.1% (100% if discount Horley New Neighbourhood)	68% Surrey average (overall PDL)	RBBC target: 80% SE Plan – 60%			AMR
b. The amount of commercial development built on previously developed land in urban areas	100%	68% Surrey average (overall PDL)	R&BBC target = 80%			AMR
c. Average density on sites with 10 or more dwellings (Dwellings per Ha.)	83 dph		40 dph			AMR

## **Sustainability issues/problems/opportunities:**

The environmental efficiency of buildings in the UK remains lower than in many other European countries. An increase in the number of single person households, together with rising domestic waste production and water consumption, means that increases in environmental efficiency are needed just to limit the impact of existing buildings.

The value of brownfield sites in terms of biodiversity should not be underestimated, much previously developed land has been used for industrial purposes; there is also a need to consider the possibility of soil contamination, the potential risk to human health and biodiversity and costs of remediation. Previously developed land and buildings are part of the historic fabric of the Borough. The potential impact upon the historic environment should be thoroughly considered and whenever possible valued features should be protected and/or enhanced.

**Key Decision Aiding Questions:**

- Will the option encourage the re-use of existing buildings? (see sustainability objective 14. regarding historic buildings)
- Will the option make the best use of PDL, so as to deliver sustainable development?

## **Land contamination**

**SA Objective:** To reduce land contamination and safeguard soil quality and quantity.

### **Summary of issues for Reigate & Banstead**

- Previously developed land may require remediation before it can be considered suitable for use.
- Over 1,100 sites, which have had uses that potentially could have led to land contamination, have been identified across the Borough.

### **Overview:**

Land is generally affected by contamination because historical land-management practices have led to the deliberate or accidental release or disposal of substances onto the land. Much of the land that is affected by contamination has been used for industrial or commercial activities involving the use, manufacture or storage of substances that are toxic, harmful or polluting, or where industrial or domestic wastes have been processed or disposed of. While the roots of the Borough are primarily agricultural, there has been a long tradition of mineral working for chalk, sand and Fullers earth. In the more recent past, brewing and tanning were significant local industries and brick and cement making also became important to serve the expansion of London. To make these operations more profitable, many of the sites that were the subject of mineral extraction were subsequently used for landfill. As well as from former industrial and commercial sites, land may also become contaminated as a result of the migration of contamination from one site to another, such as through the movement of polluted surface water or groundwater, the migration of gases through the soil or the deposition of dust. There are also areas of the Borough where the natural geology contains elevated concentrations of certain contaminants.

The Borough is characterised by a relatively large proportion (over 70%) of green belt land. This has the effect of concentrating development in the towns and increasing the pressure to reuse existing land. The investigation and remediation of contaminated sites can therefore help to conserve land (soil) as a resource, prevent the spread of pollution to air, soil and water and reduce the pressure for development on greenfield sites. Current UK Government policy towards land contamination is based on a twin approach of 1) stopping new contaminated land being created through policies on pollution, waste, water and chemicals; and 2)

taking a precautionary, risk based approach to tackling historical contamination. Improvements in environmental legislation and regulation, together with better housekeeping practices in industry, should ensure that significant large-scale new contamination is not created, except where good practice is not followed or an accident occurs. Where such issues do arise, legislation, such as the Environmental Damage (Prevention and Remediation) Regulations 2009, provides powers to ensure the clean up of contamination. Tackling historic contamination is primarily a market-based approach where companies seek to deal with their own legacies of contaminated land, or where site redevelopment needs to comply with development control requirements, such as complying with conditions attached to planning permissions pursuant to the National Planning Policy Framework (NPPF), or the requirements of building control legislation.

On a national scale this work accounts for approximately 90% of the current investigation and remediation of land. 10% is brought about through regulatory intervention using Part 2A of the Environmental Protection Act 1990 where there is little prospect of a market-based solution. Locally, in excess of 99% of all sites investigated and remediated have been done so through the market-based approach (because actual site inspections under Part 2A only commenced in the Borough in 2011 due to the high demands of Development Control work.)

**Indicators:**

INDICATOR	Quantified (cumulative total) Data (for RBBC)	Comparators	Targets	Trend (annual total) Data (for RBBC)	Problems/ Constraints	Source
a. Number of Potentially Contaminated Sites	1166	Majority of sites identified from historic OS Maps.	No target set	Constant over the last three years.		RBBC Environmental Health.
b. Area of Potentially Contaminated sites	8,513,238.82m <sup>2</sup>	Majority of sites identified from historic OS Maps.	No target set	Constant over the last three years.		RBBC Environmental Health.
c. Number of sites addressed through Development Control	119	None available	No target set	2009/10: 12 2010/11: 8 2011/12: 18	Dependent on property and finance markets.	RBBC Environmental Health.
d. Area of sites addressed through Development	3,472,533.71m <sup>2</sup>	None available	No target set	2009/10: 23,584.98m <sup>2</sup> 2010/11:232,075.41m <sup>2</sup>	Dependent on property and finance markets.	RBBC Environmental

INDICATOR	Quantified (cumulative total) Data (for RBBC)	Comparators	Targets	Trend (annual total) Data (for RBBC)	Problems/ Constraints	Source
Control				2011/12: 123,204.52m <sup>2</sup>		Health.
e. Number of sites addressed through Part 2A	1	None available	No target set	2009/10: 0 2010/11: 1 2011/12: 0	Limited resource is diverted to Development Control work.	RBBC Environmental Health.
f. Area of sites addressed through Part 2A	16,557.89m <sup>2</sup>	None available	No target set	2009/10: n/a 2010/11: 16,557.89m <sup>2</sup> 2011/12: n/a	Limited resource is diverted to Development Control work.	RBBC Environmental Health.
g. Number of sites addressed voluntarily	11	None available	No target set	2009/10: 0 2010/11: 0 2011/12: 2	Lack of land owner awareness of the contaminated land regime.	RBBC Environmental Health.
h. Area of sites addressed voluntarily	22,318.21m <sup>2</sup>	None available	No target set	2009/10: n/a 2010/11: n/a 2011/12: 4,134.28m <sup>2</sup>	Lack of land owner awareness of the contaminated land regime.	RBBC Environmental Health.

Notes: "Sites addressed" refers to sites investigated and if necessary identified as remediation being required, occurring or has occurred to ensure they are suitable for use.

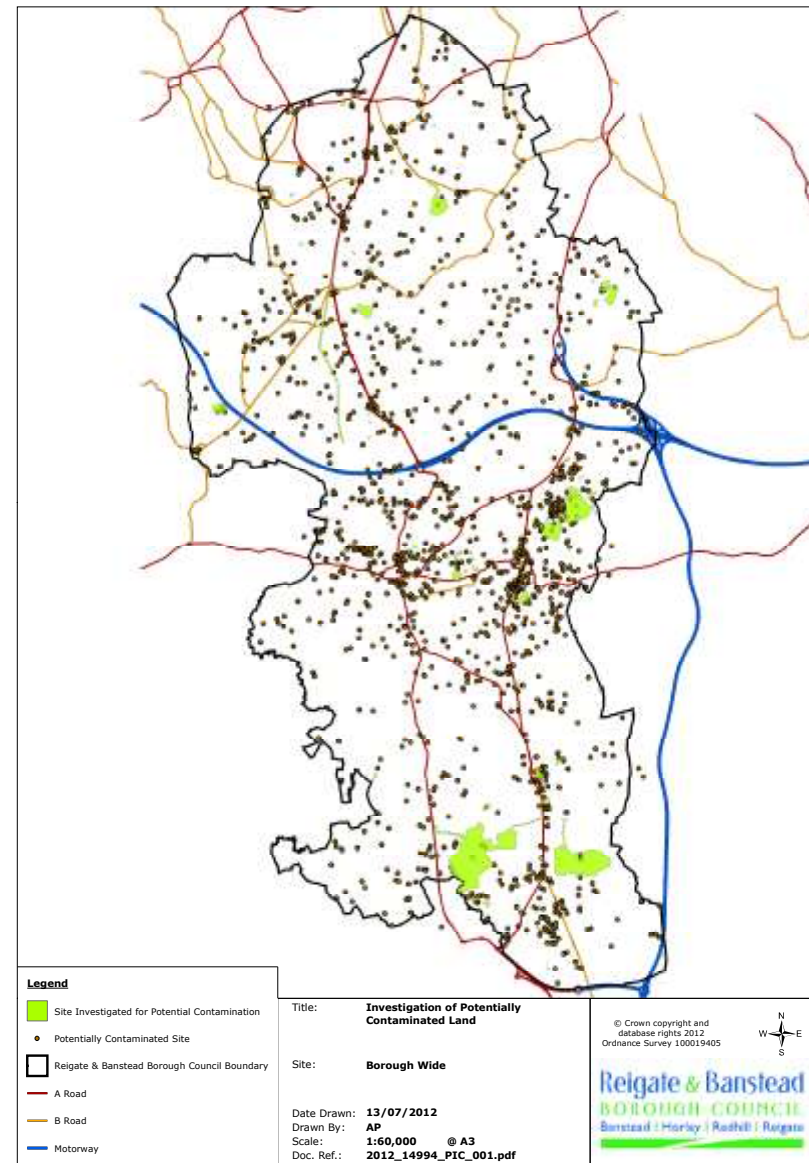
### **Sustainability Issues/ Problems/ Opportunities**

The NPPF states that the planning system should contribute to and enhance the natural and local environment by remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate, and where necessary, that after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990.

As approximately 90% of all site investigations into the existence of land contamination are a result of the market-based approach, the Council has no control over which or how many sites are investigated each year for the purposes of identifying contamination.

Similarly, the complex procedures involved in making a Contaminated Land determination mean that it is very difficult to be able to forecast the number of determinations that may be made over any given time period. Consequently, setting any targets based upon the number of Contaminated Land investigations and site remediation's is difficult to do with any reliability or accuracy.

The potential of identifying land contamination should NOT be considered as a constraint to development. In fact, to work to the principles of sustainable development, potentially contaminated sites should be actively promoted as redevelopment sites. This will ensure that sites are investigated and where necessary remediated so that they are suitable for use.



Developers should be made aware of the potential for land contamination to exist at a site at the earliest opportunity so that



Developers should be made aware of the potential for land contamination to exist at a site at the earliest opportunity. This is so that sites can be investigated in good time, and knowledge about the condition of the land can be used to make sustainable development decisions. These decisions are generally in regard to things such as site layout and the extent that remediation is required to be incorporated into a development.

**Summary:**

- Previously developed land may require remediation before it can be considered suitable for use.
- Over 1,100 sites, which have had uses that potentially could have led to land contamination, have been identified across the Borough.
- Local planning policy should wherever possible direct development to potentially contaminated sites.
- Permitting development is the principal and positive means to bring about remediation of contaminated sites.
- Sufficient information must be submitted by the applicant in connection with the state of land before the application can be duly made.
- The Council has not yet determined any land in the Borough as Contaminated Land under the statutory definition.

**Key Decision Aiding Questions:**

- ❑ Will the option help to investigate and where necessary remediate potentially contaminated sites?
- ❑ Will the option reduce the risk of creating further contamination?
- ❑ Will the option co-locate sites suspected of being contaminated with sensitive receptors and therefore require the investigation and possible remediation of the land or adjacent land?

## Air Quality

**SA Objective:** To ensure air quality continues to improve.

### **Summary of issues facing Reigate & Banstead**

- There are 9 AQMAs in the borough
- Air pollutants are concentrated around urban areas, transport corridors and Gatwick Airport

### **Overview:**

Good air quality is vital for human health and the wider environment. It is a key indicator for quality of life and sustainable development measures. Air quality in the South East is generally good, although unacceptably high levels of pollution do occur. Air pollution can occur naturally however the main concern is with man-made sources of air pollution. These can be linked to agricultural activities, industrial and commercial activities, heating and transportation. A number of controls exist to deal with these in isolation, for example, Clean Air Act 1993 prior approvals for the height of chimneys, or environmental permits for specified industrial activities.

The National Air Quality Strategy provides an overarching framework to inform policy decisions in respect of the following pollutants: benzene, 1, 3 butadiene, carbon monoxide, lead, nitrogen dioxide, particulate matter (PM<sub>10</sub>), sulphur dioxide and ozone. The first seven pollutants fall to local authorities to deal with.

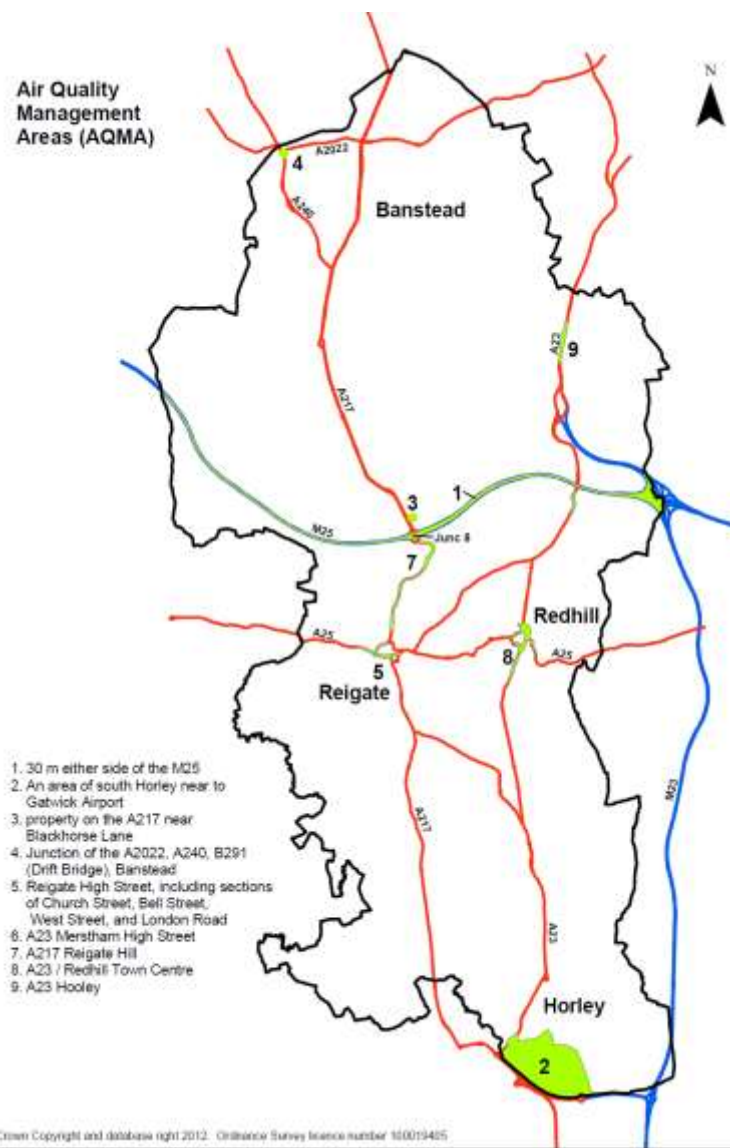
Due to the trans-boundary nature of ozone central government deal with this. However in addition to these pollutants local issues can occur with certain options due to gases, fume and grit and dusts. These must also be considered in any development option being assessed.

The Borough, in common with the rest of the South East, has few major industrial processes to generate air pollutants, although development that encroaches upon these should be carefully considered to ensure that people are not exposed to air pollution.

The borough is also host to the M25, M23, A25, A23 and A217, and thus road traffic emissions are significant. These are exacerbated by the location of Gatwick airport, which are both a major national generator of car journeys and emitter of aviation-related pollutants. As part of the Government's National Air Quality Strategy, the Borough Council has undertaken a phased review of air quality to identify the most significant pollutants in the air locally, and the areas where they are most prevalent.

In Reigate and Banstead, the Council has found that air pollution in most areas of the Borough is significantly below Government limits for all pollutants. The pollutant identified as a potential problem in certain areas of the Borough was Nitrogen Dioxide (NO<sub>2</sub>), and following computer modelling and subsequent monitoring the Council has declared nine Air Quality Management Areas:

- i) Along the M25
- ii) An area of south Horley near to Gatwick Airport
- iii) An individual property on the A217 near Blackhorse Lane
- iv) Properties at the junction of the A2022 / A240 / B291 in Banstead
- v) Reigate High Street, including parts of Bell Street, Church Street, West Street, and London Road.
- vi) A23 Merstham High Street
- vii) A217 Reigate Hill
- viii) A23 Redhill Town Centre
- ix) A23 Hooley



**Indicators:**

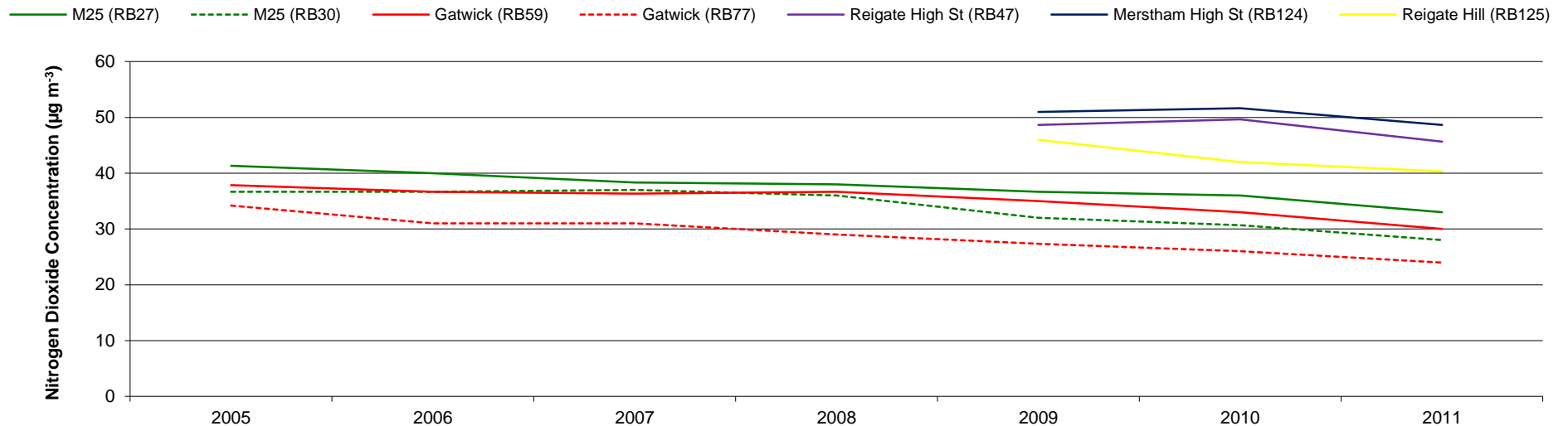
INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Annual average NO <sub>2</sub> concentration and for trend purposes the 3 year rolling average* within AQMAs relative to national standards	See table below for details of RBBC's 9 x AQMAs		<p>UK air quality objective for end of 2005 for NO<sub>2</sub> is an annual mean of &lt;40ug/m<sup>3</sup>.</p> <p>EU annual mean limit value of &lt;40ug/m<sup>3</sup> to be met by the end of 2010.</p>	<p>Areas 1, 3 and 4 are likely to meet the standards by 2015, while areas 5 to 9 are forecast to meet the standard by 2020.</p> <p>Area 2 Gatwick as a result of the recession currently (2012) meets the relevant standard, and is forecast to meet the standard in 2025. Whether the standard is met between 2012 and 2025 will depend of the economic recovery and the rate of growth at Gatwick.</p>	<p>Growing number of flights from Gatwick within the Horley AQMA.</p> <p>At the remaining sites where traffic is the main pollution source, any significant increase in traffic over that forecast, changes in the fleet mix e.g. further shifts to diesel engines, or a disproportionate increase in HGVs will increase pollution.</p>	In house monitoring
b. The number of properties affected by poor air quality (i.e. within AQMA)	* see table below					

\*prevailing weather conditions mean that it is unreliable to examine the figure for a single year if looking at overall trends.

AQMA	Properties affected	Concentrations ( $\mu\text{g m}^{-3}$ )								
		2003	2004	2005	2006	2007	2008	2009	2010	2011
Area 1: M25 as measured at RB27 / RB30	<5	43 / 41	42 / 34	39 / 35	39 / 41	37 / 35	38 / 32	35 / 29	35 / 31	29 / 24
Area 2: Horley near to Gatwick Airport (RB59, RB77)	approx. 30 to 35	41 / 40	39 / 31	34 / 32	37 / 30	38 / 31	35 / 26	32 / 25	32 / 27	26 / 20
Area 3: A217 Blackhorse Lane (RB103 / RB49)	1	-	-	37 <sup>*1</sup>	46	39	41 / 58	26 / 53	- / 64	- / 49
Area 4: Junction of A2022 / A240 / B291 (RB106)	2	-	-	-	47	39	42	37	41	34
Area 5: Reigate High Street (RB47)	140 to 160	50	41	46	62	54	50	42	57	38
Area 6: A23 Merstham High Street (RB110 / RB124)	37	-	-	-	44 <sup>*1</sup> / -	41 / 52 <sup>*1</sup>	39 / 48	37 / 45	42 / 51	28 / 41
Area 7: A217 Reigate Hill (RB125)	5 to 10	-	-	-	-	55	44	39	43	39
Area 8: A23 Redhill Town Centre (RB140 / RB145)	5 (existing development)	-	-	-	-	-	-	30 / -	31 / 46	26 / 35
Area 9: A23 Hooley (RB136)	60						-	66	65	50

<sup>\*1</sup> Annual mean equivalent as less than 1 year's data.  
Note: In previous work the M23, A217 Rushworth Road, and A23 Dean Lane have been included in this table, however concentrations now meet the relevant standards.

Trends in Nitrogen Dioxide Concentrations within the Borough's Air Quality Management Areas (3 year rolling means).



**Sustainability issues/problems/opportunities:**

Eight out of nine of the Borough's AQMAs have been declared as a result of NO<sub>2</sub> emissions derived from road transport. The concentrations in Areas 1, 3, and 4 are predicted to meet the government's air quality objectives by 2015 (primarily as a result of improvements in car engine technology). Areas 5 to 9 are likely to still breach the air quality standard in 2015; although all sites are forecast to meet the relevant standards by 2020 assuming no additional measures are taken locally.

However, the increasing shift to diesel vehicles over the past seven years has not helped with improvements in air quality in the borough, as in use diesels are inherently 'dirtier' than an equivalent petrol engine. Thus while the shift to diesel may well lead to a reduction in CO<sub>2</sub> emissions it has a potentially detrimental effect on health.

Within the Gatwick AQMA (Area 2) emissions are due to a combination of pollution from both road traffic and aeroplanes.

Although improvements in car engine emissions are likely to lead to improvements in nitrogen dioxide concentrations elsewhere, the reduction in NO<sub>2</sub> pollution from road transport within the Horley AQMA will be 'off set' to a degree by the increasing emissions from the airport (primarily from aircraft) leading to a slower rate of improvement in air quality in Horley compared to elsewhere.

Ozone concentrations across the borough continue to breach the UK air quality standard, with no sign of improvement over the past six years. Nitrogen dioxide and ozone are known to exacerbate pre existing respiratory conditions, and when combined with the additional risk of heat stress during the summer months might constitute an additional health risk.

### **Summary:**

- Air quality exceeds Government limits for nitrogen dioxide in 9 areas. These have been designated as AQMAs.
- Air pollutants are concentrated around urban areas, transport corridors and Gatwick Airport.
- Air pollution in the Borough is generally improving, albeit slowly, due to improvements in engine technology. However the increasing use of diesel vehicles has limited the scale of predicted improvements to date.
- At Gatwick the recent recession has led to a significant improvement in air quality. The extent to which this improvement continues, or remains unchanged, depends on how the airport develops over the next five to six years.
- The frequency of heat waves risk due to climate change will potentially increase health risks from air pollution

### **Key Decision Aiding Questions:**

- ❑ Will the option help improve air quality?
- ❑ Will the option support specific actions in designated AQMAs?
- ❑ Will air quality deteriorate temporarily as a result of construction practices?
- ❑ Will an option encroach upon a source of air pollution?
- ❑ Will the option minimise exposure to air pollution?



## **Pollution - Noise**

**SA Objective:** To reduce noise pollution

### **Summary of issues facing Reigate & Banstead**

- Noise is concentrated around transport corridors including the major roads, motorways, rail lines and where aircraft fly low
- There are point sources scattered throughout the borough, for example licensed premises, factories, shops.

### **Background information**

To assist in the understanding of the issues and how they may be addressed the concept of a noise linkage is introduced. A noise linkage is a way of describing the relationship between a noise source, a pathway and a receptor. A receptor is normally taken in this model to be a person or their property. A noise sensitive property, such as dwelling, school or hospital, may be used as a surrogate for the person. Noise is generally taken to include vibration.

A pathway may be any means by which noise (including vibration) travels from a source to a receptor. There are commonly multiple pathways for both noise and vibration (and also energy) travelling along a pathway. A vibration may manifest as a noise at the receptor. A source can include stereo equipment, entertainment noise, construction noise, industrial plant, ventilation plant, trains, planes and other vehicles. A source is anything that has the capacity to cause noise or vibration.

Any development should ensure that, where noise sensitive receptors are present, there is no significant noise source or there is no effective pathway. A development should not result in the placement of a significant source near a sensitive receptor or a sensitive receptor adjacent to a significant source unless the pathway is not effective.

The exception is if some action can be taken to change the source so that it is no longer significant or to modify the propagation pathway by means of control measures such as noise enclosures, barriers or insulation. There are examples where the co-location of receptors and sources is unacceptable for example; new housing should not encroach into NEC B, C or D.

### **Borough based information**

In November 2006 a survey of the borough was published. The survey was conducted by MORI on behalf of the Council. Noise was shown to be the most significant negative environmental impact and the most noise was associated with transport. (See graphs below)

### **Legislation**

Various statutes make provision for the control of noise. In some cases there are national provisions for example with legislation on the construction and design of vehicles and equipment. At a local level the powers include those in connection with the prevention of public nuisance objective of the Licensing Act 2003 which relates to nuisance arising from noise from licensed premises.

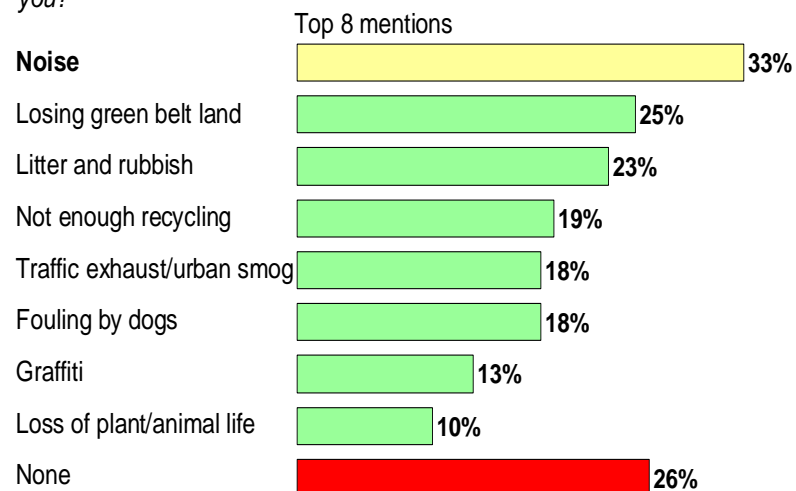
The planning regime also plays an important role in preventing and controlling noise exposure. Planning policy is directed to have regard to the ambient noise and whether it is appropriate to place a development in an area, and also whether major development would have an unacceptable impact on neighbouring land. There is also a clear role at the development control phase:

- preventing development in areas where noise sensitive development should be prohibited due to high ambient noise or some other existing local source; and
- Ensuring that the applicant uses suitable methods to control sources within their control or reduce propagation-pathways that could affect the development.

The most significant legislative change and that which is likely to have the greatest effect upon the borough is European Noise Directive (END). This requires through noise mapping and the identification of the worst affected areas, and then requires that these are improved. This requires collaboration between all stakeholders to use whatever necessary means to reduce noise exposure.

### Environmental problems with most negative impact

Q Which of these environmental problems have the most negative impact on you?

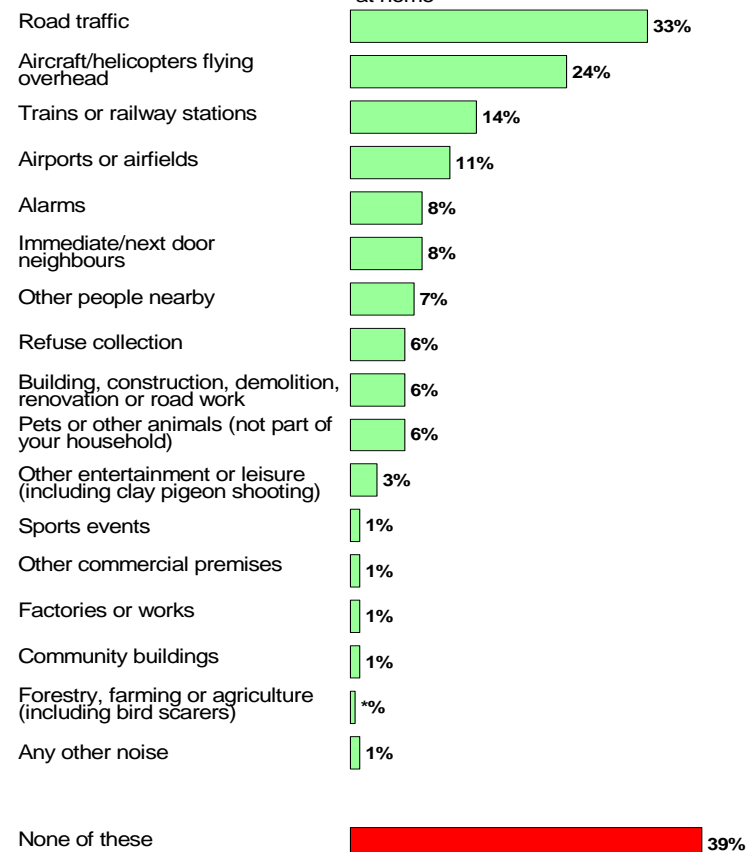


Base: 1,019 Reigate and Banstead residents aged 16+

Source: MORI

### Most annoying sources of noise

Percentage of people annoyed, bothered or disturbed by these sources of noise when at home



Base: 1,019 Reigate and Banstead residents aged 16+

Source: MORI

**Indicators:**

Indicator	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
The levels of noise around major roads.	Road noise contours have been produced. Analysis with mapping tools could provide information comparable to that above for aircraft noise.		A decrease in the extent of L <sub>Aeq</sub> contours and no. of properties affected			
Number of complaints relating to sources of noise of an industrial or commercial nature.	Uniform EP Complaints database.		A decrease.			RBBC Environmental Health
Number of complaints relating to sources of noise of an industrial or commercial nature.			A decrease.			RBBC Planning enforcement.

## Baseline Information

### Gatwick aircraft movements and noise exposure:

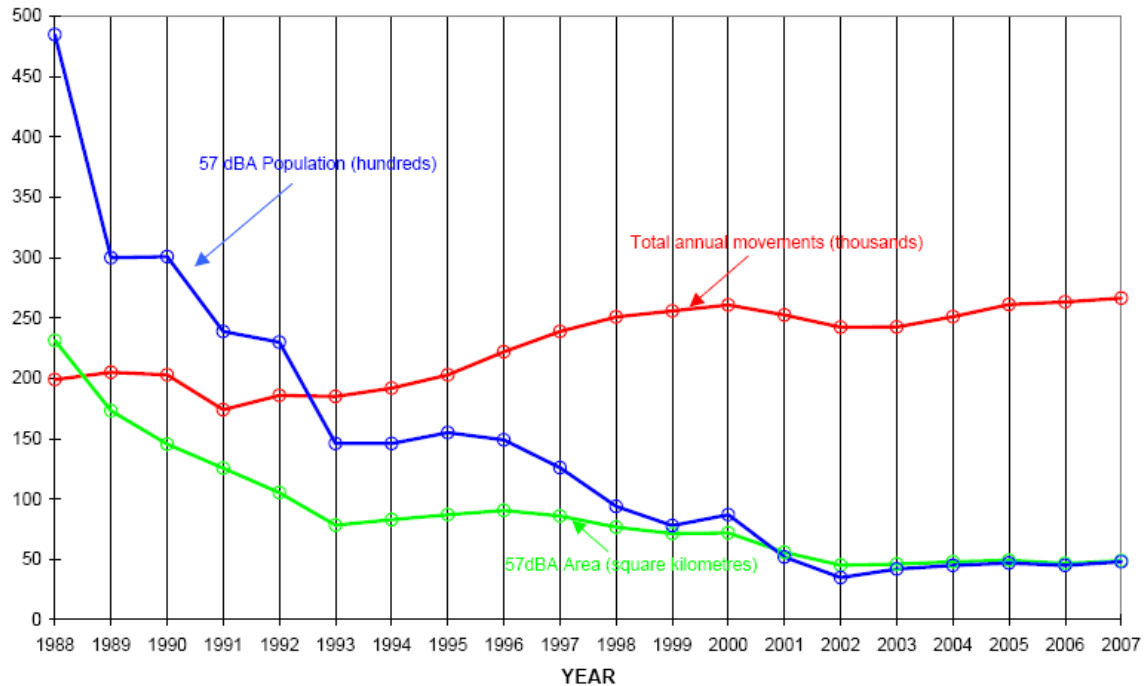
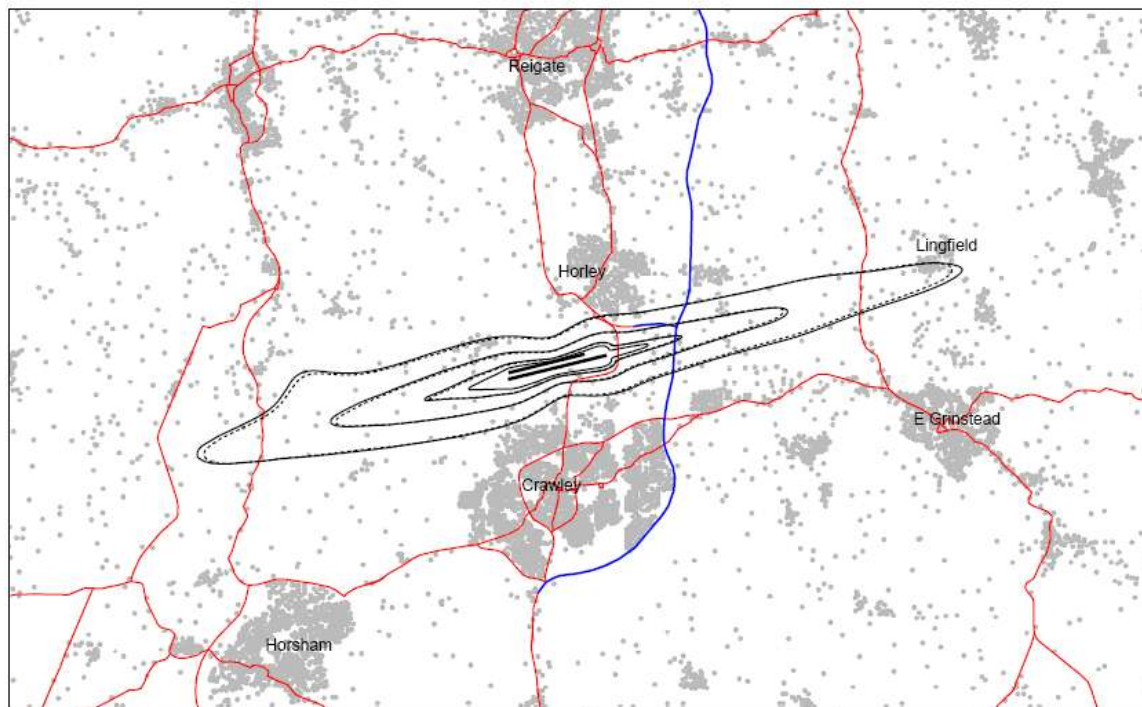


Figure 6: Gatwick traffic and noise 1988 - 2007

(Source: <http://www.dft.gov.uk/pgr/aviation/environmentalissues/nec/secnoise07/noisegatwick07.pdf>)

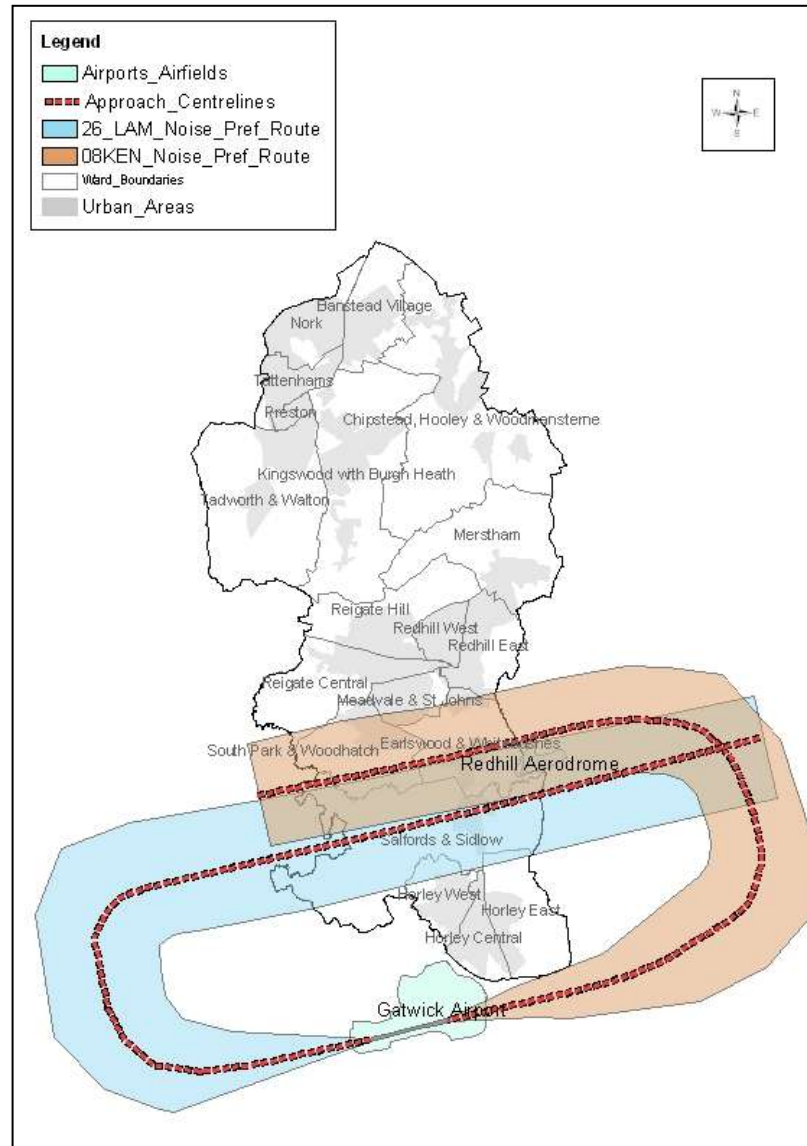
The population in the vicinity of Gatwick affected by noise in excess of 57 dBA has generally decreased since 1990, but has increased slightly in the last five years. The decrease was due to the phasing out of older jet aircraft and the more recent increases are due to higher numbers of aircraft.

Gatwick 57, 63 and 69 Leq Contours – 2006 dotted (72% West – 28% East) – 2007 solid (72% West – 28% East)

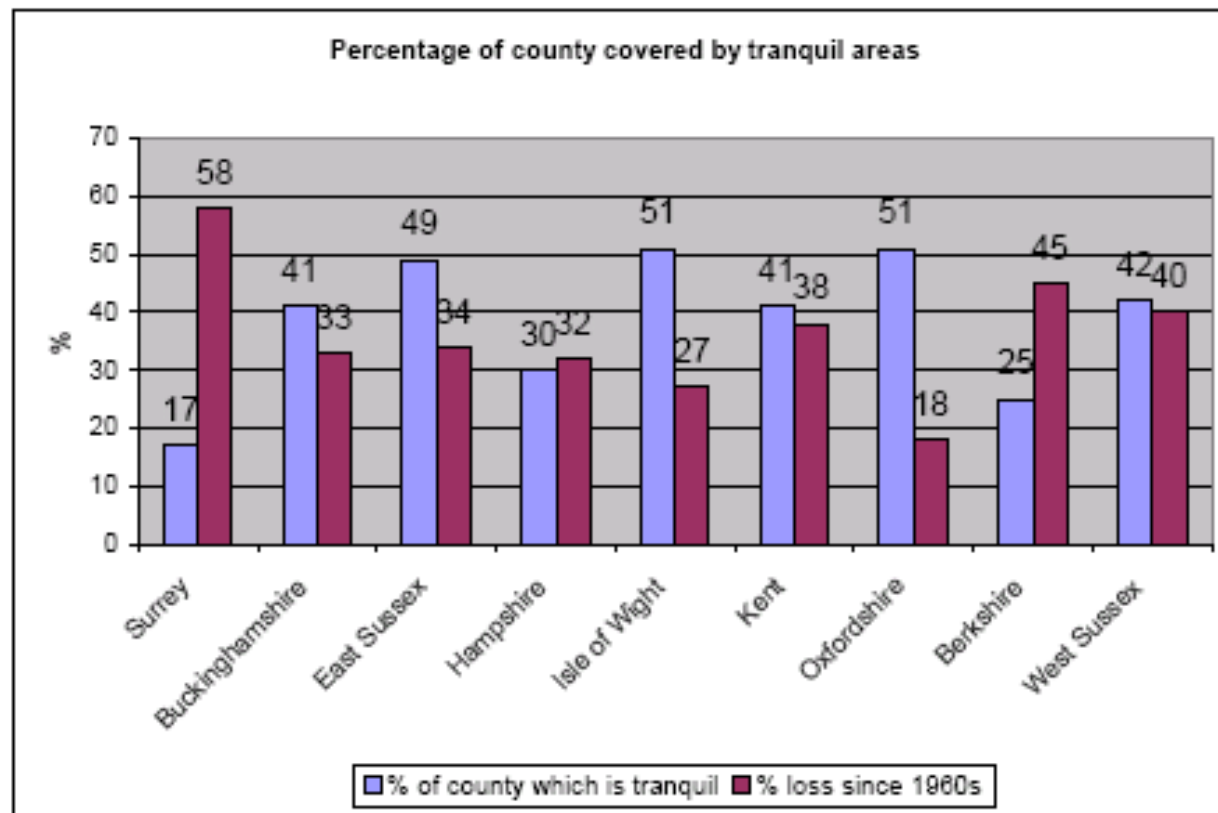


(Source: <http://www.dft.gov.uk/pgr/aviation/environmentalissues/nec/secnoise07/noisegatwick07.pdf>)

The potential for an expansion of aviation, with a second runway at Gatwick, would clearly have significant cumulative effects on the above baseline, possibly increasing the number of people within the borough affected by both poor air quality and noise. Similarly, proposals to develop Redhill aerodrome to major airport status would have severe impacts on local populations in the south of Redhill and Salfords.



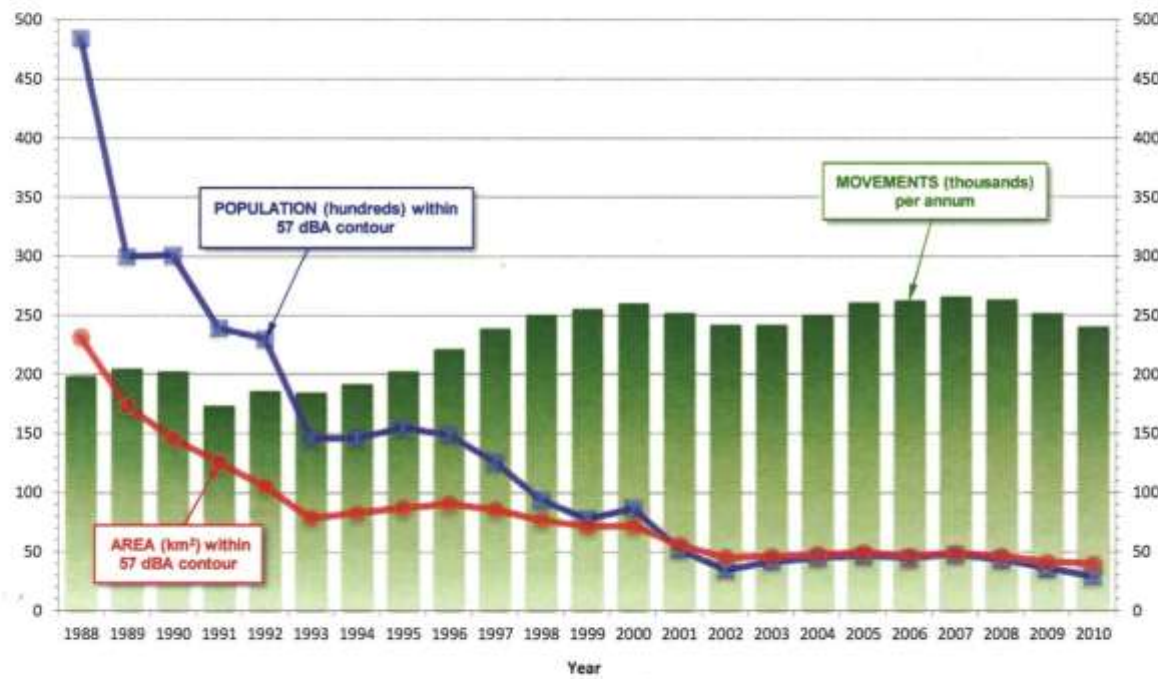
## Tranquil Areas



Source: CPRE tranquil areas maps



Figure 15 Gatwick traffic and noise contour area/population trend 1988-2010



**Key Decision Aiding Questions:**

- ❑ Is the option in an area where development should be prohibited? (i.e. in an area above NEC A or beneath a Gatwick Noise Preferential Route)
- ❑ Will the option create a noise linkage (i.e. positive relationship between source pathway receptor)?
- ❑ Where noise linkages arise will the option eliminate the pathway or control the source?
- ❑ Will the option reduce exposure to noise?
- ❑ Will the option preserve the tranquillity of tranquil areas?
- ❑ Will the option encourage the creation of tranquil areas?

## Pollution - Light

**SA Objective:** To reduce light pollution.

### Summary of issues for Reigate & Banstead

- Orange glow can be an issue in some parts of the borough, street lighting has been addressed by SCC

### Overview:

The Institute of Lighting Engineers recommend that Local Planning Authorities specify the following environmental zones for exterior lighting control within their Development Plans.

Category	Examples
E1	Intrinsically dark landscapes (National Parks, Areas of Outstanding Natural Beauty)
E2	Low district brightness areas (Rural, small villages or relatively dark urban locations)
E3	Medium district brightness areas (Small town centres or urban locations)
E4	High district brightness areas (Town/city centres with high levels of night time activity)

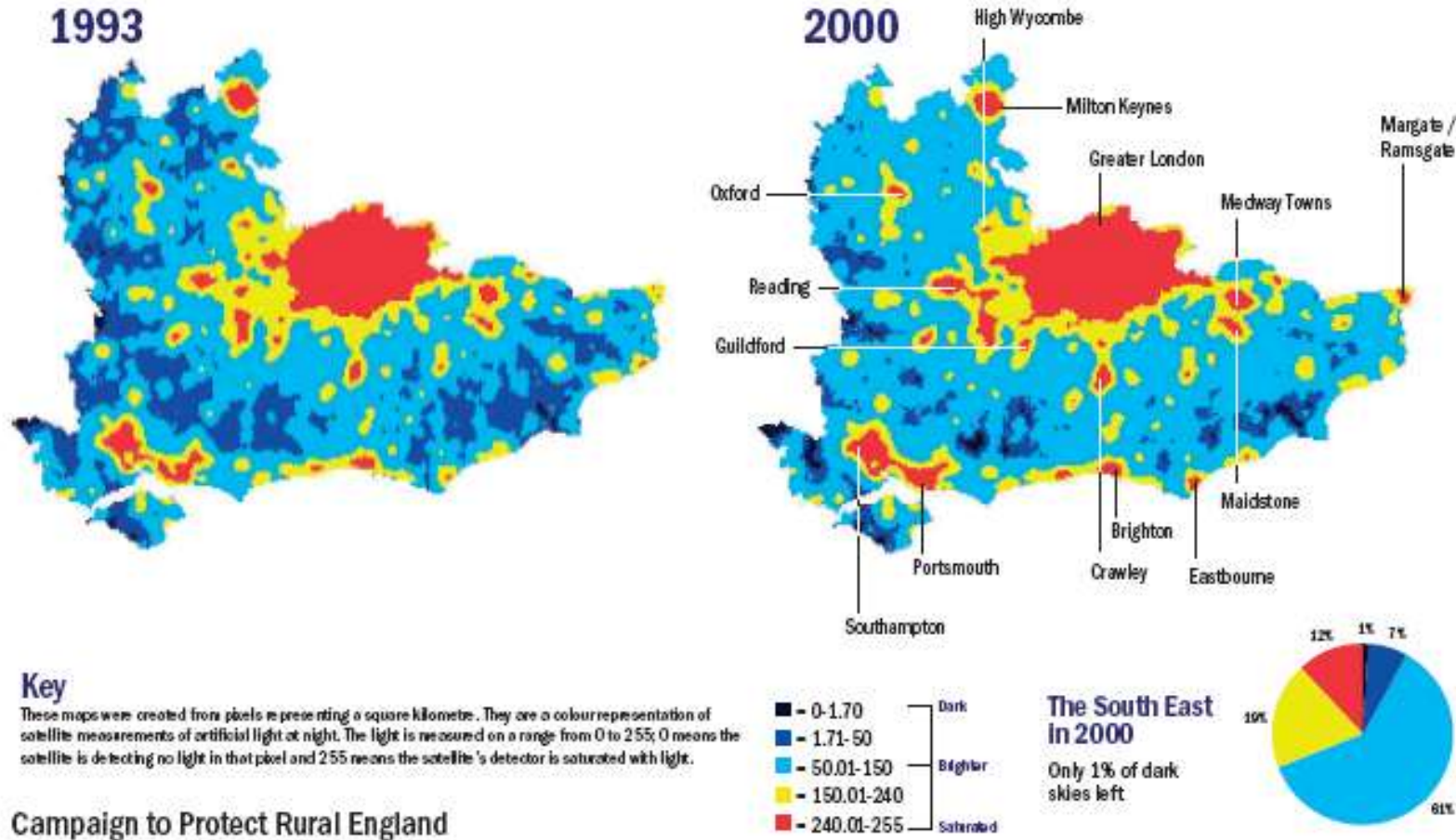
The first UK law tackling light pollution came into force on 6 April 2006. Exterior lighting joined noise and smells on the list of things that can be treated as a Statutory Nuisance under the Environmental Protection Act 1990. The new law (Section 102 of the Clean Neighbourhoods and Environment Act 2005) makes 'exterior light emitted from premises so as to be prejudicial to health or a nuisance' a criminal offence.

The new law doesn't tackle all forms of light pollution, only incidents of particularly bad lighting from some types of premises which cause people real nuisance.

Light pollution is a significant problem in the Borough but has been tackled over recent years through action by SCC as part of a carbon reduction agenda which is replacing every street light in Surrey. This has resulted in a reduction in light spillage and orange glow. These light are also smart sensed so can be dimmed during night-time hours.

# Night Blight in the South East

Satellite data shows that light pollution is rapidly increasing in the region, leaving less and less countryside where we can still enjoy starry, starry nights



**Indicators:**

<b>Indicator</b>	<b>Quantified data (for RBBC)</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
Percentage of permissions for new floodlights that include a condition to minimise light pollution and spillage	No data at present				There is a possibility that SCC may adopt an indicator for street lighting, this may result in an additional indicator being introduced	In house monitoring

**Sustainability issues/problems/opportunities:**

The issue of light pollution is getting worse. Although the need for good lighting is essential to community safety, the careless use of lights is blighting our night sky. Not only is this reducing the quality of the Borough's countryside, but the inefficient use of lighting wastes energy and can be a cause of neighbourhood nuisance.

**Key Decision Aiding Questions:**

- Will the option reduce light pollution?

## Water

**SA Objective:** To maintain and improve the water quality of rivers and groundwater and maintain an adequate supply of water.

### **Summary of issues for Reigate & Banstead**

- Water supply and treatment companies use LDF information to plan for future upgrades, early engagement between local authorities and water companies is important to ensure as much certainty and time for the delivery of infrastructure
- Water pollution and abstraction can impact on biodiversity and natural habitats.

### **Overview**

Water is a finite resource and is fundamental to all life. River flow and groundwater levels are key factors determining water quality and the health of freshwater, and some terrestrial ecosystems. An adequate supply of clean water is fundamental to public health and the maintenance of public water supplies; it also plays an important role in recreational activities.

Reigate and Banstead falls within an area of “serious” water stress<sup>32</sup>. In addition, the Environment Agency’s assessment of water availability and the impacts of existing abstraction on the aquatic environment in the catchment shows that the sub catchments are “no water available” or “over licensed”. This means that there is limited environmental capacity locally to support further abstraction to meet demand from new development.

Increasing resource availability therefore needs to focus on optimising the use of existing resources. To do this, development in the borough will require the highest level of water efficiency activity and therefore more stringent water consumption targets than those set out by Building Regulations, which may be adequate for other parts of the country.

In relation to redevelopment it is essential that capacity exists to serve any net increase in demand as a result of the development. Where new infrastructure is required it is essential that this is in place ahead of development. This is essential to avoid unacceptable impacts on the environment such as sewage flooding of residential and commercial property, pollution of land and watercourses plus water shortages with associated low pressure water supply problems.

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<sup>32</sup> Environment Agency (2007) Areas of water stress: final classification

Water quality in the South East is significantly impacted by pollution from diffuse sources including agricultural and urban areas. This pollution is generated by run-off after rainfall, which collects pollutants (e.g. nutrients, sediment, pesticides, chemicals, oil) from a wide-area. These pollutants originate from a variety of sources such as cropping, livestock grazing, urban areas and unsealed roads. Point source pollution includes industrial effluents, sewage treatment works and urban storm water drains.

Sutton and East Surrey Water supply the Borough's water. The water is almost totally derived from boreholes and aquifers (86%) the remainder coming from rivers and reservoirs. Below average demand, and above average rainfall in 2009/10, meant that the resource situation was healthy at the beginning of the report year (2011). Reservoir A was full and groundwater levels were significantly above average for the time of year.

Rivers and watercourses also act as an important part of the Borough's environment and ecosystems and can act as wildlife corridors in fragmented habitats. SESW is required to carry out studies by 2015 to investigate the potential impact of its abstractions on the environment as follows:

- the Reigate Heath and Reigate Lower Greensand study (Driver: split between "Quality Enhancement" and "Supply Demand")

### **Water quantity and quality**

Sutton and South East's Water plan to overcome an identified deficit is to upgrade the treatment works at Reservoir A (not named for confidentiality reasons), and to reinforce the distribution system to enable water from Reservoir A to be transferred over a much wider area in sufficient volumes to meet peak demands.

SESW have confirmed that the increase in treatment capacity at Reservoir A, combined with associated distribution system improvements, and a proactive programme of demand management, will ensure that sufficient resources are allocated to meet demand over the next 25 years.

Furthermore, SESW also have a range of water efficiency initiatives, covering leakage control, metering, promoting water efficiency, and the efficient use of water at treatment works. These initiatives help to manage demand.

Water quality testing in 2008 first revealed the presence of the previously undetected pesticide metaldehyde in Reservoir A. Seven PCV failures for metaldehyde were recorded in 2008 for water leaving the treatment works and eight in 2009. No failures were recorded in 2010, but pesticides and metaldehyde in particular, continue to give cause for concern.

### **Waste water treatment**

Waste water treatment is managed by Thames Water. At present, there are several treatment works operating in the borough and in neighbouring authorities. The following serve Reigate & Banstead:

- Beddington
- Earlswood
- Hogsmill
- Horley
- Ironsbottom
- Merstham

The above treatment works have been assessed as having capacity to meet future growth except Merstham where a quality and growth upgrade is planned. The proposed upgrade work will increase the STW's capacity from approximately 7000 to 10,500 population equivalent (PE). This upgrade will support the area's sewerage requirements until at least 2021.

Thames Water confirm that an increase in proposed dwellings for the 2010-2015 capital programme period may necessitate capacity upgrades at affected treatment works and/or upgrades of the sewerage network. It takes 3-5 years to plan an upgrade of sewage treatment works and 7-10 years to build a new works if required. The company uses LDF information to plan for future upgrades and require engagement between local authorities as early as possible to ensure as much certainty and time for the delivery of infrastructure. The water companies' investment programmes are based on a 5 year cycle known as the Asset Management Plan (AMP) process. Thames Water is currently in the AMP5 period which runs from 1st April 2010 to 31st March 2015 and does not therefore cover the whole LDF period. AMP6 will cover the period from 1st April 2015 to 31st March 2020 and Thames Water's Business Plan for AMP6 will be submitted to Ofwat in August 2013.



## Indicators

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Percentage rivers in plan area whose biological/chemical quality is rated as "good" or "fair"	2000-2002: 83%			The majority of the measured riverine environment meets the grade "fairly good" or "fair". The chemical quality of the stretch between the Burstow STW and the Mole continues to be "poor". Nitrates and phosphates are very, or exceedingly high in 56% of the measured length		QoLI: B5  <a href="http://www.environment-agency.gov.uk/maps/">http://www.environment-agency.gov.uk/maps/</a>
b. Quality and quantity of groundwater	2004: Mean Zonal Compliance 99.9%		Sufficient supply for essential services & environmental needs.	Fall in 2003, SE, groundwater levels		Environment Agency state of the environment 2004. Awaiting local data from E Surrey Water
d. Household per capita consumption (PCC) of water	2003-04: Sutton + E Sy Measured 155 Unmeasured 190 Average 185 litres/person/day	South East 2002/03: Measured 145 Unmeasured 168 Average 156	To stabilise PCC of water at current levels	PCC in SE has grown by 3-5% although it is now stabilising.  0.2% pa increase expected in England and Wales as a whole Average consumption in S+ES zone increased from 163 to 172 l/p/d between 1999 – 2003. Average consumption in 2002-3 was 16 l/p/d (10%) higher than South East average		Sutton and East Surrey Water, Environment Agency, Regional framework p.59 of data and trends
e. Number of	Awaiting data					

developments approved against the recommendation of the statutory water/sewerage undertaker on low pressure / flooding grounds						
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**Sustainability issues/problems/opportunities:**

The South East consumes more water per person than other regions, but receives one of the lowest amounts of rainfall. An increase in water demand is expected as a consequence of the increase in new housing in the South East. The effects of continuing urban growth, with its additional pressure on water demand, sewerage systems and pollution, will create effects that are likely to be complex and inter-related: for example increased development increases the level of abstraction of water, which may lead to low flow in rivers and loss of habitat and increase the input of polluted run-off. Our historical approach to prioritise the water needs of consumers continues to create vulnerability in the natural environment.

Some water sources contain small traces of herbicides and nitrates. Although these pollutants are removed, or are brought within acceptable limits in drinking water, they are still present in the natural environment and require elimination or control by the use of Sustainable Drainage and other relevant pollution prevention measures. Some aquifers have become polluted with ammonia from historic landfill sites, leading to some boreholes to be abandoned (e.g. The Clears, Reigate). Development in the vicinity of aquifers can increase the risk of pollution.

Much of the River Mole and its tributaries have biological characteristics “worse than expected for an unpolluted river”. It also includes one area (Burstow STW) where the chemical quality is that of an “impoverished ecosystem”. Many of the monitoring stations have recorded continuing very high levels of nitrates and excessively high levels of phosphate. The source of these nutrients derives from both sewage treatment works and Gatwick holding ponds. STWs at both Horley and Earlswood will take action to reduce levels of phosphate in effluent; however the Horley STW is close to its existing treatment capacity.

Water efficiency, sustainable water supply, storm water attenuation, and river water quality protection and enhancement must in part be achieved through the promotion of water efficiency technology. In particular the use of rainwater harvesting systems should be actively considered in new build to both replace some non-potable water uses and to help reduce surface run-off. The implementation of the emerging Code for Sustainable Buildings should be expected in new development.

### **Summary**

- The effects of climate change means that rainfall is now consistently below long-term average
- Local aquifers are frequently depleted
- Some local aquifers have become polluted and consequently abandoned
- Water demand is close to exceeding supply
- Competition for water is likely to occur between the domestic/commercial needs and the natural environment
- High levels of phosphate and nitrates in over half of our rivers
- Horley Sewage Treatment Works is close to capacity

### **Key Decision Aiding Questions:**

- ❑ Will the option increase pollution of groundwater, watercourses and rivers from run-off/point-sources?
- ❑ Will the option increase the demand for water?
- ❑ Will the option encourage Sustainable Urban Drainage Schemes?
- ❑ Will the option encourage water to be stored for re-use?
- ❑ Will the amount of nitrates/phosphates entering the water environment be reduced?
- ❑ Will the option ensure the provision of water and sewerage infrastructure?

## **Biodiversity**

**SA Objective:** To conserve and enhance biodiversity and networks of natural habitat.

### **Summary of issues for Reigate & Banstead**

- Less than 20% of the open countryside is designated formally for nature conservation
- There is one Special Area of Conservation (SAC) within the borough boundary, and one other SAC and one Special Protection Area within 15 km of the borough boundary.

### **Overview**

Biodiversity represents the richness and variety of plants, birds, animals and insects that exist throughout the world. It concerns the whole variety of living things, including the habitats that support them, different arrays of species and the genetic variations between them. Biodiversity is being lost at an alarming rate, both globally and in the UK.

The Council's Corporate Plan aims to achieve a 'clean, green, safe and healthy borough' and commits the Council to providing 'access to high quality green infrastructure'. The National Planning Policy Framework 2012 (NPPF) requires that Local Planning Authorities plan positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

One Natura 2000 site lies within the Reigate & Banstead boundary- the Mole Gap to Reigate Escarpment Special Area of Conservation (SAC). In addition, Ashdown Forest SAC and Special Protection Area (SPA) lie within a 15 km distance of the borough boundary. As a result of a screening study, the key potential impacts of the Core Strategy on these Natura 2000 sites were identified as being:

- Potential impacts on habitat due to increased recreational use and the maintenance (and cessation of grazing);
- Potential disturbance to roosting populations of the Bechstein Bat, a European Protected Species; and
- Potential impacts on habitats as a result of increased air pollution.

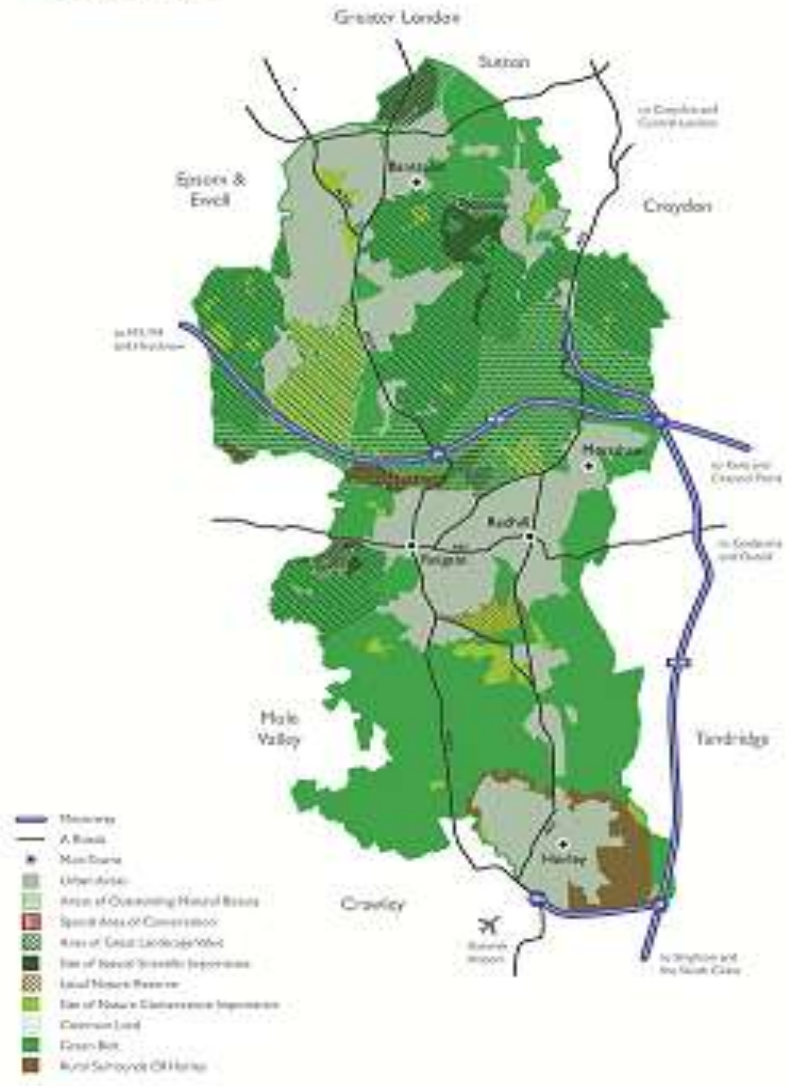
These potential impacts of the Core Strategy were examined in the Appropriate Assessment (AA) of November 2008, and measures were identified to avoid impacts. As a result of the AA, it was concluded that the Core Strategy alone, and in combination with other plans and projects, would have no adverse impact on the integrity of the natural 2000 Sites as protected by the European Habitats Directive. The AA was revised in 2012 to take account of the changes to the Core Strategy and it was concluded that the changes “do not alter the conclusions reached in the earlier HRA”.

In total the Borough contains four sites of Special Scientific Interest (SSSI), which are nationally important and which enjoy statutory protection; there are also two Local Nature Reserves (Earlswood Common and Reigate Heath). The SAC and SSSIs together total 797 hectares and are effectively the Borough’s most important sites for wildlife, ranging from the chalk downland of the Chipstead Downs complex in the north of the Borough to lowland heath in Reigate. Sites of Nature Conservation Importance (SNCI) are of County wildlife value.

There are currently 40 SNCI’s, an increase of 4 sites from last year. They cover a range of habitats including ancient woodland, wetland and herb-rich grassland.

At present 65% of SSSIs in the Borough are in an unfavourable condition, these are presently recovering. This is because most of the Borough’s SSSI’s consist of chalk grassland, which was originally created through centuries of sheep and cattle grazing, and quickly degraded when the local economy changed and grazing of these areas ceased. The Council and other landowners are working with Natural England to improve the condition of these sites via grazing and other appropriate management techniques. The percentage of favourable and unfavourable recovering is presently 98%, which exceeds the Government’s target of 95% by 2010.

# The Green Fabric



**Indicators:**

<b>INDICATOR</b>	<b>Quantified data (for RBBC)</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
a. Extent and condition of land designated as a Site of Special Scientific Interest (SSSI).	98% in favourable or recovering state		Natural England - 95% of SSSI's are favourable or recovering condition by 2010	Increasing, exceeds target	Quality of SSSI out of Local Authority control, primarily a land management issue.	AMR (Apr 2010 – Mar 2011)
b. Number, area and condition of Sites of Nature Conservation Importance (SNCIs) and Local Nature Reserves (LNRs)				The number and area of SNCIs, potential SNCIs and LNRs is increasing		The Council's geographical information system ESRI. Condition currently being established by resurvey and the SNCLG selection process
c. Extent and condition of ancient woodlands	597 Ha (2012)		The council aims to preserve and protect these areas	Increased due to re-assessment	Condition not generally monitored	In house

SSSI	Main habitat	Unit number	Unit area (ha)	Latest assessment date	Condition	Trend
<b>Banstead Downs</b>	Calcareous grassland - lowland	1	43.94	16 Aug 2007	Unfavourable	recovering
	Calcareous grassland - lowland	2	49.30	01 Jul 2010	Unfavourable	recovering
	Calcareous grassland - lowland	3	33.43	16 Aug 2007	Unfavourable	recovering
<b>Chipstead Downs</b>	Calcareous grassland - lowland	1	16.78	02 Oct 2008	Unfavourable	recovering
	Calcareous grassland - lowland	2	5.52	28 Aug 2007	Favourable	
	Broadleaved, mixed and yew woodland - lowland	3	84.24	02 Oct 2008	Favourable	
	Calcareous grassland - lowland	4	19.41	01 Jul 2010	Unfavourable	recovering
	Calcareous grassland - lowland	5	11.47	02 Oct 2008	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	6	9.95	02 Oct 2008	Unfavourable	recovering
	Calcareous grassland - lowland	7	10.48	01 Jul 2010	Unfavourable	recovering
<b>Mole Gap To Reigate Escarpment</b>	Broadleaved, mixed and yew woodland - lowland	1	7.50	15 Sep 2008	Favourable	
	Broadleaved, mixed and yew woodland - lowland	2	77.29	14 Oct 2009	Favourable	
	Broadleaved, mixed and yew woodland - lowland	5	19.41	15 Sep 2009	Unfavourable	recovering
	Calcareous grassland - lowland	8	23.27	31 March 2008	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	16	190.02	13 Aug 2009	Unfavourable	recovering



SSSI	Main habitat	Unit number	Unit area (ha)	Latest assessment date	Condition	Trend
	Broadleaved, mixed and yew woodland - lowland	17	21.38	15 Sep 2008	Unfavourable	recovering
	Calcareous grassland - lowland	23	39.85	15 Sep 2008	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	24	1.39	15 Sep 2008	Favourable	
	Broadleaved, mixed and yew woodland - lowland	25	19.91	15 Sep 2008	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	26	8.33	15 Sep 2008	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	27	42.03	13 Aug 2009	Favourable	
<b>Reigate Heath</b>	Broadleaved, mixed and yew woodland - lowland	1	3.10	14 Sep 2011	Unfavourable	No change
	Dwarf shrub heath - lowland	2	45.65	14 Sep 2011	Favourable	
	Neutral grassland - lowland	3	13.00	13 Sep 2011	Unfavourable	declining

### **Sustainability issues/problems/opportunities:**

Although the Borough contains a variety of habitats that are designated, this only makes up less than 20% of the open countryside; much wildlife and many important habitats underpinning biodiversity are not subject to any designation. Urban areas also contain many important habitats and species included in Biodiversity Action Plans and have the advantage of not being subject to intensive agricultural management. Moreover these green spaces, which support wildlife, may be of great actual or potential importance to local communities: contact with, and access to, wildlife is a significant factor in determining quality of life and wellbeing. This urban biodiversity is considerably enhanced by the presence of gardens.

It is sometimes assumed that previously developed land has no wildlife value, when in fact the converse is normally true. As the majority of development is focussed on these sites, it is important that the significant potential, which exists, is exploited.

Minor development may have only a small impact on wildlife, but the impact of several minor developments can be large. These cumulative impacts can be both direct and indirect – both need to be taken into account.

Significant impacts can include: destruction or damage to habitats and species; fragmentation of habitat by development; disturbance and/or erosion from increased recreational pressure; hydrological changes; localised pollution.

The condition of the riverine environment is also of particular importance to certain target species in the South East (e.g. water voles). The concerns relating to the water environment are expressed in Sustainability Objective 11 relating to water quality.

Habitat fragmentation and species isolation is increasing as a result of the pressures of development. An ecologically coherent network needs to be maintained by creating corridors from one habitat to another. Statutory and non-statutory sites create “anchor points” which can be enhanced and extended. The Habitats Directive encourages the inclusion of policies for the protection, management, restoration and enhancement of landscape features (such as linear and continuous riverbanks and hedgerows, or “stepping stones” such as ponds or small woods).

The design of new development in particular needs to create and integrate habitats. All too often biodiversity is considered as an afterthought at a stage when it is very difficult to make critical changes. Even in the modern built form, opportunities can be integrated (e.g. green roofs) which can encourage biodiversity. Where it is inevitable that some habitat will be lost, measures should be secured that minimise and, where possible, replace that loss.

Opportunities for appropriate management of existing and new habitats need to be considered. A few educated tweaks to a grounds maintenance contract created for a newly landscaped development can make a difference to the wildlife interest of the site. Similarly, planning to maintain the water input to an old pond or water storage area can retain a naturally diverse local habitat.

Climate Change is without doubt the most significant threat, which will demand a new way of thinking. The philosophy of conserving designated sites to protect habitats and species is likely to be significantly challenged. Habitats will be lost or significantly altered (even though there will also be some habitat creation opportunities). Habitats and species may be affected by direct loss and through physical changes to the environment (water availability, temperature). Lowland woodlands may suffer from an increased drought frequency and some may be exposed to increased storm damage. Warmer summers and milder winters could also increase proliferation of insects and growth of noxious weeds.

The Council is in the process of producing a Green Infrastructure Strategy which sets out the proposed direction for developing, enhancing and extending a multi-functional Green Infrastructure (GI) network across the borough over the next 15 years to complement and support the significant growth in housing, address current and future GI needs, and bring a range of social, environmental and economic benefits to the community.

**Key Decision Aiding Questions:**

- ❑ Will the option secure enhancement in biodiversity in all new development?
- ❑ Will the option continue to protect formally designated areas of nature conservation?
- ❑ Will the option create more habitats?
- ❑ Will the option prevent fragmentation, and increase connectivity, of habitats?
- ❑ Will the option enhance urban biodiversity?
- ❑ Will the option take account of the effects of climate change on biodiversity?
- ❑ Will the option adequately defend and enhance protected species?
- ❑ Will the option enhance understanding of the importance of biodiversity?

## Heritage and natural assets

**SA Objective:** To To conserve and enhance landscape character and feature, the historic environment and cultural assets and their setting.

### **Summary of issues for Reigate & Banstead**

- The borough has 459 statutory listed buildings, 533 locally listed buildings and 20 conservation areas
- There are many areas identified in the Landscape and Townscape character assessment as being sensitive to change
- The borough is traversed by the Surrey Hills AONB
- Areas of the AGLV have been identified as of being of the same quality as the AONB

### **Overview**

Today's landscape has come about from a long process of interaction between people, plants, animals and the land. Physical influences, such as geology, landform, streams and rivers are often the key determinants of landscape character, but in many places the overlying effects of settlement, land-use or agriculture may be more apparent.

The landscape also contains features of the built environment, which contribute to the Borough's surroundings and provide a valuable record of our heritage. Buildings, churches, monuments, gardens etc. can all be protected by a heritage designation as listing or scheduling or conservation area status. This environment is fragile and requires protection, but also has an enormous potential to contribute to a sense of place and identity and add to the quality of our daily lives through understanding and appropriate management and access. The Government's 'Statement on the Historic Environment for England' (2010) sets out the historic environment's potential for regeneration, tourism and social exclusion as well as for conservation.

There are some 459 statutory listed buildings in the Borough including 6 Grade I (4 churches, Reigate Priory and Tadworth Court) and 21 Grade II\*. There are 169 curtilage structures that have been identified as of interest by the Borough Council. There are 533 Locally Listed Buildings and 20 Conservation Areas. From an archaeological perspective the Borough contains 21 Ancient Monuments, 6 County Sites of Archaeological Importance and 174 Sites of High Archaeological Potential. There are also 7 proposed Areas of Historic Landscape Value. There are two Grade II registered historic parks and gardens within the Borough; Lower Gatton Park and Reigate Priory.

The historic environment should be seen as more than designations. Development decisions should also be based upon an understanding of the wider historic environment and its impact on the character and distinctiveness of areas. Much of what is important about the countryside will be protected and enhanced by focusing on the needs of biodiversity and habitats; however, landscape character has also to be considered. A large area of open space and parkland is owned and/or managed by the Borough Council. The managed land area totals 1,197 hectares (2,959 acres) and includes 55 parks, 34 children's play areas, 22 allotment sites (presently underutilized) and 2 cemeteries.

### **Indicators**

<b>INDICATOR</b>	<b>Quantified data (for RBBC)</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
a. Number of listed buildings, ancient monuments and conservation areas	March 2012: Listed Buildings: Grade 1 - 6 Grade 2* - 21 Grade 2 - 459 Local List- 533 ancient monuments - 21 conservation areas - 20	4 <sup>th</sup> highest number in Surrey with caseload in top three.	Not to see a reduction in these numbers and upgrade or add where appropriate	Whilst large increases are not anticipated, further additions continue to occur as part of the DC process	Additions resource intensive	Statutory list <a href="http://www.cipfastats.net">www.cipfastats.net</a>  Internal files
b. Proportion of statutory listed buildings at risk	March 2012: zero grade I or II* at risk (1.3% Grade II )	No other Borough in Surrey has up to date figures	To see this figure reduced	Continued reduction	Removal of Historic Buildings Grants Fund	English Heritage Buildings at Risk Register Borough Buildings at Risk Register
c. Proportion of statutory listed buildings demolished or removed from the list owing to approved or unauthorised alternations.	2012: 0		For this figure to remain at 0	Rigorous enforcement ensures standard of listed buildings is maintained.	Lack of historic building grants for appropriate maintenance	

d. Proportion of scheduled ancient monuments at risk	March 2012: 2		To persuade owners to repair	Lack of any local powers problematic. Again lack of a grant fund makes any local influence difficult.		English Heritage
e. Proportion of conservation areas with an appraisal that has been reviewed within the previous 5 years (EH could set a period)	Draft notes for all areas, with 6 complete drafts.		1 a year	1 a year	Additional funding for map preparation needed.	
f. % of planning applications for which archaeological investigations were required prior to approval	Awaiting data					

**Sustainability issues/problems/opportunities:**

The historic environment is as fragile as it is precious; it is not renewable. A failure to protect it and sustain it risks losing permanently not just the fabric itself, but the history of which it is the visible expression. It is therefore essential that decisions taken have regard to any potential impact on the physical fabric that constitutes our heritage.

The full potential of the historic environment needs to be realised. The historic environment can play an important role in wider sustainability issues: such as combating social exclusion through lifelong learning and volunteering, however the need to ensure accessibility to take advantage of this potential is key, so the need to remove physical (and other) barriers is a concern to be

addressed. The historic environment can also be important as an economic asset if skillfully harnessed; opportunities exist to promote sensitive re-use of historic and culturally important buildings to achieve these aims e.g. Old Town Hall, Reigate.

Although Heritage Open Days have been successfully held in the Borough over the past few years, the absence of a Borough museum continues to be an issue for many people as access to both Holmesdale Natural History Museum and the Priory Museums are restrictive; Reigate and Banstead remains the only Surrey district without a public museum. The considerable demand for access to the Borough's heritage sites is indicative of the latent potential for tourism.

The future state of the historic environment will be influenced by pressure from new development in the borough. Greater densities within towns such as Reigate will have an impact on the overall historic setting. Conservation area designations and listed building designations will go some way to reducing the impacts of new development, but the overall setting may be impacted if care is not taken in designating areas for growth. The likely future state of historic parks and gardens will also be influenced by an increase in footfall and pressures created from areas of the borough with less recreation space. The Landscape and Townscape Character Assessment indicates which areas are more sensitive to change and this should be guide any development at a scale likely to impact on the historic setting of an area.

### **Summary:**

- No grade 1 or 2\* listed buildings are presently at risk
- The number of unauthorised works in Conservation Areas are low due to effective enforcement
- Heritage Open Days are increasingly well patronised, however there is still no publicly owned or funded museum in the Borough
- There is a latent demand for better access to the Borough's heritage sites, with potential for harnessing tourist improvements
- Heritage sites and landscapes need to be adapted so as to withstand the changing climate

### **Key Decision Aiding Questions:**

- ❑ Will the option conserve and enhance the natural beauty of an AONB?
- ❑ Will the option continue to protect and/or enhance the Borough's cultural assets?

- ❑ Will the option improve equitable access to the Borough's cultural assets?
- ❑ Will the option promote sensitive re-use of culturally important buildings, where appropriate?
- ❑ Will the option increase equitable access to the urban fringe?



## Transport and accessibility

**SA objectives:** To improve accessibility to all services and facilities;

To reduce the need to travel, encourage sustainable transport options and make the best use of existing transport infrastructure.

### Summary of issues for Reigate & Banstead

- Many major routes and town centres through the borough can experience congestion during peak hours
- Traffic modelling work has been carried out for Redhill

### Overview

The Borough plays host to some of the busiest roads in the UK. Average traffic flows are about twice the national average; unsurprisingly traffic and transport related problems consistently top the list of residents' concerns. The environmental consequences of road traffic are also a matter of concern and can result in increased noise, carbon dioxide and air pollution, as well as having an impact in terms of visual intrusion, severance and reduced road safety for all road users. By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, planning can help to reduce the need to travel and reduce the length of journeys.

The National Planning Policy Framework (NPPF) (2012) states that "Planning policies should aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities" and "The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel". The NPPF also goes on to state that "Local Authorities should seek to improve the parking in town centres". The main thrust of the policy approach set out in the NPPF is to give people a choice in how they travel, but also to minimise the need to travel.

Surrey Local Transport Plan 3 (LTP3) (April 2011) has the following objectives:

- Effective transport: To facilitate end-to-end journeys for residents, business and visitors by maintaining the road network, delivering public transport services and, where appropriate, providing enhancements.
- Reliable transport: To improve the journey time reliability of travel in Surrey.
- Safe transport: To improve road safety and the security of the travelling public in Surrey.
- Sustainable transport: To provide an integrated transport system that protects the environment, keeps people healthy and provides for lower carbon transport choices.

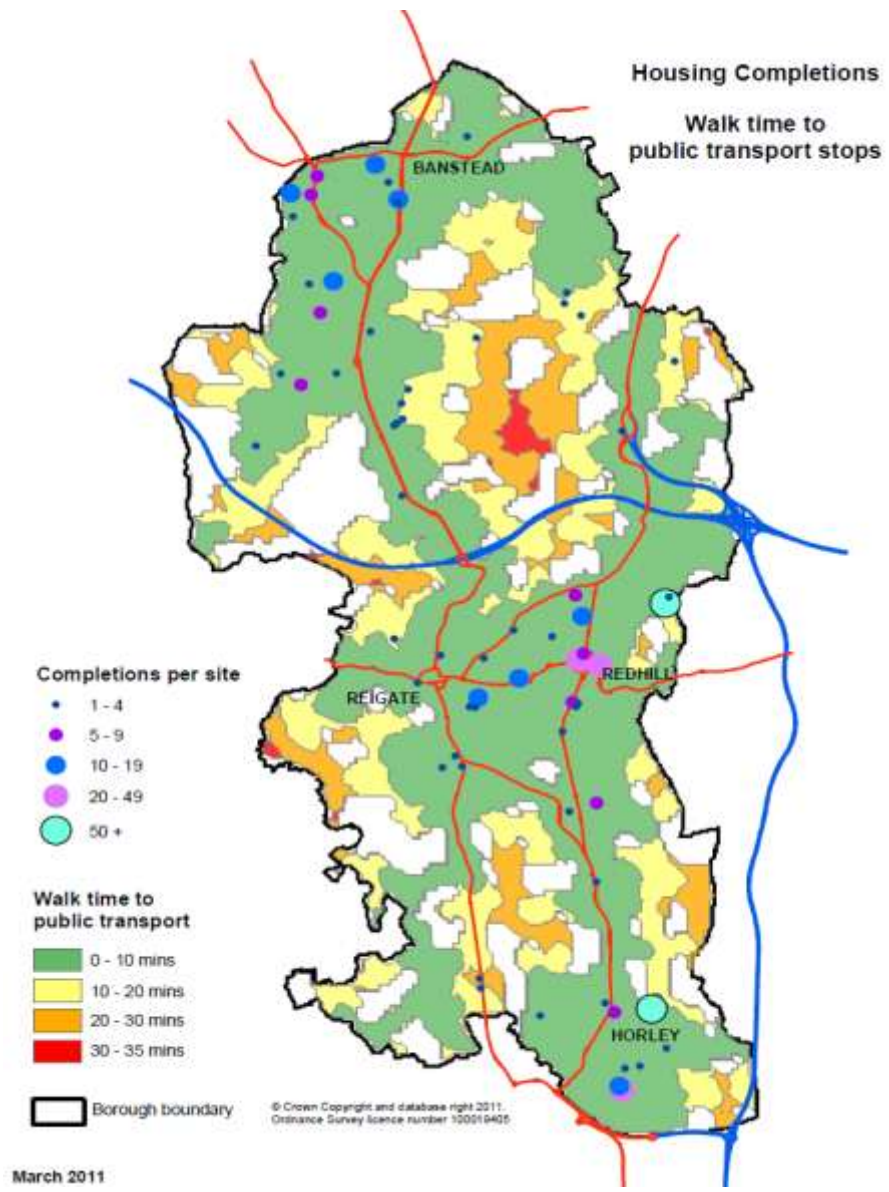
LTP3 has the indicator 'Average journey time per mile during the morning peak'. This is calculated as an average across the monitored routes and measures the difference in time by traffic to travel the route during the rush hour compared with uncongested conditions. The major inbound route in Redhill/Reigate is a monitored route and shows that 2008/09 data is that it takes each vehicle an extra 3 minutes and 22 seconds per mile to travel one of the monitored routes compared with off-peak conditions. The target set by SCC is that there should be no increase in average journey time as a result of congestion on key routes from 2008/09 levels. Data for this is provided to SCC the Department of Transport on an annual basis.

Major transport modelling has been carried out for Redhill as it is a main location for development within the borough. Traffic improvements have been identified that have been shown to improve congestion and journey times, such as making a section of the one-way system two-way, and encouraging cars to approach the Lombard Roundabout from two lanes. There has also been modelling work done to incorporate sustainable transport modes and pedestrian accessibility.

The significant inter-relationship of traffic with other sustainability objectives means that moving this objective forwards is key to progress in other areas.

Ensuring that residential developments within the borough are located within areas which have access to public transport services is a key consideration for promoting sustainable and self reliant communities. Directing development towards locations with good accessibility is essential in promoting alternative travel choices. For this purpose, the Council monitors the location of newly completed residential dwellings with respect to local bus or Fastway stops and train stations.

Of the 488 gross housing completions during the period (1 April 2010 to 31 March 2011) 98.5% were located within 1,200m (15 minutes walk) of a public transport stop.



## Indicators

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
A. Peak period vehicle journey time	The major inbound route in Redhill/Reigate 2008/09 - it takes each vehicle an extra 3 minutes and 22 seconds per mile 12 to travel the route compared with off-peak conditions		No increase in average journey time as a result of congestion on key routes from 2008/09 levels			SCC LPT3 Indicator
b. Proportion of travel to work by mode	2001	2001 Surrey		Update when census 2011 data available		Census
▪ Car	64.3%	64.5%				
▪ Rail	11.7%	10.6%				
▪ Bus	2.2%	2.3%				
▪ Motor cycle	1.2%	1.2%				
▪ Bicycle	1.6%	2.2%				
▪ Walking	8.4%	8.0%				
▪ Other	0.4%	0.5%				
▪ Works at home	10.1%	10.7%				
c. Access to healthcare			No increase in average travel time in			SCC LTP3 Indicator

Travel time to nearest GP by public transport or walking			any of the boroughs in Surrey. Baseline to be determined.			
d. Carbon reduction from road transport			10% reduction in absolute emissions by 2020 increasing to 25% reduction by 2035 on 2007 levels of 2,114 k tonnes (1.9 tonnes per capita)			SCC LTP3 Indicator
e. Household transport	2001	2001 Surrey		Update when census 2011 data available		Census data
▪ Percentage of households without a car / van	14.9%	14.0%				
▪ Percentage of households with 1 car / van	41.9%	40.6%				
▪ Percentage of households with 2 or more cars / vans	43.3%	45.4%				

**Sustainability issues/problems/opportunities:**

High levels of car reliance have continued to be a factor in the social exclusion of the 14.9% of families in the Borough who have no access to a car. It has also fuelled “hypermobility”, with its tendency to undermine communities by reducing social interaction.

The effect of a growing car culture, amongst other factors, is having a more insidious effect on quality of life issues, with childhood obesity in the area a recognised problem; unsurprisingly there is considerable alarm about the future health problems being caused by the increasing level of inactivity in young people in particular.

Cycling and walking can provide a practical, genuine and healthy alternative to car travel, particularly for shorter distance trips. The barriers to improved travel choice can often be in the detail e.g. the location, number and quality of cycle parking in new development. The general road safety environment in residential areas can also be improved by the designation of 20mph zones/home zones.

Bus and rail travel is the most realistic alternative to car travel for medium and longer distance journeys. However, there will be increasing demands on these services as a result of the new growth expected in the Borough.

Rail services have been eroded in recent years due to capacity constraints: the Victoria-Brighton rail line is at capacity and any move to increase this capacity may require the safeguarding of land. The operators' priority of serving Gatwick has also meant that Redhill has lost direct off-peak services to the City of London and Brighton; Reigate is without a frequent direct service to London. The North Downs rail line similarly needs to be enhanced between Gatwick Airport and Reading, via Redhill; trains could very usefully serve Horley to provide a much needed Horley-Reigate service. The Fastway guided bus service became operational from Crawley to Horley in August 2005, and was extended northwards to Redhill in 2008 (funded by New Growth Points grant). However, the general dilemma regarding the lack of a comprehensive bus service has led to the introduction of Demand Responsive Transport through a multi-agency partnership (although this does not cover the whole of the Borough).

The success of FastWay proves the value of bus priority measures, the absence of which creates ongoing problems for the efficiency and effectiveness of other bus services which are delayed in traffic.

### **Summary:**

- High car ownership and use conflicts with the achievement of many other Sustainability Objectives e.g. improvements in health; reducing social exclusion.
- Inconsiderate parking is causing a nuisance to local neighbourhoods and interfering with other travel modes
- Cycle and pedestrian routes need to be identified within LDF
- Railway network is strained
- Bus are underutilised; some evening and Sunday services have been cut
- Fastway has been extended from Crawley to Redhill
- Traffic contributes to the poor air quality
- Car clubs reduce the need for car ownership

**Decision aiding questions:**

- ❑ Will the option reduce congestion?
- ❑ Will the option reduce the need to travel, especially by car/lorry?
- ❑ Will the option reduce the need for car ownership?
- ❑ Will the option increase walking/cycling levels?
- ❑ Will the option help provide walking/cycling/public transport infrastructure?
- ❑ Will the option be accommodated within the existing public transport constraints?
- ❑ Will the option reduce pollution from traffic?
- ❑ Will the option reduce the need for road freight?

## Climate Change

**SA objective:** To ensure that the borough adapts to the impacts of the changing climate

### **Summary of issues for Reigate & Banstead**

- The borough will be susceptible to heat island effect in urban centres such as Redhill
- The borough's Green Infrastructure Strategy will be key in mitigating the effects of climate change

### **Overview**

UK climate projections (UKCP09) provide projections that can be used to help decisions on adaptation. The projections give a range of probability levels from 10 – 90% and have been made for 3 emissions scenarios, low, medium and high. We need to plan for a range of impacts including flooding (covered in the flooding section), heatwaves and urban heat island effect, storms, water shortages and secondary impacts that may be caused by the change in climate such as subsidence and civil unrest. There are a number of design measures that can be introduced to increase resilience to climate change; the borough Green Infrastructure Strategy will be particularly important in enabling adaptation.

### **Legislative context**

**Localism Act 2011:** The various provisions within this Act can be used to implement action on climate change. Neighbourhood Development Plans and Neighbourhood Development Orders can be used for community action on climate change and the duty to co-operate is important in tackling cross-boundary issues, adaptation and mitigation.

**Renewable Energy Directive 2009:** In response to EU Directive 2009/28/EC on the promotion of the use of energy from renewable sources, the UK is committed to sourcing 15% of its energy from renewable sources by 2020. Application for renewable energy plants of fewer than 50 megawatts will be decided by Local Authorities. If the UK is to meet its energy target then LAs will need to engage in identifying and approving appropriate renewable energy development.



Climate Change Act 2008: This Act introduced a statutory target of reducing CO2 emissions to at least 80% below 1990 levels by 2050, with an interim target of 34% by 2020.

Planning and Compulsory Purchase Act 2004 and the duty on mitigation and adaptation: There is a legal duty within section 19 of this Act, as amended by the 2008 Planning Act, to ensure that, taken as a whole, plan policy contributes to the mitigation of and adaptation to climate change. Section 10 paragraph 94 of the National Planning Policy Framework (NPPF) requires that policies and decisions are in line with the objectives and provisions of the Climate Change Act 2008 and support the National Adaptation Programme.

The mitigation of climate change is covered within the 'Energy' section. There is also a separate section on 'Flood Risk'.

### Indicators

<b>INDICATOR</b>	<b>Quantified data (for RBBC)</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
Homes damaged by subsidence	Awaiting data					Insurance companies
Buildings damaged by extreme weather events	No data at present					
Flooding	See section on flooding					

### **Sustainability issues/problems/opportunities:**

Climate Change scenarios for the South East have been developed by the UK Climate Impacts Programme. These show that (for high greenhouse gas scenarios) by 2050, the region will have to prepare itself for major extremes of temperature (+2-3degC); a reduction of summer rainfall of 30%; and increases of winter rainfall of 15%. These extremes are estimated to double by 2080.

The occurrence of extreme weather events (heat waves, heavy rainfall, drought and strong winds) is likely to cause significant impacts, as existing infrastructure has been designed based on historical climate conditions, rather than the predicted weather patterns. While it will be necessary to adapt existing buildings and infrastructure retrospectively, when addressing new build, these issues should be planned for now.

In developing buildings and communities, it is important to plan for the climate throughout the design life of the development (50-70+ years), especially with regard to its location and design. Climate Change could otherwise mean that the development proves to be too uncomfortable to live in, too expensive to run and maintain, and affordable insurance may no longer be available; climate-proofed development could be a better investment and command a higher price. A whole-life costing approach to new development should be embraced; running costs are an important facet of affordability. Climate proofing also needs to be considered in other less obvious ways e.g. subsidence risk on clay soil; high wind speeds.

It is important that decisions made now should not constrain future options to adapt, so as to mitigate increasing vulnerability. There are many “no regret” actions that can be taken. Failure to deal with higher temperatures (that could also be exacerbated by the urban heat island effect) could result in increased heat stress, with the likely consequence of increased mortality rates, as seen in the hot summer of 2003. Site layout and tree cover can help ameliorate many of the extremes of the urban microclimate, but the limits of natural ventilation to deal with extremes must be appreciated: active cooling systems using heat exchange to the ground need to be considered.

Water resources will be reduced as rainfall becomes more seasonal. Increasing storage capacity at every scale could mitigate this reduction. Drier summers will also tend to create more impermeable ground, which linked with higher intensity rainfall events, risk increases in flash flooding. The traditional drainage/sewerage systems (underground pipes) can be quickly inundated in these situations, risking foul water flooding to buildings and rivers with the concomitant risks to human health and biodiversity.

Design solutions (e.g. rainwater harvesting; green roofs; porous surfaces) that will reduce run-off rate and prevent rainwater from entering watercourses should be part of a necessary solution.

Other Sustainable Drainage Systems (e.g. swales) can lead to the creation of amenity and wildlife enhancements (as well as

helping in the control of pollution); careful design can bring about multiple benefits.

The extreme range of weather events that are likely to befall the Borough in the future means that it is essential that services are able to be maintained in flood, storm, drought or heat wave; infrastructure resilience is essential to reduce risks (e.g. electricity sub-stations/access routes at risk of flood; pylons/phone lines at risk from storm; pipes vulnerable to wetting/drying cycles). Furthermore, extreme weather events will undoubtedly test the ability of health/emergency, emergency planning services to cope. An increased emphasis on local self-sufficiency in basic resources (e.g. energy; water) will help in preparing for these eventualities.

Biodiversity will also be impacted by the changing climate conditions. These impacts need to be pre-empted when planning nature conservation, traditional landscaping (e.g. village greens; golf courses) and tree planting (e.g. beech trees are a threatened species in the South East). Insect numbers are also likely to increase due to the mild winters and warm summers. These will include house-pests such as cockroaches, fleas and mites and even termites.

#### Impacts on infrastructure: the basics

Possible future impacts on:	Increased and more intense rainfall, Flooding, Sea level rise, coastal erosion	Stronger winds, storms	Drought/heat/subsidence
Transport	Roads/rail/footpaths/bridleways washed away or made temporarily unusable; increased demand for aggregates etc to rebuild.	Transport accidents, obstructions on roads/rail lines.	Damage to road and rail structures.
Energy	Power stations, substation, transformers in coastal areas or floodplains at risk; buildings that are not flood proof lose power.	Damage to pylon lines and transmission equipment.	Sudden increased demand for air conditioning and cooling causing outages and transformers to overheat.
Water and sewerage Networks	Sewers back up, water becomes contaminated; sewage and water treatment plants in coastal areas or floodplains at risk.		Water shortages. Increased demand for resources etc. Pipes damaged by subsidence.
Telecommunications	Buildings that are not flood proof lose telecommunications.	Damage to masts, towers and equipment.	
Emergency services	Emergency services cannot function; increased need for emergency services.	Increased need for emergency services.	Increased heat-related health problems.

### **Summary:**

- Climate change is predicted to cause mean temperatures to rise by up to 3.5 deg C by 2050; and by 4.5 – 5.0 deg C by 2080
- The frequency of extreme weather events will intensify
- Housing and infrastructure needs to be built so as to withstand these extremes: flash floods, heat waves, drought, high winds
- The need to plan for cooling infrastructure will be key to maintaining human health
- New development should help address the causes of climate change and may even become net producers of energy
- Hard surfacing risks adding to flood risk elsewhere
- Biodiversity is at risk. The predicted weather patterns need to be considered fully when planning to protect and enhance biodiversity
- Increasing “self sufficiency” will help withstand both predicted and unforeseen risks
- Future flexibility to adapt should not be constrained

### **Key Decision Aiding Questions:**

- ❑ Will the option reduce the quantity of greenhouse gases released into the atmosphere?
- ❑ Will the option mean that “cradle to grave” energy is reduced?
- ❑ Will the option help in protecting the community from the extremes of climate change?
- ❑ Will the option increase the ability of the community to become more self sufficient, so as to withstand major weather events?
- ❑ Will the option reduce the opportunity to adapt in the future?

## Economy

**SA objectives:** Provide for employment opportunities to meet the needs of the local economy. Support economic growth which is inclusive, innovative and sustainable.

### **Summary of issues for Reigate & Banstead**

- The borough performs below the national and county for entrepreneurial start-ups
- Small businesses are growing slower than Surrey comparators
- Reigate & Banstead has the lowest one-year survival rate for 2008 businesses start-ups in Surrey
- Unemployment is relatively low

### **Overview:**

The Financial & Business Services sector is the largest employer within Reigate & Banstead, accounting for 33% of full time equivalent (FTE) employment. Public services provide 29% of FTE employment within the borough whilst Distribution, Hotel & Catering accounts for 20%. Of the three key sectors, the Financial & Business Services sector has the highest levels of productivity, contributing more output compared to number of jobs.

**Employment breakdown by sector:**

<b>Sector</b>	<b>Employment split (FTE)</b>
<b>Financial &amp; Business Services</b>	33.4%
<b>Other (mainly public) Services</b>	28.8%
<b>Distribution, Hotels &amp; Catering</b>	19.8%
<b>Construction</b>	9.0%
<b>Transport &amp; Communications</b>	3.4%
<b>Engineering</b>	2.3%
<b>Other Manufacturing</b>	2.0%
<b>Mining &amp; Utilities</b>	0.8%
<b>Agriculture, Forestry &amp; Fishing</b>	0.4%
<b>Metals, Minerals &amp; Chemicals</b>	0.3%

In terms of number of registered businesses, the three largest sectors (UKSIC 2007) are:

- Professional, scientific & technical: 1,120
- Construction: 880
- Business administration and support services: 540

### **Business size**

Micro businesses (1-9 employees) make up more than 91% of the total number of VAT registered businesses within the borough, largely similar to the corresponding figure for Surrey. Only 1.2% of the borough's businesses are classed as medium sized (50-249 employees) compared to 1.4% across Surrey as a whole.

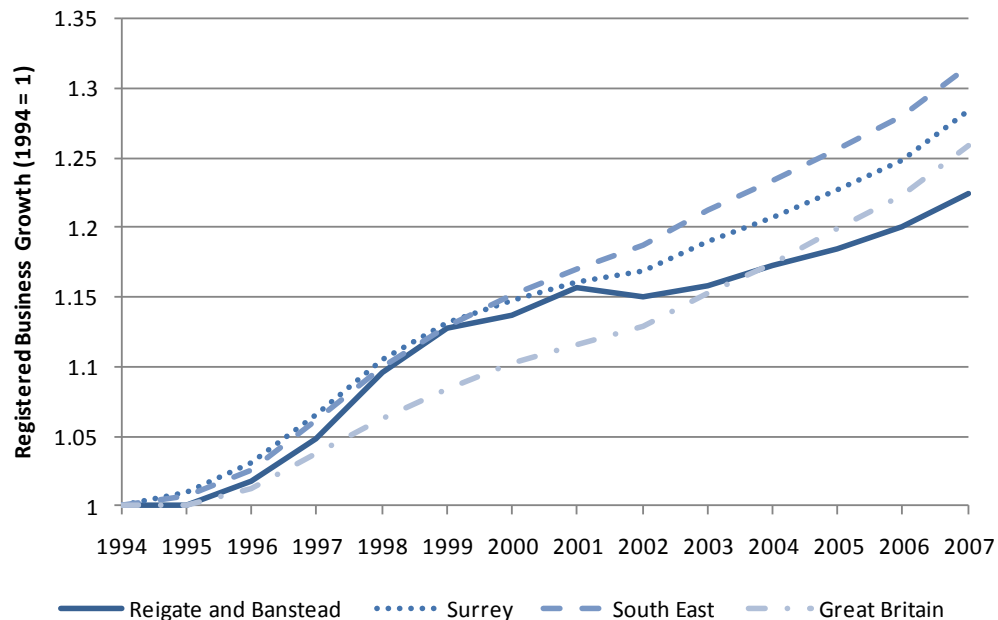
The table below provides some more information about some of the key major employers within the borough:

<b>Organisation</b>	<b>Business Line</b>	<b>Location</b>
<b>Toyota</b>	Vehicle manufacturing	Burgh Heath & Salfords
<b>AXA Insurance</b>	Insurance	Reigate
<b>Esure</b>	Insurance	Reigate
<b>Pfizer</b>	Pharmaceuticals	Walton on the Hill
<b>Legal &amp; General</b>	Finance, Investment & Insurance	Kingswood
<b>Total GP</b>	Gas & Petroleum	Redhill
<b>Osborne</b>	Construction & Engineering	Reigate
<b>Canon</b>	Digital technology products	Reigate
<b>Balfour Beatty</b>	Construction & Engineering	Redhill
<b>Towers Watson</b>	Professional & Business Services	Reigate
<b>Kimberley Clark</b>	Personal & Health Care Products	Reigate
<b>Santander</b>	Banking & Finance	Redhill
<b>AON</b>	Insurance	Redhill

## **Business Growth**

In 2010, there were 5,605 VAT registered businesses in Reigate & Banstead and 6,600 business units.<sup>33</sup> Growth in the number of registered businesses since 1994 is below comparator areas. The number of businesses in the borough grew by 22.5% compared to 28.4% in Surrey and 31.6% across the South East. Stock growth in the borough to 2007 was on a par with comparator areas until 2000/01 but has steadily fallen behind since then. The methodology of this statistical release was changed in 2008 and as such, long term comparison prior to 2007 is not possible.

### Growth in VAT Registered Businesses (1994-2007)



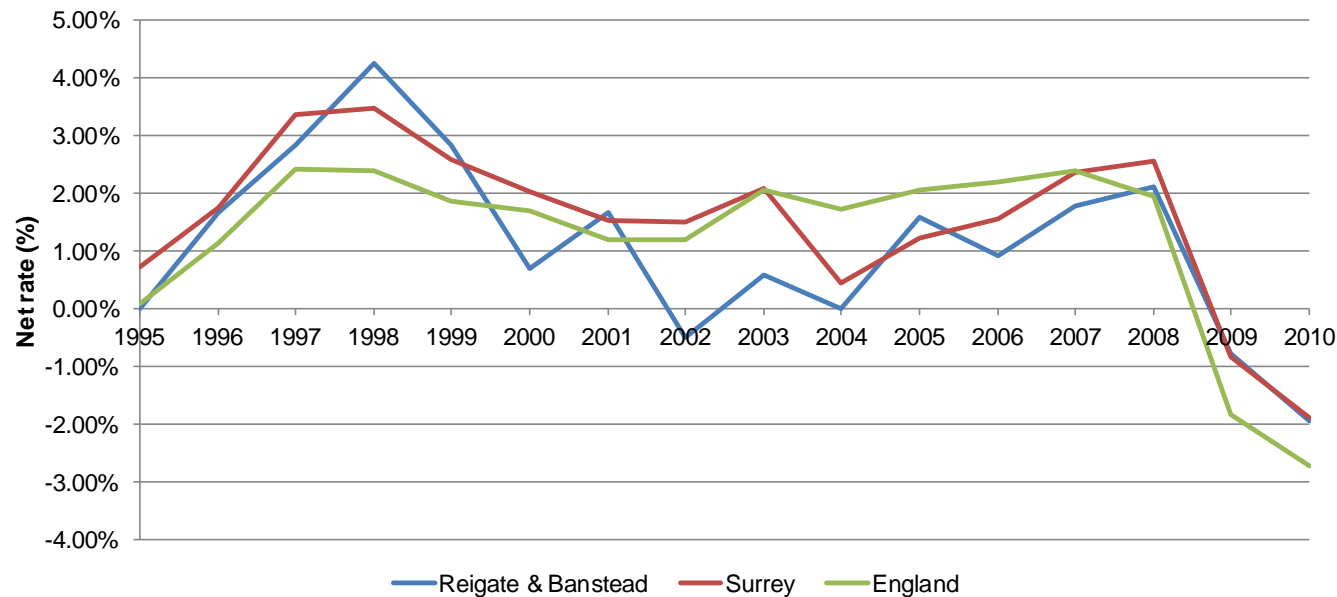
<sup>33</sup> Office of National Statistics from Inter-departmental Business Register (IDBR)



### **Business start-up and survival rate**

Due to the impact of the ongoing economic uncertainty, the net start-up rate in the borough in 2010 was -1.94%, slightly worse than the Surrey average of -1.84% but better than the national rate of -2.72%. The long term trend also demonstrates that, by and large, the borough performs below the national and county in terms of entrepreneurship (as identified by the net start up rate).

### **Net Annual Start-Up Rate (1994-2010)**



Businesses survival rates in the borough are strong with performance slightly better than the county average, particularly for longer term survival. Based on business which started in the borough in 2005, 97.5% were still in existence after one year. The five year survival rate in the borough is almost 50% compared with 44% across Great Britain. The two tables below show that the long term survival rate of businesses which started in 2005 is slightly better than those which started in 2004

### New Business Survival Rate (2004 Births)

	1 Year %	2 Year %	3 Year %	4 Year %	5 Year %
<b>Reigate and Banstead</b>	94.4	81.0	68.3	57.0	49.3
<b>Surrey</b>	94.5	81.2	68.1	58.0	50.8
<b>South East</b>	94.5	80.2	66.9	56.4	48.7
<b>Great Britain</b>	94.2	78.7	65.2	54.6	46.7

Source: ONS, 2009

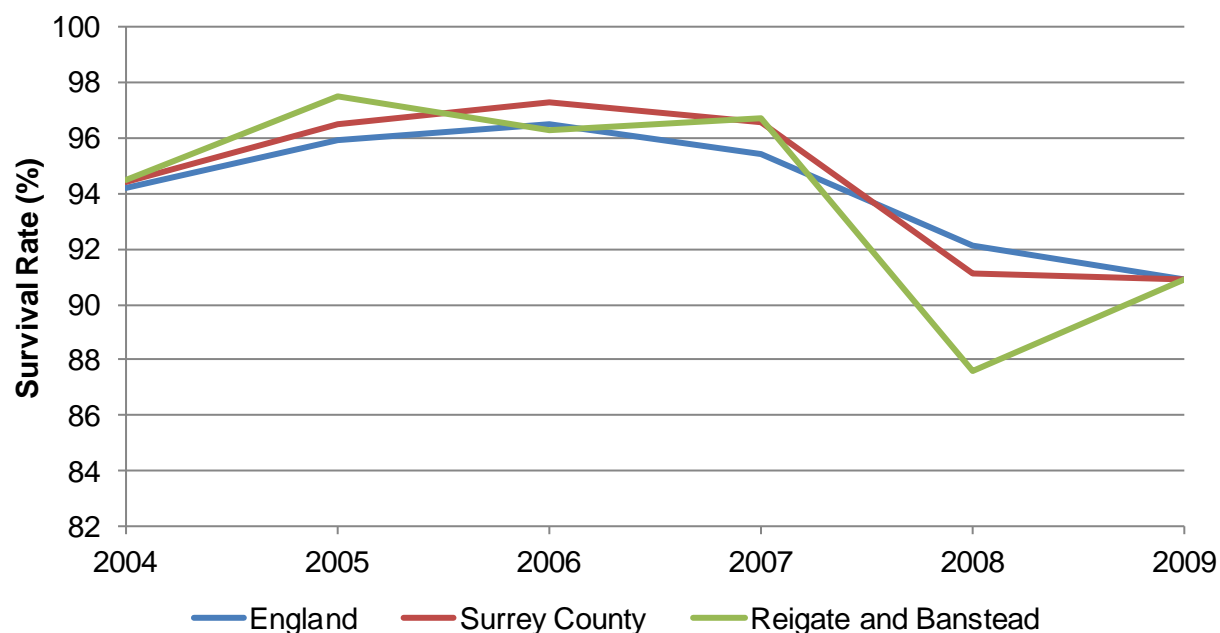
### New Business Survival Rate (2005 Births)

	1 Year %	2 Year %	3 Year %	4 Year %	5 Year %
<b>Reigate and Banstead</b>	97.5	82.7	69.3	60.0	49.8
<b>Surrey</b>	96.5	81.8	67.8	58.2	49.0
<b>South East</b>	96.2	81.7	67.4	56.4	46.8
<b>Great Britain</b>	95.9	79.9	64.6	53.7	44.1

Source: ONS, 2010

The chart below demonstrates the significant impact of the economic downturn on business survival, charting the one year survival rate for new start-ups nationally, across the county and in Reigate & Banstead. A clear drop in the one-year survival rate is apparent for businesses which started in 2008; however, the drop is far more profound for Reigate & Banstead (87.6% survival) suggesting new start-ups in the borough fared worse than those elsewhere. In fact, of all of the Surrey districts, Reigate & Banstead has the lowest one-year survival rate for 2008 businesses.

One year survival rate for new start-ups (year of start)



**Small Business Growth**

Between 2007 and 2008, small businesses in Reigate & Banstead grew at a slower rate than most comparator districts within Surrey. Of the total number of businesses with less than 50 employees, 12.2% showed an increase in employment during the period, whilst the Surrey average was 13.3% and the Great Britain average was 14.4%.

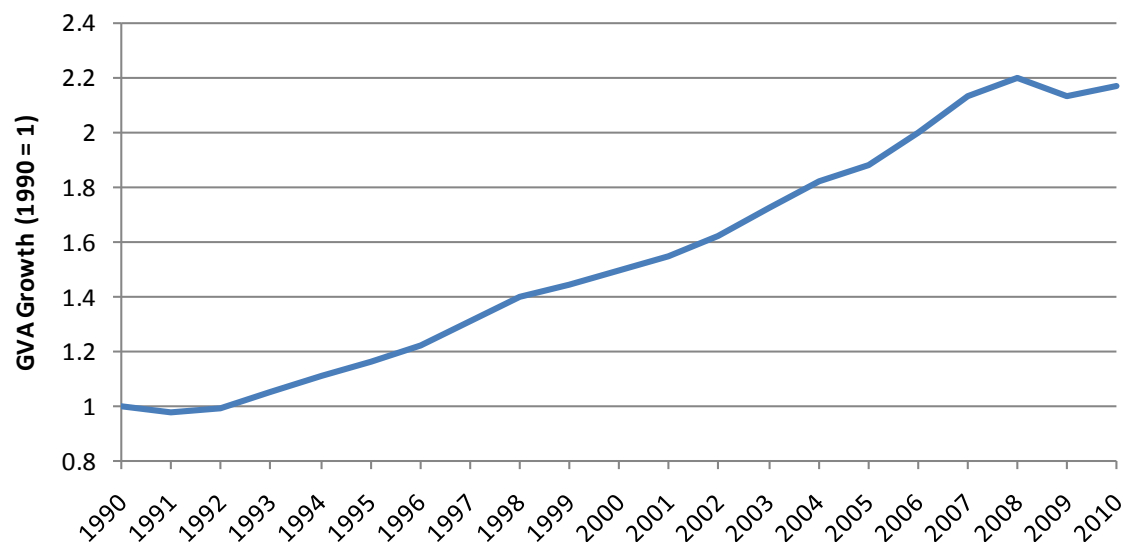
### Small Business Employment Growth

	Businesses with <50 employees (2007)	Number showing employment increase (2008)	% showing employment increase
<b>Great Britain</b>	1,937,410	278,020	14.4
<b>South East</b>	322,375	43,870	13.6
<b>Surrey</b>	51,145	6,820	13.3
<b>Reigate &amp; Banstead</b>	5,465	665	12.2

### Gross Added Value

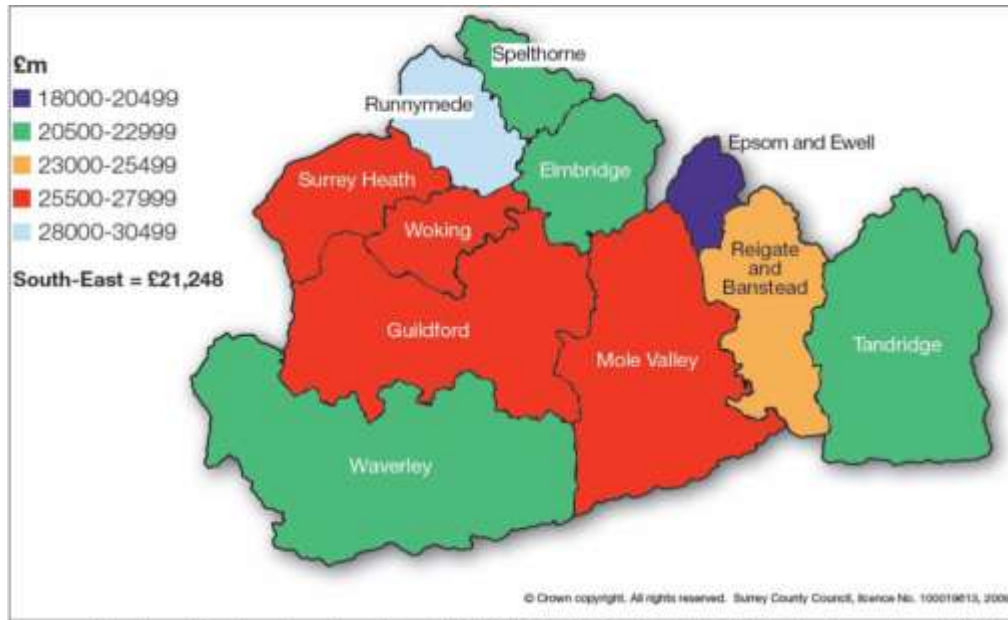
Gross Value Added is a measure of the value of services and goods produced in a particular area. Levels of output in 2010 in Reigate & Banstead stand at £3,458 million (Experian, 2010). Since 1990, the borough's GVA has shown steady growth, increasing by 117% over the period to 2010.

### GVA Growth (1990-2010)



Reigate & Banstead has similar levels of productivity to Surrey and the South East region: GVA per employee for Reigate & Banstead was £42,257 compared to £41,293 in Surrey and £43,675 in the South East (Economic Market Assessment, 2006). Of the 11 Surrey districts, Reigate & Banstead is 6<sup>th</sup> in terms of GVA per capita (Surrey LEA, 2010).

## Surrey GVA per Capita



Financial & Business Services contributes almost half of the borough's total GVA, significantly more than any other sector. The two other key sectors in terms of output are public services and distribution, hotels & catering. In terms of economic competitiveness, Reigate & Banstead ranks 37<sup>th</sup> out of the 379 UK districts and boroughs in the UK Competitiveness Index, up from 38<sup>th</sup> in 2009: Of the 11 Surrey districts, Reigate & Banstead ranks 8<sup>th</sup> (no change compared to 2009).

### **Workforce, Education & Skills**

This section includes a range of indicators and information relating to the workforce in Reigate & Banstead. The issue of employment and job prospects has become increasingly important amongst local residents with 21% reporting this as an important factor in making somewhere a good place to live.

However, the percentage of residents who feel that employment/job prospects improving in Reigate & Banstead has jumped from 9% in 2008 to 20% in 2011<sup>34</sup>. Unemployment levels can be seen as an indicator of economic strength and coupled with this, information regarding the skills levels and educational attainment of the current and emerging workforce will help us understanding the capacity of the local workforce to support business growth, particularly within knowledge intensive sectors.

### **Unemployment**

There are a number of measures used to identify levels of unemployment within the working age population (16-64), largely based around claimant rates for different types of benefits.

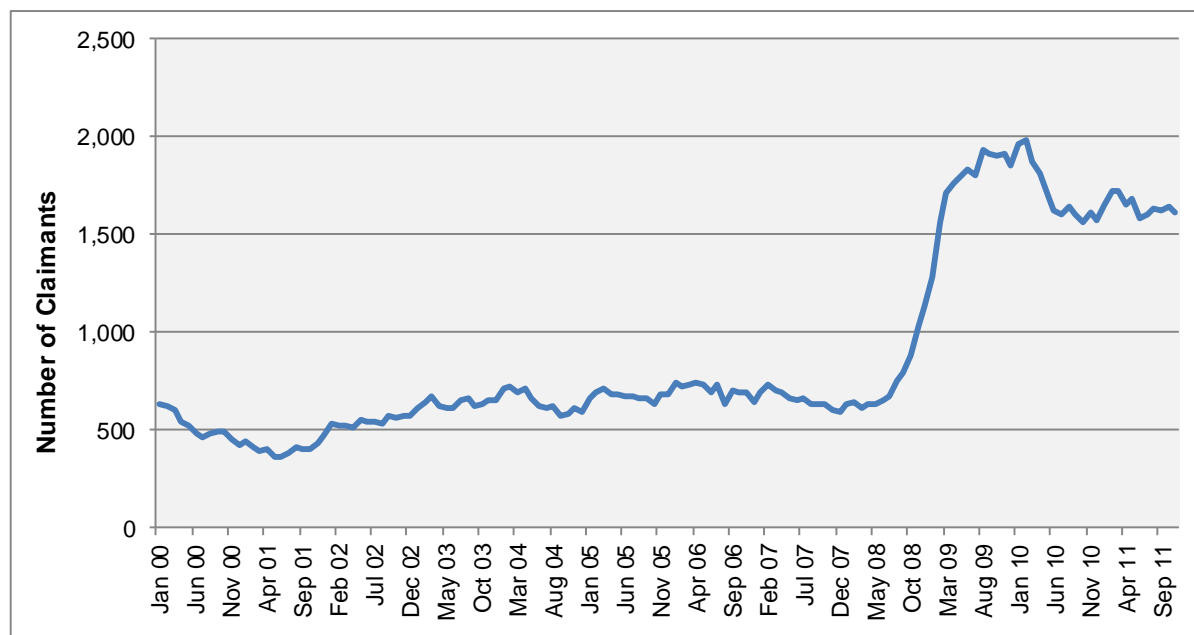
One of the most common measures is the number or rate of Job Seekers Allowance Claimants. From 2000 to 2008, the number of claimants in the borough was largely stable, fluctuating between 400 and 600 people. However, with the onset of the economic downturn and subsequent recession, the number of claimants rose steeply from late 2008. Over an 18 month period between March 2008 and August 2009, the claimant rate more than trebled from 613 claimants to 1,938.

The number of claimants in Reigate & Banstead reached a peak of 1,985 in early 2010 but reduced slightly in the later months of the year. Since then, the level of claimants has largely stabilised and in November 2011 stood at 1,613. However, this remains 2.7 times the figure seen in December 2007.

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<sup>34</sup> Residents Survey 2011 and Place Survey 2008

## JSA Claimant trend (2000 – 2011)



Source: ONS available through Nomisweb (2011)

By both national and regional standards, the borough's claimant rate is low. At 1.8% of the working age population it is less than half of the national average (3.8%) and significantly lower than the South East average of 2.8%. The table below demonstrates that the claimant rate in the borough is largely comparable to that of other districts in Surrey.



### Job Seekers Allowance claimants compared to Surrey districts

	Number of Claimants	Claimant Rate
<b>Elmbridge</b>	1,159	1.4
<b>Epsom and Ewell</b>	763	1.6
<b>Guildford</b>	1,533	1.7
<b>Mole Valley</b>	717	1.4
<b>Reigate &amp; Banstead</b>	1,613	1.8
<b>Runnymede</b>	830	1.4
<b>Spelthorne</b>	1,311	2.2
<b>Surrey Heath</b>	948	1.8
<b>Tandridge</b>	884	1.7
<b>Waverley</b>	1,044	1.4
<b>Woking</b>	1,097	1.8

Source: ONS available through Nomisweb (2011)

However, the overall claimant rate masks some variations across the borough. In Reigate Hill, the claimant rate is less than 1%, whilst in Redhill West the rate is 3.1%, higher than the regional average.

There is also age related variation. Across the borough, the claimant rate amongst those residents aged 25-49 and 50-64 stands at 1.6% and 1.3% respectively whilst the claimant rate for those aged 18-24 is significantly higher at 4.6%.

### **Skills Levels**

A high skills base is essential to supporting businesses and driving the growth of the knowledge economy both locally and nationally. The most common measure of skills is highest qualification levels. Statistics on qualifications are collected through the Annual Population Survey (APS) and are only available at borough level. The NVQ qualifications levels correspond to the following equivalents:

NVQ1 – equivalent to GCSE grades D-G

NVQ2 – equivalent to five GCSEs at grade C or above

NVQ3 – equivalent to two A level passes

NVQ4 – equivalent to a first degree

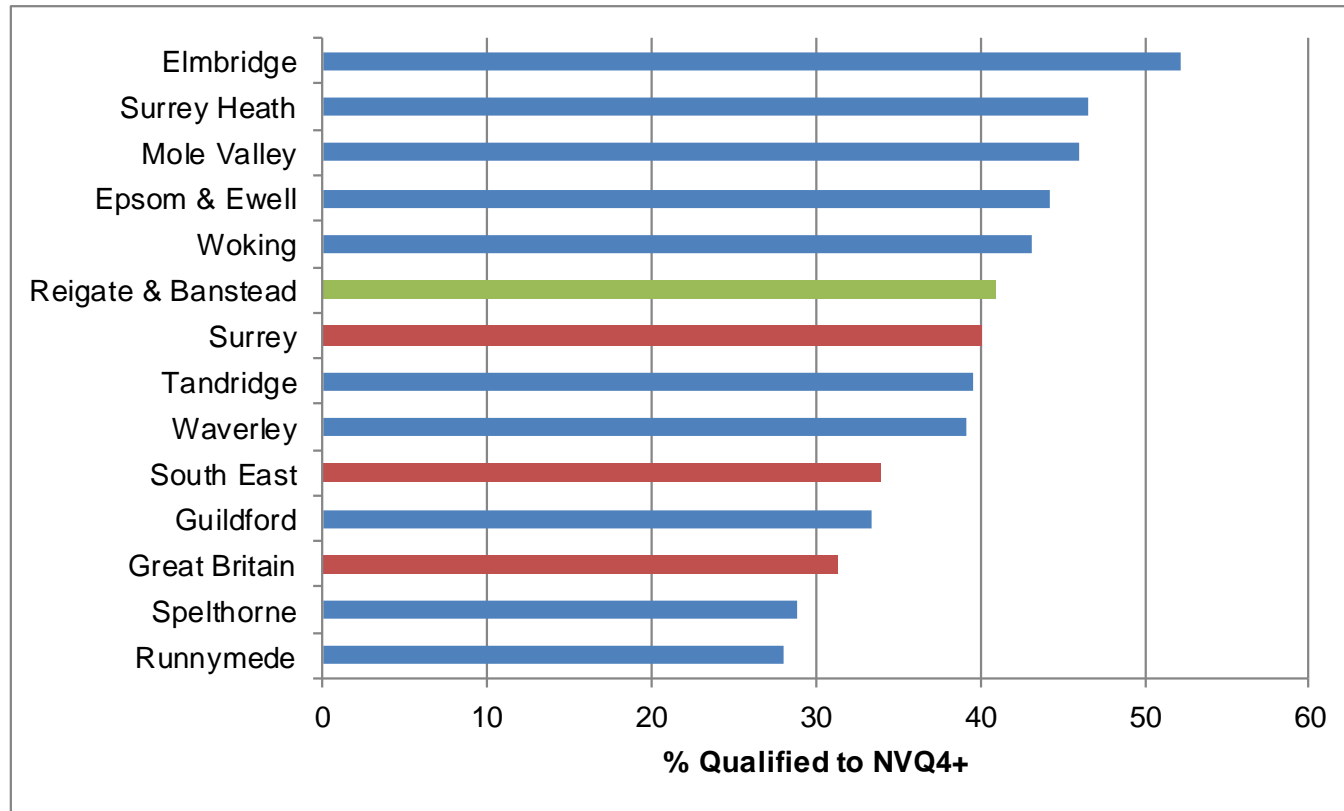
NVQ5 – equivalent to a Masters degree

The chart below shows that almost 41% of residents in Reigate & Banstead are estimated to be qualified to NVQ level 4 and above (i.e. lowest level of qualification is a degree). In this respect, skills levels are broadly comparable with the Surrey average (40%) and significantly above the national (31%) and regional averages (34%).

### **Not Entering Higher Education**

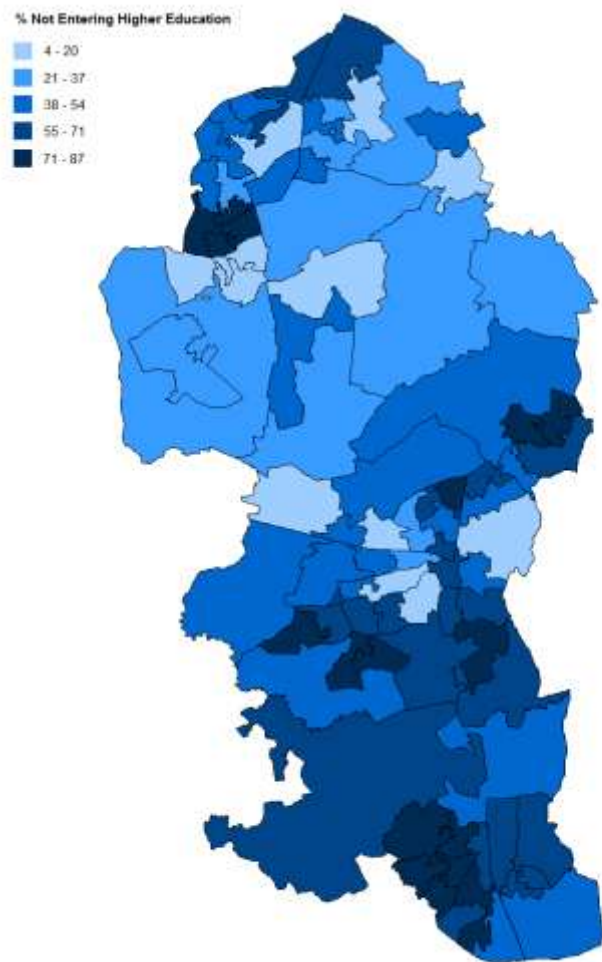
The Education, Skills & Training domain within the Index of Multiple Deprivation 2010 includes an indicator of the proportion of people not entering higher education. The level of non-entry varies significantly across the borough and there are clear pockets where non-entry is far higher. The highest levels of non-entry are seen in lower super output areas (LSOAs) in and around areas such as Preston, Merstham, Woodhatch and the west of Horley with as much as 87% of people under the age of 21 not entering higher education. On the other hand, the north of the borough generally has much greater levels of entry to higher education and in several small areas the non-entry rate is less than 10%.

Percentage of residents qualified to NVQ4+ by Surrey district



Source: Annual Population Survey 2010

Non-entry to Higher Education by LSOA



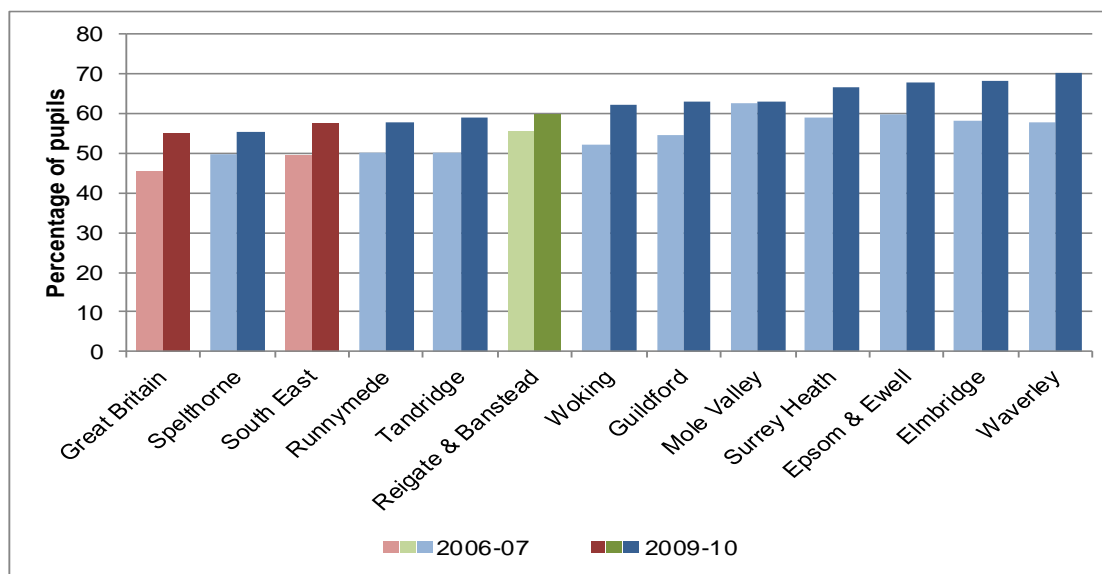
Source: English Indices of Deprivation 2010 Underlying Indicators [Map: Crown Copyright Licence: 100019405]

## GCSE Attainment

The percentage of pupils in Reigate & Banstead achieving 5 A\* - C grades at GCSE (including English and Maths) has increased steadily since 2007, up from 55% to 60% for the 2010 cohort<sup>35</sup>. However, the graph below shows that the improvement in GCSE attainment in the borough is behind that seen both regionally and nationally and is also the second lowest in Surrey (only Mole Valley has a smaller improvement but from a much better initial attainment level that of Reigate & Banstead).

The borough underperforms compared to other Surrey districts in terms of GCSE attainment and has the fourth lowest percentage of pupils achieving 5A\* - C grades including maths and English.

### Percentage of pupils achieving 5 A\*-C (Inc. English & Maths) across Surrey (2006/07 – 2009/10)

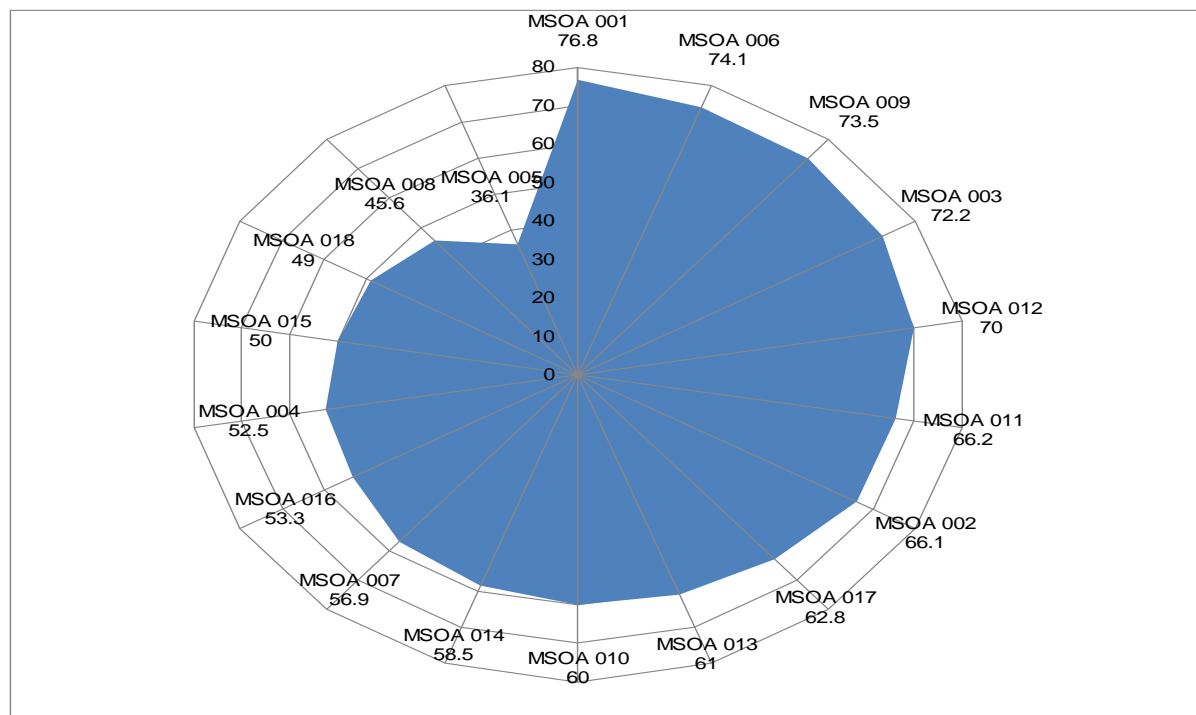


Source: Department for Education 2010

<sup>35</sup> Department for Education GCSE attainment statistics

There is a large performance gap across the borough with pupils in some areas performing significantly below the national average whilst others perform far above national averages. The chart below shows the percentage of pupils achieving 5A\* to C grades including maths and English in each of the borough's Middle Super Output Areas (MSOAs). The best performing MSOAs are Reigate & Banstead 001, located around the Nork area (77%) and Reigate & Banstead 006 in the Tadworth & Walton area (74%). Conversely, the lowest performing areas are Reigate & Banstead 005, located in the Preston area (36%) and Reigate & Banstead 008 in the Merstham area (46%).

Pupils achieving 5 A\*-C grades (Inc. English & Maths) by MSOA



Source: Department for Education 2010

## **KS1 Attainment**

At Key Stage 1 (KS1), pupils in Reigate & Banstead perform broadly similar to the national average in terms of pupils achieving 2+ in reading, writing, maths and science. In most of these subject areas, there is little variation in terms of the performance of children from different areas of the borough. However, in writing, children in the Redhill West (63%), Woodhatch (73%) and Horley Central (77%) areas of the borough perform significantly below the borough average of 84%.

## **Indicators**

<b>INDICATOR</b>	<b>Quantified data (for RBBC)</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
a. Business Growth	2010 6,600 units, 5.605 VAT registered businesses	Growth since 1994 22.5% compared with 28.4% Surrey, 31.6% South East	Increase in line with Surrey average	Increasing – but fallen behind Surrey, South East and England		In house monitoring
b. New Business Survival Rate	5 year survival rate (from 2005 – 2010) 50%	44% across Great Britain	55%	Increasing – survival rates are better for businesses started in 2005 than in 2004.		ONS
c. Small business employment growth (less than 50 staff)	Between 2007 and 2008 12.2% increase in employment	Surrey 13.3% increase Great Britain 14.4% increase	Increase in line with Surrey average	Growth – but slower than most comparator districts across Surrey		ONS
d. Job seekers claimants by ward	1.8% across borough Reigate Hill >1% Redhill West 3.1%	1.8% Roughly comparable with Surrey Regional average 2.8%	To reduce variations between wards		Variations across borough	ONS available through Nomisweb (2011)
e. Not entering higher education	Preston, Merstham, Woodhatch	North of the borough generally has much greater levels of	Decrease variation across wards		Variations across borough	IMD 2010

	and the west of Horley 87% of people under the age of 21 not entering higher education	entry to higher education and in several small areas the non-entry rate is less than 10%.				
f. KS1 attainment - Writing	Redhill West 63% Woodhatch 73% Horley Central 77%	Borough average 84%	Increase ward variation in line with borough average		Variations across borough	Department for Education 2010

**Sustainability issues/problems/opportunities:**

Although there is a traditional view that travel, and the need to travel, will reduce if the labour demand in the Borough is sufficiently satiated by an increased supply of housing, the evidence suggests a much more complex picture driven more by economic opportunity. What is very evident is that the present daily commute to and from work by residents and employees in the borough is responsible for a significant environmental disadvantage.

Different modes of working and types of economic activity are required to move toward a more sustainable economy. Particularly, low carbon industries requiring a low input of natural resources must be encouraged.

**Summary:**

- The supply of resident labour and demand for jobs within the Borough are almost evenly balanced
- The amount of in and out commuting is increasing
- A minimum of one million kilometres are travelled each work day by people employed within the Borough
- The Borough is less self-contained i.e. fewer workers now live and work in the Borough



**Key Decision Aiding Questions:**

- Will the option have a significant detrimental effect on the financial viability of delivering future employment development?
- Will the option encourage jobs accessible to local residents?
- Will the option help maintain the supply of labour?
- Will the option encourage the provision of, and access to, lifelong learning?
- Will the option provide for the needs of the local economy?
- Will the option encourage rural diversification?
- Will the option enhance the viability of urban centres?
- Will the option enhance the vitality and attractiveness to urban centres?

## Energy Efficiency

**SA Objective:** To increase energy efficiency

### **Overview**

Energy efficiency can be related not only to its use and generation, but also in the context of security of supply, affordability and fuel poverty. Energy is used in heating/cooling buildings, providing light and hot water, powering appliances in the home and workplace, and for travel.

The promotion of energy efficiency is one of the major instruments enabling us to mitigate the causes of Climate Change. The Government's Energy White Paper states that energy efficiency alone can contribute around half of the carbon savings that the UK is likely to need by 2020.

Building Regulations have now been brought into line with the previous government's ambition that all homes will be "zero carbon" by 2016 (and commercial by 2019); Building Regulations 2013 will effectively introduce a 44% improvement in energy efficiency over 2006 Building Regulations. This has meant that the crux of the issue remains largely embedded in the existing stock.

The energy efficiency of the Borough's homes has traditionally been measured through a cyclical Housing Stock Condition Survey. In 2005 this information was supplemented by comprehensive information collected through a Home Energy Survey (supplied by 60% residents). This information indicates that the Borough's housing stock at that time had an average Standard Assessment Procedure, or SAP rating (a measure of a home's energy efficiency) of 54, which is marginally better than the national average. The proportion of the housing stock with a SAP rating of below 30 is 5.5% (compared to 9% nationally in 2001). Although some improvement has occurred in the 7 years since the survey, the number of insulation measures installed per year is still at a relatively low rate.

The Coalition Government's flagship project, the Green Deal, is being introduced in autumn 2012, the aim of which is to bring about a step-change in energy efficiency in the domestic and commercial sector.

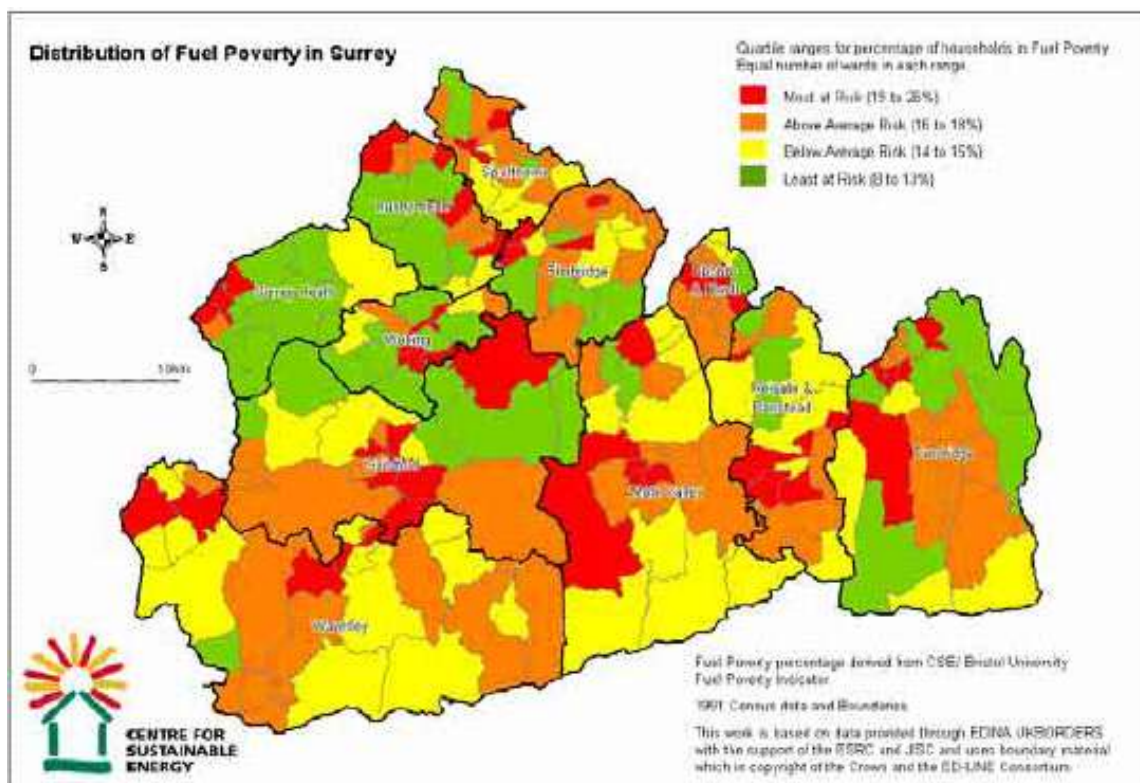
## Indicators

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Energy use per capita	This data will be captured in future by the national performance indicator, NI186	Energy ratio index (tonnes oil equivalent/£1 million GDP) 177.9 [1970]; 142.5 [1980]; 118.0 [1990]; 100.0 [2000]; 93.8 [2003]		SE, no clear trend apparent, little change since 1970.		<a href="http://www.southeast-ra.gov.uk/our_work/planning/sus_dev/irf_2004/irf_data_trends_final.pdf">http://www.southeast-ra.gov.uk/our_work/planning/sus_dev/irf_2004/irf_data_trends_final.pdf</a> <a href="http://www.dti.gov.uk/energy/inform/energy_stats/total_energy/dukes1_1_4.xls">http://www.dti.gov.uk/energy/inform/energy_stats/total_energy/dukes1_1_4.xls</a>
b. Improvement in dwelling SAP rating across district	2004: SAP 54 (all housing stock)	Average SAP rating in England (2004): 50. Regulations take effect April 2005. Structure Plan target 11 requires all new homes to be built at BRE Ecohomes 'excellent' standard by 2010.	The Government's target, by which Fuel Poverty will be eliminated, is to achieve a SAP rating of 65. The target date for this achievement is 2016	An increase of SAP rating of 2 occurred across the whole housing stock between 2003-2004.  More recent information is not yet available, but it is likely that trend is upwards.		Local authority home energy conservation officer

### Sustainability problems/issues/opportunities:

The UK residential sector needs to deliver a 60% reduction in carbon emissions by 2050 to meet the targets outlined in the Government's 2003 Energy White Paper. This represents a significant challenge that requires radical solutions. The ultimate aim would be to transform the total housing stock to the average of a "40% house" by this time (i.e. one that uses 60% less energy than at present). The savings would need to be achieved despite constraining assumptions, including the proposed increase in household numbers and smaller average household size (per capita energy consumption plummets when people live in larger households). These changes alone could lead to a 33% increase in energy demand, if nothing else alters.

New build provides the best opportunity to progress the far-reaching changes required. However, Building Regulations, which set the minimum standard are frequently viewed, and applied, as the maximum standard. Part L of the Building Regulations is presently under review and will be implemented in 2013 and will apply more stringent standards; policy needs to support and facilitate the establishment and delivery of these standards.. The existing housing stock requires a substantial programme to upgrade energy efficiency, requiring the majority of homes to have cavity wall/loft insulation and high performance doors/windows installed (at present only 15% of Reigate and Banstead housing stock have SAP values of 70 or more.) To achieve the maximum energy efficiency the existing stock should reach an average SAP of 80. A minority of homes (14% nation-wide are “unhealthy” (as defined by the Housing Health and Safety Rating System)) and may be beyond the realms of affordable improvement (although the Green Deal may yet provide acceptable solutions).



Much of the current housing stock is able to accommodate larger households than it does at present. It is estimated that 45% of owner-occupiers in England have two or more rooms above the “bedroom standard” (ODPM 2004), which is a factor in causing and compounding fuel poverty. Energy efficiency is becoming increasingly linked to the need for cooling. Eighty-three per cent of US homes are now air-conditioned and sales of air-conditioning are rising in the UK. Climate change will contribute to continued growth of air-conditioning in the UK, resulting in a destructive positive feedback cycle of hot summers that increase the demand for fossil-fuel-based cooling systems; these predictions are inevitably going to pose a challenge.

There is renewed interest in making modular, pre-fabricated building elements as a solution to the dual problems of a housing shortage and persistent low level of quality in construction. However, pre-fabrication using mainly light-weight building materials may lead to an increase in summer over-heating and an energy penalty from residential air-conditioning demand. Policy needs to be geared towards design for high thermal mass, high insulation values and the use of shading (e.g. tree planting; shutters) natural ventilation and other passive/renewable systems (e.g. bore hole) wherever possible, rather than energy intensive solutions.

Increased energy efficiency can also be brought about by the introduction of low and zero carbon technologies (which includes renewable technology, which will be dealt with elsewhere) in both supply (e.g. Combined Heat and Power, CHP) and demand (e.g. LED lighting). Traditional centralised electricity generation is highly inefficient (only 40-50% efficient), unlike the efficiency of CHP supply (70-90%), which provide both thermal energy and electricity. Micro CHP units are presently being commercially field-tested and will represent the next generation of technology to replace the condensing boiler (mandatory under Building Regulation 2005). These units will produce a proportion of a home’s own electricity demand, as well as space heating and hot water. The advent of this technology and other low energy appliances will reduce the peak demands for electricity and hence reduce the need for generating capacity and infrastructure.

The promotion of mini- or larger scale CHP in other situations (e.g. new office blocks; nursing homes; leisure facilities) is inherent in Building Regulations (2005) as a result of the EU Directive on Energy Performance of Buildings, but nevertheless could be strengthened by a policy focus. Over time, evolution towards a more sustainable and efficient pattern of electricity and heat generation, distribution and use could result in a larger number of relatively small scale and dispersed power generation facilities.

### **Summary:**

- In 2004 the SAP rating of the Borough's housing stock was 54, compared to the national average of 50
- Only 15% have SAP ratings above 70; to achieve the maximum energy efficiency the existing stock should reach an average SAP of 80
- The 2004 survey showed that 5.5% of the housing stock have SAPs of less than 30
- Many homes that are energy inefficient cannot be remediated.
- Energy use is likely to increase due to cooling needs. Passive measures can help reduce energy needs
- Installed CHP plant in the Borough is negligible
- CHP should be promoted to boost energy efficiency
- Mini and micro CHP is for small developments and individual homes is becoming technically feasible

### **Key Decision Aiding Questions:**

- ❑ Will the option reduce the need for energy use?
- ❑ Will the option help to reduce fuel poverty? (see sustainability objective 2)
- ❑ Will the option improve the energy efficiency of the building stock?
- ❑ Will the option support de-centralised energy generation?
- ❑ Will the option support the development of CHP?

## Renewable Energy

**SA objective:** To increase the production of energy from low carbon technologies, renewable sources and decentralised generation systems

### **Overview**

In 2008 an agreement was reached amongst EU countries that 20% of its energy should be generated from renewable resources by 2020; the proportionate UK contribution towards this target was 15%. The UK's expert panel, the Renewables Advisory Board, believes 14% renewable energy could be achieved by 2020 through "significant but achievable policy changes". The bulk of the changes will fall upon the electricity industry. The EU target applies to all energy sources, but translated it will mean that up to 40% of Britain's electricity must come from renewable sources by 2020.

In the light of the above targets, SEEDA commissioned a study which indicates that the South East would be unable to meet this target without a radical increase in both wind and biomass development. The study proposed two choices of scenario (high wind; or high biomass), which would be needed to meet the South East targets. Of significance is the fact that biomass would play a major role in either scenario, which would mean that every town and village across the region would require a sizeable biomass installation to meet the target (and a consequentially vast amount of existing available agricultural land would have to be put over to the growing of fuel crops).

Although the major driver for the above legal agreement is to reduce carbon emissions to combat climate change, it will also make a significant contribution to the UK's energy security in the face of a worrying decline of the UK's indigenous energy supplies – oil, gas, nuclear and coal. Much of the UK's viable coal reserves are likely to be exhausted in the near future. In 2006 we became a net importer of gas. By 2020 we could be dependent on imported energy for three quarters of our total primary energy needs (much of this being derived from politically unstable countries). Fuel prices have already been increasing alarmingly with oil reaching several new highs over the past few.

Increasing the production and use of renewable energy, and fuels, is at the heart of our ability to deliver a sustainable, secure future. The above twin drivers of Climate Change and energy security demands new thinking about energy supply. A shift is needed towards energy sources and generation technologies that produce little or no carbon, comprising far more small-scale distributed heat and electricity generation.

The only significant generation of renewable energy in Reigate and Banstead is the 3-7MWe of installed capacity fuelled by landfill gas at Biffa's Redhill site. The operational capacity of renewable energy across the South East in 2007 was 72Mwe which represents only 50% of the 2010 target of 140Mwe installed capacity.

More recently a number of medium-sized renewable energy installations have been developed; promoted by both policy drivers and the subsidising revenue streams: the Feed in Tariff and the Renewable Heat Incentive. E.g. Horley Leisure Centre (500KW wood fuel boiler); Beacon School (42KW Photovoltaic solar system). This increase has been mirrored across the domestic sector, especially for PV installation.

### **Indicators**

<b>INDICATOR</b>	<b>Quantified data (for RBBC)</b>	<b>Comparators</b>	<b>Targets</b>	<b>Trend (RBBC)</b>	<b>Problems/ Constraints</b>	<b>Source</b>
a. Installed capacity for energy production from renewable sources (MWe)  (Biomass, biogas/sewage gas, solar PV, wind, hydro)	2008: 3 – 7 MWe (landfill gas)  0.84 MW th Biomass (Park 25)	South East 2004 - 73MW declared net capacity (1% of regional generation capacity)	Regional targets: 2010: 620MW (5.5%); 2016: 895MW (8%); 2026: 1750MW (16%); Sub-regional targets: (Thames Valley and Surrey) 202MW [2010] 271MW [2016]. Structure Plan target: 10% of energy requirement to be met from renewable resources.	SE trend upwards.  SE targets: 50% of 2010 target has been met as at June 2007		<a href="http://www.see-stats.org/thamesvalley.htm">http://www.see-stats.org/thamesvalley.htm</a>
b. Annual electricity production from renewable sources (MWhe)	2007: 0.37MWe					



c. Installed capacity for heat generation from renewable sources (MWth) (Biomass, biogas/sewage, solar thermal, ground source heat pumps)	0.84MWth			Increased trend in heat energy from woodchip		
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**Sustainability issues/problems:**

The South East Plan Policy NRM11 requires that 10% minimum RE is generated on-site in new development. RBBC has, since the beginning of 2008, been implementing this policy in earnest. The presence of Gatwick, Heathrow and Redhill aerodrome either in, or in close proximity, to the Borough puts major constraints to the major exploitation of wind (i.e. wind farm), although the installation of well-sited single turbines, which may have hub-heights from 9 metres are likely to overcome many issues (many of which would now be covered by the General Permitted Development Order). Wind-speeds across much of the borough are sufficiently high (5.5 -7.5m/s Seeboard study, 1995) to be practicable, and although there is no longer a presumption against this type of development in the greenbelt (or AONB); landscape concerns are likely to present a significant barrier. WS Atkins has completed a preliminary scoping study as part of a Landscape Character Assessment of the Borough, which will help in identifying potential opportunities for RE development.

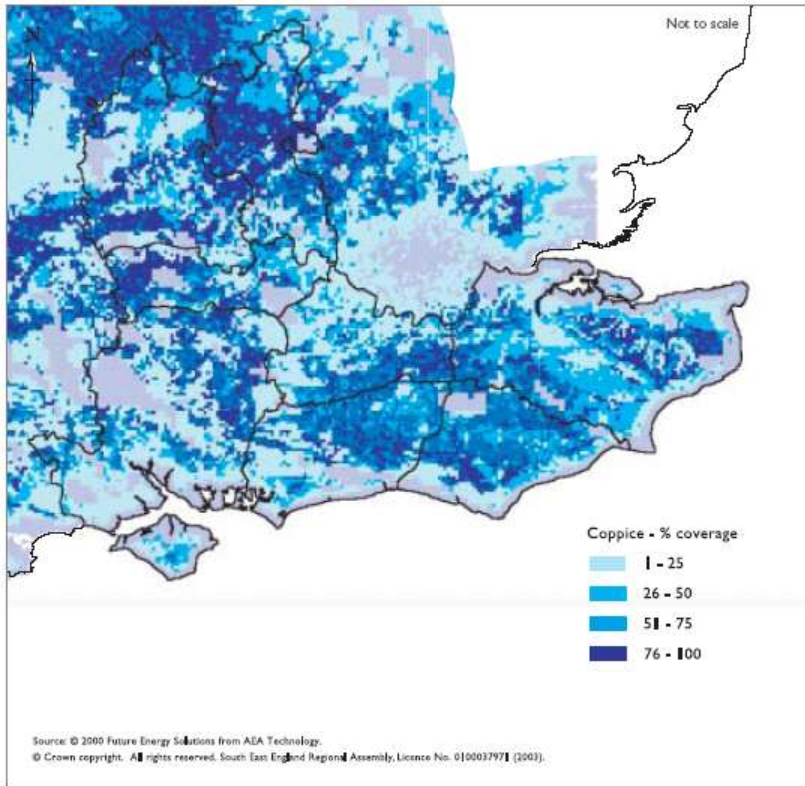
A more mature technology is that of solar heating panels; these are able to deliver up to 60% of a home’s hot water demands throughout the year. The planning position relating to their installation is now very much clearer than previously, with the majority of installations now being allowed without the need for planning permission, as a result of the revision of the General Permitted Development Order their integration into new build and renovated buildings could be established as a matter of course.

Other less mature technologies such as photovoltaic (PV) cells and ground source heat pumps are both being used more frequently, the former being cost-effective if used also to replace building fabric, the latter when excavation means the easy introduction of underground piping. The distribution of both heat and electricity (from CHP and district heating) is also strongly

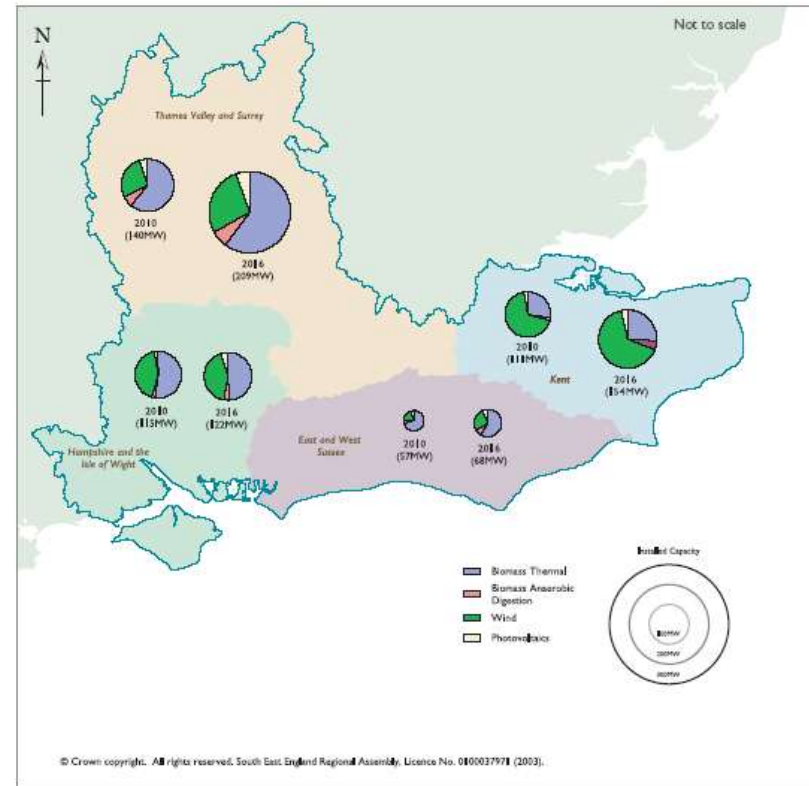
encouraged through the South East Plan. The ability to fuel this type of plant renewably depends on the development of a biomass supply chain (wood waste/energy crops etc.) and in the future may require the exploitation of the potential for new short rotation coppice in the area.

A further 10% (approximately) of potential RE from biomass could be met from the management of the organic fraction of municipal waste by anaerobic digestion (AD). This technology also has the potential to co-digest sewage and other organic wastes, producing a useable organic fertiliser as a bi-product, as well as electricity and heat from the combusted gas. AD is being considered increasingly to deal with the demands of the Landfill directive (avoiding the landfilling of organic waste). Appropriate siting of such development could encourage the co-digestion of other wastes e.g. Leicester City Council Waste Local Plan directs the development of anaerobic digestion to sewage treatment works and existing landfill sites.

Technical Potential for New Short Rotation Coppice



Sub-regional Land-based Renewable Energy Potential, 2010 and 2016



The additional opportunity to use heat from these CHP processes for both heating and cooling (using “absorption chill” technology) should lead to siting such plant as close to the points of use as practicably possible. The nature of some of the processes and fuel supply in larger development means that some conflict could be created; sensitive siting for transport, noise, odour etc. are key considerations, but existing industrial areas could provide ideal sites. Smaller biomass plant is little different in scale to existing oil boiler systems, although fuel storage (which is inevitably larger) is a necessary consideration (although this can be optimally overcome by underground storage).

## **Summary**

- Presently relatively little installed renewable energy capacity in the
- Opportunities exist to maximise the use of renewable waste heat from the Redhill landfill site
- Sub-regional targets point to the need to increase RE capacity significantly
- Wind-speeds are suitable for exploitation, but landscape designation and airport proximity are known constraints
- Biomass is expected to meet majority of future capacity, but supply chain needs development
- Significant potential for short rotation coppice identified locally
- Future potential for integration of renewable energy generation with organic waste management

## **Key Decision Aiding Questions:**

- ❑ Will the option facilitate the generation/use of renewable energy?
- ❑ Will the option support the production/use of biomass?
- ❑ Will the option support the use of wind as energy?
- ❑ Will the option support the use of sun as energy?
- ❑ Will the option support the collection and use of organic waste as a fuel?