Core Strategy

Sustainability Appraisal

APPENDIX D

Sustainability Appraisal Scoping / Baseline data report

October 2005

Reigate & Banstead
BOROUGH COUNCIL
Banstead | Horley | Redhill | Reigate

Sustainability Appraisal and Strategic Environmental Assessment of the Local Development Framework

Scoping Report

October 2005

Contents

Annexes (available separately)

1.   Introduction

The concept of sustainable development

1.1   Sustainable development is a term that has been commonly used since the Earth Summit at Rio de Janeiro in 1992. The aim is to balance economic progress with social and environmental needs, and not take resources that future generations may need to survive. There are now numerous definitions of what the term sustainable development means, but the UK government defines it as:
- Social progress which meets the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources; and
- Maintenance of high and stable levels of economic levels of economic growth and employment.

Sustainability Appraisal and Strategic Environmental Assessment

1.2   There is now an international commitment to achieving sustainable development, and this has been incorporated into laws, guidance and advice. One of the means by which sustainable development can be achieved is through the land-use planning process. In line with the new planning legislation, Local Development Frameworks (LDFs) are to be produced which contain plans, policies and guidance in relation to the type of development which can take place in an area. These plans and policies can help to achieve sustainable development if they are written to ensure that development meets the needs of people living and working in an area, whilst the same time ensuring that it is developed in such a way as to protect the environment.

1.3   As economic, social and environmental needs are often conflicting, it can sometimes be hard to reconcile all these issues. In response the Government has set out a requirement for a 'Sustainability Appraisal' of emerging LDF Documents to be undertaken, to ensure that sustainable development is treated in an integrated way. In particular, the inter-relationship between social inclusion, protecting and enhancing the environment, the prudent use of natural resources and economic development need to be carefully considered.

1.4   Recent European Legislation, the Strategic Environmental Assessment Directive (SEA) requires that an assessment of the environmental effects of certain plans and policies (including planning documents) is undertaken. In complying with this Directive, the Government, under the Planning and Compulsory Purchase Act, has incorporated its requirements into a wider appraisal process, termed Sustainability Appraisal (SA). It is this combined process that has been used for the assessment of the emerging Reigate and Banstead LDF.

1.5   At present the final version of Government guidance on the Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents is yet to be published. If there are any significant changes to the draft guidance, these matters will be taken into account when carrying out appraisals, and in any future revisions to this report.

What does the Sustainability process achieve?

1.6   By undertaking a SA it is possible to look at the range of policies and plans contained in the LDF documents, and examine how they contribute to the aim of sustainable development. By looking at every policy in this manner it is possible to identify areas

where policies may not contribute to, or are contrary to the needs of, sustainable development. By identifying these problems at an early stage, it is possible to change and amend policies to ensure that they are as sustainable as possible.

What is the process of SA/SEA?

1.7   The process of a SA requires an examination of the state of the Borough as it is today and how it may change in the future, together with an identification of the key issues which could affect the sustainability of the area. Using this information it is possible to develop sustainability objectives and indicators against which LDF policies can be measured to decide how they contribute to sustainable development, and enable appropriate amendments to be made to policies. The objectives and indicators also enable the success of the plan to be tested once the plan is adopted.

1.8   There are several documents that will be contained within the Reigate & Banstead LDF to which SA is required. As outlined in the current LDS, at this stage the SA will focus on initial work on the Core Strategy DPD, and the Redhill Town Centre Area Action Plan DPD, and the first SPDs to be produced on Horley Infrastructure Provision and Horley Design Guide. This means this Scoping Report focuses on boroughwide issues, as well as identifying issues at a more local level where applicable. The results will be published in a 'Sustainability Report' at the same time as the Preferred Options stage for the DPD or a draft SPD is consulted upon. The current LDS also includes other SPDs. As the LDS is a rolling project plan, there may be alterations to the current proposals or new DPDs or SPDs proposed in future revisions to the LDS. As revisions to the LDS are made, and preparation commences of any other DPDs or SPDs, there will need to be consideration as to whether this Scoping Report is sufficient for that SA or whether any revisions to the Scoping Report are necessary.

1.9   The Scoping Report is the first step in undertaking a SA of the LDF. It sets out the baseline information that has been collected so far, as well as the draft objectives and indicators and proposals as to how the appraisal of the LDF policies will be undertaken.

1.10   We have sought comments, or views, on the information and proposals by sending out the Preliminary version of this document. In this way we ensured that no relevant aspect of sustainability was omitted from the appraisal process.

Joint working

1.11   It should be noted that the Borough Council has been working with other Surrey Districts and Surrey County Council in order to develop a common methodology, set of objectives and indicators. The statutory SEA consultees (noted below) have been involved in the process through attendance at SA workshops organised by Surrey County Council. Account has also been taken of the guidance issued by the Environment Agency/English Nature/Royal Society for the Protection of Birds.

1.12   It is considered that this method of planning authorities and statutory SEA consultees jointly 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 benefit is to build upon local knowledge and provide mutual verification of the process.

Consultation

1.13   The preliminary Scoping Report was sent to the four statutory SEA consultation bodies (Countryside Agency, English Heritage, English Nature and Environment Agency), Surrey County Council and any other bodies that the Council considers may be able to offer useful comment. This was to help ensure that the SA will be comprehensive and robust enough to support the LDDs during the later stages of full public consultation and examination.   The consultation also had regard to the requirement to consult the 'specific consultation bodies' as set out in the Town & Country Planning (Local Development) (England) Regulations 2004. The Preliminary Scoping Report was also made publicly available on the Borough Council's website.

1.14   The consultation on the Preliminary Scoping Report occurred between 24th June and 29th July 2005. Responses were received from six consultees within the statutory consultation period, and two Council officers.   These responses and recommendations were taken on board in producing this revised Scoping Report, for example including references to additional Plans and Programmes, and additional indicators. For one consultee an extended deadline was agreed, and subsequently two consultees submitted late responses, that were also able to be taken into account in revising this report.   A separate document which summarises the comments made and the Council's response, including any action(s) taken, is available separately on request.

2. Plans and Programs Influencing the Local Development Framework

2.1   The LDF has not been prepared in a vacuum. The policies and plans that it is to contain will be developed taking into account Government guidance, the Structure Plan, and other relevant regional, county and local strategies, as well as reflecting local needs and requirements, for example those which have been identified through the Community Plan.

2.2   Listed below are the plans, programmes and strategies that have been considered to influence the formation of the sustainability objectives and consequently have a bearing on the formation of LDF policies. Reviews have been carried out for guidance at the international, national, regional, county and local level to identify relevant sustainability objectives, targets and any specific requirements. They are outlined in more detail in Annex 1.

INTERNATIONAL
The Johannesburg Declaration on Sustainable Development
European Spatial Development Perspective (97/150/EC)
European Habitats Directive (Special Areas of Conservation (SACs)) (92/43/EEC)
European Birds Directive (79/409/EEC)
European Nitrates Directive
European Air Quality Directive
European Water Framework Directive (2000/60/EC)
European Waste Framework Directive
European Environmental Impact Assessment Directive (97/11/EC)
European Strategic Environmental Assessment Directive (2001/42/EC)
European Energy Performance of Buildings Directive (2002/91/EC)
European Noise Directive (2001/14/EC)
Aarhus Convention 1998 (UN Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision- Making and Access to Justice in Environmental Matters
European Union Sixth Environmental Action Plan (2001)
Kyoto Protocol on Climate Change
United Nations Convention on Human Rights
Valetta Convention (the European Convention on the protection of Archaeological heritage) (2001)

NATIONAL
UK Sustainable Development Strategy (May 1999)
Securing the Future – delivering UK Sustainable Development Strategy (2005)
Sustainable Communities Plan
Urban White Paper
Rural White Paper (2000)
UK Biodiversity Action Plan (1994)
Working with the grain of nature: A Biodiversity Strategy for England (October 2002)
Rural Strategy (2004)
Farming and Food Strategy
Energy White Paper
National Air Quality Strategy
Aviation White Paper – The Future of Air Transport
10 Year Transport Plan (2000)
White Paper on The Future of Transport: a network for 2030 (July 2004)
UK Climate Change Programme

Water Act 2003
Waste Strategy for England and Wales (2000)
The Historic Environment: A Force for our Future
Planning Policy Statement 1: Delivering Sustainable Development (2005)
Planning Policy Guidance 2: Green Belts (1995)
Planning Policy Guidance 3: Housing (2000; Paras. 18, 36, 42a & Annex B updated 2005)
Circular 6/98 Planning and Affordable Housing
Planning Policy Guidance 4: Industrial & Commercial Development and Small Firms (1992)
Planning Policy Statement 6: Planning for Town Centres (March 2005)
Planning Policy Statement 7: Sustainable Development in Rural Areas (2004)
Planning Policy Guidance 8: Telecommunications (2001)
Planning Policy Statement 9: Biodiversity and Geological Conservation (2005)
Planning Policy Statement 10: Planning and Sustainable Waste Management (2005)
Planning Policy Statement 12: Local Development Frameworks (2004)
Planning Policy Guidance 13: Transport (2001)
Planning Policy Guidance 14: Development on Unstable Land
Planning Policy Guidance 15: Planning and the Historic Environment (1994)
Planning Policy Guidance 16: Archaeology and Planning (1990)
Planning Policy Guidance 17: Planning for Open Space, Sport and Recreation (2003), and Companion Guide: Assessing Needs and Opportunities
Planning Policy Guidance 18: Enforcing Planning Control (1991)
Planning Policy Guidance 19: Outdoor Advertisement Control (1992)
Planning Policy Guidance 21: Tourism (1992)
Planning Policy Statement 22: Renewable Energy (2004) and Companion Guide
Planning Policy Statement 23: Planning and Pollution Control (2004)
Planning Policy 24: Planning and Noise (1994)
Planning Policy Guidance 25: Development and Flood Risk (2001)
Circular 1/94 – Gypsy Sites and Planning (new draft circular November 2004) Circular 22/91 – Travelling Show People
Circular 5/05 – Planning Obligations
ABI The Vulnerability of UK Property to Windstorm Damage (2003)

REGIONAL
Draft South East Plan (July 2005)
Regional Planning Guidance for the South East (RPG9, 2001)
Regional Transport Strategy (2004)
Regional Housing Strategy (2005)
Regional Economic Strategy (2002)
Regional Waste Strategy (draft 2004)
Regional Strategy for Energy Efficiency and Renewable Energy 2004
Integrated Regional Framework (2004)
Social Inclusion Statement (SEERA and Partners, 2002)
Action for Biodiversity in South East England (SE England Biodiversity Forum, 2001)
The Cultural Cornerstone: A Strategy for the development of cultural activity & its benefits in the South East (June 2001)
The Cultural Agenda: realising the cultural strategy of the South East (November 2002)

COUNTY
Surrey Structure Plan (Dec 2004)
West Sussex Structure Plan (Oct 2004)
London's Spatial Development Strategy (2004)

Surrey 2020 – Community Strategy for Surrey
Surrey Hills Area of Outstanding Beauty Management Plan
Surrey Economic Development Action Plan
Surrey Education Service Strategy
Surrey School Organisation Plan 2003/4 – 2008/9
Surrey's Medium Term Strategy for Adults and Community Care
Surrey Biodiversity Action Plan
Surrey Cultural Strategy
Surrey Local Government Association Key Worker Strategy – Housing to underpin economic success
Surrey Economic Partnership (SEP) Economic Strategy
Surrey Heritage Strategy
Surrey Provisional Local Transport Plan 2006/7 –2010/11
Surrey Minerals Local Plan
Surrey Rural Strategy
Surrey Sports Strategy
Surrey Waste Local Plan
Parking Strategy for Surrey (2003)
Surrey Draft Crime and Disorder Reduction Strategy 2005-2008/9
Surrey Design Guide (2001)
Future of Surrey's Landscape and Woodlands (1997)

LOCAL
Reigate & Banstead Borough Local Plan 1994
Reigate & Banstead Borough Local Plan First Alteration
Reigate & Banstead Community Plan 2003 (due to be reviewed)
Corporate Plan 2003-06 (due to be reviewed)
Gatwick Airport Outline Master Plan
A Strategy for dealing with Eastern Surrey's Municipal Waste
East Surrey Rural Transport Plan
Housing Strategy 2003-06
Community Safety Strategy 2005-08
Local Air Quality Review and Assessment
Heritage Strategy 1996
Countryside Strategy 1999
Homelessness Strategy 2003-08 and Review 2002
Parks & Open Spaces Policy 2004 – 2007
East Surrey NHS Primary Care Trust Business Plan 2003-2004
East Surrey NHS Primary Care Trust Annual Report 2003-04
East Elmbridge and Mid-Surrey NHS Primary Care Trust Local Annual Report 2003-04
East Elmbridge and Mid-Surrey NHS Primary Care Trust Public Health Annual Report 2003

2.3   As shown above, there are different levels of plans and strategies that affect the LDF. At a national level, Planning Policy Guidance notes (PPGs) and their successors, Planning Policy Statements (PPSs), set out the Government's strategy for development on a wide range of issues, including housing, the economy, transport and the environment. Areas of particular importance to the Reigate & Banstead LDF that are contained in the PPGs and PPSs include:

- Creating sustainable communities that will meet the needs of future generations as well as our own;
- Increasing provision for affordable housing;

- Creating safer and more secure communities;
- Promoting the economic vitality of local areas;
- Protecting the Green Belt;
- Protecting the environment, including the need to safeguard character and distinctiveness;
- Promoting and encouraging renewable energy development; and
- Encouraging practical alternative means of transport.

2.4 The Government has also prepared Regional Planning Guidance (RPG 9) which sets out the overarching framework for the preparation of development plans in the South-East. In addition to setting out policies which provide a regional dimension to the national planning policies, it sets the housing requirement for Surrey for the period until 2016. In addition to the original RPG 9 other revised chapters relating to specific issues have been adopted e.g. transport and renewable energy. Guidance has also been produced at a regional level providing guidance on undertaking urban housing potential and housing needs surveys.

2.5 Under the new planning system, a Regional Spatial Strategy (RSS) will be prepared, which in this region is called the South East Plan. The South East Plan will provide a statutory regional framework for development in the South East region to 2026. A draft was consulted upon earlier in 2005. The plan will provide the spatial framework that forms the context within which the LDF needs to be prepared.

2.6 The main strategy which will influence the development of the LDF at the County level is the Surrey Structure Plan. Although the Structure Plan will be replaced by the South East Plan, it is saved until at least 2007. This document sets out the broad framework for development within the County. The policies in this document will shape Surrey's future physically and environmentally, and influence it economically and socially.

2.7 The LDF must also take into account Reigate & Banstead's Community Plan. The Community Plan is prepared and delivered through a Local Strategic Partnership (LSP) working towards a common aim of improving the quality of life for those who live and work in the borough. It summarises the needs and priorities for the future with clear targets and actions so that progress can be monitored. This is done by encouraging key agencies to work in partnership to improve service delivery and give local people a real say in how services are provided. The first Community Plan, prepared in 2003, is due to be reviewed and opportunities for working on this review in parallel with the preparation of the Core Strategy are currently being explored.

2.8 At a more local level there are other documents such as the Reigate & Banstead Housing Strategy and Community Safety Strategy which influence the LDF.

2.9 As a result of the different plans and strategies which feed in to the LDF there are different challenges and requirements that the Council must try to address.

Conflicting Plans affecting the LDF

2.10 The need for housing to be accommodated as far as possible on previously developed land is an example of a potential source of conflict. The development of all previously developed land for housing, increasingly at higher densities, has the potential to dramatically alter the character of the area and may result in the loss of employment land.

3. Sustainability objectives and indicators

3.1   The aim of the LDF is to provide a planning framework for the Borough and to improve the sustainability of the Borough; undertaking a SA is a means of achieving this. In order to assess how effective the LDF will be in contributing to sustainability a number of sustainability objectives have been devised against which the plan objectives and individual policies can be tested.

3.2   The sustainability objectives have been derived from a refinement process drawing on the sustainability issues which are affecting the Borough, the SA objectives contained in the Integrated Regional Framework, and joint working with other Surrey Districts and statutory organisations.

3.3   In addition to the objectives a set of indicators have been set out which will enable the effect of the plan on sustainability to be measured. For each objective, one or more indicators have been set that provide for the status of the objective to be tested, now or in the future. Some of the objectives are closely related, for this reason some indicators have not been set out under just one objective.

3.4   This Preliminary Scoping Report acts as a snapshot of the situation at this time, but at the SA process is iterative the content will change in the future. Some of the indicators have been chosen so as the most appropriate measure to reflect the achievement of a specific objective. However the collection of data at the present time has not always been possible. It is hoped this data will become available in the future, perhaps even as a result of this process highlighting the need for such data. Current guidance states that if it is not possible to find the data required, this should be recorded and such gaps may influence judgements on risks or uncertainties during later stages in the SA process.   An objective may also need to be deleted or altered in the future. Perhaps where an objective is covering more than one issue and these are often found to be moving in opposite directions, then the issues may need to be separated into more than one objective. The objectives and indicators may also need to be revised, as additional baseline data is collected and additional sustainability issues identified.

3.5   The objectives, indicators and baseline data will be used in monitoring the implementation of the relevant LDDs. Any significant changes will trigger the production of a revised Scoping Report.

Table of Sustainability Objectives and Indicators

Social progress that recognises the needs of everyone		
Objective Number	**Objective**	**Indicator**
1	To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford.	▪ Housing completions ▪ Percentage of affordable housing delivered per year ▪ Number of households on the housing register ▪ Average property price compared against average earnings ▪ Lower quartile property price compared to lower quartile workplace earnings ▪ Number of unfit homes in the District ▪ The proportion of new homes with fewer than 3 bedrooms
2	To facilitate the improved health and	▪ Death rates from circulatory disease, cancer and suicides ▪ Infant mortality rates

	wellbeing of the whole population, including enabling people to stay independent.	▪ Conceptions among girls under 18 ▪ Life expectancy ▪ Percentage of people whose health is classed as poor ▪ A+E Emergency admission waits ▪ Amount of Extra Care Housing completed ▪ Number of older people helped to live at home
3	To reduce poverty and social exclusion.	▪ Proportion of children under 16 living in income deprived households ▪ Percentage of population of working age who are claiming key benefits ▪ Percentage of population who are income deprived ▪ Average score for Indices of Multiple Deprivation ▪ Percentage of people achieving five or more A*-C GCSEs ▪ Level of qualification of those living in the district ▪ Proportion of adults with poor literacy and numeracy skills ▪ Percentage of all respondents satisfied with the local bus service ▪ Number of journeys made on local buses ▪ Access to services ▪ Percentage of rural households at set distances from key services
4	To create and maintain safer and more secure communities.	▪ The number of recorded offences per 1,000 people ▪ The proportion of people that live in fear of crime ▪ Pedestrians/cyclists – number killed and seriously injured ▪ The number of people killed or seriously injured in road accidents ▪ Deaths and casualties arising from fires
5	To minimise the harm from flooding.	▪ Number of properties at risk from flooding ▪ Number of properties built with sustainable drainage installed ▪ Number of properties or households that have access to the Environment Agency's flood warning service

Effective protection of the environment		
Objective Number	Objective	Indicator
6	To make the best use of previously developed land and existing buildings, encouraging sustainable construction.	▪ Percentage of dwellings built on previously developed land ▪ The amount of commercial development built on previously developed land in urban areas ▪ Average density on sites with 10 or more dwellings ▪ Percentage of new build and retrofit homes meeting EcoHomes "very good" or "excellent" standard and the percentage of commercial buildings meeting BREEAM Very Good standard ▪ The number of construction sites recycling or reusing demolition waste
7	To reduce land contamination and safeguard soil quality and quantity.	▪ The amount of contaminated land remediated to suitable use ▪ Area of grade 1,2 and 3 agricultural land lost to development
8	To ensure air quality continues to improve and noise/light pollution is reduced.	▪ Annual average of NO2 and PM10, within AQMAs (Air Quality Management Areas) relative to national standards ▪ The monitoring of LEQ levels around airports ▪ The number of properties affected by poor air quality ▪ Number of new floodlighting instillations including the number of fittings installed which minimise light pollution ▪ The percentage of population who would benefit from new quiet road surfacing

9	To conserve and enhance biodiversity within the plan area.	- Population of wild birds - Hectares of land designated as a Site of Special Scientific Interest (SSSI) - Extent and condition of key habitats for which Biodiversity Action Plans have been established - The number and area of Sites of Nature Conservation Importance (SNCIs) and Local Nature Reserves (LNRs) - Extent of ancient woodlands
10	To protect, enhance and, where appropriate, make accessible the natural, archaeological and historic environments and cultural assets, for the benefit of both residents and visitors.	- Number of listed buildings, ancient monuments and conservation areas - Proportion of statutory listed buildings at risk - Proportion of statutory listed buildings demolished or removed from the list owing to approved or unauthorised alternatives. - Proportion of scheduled ancient monuments at risk - Proportion of potential archaeological sites where acceptable archaeological assessment/recording took place. - Number of potential archaeological sites where investigation took place and finds were recovered and recorded. - Proportion of conservation areas with an appraisal that has been reviewed within the previous 5 years - The number of unauthorised works undertaken within conservation areas in the previous four years that have been enforced against. - Number of properties open to the public on heritage open days - The percentage of residents very or fairly satisfied with cultural assets - Level of recreation activity associated with biodiversity - Achievement of 'Accessible Natural Greenspace Standards' - The promotion and safeguard of open land and green corridors in urban areas - Improvement in accessibility of the countryside to the public via the Rights of way network - Landscape conservation and enhancement or management of the urban fringe
11	To reduce road congestion and pollution levels.	- Level of vehicle emissions - Traffic reduction - Proportion of travel to work by mode - Proportion of major developments located in accessible urban areas - Proportion of schools with current travel plans - Number of businesses with travel plans - Length of cycle tracks and number of cycling trips - Accessibility by public transport, cycling and walking - Household transport by mode - Implementation of a Local Parking Management Plan
12	To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the District is prepared for its impacts [could include aviation and road transport].	- Emissions of greenhouse gases, CO2 - Capacity during 'critical periods' to supply water without the need for restrictions - Number of homes damaged as a result of an extreme weather event - Number of sites of ecological interest where flora or fauna were damaged by an extreme or persistent weather event e.g. tree loss from storm, species loss resulting from habitat change caused by persistent dry or wet conditions.

Maintenance of high and stable levels of economic growth		
Objective Number	**Objective**	**Indicator**
13	Maintain low rates of unemployment and high levels of economic activity.	▪ Percentage of economically active people that are unemployable ▪ Proportion of people claiming unemployment benefits who have been out of work for more than one year ▪ Percentage of population who are income deprived ▪ Percentage of people of working age that are economically active ▪ The net change in the number of VAT registrations and deregistrations ▪ Industrial breakdown of VAT registrations ▪ Average annual earnings for full time male and females working in the district ▪ Number of persons registered in adult education classes ▪ Number of persons receiving on the job training ▪ Growth in GDP and Value Added
14	Provide for appropriate commercial development opportunities to meet the needs of the economy.	▪ The number of granted planning permissions for commercial development ▪ The area of employment sites lost to other uses ▪ The number of rural diversification schemes
15	Provide additional commercial development in urban areas [stimulating economic revival in priority regeneration areas].	▪ The number of commercial developments within urban areas ▪ Percentage of vacant employment floorspace ▪ Shop surveys (growth/change in floorspace use & vacancy rates) ▪ The number of retail developments within and around town centres
16	Balancing the needs for employment and housing to reduce the need to travel.	▪ The number of live work units constructed ▪ Balance between labour supply and labour demand ▪ Number and direction [and distance] of journey to work movements ▪ Number of residents working at, or from home

Prudent use of natural resources		
Objective Number	**Objective**	**Indicator**
17	To reduce the global, social and environmental impact of consumption of resources.	▪ Number of businesses producing local food ▪ Number of businesses actively engaged in the Sustainable Business Programme ▪ Amount of energy supplied to homes and businesses ▪ Number of homes taking up energy saving grants for loft insulation, double glazing, or cavity wall insulation. Number of homes installing low energy light bulbs.
18	To reduce waste generation and disposal, and achieve the sustainable management of waste.	▪ Amount of waste disposed of in landfill ▪ Waste collected per capita ▪ Percentage of waste recycled ▪ Percentage of waste composted
19	To maintain and improve the water quality of the region's rivers and groundwater, and to encourage the	▪ Percentage rivers in plan area whose biological/chemical quality is rated as "good" or "fair" ▪ Quality and quantity of groundwater ▪ Security of supply index banding ▪ Household per capita consumption (PCC) of water ▪ Water supply and demand balance

	sustainable use of water.	▪ The number of water meters installed ▪ The amount of water lost through leakage in mains systems
20	To increase energy efficiency.	▪ Energy use per capita ▪ Improvement in dwelling SAP rating across district ▪ Number of homes incorporating CHP heating
21	To increase the production and use of renewable energy/fuels.	▪ Installed capacity for energy production from renewable sources ▪ Annual electricity production from renewable sources ▪ Installed capacity for heat generation from renewable sources ▪ Annual heat production from renewable sources ▪ Greenhouse gases displaced annually by total renewable energy generation ▪ Area of land planted with short rotation coppice ▪ Area of land planted with energy crops for transport biofuels

3.6 Following the Core Strategy Issues & Options consultation, proposed plan objectives setting out what the LDF is aiming to achieve in spatial planning terms will be drawn up. It is considered inappropriate to draw them up in advance of this consultation.

3.7 The LDF objectives will form a critical part for the development of policies, therefore it is important that they are in accordance with sustainability principles. Once they have been drawn up these LDF objectives will then be tested for consistency with the SA objectives, using a matrix to test their compatibility. This process will identify the possibility of effects that might be secondary, cumulative, synergistic, short, medium or long-term, permanent or temporary, and positive or negative. To enable this process the "decision aiding questions" for the SA objectives, to focus the aim of each objective, which are listed in Annex 3 will be used. In testing the compatibility, when it is noted that there is potential conflict between LDF objectives and sustainability objectives any possible conflict will be commented on and, where it has been thought appropriate, recommendations will be made to refine the LDF objectives.

4. **The Baseline – the quality of life in the Borough today, Sustainability Issues and predictions for the future**

4.1 Before an assessment is undertaken to determine how well each of the policies in the LDF contributes to sustainable development, it is necessary to have an understanding of the state of the Borough today with predictions of how this may change in the future. This 'Baseline' information about the Borough can be used to help identify sustainability issues that are affecting the Borough. There are certain key sustainability issues which are central to the LDF. This section sets out those which have been determined to date, although they will be updated as a result of further consultation as work as the LDF progresses. While this focuses on Boroughwide issues, any particular local issues have also been detailed. The identification of the key sustainability issues is important, as these are the areas that the Sustainability Appraisal will need to address.

4.2 The key sustainability issues have been derived from merging information from various sources. This includes the baseline data, and the plans and policies affecting the LDF, as well as the consultation with key organisations such as the Environment Agency and Surrey County Council.

4.3 The key issues are set out in more detail below, with an overview, the relevant baseline data, then an outline of the sustainability problems for each issue, a consideration of potential sustainability opportunities, and some key questions for how that objective needs to be achieved. These questions will be used as decision-aiding questions in any SA, and are also listed in Annex 2. The issues have presently been grouped under the Government's original four key strands of sustainable development, however future revisions to the Scoping Report are likely to reflect changes that have been adopted in the Government's review of its sustainable development strategy: "Securing the Future", and any other future reviews.

Social Progress that recognises the needs of everyone

Objective.1: To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford

Overview:

This Sustainability Objective is a priority at both a national, regional and local level. The Government's policy statement: "Sustainable Communities: Building for the Future, April 2003" (the Communities Plan) sets out a comprehensive action plan for creating sustainable communities in all regions. The Communities Plan emphasises the need to tackle the housing shortage in the South East, while at the same time protecting the countryside.

The Government's aim ("Quality and Choice: a decent home for all. Dec 2000) is also to improve the quality of housing. All social housing and private-rented accommodation should meet the Decent Homes Standard by 2010; sustainable home-ownership should be encouraged; and the needs of the homeless and socially excluded met. Government Planning Policy Guidance on Housing (PPG3) indicates that a community needs a mix of dwelling types to promote social cohesion.

Regional Planning Guidance for the South East (RPG9) requires Surrey to provide an average 2,360 net additional dwellings per annum until such time as a different rate is adopted. Up to 2016 this equates to 35,400 dwellings; the Surrey Structure Plan allocates 6,290 of these to Reigate and Banstead (of which 2,600 of the allocation to be provided in Horley) with a target to provide a level of affordable housing (including housing for key workers) of at least 40%.

The 2001 Census confirms that since 1991 the population has increased by 7% to just over 126,500 (51,694 households); seventy-nine per cent are owner-occupiers. Projections indicate that the number of households will grow to 53,000 by 2006. The average household size in the same period has reduced from 2.5 to 2.3, reflecting the trend in England and Wales as a whole. The trend towards smaller households is in part a reflection of the Borough's ageing population (16% of residents are over retirement age).

In 2002 the Council transferred its housing stock (10% of all homes) to the Reigate and Banstead Housing Trust, who have implemented a 5-year stock improvement programme in order to meet the Decent Homes Standard by 2010.

The Housing Needs Survey provides an estimate of the need for homes in the Borough. Until 2007, it is estimated that, 600 private rented and owner-occupied units (60% of which need to be one or two-bedroom units) and 543 affordable housing units (48% of the total), will be needed each year. A new survey has just been commissioned and these figures will be updated in due course.

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Housing completions compared with SSP	2001-2002: 403 2002-2003: 460 2003-2004: 493 2004-2005: 463	Surrey 2003-2004: 3,487	Surrey Structure Plan (annualised allocations) 2001-2005: 230 pa 2005-2016: 514 pa	Annual completions are above annual target. The Structure Plan Requirements for the period 2001 - 2016 will be exceeded at the end of 2013/2014. There is a projected surplus in the Borough of 992+364 = 1,356 units.		Housing Monitor 2005
b. Percentage of affordable housing delivered per year to increase from 18% (2001) to 40% by 2016. (Structure plan target 14)	1991-2004: 17.5% (21.4% on large sites i.e. above 10 units) 2001-2005: (26.7% on large sites)	Surrey 2003-2004: 16%	Surrey Structure Plan: 40% of housing delivered to be affordable by 2016. South East Plan (draft) proposes 40% for the London Urban Fringe	Trend is showing a small positive increase, but shows little progress towards the figure of 48% identified in the Housing Needs Survey.	RBBC presently only require 25% of housing on sites over the threshold to be affordable	Housing monitor
c. Number of households on the housing register	2002: 1,062 2003: 1,173 2004: 1,391 2005: 2,230	:	Reduce by 50% the number of households in temporary accommodation by 2010 (from 2004/5 levels)	Significant increase in last year reflecting recent change in legislation	The massive increase is due to people outside the district being able to register.	Housing Investment Programme 2004 returns
d. Average property price compared against average workplace earnings	March 2004: Average property price £256,116: Average annual fulltime earnings £28,712	Jul-Sep 2003 Surrey Average property price £284,983: 2003 Average annual fulltime earnings £30,059.64	To increase the number of affordable units and the percentage of 2 and 3 bedroom properties built reducing the average property price	Average property price in Borough is less than Surrey average; Affordability gap is increasing		Property price http://www.landreg.gov.uk/propertyprice/interactive/ppr_ualbs.asp and CSI F4 average earnings
e. Lower quartile property price compared to lower quartile workplace earnings	2004: Lower quartile price (LQP) £174,000 2001: Lower quartile earnings (SE): £14,794	2004: Surrey LQP £182,500 London £169,000 South East £140,000		There are no areas in the South East where LQE alone are sufficient to allow the purchase of a house in the LQP bracket. The minimum mortgage shortfall is £50,000	Up to date information on LQEs is unavailable.	
e. Number of unfit homes in the District	2002: 2,565 Dwellings (5%)	South East 139393 (4.1% of stock) UK: 7.5%		Improvement from 1995 Stock Condition Survey: 7.3%	Over 85% of all unfit homes are privately owned. Almost 16% of privately rented	Housing Stock Survey 2002

Reigate & Banstead Scoping Report – October 2005

						homes are unfit.	
f. The proportion of new homes with fewer than 3 bedrooms	2003-4: 65% (of planning permissions and completions)		Surrey Structure Plan: to continue the increase from 1998 to 2001 onwards				Housing monitor

Sustainability issues/problems/opportunities:

Surrey is one of the most expensive places in England to either buy or rent a home, and prices are still continuing to rise rapidly. Within Surrey, there has been widespread concern that market demand for larger, executive style housing is excluding not only those most in need, but also families who require two or three bedroom accommodation. The average house price in Reigate and Banstead has increased 87% in the last 5 years and flats 130%. The current affordability of housing ratio for the Borough (the average house price divided by the average full time annual earnings) is 8.92 (compared to 7.55 in 2003). It is estimated that 48% of new households each year are unable to buy their own homes or privately rent in the Borough. Affordability is most likely to affect single pensioners, lone parents and households who have members with special needs, as these groups have been shown to have the lowest incomes in the Borough.

As of March 2004, the Borough had exceeded its Surrey Structure Plan housing requirement for new housing (with a further 2,000 approximately committed). Significantly, the number of affordable units within this total for 2003-4 that have been provided as a result of Planning obligations amounted to only 66 units compared to the Council's Housing Strategy target of 543 (per annum), which has had little effect on reducing housing needs. Indeed the actual amount of affordable housing has reduced under the Right to Buy and Right to Acquire legislation.

Without a very significant increase in the commitment of resources, or change in the mechanisms for providing affordable housing, the identified need cannot realistically be met. The Council, in recognising this fact, has set more pragmatic targets in the Housing Strategy of 180 homes, which in the last 4 years have largely been met or exceeded. Including additional provision by Registered Social Landlords and private purchase through the Government's Key Worker Living Initiative, in each of the last two years, 41% of the identified need has been met.

Nonetheless, the continuing shortfall in affordable housing is creating negative synergies in the achievement of other sustainability objectives relating to travel, the economy, health and social inclusion. Many public and private sector organisations within the Borough are finding it increasingly difficult to recruit and retain key staff. One consequence of this is that a greater proportion of the workforce is now commuting longer distances to work from lower cost housing areas; another is the effect this has on maintaining other essential services e.g. serious difficulties in recruiting full-time staff at local hospitals have hindered much needed improvement in performance.

The present threshold at which housing sites are required to provide affordable housing is 25 dwellings or 1 hectare; nearly 60% of new housing in Surrey is presently being provided on sites less than this size and consequently avoid this commitment. The Government is presently consulting on changes to PPG3, which could see a change in the thresholds. The newly proposed limit is 15 dwellings or 0.5 hectares, but could be set even lower if there is a high level of need. The consultation also paves the way (as does the Surrey Structure Plan) towards seeking appropriate contributions for new affordable housing from commercial development, as well as residential.

Another significant issue is homelessness. The number of homeless in the Borough is the highest in Surrey and has continued to grow over the last 5 years (although 2004-05 saw a drop of 20%). Prevention schemes (e.g.YMCA's "Next Step") have made some impact in reducing this growth, but the lack of social rented accommodation and affordable housing for purchase is clearly compounding the problem. The number of registered homeless 2004-05 was 205 households; the target for 2005-06 is to reduce this by a further 10%.

The needs of the increasingly elderly population in the Borough have been relatively well met, with an identified oversupply of both traditional sheltered housing and residential care homes. However, there is presently little in the way of enhanced sheltered housing and extra-care housing is non-existent, which has a significant effect in preventing increased levels of independent living.

Summary:

> Reigate and Banstead is one of the most expensive places in England to either buy or rent a home
> The average house price in Reigate and Banstead has increased 87% in the last 5 years and flats 130%.
> It is estimated that 48% of new households each year are unable to buy their own homes or privately rent in the Borough
> Affordability gap is increasing
> Provision of affordable housing from new development is at a very low level
> Only 41% of the identified need for affordable housing is presently being met
> The Borough has the highest level of homelessness in Surrey and is increasing
> Extra-care housing is non-existent
> A small proportion of homes are unfit (5%), but nonetheless this represents the highest number for a Surrey district (ODPM 2003-4). Unfit homes are significantly in the private-rented sector (19%)

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 reduce the number of homeless in the Borough?
❑ Will the option increase the amount of extra-care or enhanced sheltered accommodation?
❑ Will the option reduce the number of unfit homes?

Social Progress that Recognises the Needs of Everyone

Objective 2: To facilitate the improved health and wellbeing of the whole population, including enabling people to stay independent.

Overview:

The residents of Reigate and Banstead, like other local authorities in Surrey, have relatively high levels of health relative to the South East, which in itself has the best health of any region in the UK. These health statistics however do not highlight many profound differences between the affluent and deprived communities in the Borough.
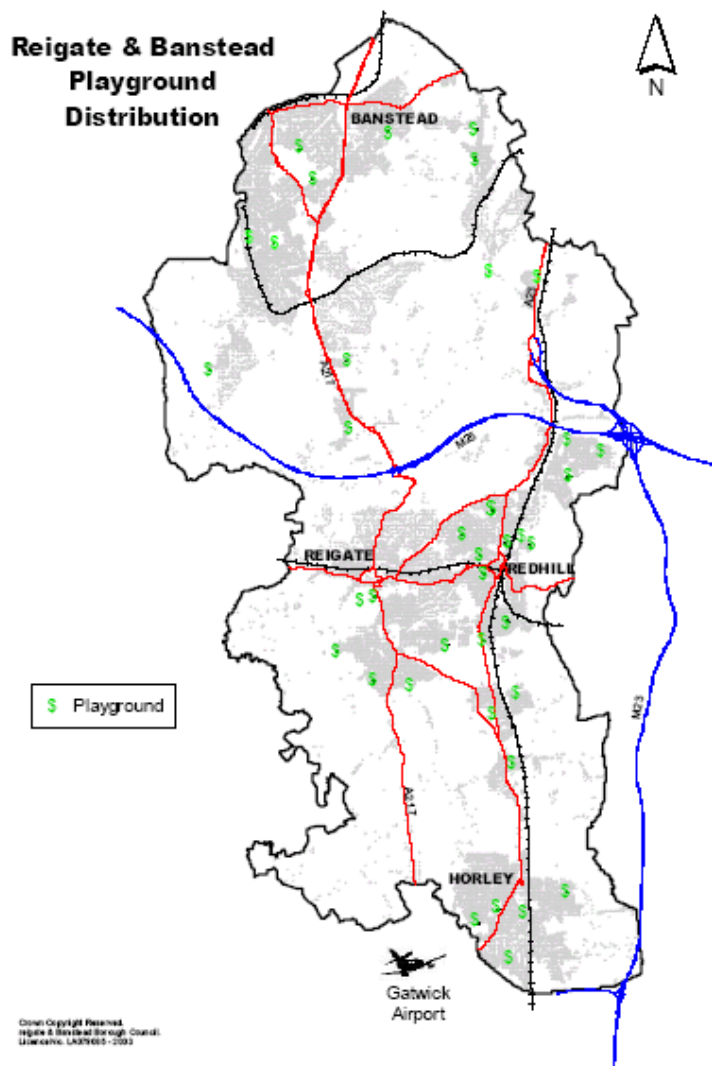
The decentralisation of hospital services is one way in which access problems that can exacerbate these inequalities are being tackled. The creation of a network of local care hospitals that will provide diagnostic services (such as x-ray and ultrasound), minor injuries clinics, day surgery, outpatient clinics and so on will bring "Better Healthcare closer to Home", supporting the development of critical care hospitals for emergency care, intensive care, complex operations and specialist care for sick children.

The Government has recently published its White Paper: "Choosing Health - Making healthy choices easier" which recognises that there is no obvious simple, quick solutions to latter day health conditions such as cancer and coronary heart disease. With widening health inequalities, a sharp rise in obesity, a slowing in the decline of smoking rates, growing problems with alcohol, teenage pregnancy and sexually transmitted diseases, old ways of thinking about and responding to public health problems are increasingly shown to be inadequate.

If people are to be able to make healthy choices, they need to have the right motivation, opportunities and support. The challenge is to create an environment in which healthy choices become the easy option. Progress in creating this right environment depends on effective partnerships across communities, including local government, the NHS and the voluntary sector, as well as many others; the Planning system has a key role in shaping healthy sustainable communities.

Not all people however are able to make the healthy, or informed choices that others take for granted. For instance, children are too young to make informed choices for themselves, and others may live in circumstances beyond their control. Special responsibility needs to be exercised so that the young, the elderly and the vulnerable are able to become and remain more independent.

Geographical Distribution of Playgrounds in the Borough

Reigate & Banstead
Playground
Distribution

$ Playground

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Many useful initiatives have already taken place across the Borough to combat levels of inactivity and car-reliance. For instance the East Surrey PCT runs a Walking for Health scheme and many schools have developed School Travel Plans, however the number of primary aged children being driven to school remains at around 60 – 70%.

Opportunities for active play to maintain healthy lifestyles for children exist across the Borough. The provision of play space is outlined in the table below, as assessed against the National Playing Fields Standard. It highlights shortfalls in certain areas that need to be addressed, as part of the wider planning framework, relative to community demands and access to other suitable open space.

Specific areas for action have been identified as
- Toddler's play provision in
    o Meadvale and St John's
    o Nork
    o Tadworth and Walton
    o Tattenhams
- Review of play provision in Horley

More formal sports provision also has a major contribution to make to encourage healthy lifestyles. Sport England has set an objective to
- Increase the number of people taking part in sport three times a week for 30 minutes of moderate intensity, as sport's contribution to the achievement of the Government's physical activity targets and to encourage sports people to develop an active lifestyle - sport, active recreation and physical activity - as part of everyday life.
- Reduce inequality in participation amongst priority groups.

Reigate & Banstead Scoping Report – October 2005

Play area provision (LAP's/ LEAPS/ NEAPS) by ward mapped against NPFA Standard (In order of provision met)

Variables	Population: Aged 0-14 (Census 2001)	RBBC Play Areas excluding skateparks (Number)	RBBC Play Areas (Hectares)	NPFA Requirement (Hectares)	NPFA Standards Met (%)
Area Reigate and Banstead	**23,666**	34	2.5	7	35%
Earlswood and Whitebushes	1,657	4	0.5	0.5	100%
Salfords and Sidlow	363	1	0.09	0.1	83%
Reigate Central	1,064	1	0.2	0.3	63%
Banstead Village	1,391	1	0.2	0.4	50%
Chipstead Hooley and Woodmansterne	1,345	4	0.2	0.4	50%
Merstham	1,428	3	0.2	0.4	47%
Redhill West	1,414	4	0.2	0.4	47%
South Park and Woodhatch	1,408	3	0.2	0.4	47%
Nork	1,453	1	0.2	0.4	46%
Preston	782	1	0.09	0.2	38%
Redhill East	1,160	4	0.1	0.3	29%
Horley East *	993	1	0.07	0.3	23%
Tattenhams	1,325	2	0.09	0.4	23%
Kingswood with Burgh Heath	1,114	2	0.07	0.3	21%
Horley Central *	1,252	1	0.07	0.4	17%
Meadvale and St. John's	1,489	1	0.05	0.4	11%
Tadworth and Walton	1,355	1	0.03	0.4	7%
Horley West *	1,675	0	0	0.5	0%
Reigate Hill	998	0	0	0.3	0%

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Death rates from circulatory disease, cancer and suicide (direct standardised mortality rate per 100,000 population)	2002: Circulatory disease - 84.6 Cancer - 106 Suicide - ?	South East 2001: Circulatory disease - 89 Cancer - 117 Suicide - 8	East Surrey PCT: Contribute to a national reduction in death rates from CHD of at least 25% in people under 75 by 2005 compared to 1995/97, targeting the 20% of areas with the highest rates of CHD.

Contribute to a national reduction in cancer death rates of at least 12% in people under 75 by 2005 compared to 1995/97, targeting the 20% of areas with the highest rates of cancer. | SE figures over the last 5 years show a steady decline. | | QoLI: C7 http://www.chi.nhs.uk/ratings/ |
| b. Infant mortality rates (per thousand live births) | | Surrey - 3.8 | | | | QoLI: C2 http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=6631&Pos=6&ColRank=1&Rank=272 |
| c. Conceptions among girls under 18 (per thousand) | 2002 – 25.5 | Surrey 2002: 25.2 England 2002: 43.8 | East Surrey PCT Reduce <18 conceptions by 10% by 2004; Reduce <18 conceptions by 40% by 2010; Establish a downward trend in <16 conceptions by 2010 | Reducing. East Surrey PCT's initial target of reducing pregnancies by 10% by 2004 (on 1998 baseline) has been met. | | QoLI: C15 Teenage pregnancy unit, SCC

East Surrey PCT Annual Report 2004 |
| d. Life expectancy | 2001: Males 77.0 / Females 81.5 | South East 1999/2000: Males 76.7 yrs / Females 81.2 yrs | | Increasing | | QoLI: C4 http://www.statistics.gov.uk/downloads/theme_population/LEResultsE&W15oct20 |

						04.xls#'E&W LAs - M'!A1
e. Percentage of people who said their health was poor	April 2001: 6.0	Surrey April 2001: 6.2 England and Wales 2001: 9.2				Census data 2001
f. A+E Emergency admission waits (The percentage of patients admitted to hospital via A&E within 4 and 12 hours of decision to admit)	East Surrey and Sussex Trust: 2005: 4hr – significantly underachieved 12hr- significantly underachieved					
f. Amount of Extra Care Housing completed	None at present					
f. Older people (over 65) helped to live at home per 1000	No data at present	Surrey 2003-04: 56	East Surrey PCT: Improve the quality of life and independence of older people so that they can live at home wherever possible, by increasing by March 2006 the number of those supported intensively to live at home to 30% of the total being supported by social services at home or in residential care.			QoLI: J2 http://www.bvpi.gov.uk/pages/keyFacts_BVPI.asp?lastpage=1&aid=110 (BVPI 54)

<u>Sustainability issues/problems/opportunities:</u>

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.

Over a third of people are not active enough to benefit their health, and rates of walking and cycling have fallen over the last 25 years. Concerns over road safety, due to the volumes/speed of traffic and other issues such as pavement parking, coupled with the relatively poor provision of walking and cycling routes, is continuing to exacerbate this problem. Staggeringly, 15.5% of children aged 2 –10 are now clinically obese (2002) and up to 30% overweight. A target that all schools should have Travel Plans by 2010 has been set to try and decrease the degree of car-dependence. However, dependence on the private car for shopping, commuting and the school run has knock-on effects on people's willingness to use more sustainable forms of transport for these activities.

As well as the high ownership and use of cars, other issues related to the economic success of the Borough create pressures on the health of our residents. The stresses of living in a heated economic environment are deleterious to our mental wellbeing, which is crucially linked to good physical health and making healthy choices. Stress is now the commonest reported cause of sickness absence and an unnecessary drain on the local economy. Partnerships between public agencies and others, possibly through the Local Strategic Partnership, can help shape the environment in which we live. A more liveable, safer environment can encourage opportunities for daily, utilitarian 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 the more urban areas could come under even more pressure due to development and undermine this goal.

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, compounding the continuing disquiet over the amalgamation/rationalisation of services between Crawley and East Surrey and current difficulties in recruiting staff. The increasing number of elderly residents in particular is adding to the demands on provision of appropriate health care; the lack of extra-care housing in the Borough inevitably adds to the burden on local health services, which could otherwise enable the elderly to maintain their health and independence within their own homes.

The importance of transport provision should also not be overlooked in relation to the ability of residents to maintain their independence. The number of households that are without access to a car has changed little over the last decade, even though in many instances the number of local shops, post-offices and other facilities 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, which could prevent, or make difficult, access to services and so endanger health. Policies should specifically consider how the mobility of the elderly can be maintained.

Independence can also be enhanced by the application of Lifetime Homes (LTH) Standards to dwellings. The 16 standards associated with LTH are designed to allow homes to meet the diverse and changing needs of residents throughout their lives, building in features that also meet the needs of the young, elderly and disabled; other considerations allow the interior and exterior of the home to be easily adapted in the event of life-change. The LTH standards are now mandatory for Wales and Northern Ireland, but not for England.

The continuing risk from fuel poverty, especially relative to the young, elderly and other vulnerable groups remains an issue: an estimated 7,000+ households are potentially at risk of fuel poverty, with the consequential increased risk to health (covered elsewhere).

Summary:

- Reigate and Banstead have high levels of good health relative to the South East and UK
- There are significant differences in health between affluent and deprived areas of the Borough
- An objective of improving access to healthcare is to de-centralise some services, supported by critical care hospitals
- Obesity is becoming an increasing concern, especially amongst children
- Over a third of people are not active enough to benefit their health
- The need for safe and clean open spaces has been identified as necessary to encourage physical activity and prevent weight gain
- Formal sports provision has a major contribution to make to encouraging and maintaining healthy lifestyles
- The application of Lifetime Homes standards can help in maintaining independence
- Over 7,000 households are potentially at risk of fuel poverty

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?

Social Progress that Recognises the Needs of Everyone

Objective 3: To reduce poverty and social exclusion

<u>Overview:</u>

Surrey is an affluent county with low levels of unemployment and high levels of academic success. However, Reigate and Banstead (as elsewhere in Surrey) has pockets of deprivation. As well as raising academic performance within the Borough, it is important to give young people the opportunity to learn about and experience different career paths and support them in making these important decisions.

Almost 60% of 15 year olds in Surrey achieved 5 or more GCSE's grade A* - C in 2001, which is much higher than the national average (In the academic year 2003/04, 58.6 per cent of pupils in Surrey achieved five or more GCSEs graded A* to C, compared with an average for England of 53.7 per cent.) 80% of sixteen year olds in East Surrey continued their education after 16, but this drops by 20% by the age of 19 (between level 2 and 3 qualifications).
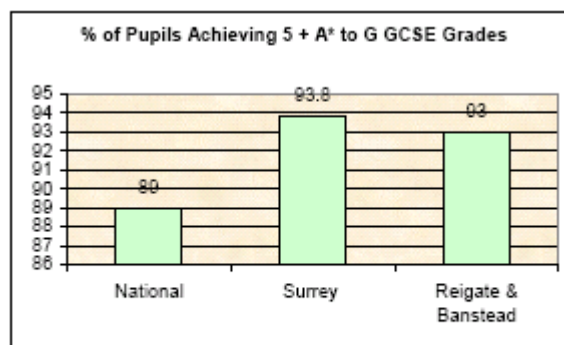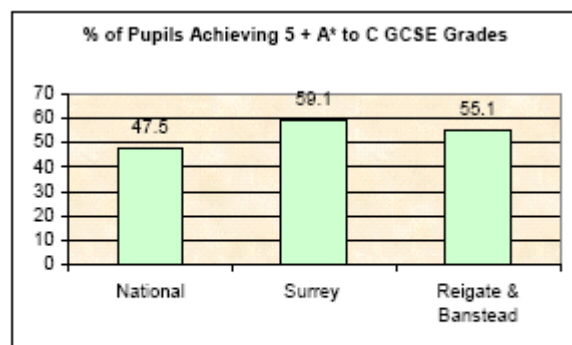
- The average attainment of pupils within Surrey boroughs and districts was nearly always above the national average.

Over the last five years, standards in education, as shown by Standard Assessment Tests (SATs), have also improved in respect of younger students in the area. In Surrey the proportion of pupils achieving level 4 at Key Stage 2(KS2) (the anticipated level of attainment for pupils aged 11 in their final year at primary school) has changed from 76 per cent in 1999 to 79 per cent in 2004 for Mathematics and from 78 per cent to 85 per cent in respect of English.

Qualifications: percentage of resident population ages 16 to 74, April 2001

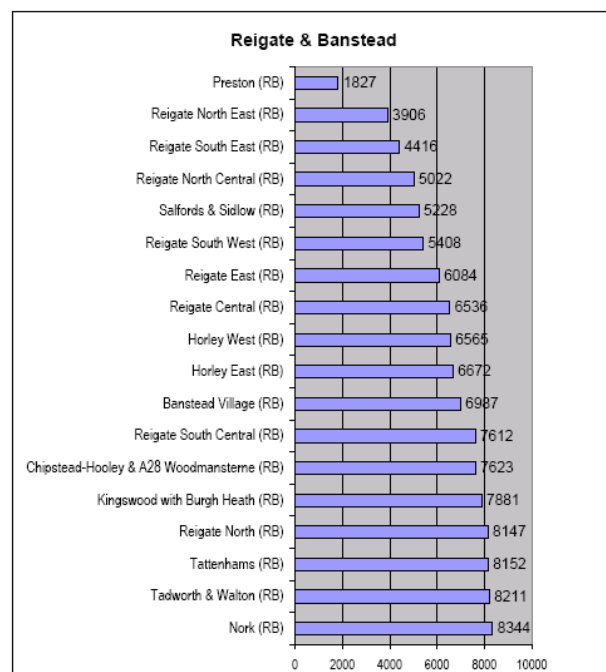|	Reigate and Banstead	Reigate Hill	Preston	Merstham (SOA 008A)	South East	England and Wales
People aged 16-74 with: No qualifications	20.12	10.96	34.98	33.30	23.92	29.08
People aged 16-74 with: Highest qualification attained level 4 / 5	24.60	38.10	10.20	11.35	21.75	19.76

However, the table above demonstrates that the high levels of academic achievement are not evenly spread across the Borough:

Deprivation Indexes
(Department of Transport, Local Government and the Regions, Indices of Deprivation 2000)

The Indices of Deprivation 2000 compares 8414 wards in England and Wales. It combines a number of indicators (income, employment, health deprivation and disability, education skills and training, housing and geographical access to services) into a single deprivation score for each area.

(8414 wards in England & Wales, lower the score the higher the deprivation)

Reigate & Banstead

Ward	Value
Preston (RB)	1827
Reigate North East (RB)	3906
Reigate South East (RB)	4416
Reigate North Central (RB)	5022
Salfords & Sidlow (RB)	5228
Reigate South West (RB)	5408
Reigate East (RB)	6084
Reigate Central (RB)	6536
Horley West (RB)	6565
Horley East (RB)	6672
Banstead Village (RB)	6987
Reigate South Central (RB)	7612
Chipstead-Hooley & A28 Woodmansterne (RB)	7623
Kingswood with Burgh Heath (RB)	7881
Reigate North (RB)	8147
Tattenhams (RB)	8152
Tadworth & Walton (RB)	8211
Nork (RB)	8344

Seven out of the 18 wards in Reigate & Banstead are in the top 10% of least deprived wards in England and Wales and 11 wards appear in the least deprived national quartile.

Traditionally the key areas of concern have been Preston and Merstham as evaluated on a whole ward basis (see Deprivation Index graph, left).

The recent use of the smaller geographic Supra Output Areas, SOAs, identify additional areas including Redhill West and parts of Horley (see table below).

These areas of deprivation share similarities, most being Council built areas areas, and although a large proportion of properties have now been bought under the right-to-buy scheme, a high proportion (e.g. Preston: 40%; Merstham: 60%) are still rented from a Registered Social Landlord. The socio-demographic profile for these areas indicate low affluence as the proportion of those with routine/semi-routine occupations far exceeds that seen for the borough as a whole. Apart from the tenure and socio-demographic differences with surrounding areas, there are associated poor reputations for crime and anti-social behaviour.

Location	RANK OF IMD (where 1 is most deprived)	Borough Rank	Surrey Rank
Merstham	8174	1	1
Redhill West	11159	2	8
Horley West	12228	3	16
Redhill West	12969	4	20
Horley Central	13041	5	22
Preston	13611	6	25
Preston	13641	7	26
South Park & Woodhatch	14951	8	36
Earlswood & Whitebushes	15462	9	42
Merstham	15860	10	50

Table of Supra Output Areas (2004) showing pockets of deprivation, ranked in the top 50 (of 709) in Surrey

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Proportion of children under 16 living in income deprived households	2004: 9%	Surrey 2004: 9%				QoLI: D1 http://www.odpm.gov.uk/stellent/groups/odpm_control/documents/contentservertemplate/odpm_index.hcst?n=4610&l=3
b. Percentage of population of working age who are claiming key benefits	2003 May: 6.3% 2001: Job Seekers Allowance: 0.9%	2001: Job Seekers Allowance: 1.4% SE 2.3% GB				National Statistics

|						
c. Percentage of population who are income deprived	2004: 6%	Surrey 2004: 6%				QoLI: F9 http://www.odpm.gov.uk/stellent/groups/odpm_control/documents/contentservertemplate/odpm_index.hcst?n=4610&l=3
d. Average score for Indices of Multiple Deprivation (IMD) 2004	2004: ranked 309 out of 354 districts in England (1st being the most deprived)	2004: the average rank in Surrey 330				http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_029534.pdf
e. Percentage of pupils achieving five or more A*-C GCSEs		Surrey 2002/03: 58.4%	Increase the percentage to 60%			http://www.bvpi.gov.uk/pages/keyFacts_BVPI.asp?lastpage=1&aid=110 (BVPI 38)
f. Level of qualification of those living in the district						QoLI: E1 http://www.statistics.gov.uk/STATBASE/ssdataset.asp?vlnk=6564
▪ Proportion of population of working age (16-74) with GCSE or equivalent as the highest qualification achieved (Level 2)	2001: 25%	Surrey 2001: 22%				
▪ Proportion of population of working age (16-74) with A-levels or equivalent as the highest qualification achieved (Level 3)	2001: 9.4%	Surrey 2001: 10%				
▪ Proportion of population of working age (16-74) with a first degree or equivalent as the highest qualification achieved (Level 4/5)	2001: 24.6%	Surrey 2001: 27%				
g. Proportion of adults (16-60) with	2001: Literacy – 19.2 % /	Surrey 2001: Literacy - 18.6% / Numeracy -				QoLI: E4 www.basic-skills.co.uk

poor literacy and numeracy skills	Numeracy – 18.1%	17.3%				
h. Percentage of all respondents satisfied with the local bus service		Surrey 2003/04: 33%				QoLI: H6 http://www.bvpi.gov.uk/pages/keyFacts_BVPI.asp?lastpage=1&aid=110 (BVPI 104)
i. Local bus services (passenger journeys per year)		Surrey 2003/04: 25,820,075				QoLI: H7 http://www.bvpi.gov.uk/pages/keyFacts_BVPI.asp?lastpage=1&aid=110 (BVPI 102)
j. Access to services (very or fairly easily) ▪ Local Shop ▪ Post Office ▪ Chemist/ pharmacy ▪ Shopping centre/supermarket ▪ Publicly accessible green space ▪ Shop selling fresh fruit and veg ▪ Bank/cash point ▪ Public transport facility ▪ Library ▪ Cultural/ recreational facility ▪ Sports/Leisure Centre ▪ Local Hospital ▪ Council/ neighbourhood office	2003/04 Data presently unavailable					QoLI: H5

Sustainability issues/problems/opportunities:

By far the most pressing issue is the continued existence of deprivation in some areas of the Borough; part of Merstham has been ranked the most deprived area in the whole of Surrey.

Some notable demographic differences, when compared to the national/regional/Reigate and Banstead averages, help to explain the issues, but they are not always common factors that can point to the issues. For example, the number of single parents/carers in Preston is >10% (compared to <4% in Reigate and Banstead as a whole); and in the Portland Drive areas of Merstham Pensioners comprise 25%, and single people 19%. The needs of these communities are likely to be markedly different to those of the wider Borough population.

Reigate & Banstead Scoping Report – October 2005
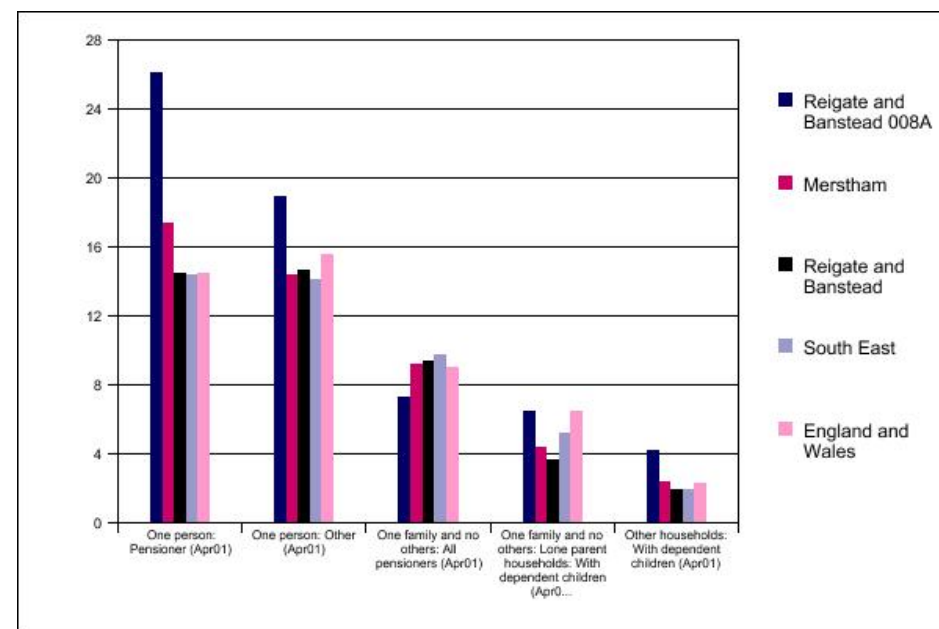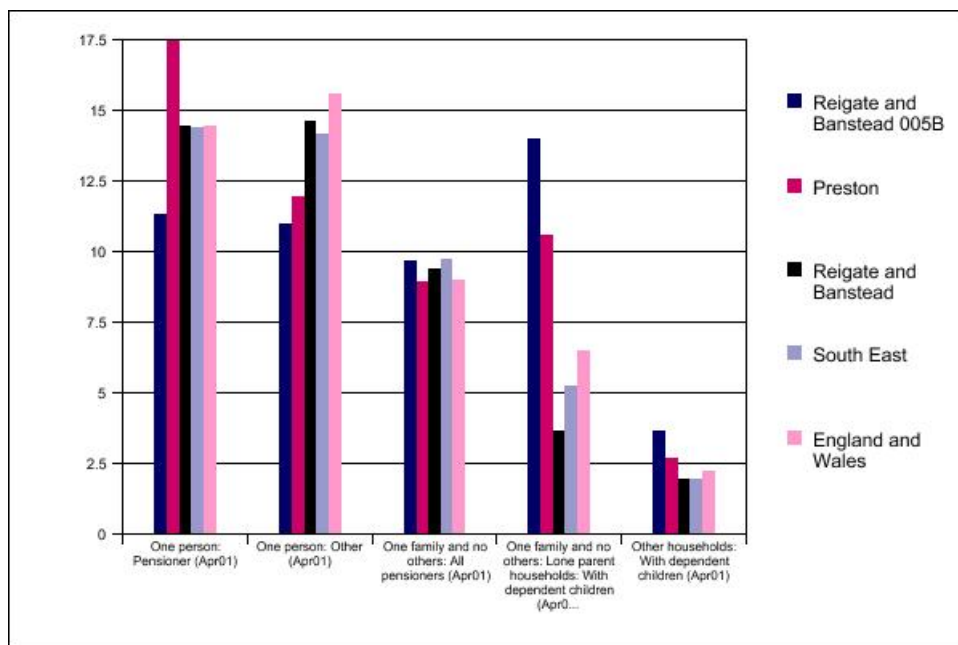
Although, there are some common factors (i.e. low incomes) other aspects associated with deprivation cannot be presumed:

- lack of access to a car in Merstham (SOA Reigate and Banstead 008A) is significant, affecting almost half (43.1%) of households. However, this statistic is not shared to the same extent by Preston, where only 22.8% of households have no car access (compared to the average of 26.8 per cent in England and Wales.) This apparent availability of car access in Preston is still low in comparison to the Reigate and Banstead average unavailability of 14.9% and may mask the finer detail: lack of availability may still be concentrated in certain sections within the community; recent reductions in bus services at weekends and evenings may be a cause for continued concern for social exclusion and reduced opportunity.
- Neither show significant differences in levels of employment, compared to benchmarks (although this is not true of job type or income), but those differences that are apparent seem to be related to caring responsibilities.
- Both have a larger number of residents in these areas appear to suffer from permanent sickness or disablement.
- Preston scores extremely highly when appraised against the risk factor: "community disorganisation". This may be a result of the fact that Preston is a combination of social housing belonging to three (now two) Local Authorities. Consequently residents have their roots in three different communities seriously affecting the sense of community in Preston itself.
- Standards for the key catchment schools in both these areas of deprivation are also lower than average; the number of pupils with special educational needs is both well above the national average and attendance well below the national average.

The low level of educational attainment is a key concern: the Government target is that, by 2010, half of all 18-30 year olds should experience higher education, against the current level of around 30%. This is of particular significance in Surrey because of the need for even more people with higher-level skills in our largely knowledge-based workforce. Participation rates in higher education range from 72% among children of professional classes to just 13% of children of unskilled workers. This disparity will tend to perpetuate problems associated with reduced opportunities and low incomes. In order to widen participation from under-represented groups, practical support will be needed. For example it will be important to promote parity of esteem between vocational and academic learning and ensure appropriate learning infrastructure is located in deprived areas.

It is understood that the issue of participation in structured learning is wider spread problem. Participation by Surrey's young people drops from being above the national average for 16 year olds to below the national average for 17 and 18 year olds. This means that, while Surrey ranks 17th out of the 47 Local Skills Council areas at age 16, it drops to 29th at age 17. For some young people we may need to generate a positive interest in learning. Increasing participation and achievement will require work with partners, particularly Surrey County Council, colleges, schools and the Connexions Service, to address the underlying reasons for lower achievement or lower levels of progress post-16 as early as possible within education

The provision of appropriate affordable childcare facilities can be a significant factor is overcoming deprivation. . If parents cannot afford the childcare that is available, then it will be of no help them - this will not help unemployed parents to enter employment, those wishing to study or train to do so, and teenage parents to continue in. Preston already has a mini SureStart programme (not covered by the tradional Sure Start

local programme model) which aims to make childcare affordable for parents, and sustainable for providers. The Government provides a variety of forms of support with the cost of childcare for various groups, and it is important that local authorities and others are able to promote these effectively.

Summary:

- ➢ Reigate and Banstead is a largely successful, affluent Borough, but some pockets of deprivation exist
- ➢ Although Preston and Merstham have been identified as areas where deprivation exist, the finer geographic focus of Supra Output Areas have highlighted further areas including Redhill West. Horley West and Horley Central
- ➢ The demographic profiles of these areas, although sharing some similarities, do also highlight distinct differences e.g. car ownership; single parent families
- ➢ Preston has an exceptionally high level of single parent families
- ➢ Preston scores extremely highly against the risk factor "community disorganisation"
- ➢ Deprivation primarily exists in areas with high concentrations of RSL tenures
- ➢ Lack of car access in some deprived areas exceed 40%
- ➢ School attendance and academic achievement in deprived areas are lower than average
- ➢ Participation in further education drops markedly at age 17 + and is only 13% in children of unskilled workers
- ➢ Preston has a Mini SureStart programme

Key Decision Aiding Questions:

- ❑ Will the option address issues of deprivation?
- ❑ Will the option help to overcome social exclusion?
- ❑ Will the option address issues of poverty in identified areas?
- ❑ Will the option improve access to key services (education, employment, recreation, health, community services, cultural assets)?
- ❑ Will the option improve the provision of affordable transport?
- ❑ Will the option provide additional assistance to single parents, the elderly, those with ill health or disability?
- ❑ Will the option improve participation in further education?

Social Progress that recognises the needs of everyone

Objective 4: To create and maintain safer and more secure communities.

Overview

Every individual has the right to expect to live in a safe and secure environment. Crime, and fear of crime, destroys the lives of innocent victims and everyone pays in different ways.

In recent years Surrey has consistently been one of the safest areas of the country with the lowest recorded crime rate in England. However the very high volumes of traffic in the County means that road safety is a major cause of concern, affecting our quality of life and attitudes about where we live.

The Crime and Disorder Act 1998 placed a duty on Reigate and Banstead Borough Council, Surrey County Council and Surrey Police (the Crime and Disorder Reduction partnership; CDRP) to work together to jointly develop a Community Safety Strategy to reduce crime and disorder within the Borough.

Crime in the Borough of Reigate & Banstead is low compared with other areas of England and Wales. In 2002–2003 there were 68 recorded crimes per 1000 population in Reigate and Banstead, just above the Surrey wide figure of 65 per 1000, and well below the South East at 86, and England & Wales at 113, per 1000 population. Of all crime in England and Wales in 2002-2003 less than 1% was committed in the Borough of Reigate and Banstead. Overall crime in the Borough of Reigate and Banstead equates to 1.25 % of the crime in the South East and 13% of the crime in Surrey.

In 2003-2004 the Borough experienced a 3.7% decrease in total crime compared to the previous year and a further 2.3% reduction on 2004-2005, placing it second across the County in terms of crime reduction for two years running. However, some particular areas of crime continue to be a problem: in 2004-2005 violence increased by 14.8% (partly due to an increase in reporting of domestic violence, but also alcohol related incidents in town centres); criminal damage increased by 5.5% (the bulk being vandalism, including graffiti, vehicle damage and damage to property, particularly in the town centres on Friday and Saturday nights)

Perceived levels of crime were measured in addition to actual levels through a Fear of Crime survey (FOC). This was carried out during 2003/04 as part of the Borough Council Best Value General Survey. The survey was sent to 2,400 households within the Borough and solicited a 59% response rate. Results from the 2003/4 surveys suggest that fear of crime is higher than in 2000 when the last survey was conducted (this may, in part, be due to the amalgamation of various individual crime types for reporting purposes). However, the reassuring message was that the vast majority of residents feel safe in the Borough during the day and night (78% and 68% respectively), with little variance by area.

Specific areas of concern were noted and listed below:

Places that residents try to avoid

Most frequently mentioned:
- Redhill Town Centre
- public parks, commons and open spaces

Additionally concerns were raised about:
- Merstham, around the Portland Drive area
- Railways Stations (Tadworth & Horley in particular)
- Merland Rise/Preston
- Footpaths & alleyways
- Woodhatch
- Reigate town centre
- Car parks
- Unlit streets/side roads

Anti-social behaviours that are of most concern are rubbish & litter, vandalism, graffiti and damage, and teenagers hanging around.

CCTV is playing a valuable part in deterring and detecting criminal activity. Both static and mobile equipment are being promoted by the Crime and Disorder Reduction Partnership: 104 cameras across the Borough are now live-linked to the control centre in Reigate Police Station, with 3 additional live-link CCTV systems (Portland Drive, Merstham; Priory Park, Reigate; Tattenham Corner) being installed in the past few years. CCTV cameras assisted in making arrests in 390 cases 2004.

In the context of a low crime rate area (Surrey is the safest county in England) the fear of crime appears somewhat high. However, Reigate and Banstead is a Borough, which enjoys a high rate of resident satisfaction at 59%.

Road safety across Surrey is improving. Performance has continued to exceed Government targets, with all modes of travel, with the exception of motorcycling, showing significant decreases relative to 1994-1998 averages. However it is pertinent that two of the highest priorities in a Surrey County Council residents survey (2003) was road safety (27%) and enforcement of road traffic speed restrictions (21%) and exceeded other safety concerns, such as street crime (23%).

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. The number of recorded offences per 1000 people	2004/05	(Surrey Police force as a whole)	The Government has set a 15.3% reduction target on the 2003-04 baseline by 2008	(see table below for 2003/4 trends against national performance)		QoLI: B13-B21 Police monthly monitoring sheet
Domestic violence	2.2	2.15				
Violence against the person	12.1	10.02				
Sexual offences	0.77	0.77				
Robbery	0.45	0.43				
Burglary	8.56	8.54				
Theft of motor vehicle	2.16	2.27				
Theft from motor vehicle	6.01	6.42				
Number of drug offences	2.39	1.79				
b. The proportion of people that live in fear of crime		Surrey 2002/03			The Fear of Crime tends still to be rising, even though total crime is still decreasing	QoLI: B9-B12 http://www.homeoffice.gov.uk/rds/crimeew 0304.html
▪ % very worried about burglary	Not available	9%				
▪ % high level of worry about car crime	Not available	11%				
▪ % high level of worry about violent crime	Not available	13%				
▪ % high level of perceived disorder	Not available	15%				
c.Pedestrian/cyclists – number killed and seriously injured (KSI)	See table and graph below	Surrey 2002/03 - Pedestrians: 9.7 Cyclists: 4.2		Decreasing	Generally higher levels of pedestrian KSI may be due to more urban environment of R&B	QoLI: H3 ODPM
d. Road safety – All ages KSI	See table and graph below	2002 average of the 11 Surrey Districts: 63	40% reduction in KSI by 2010 50% reduction in child KSI by 2010 (both	Decreasing	Motorcycle KSI showing significant increase	QoLI: H3 http://www.dft.gov.uk/ stellent/groups/dft_tra

			on 1994-1998 baseline (SCC stretch target: achievement by 2007)			nsstats/documents/page/dft_transstats_027 429.hcsp
e. Deaths and casualties arising from fires per 100,000 population	2003/04: 0.21	2003/04 Surrey - 0.16				QoLI: B22 Speak to fire safety officer

CDRP performance against crime targets 2003-2004
(NB: figures show *key* crimes only: Total shows *all* crimes).

Government Target 2003-2004 (compared with 02- 03)	National performance 2003-2004	Reigate and Banstead performance 2003-2004
Reduce vehicle crime by 30% by 2004	9% decrease ⬇	10.7% decrease **(-139 crimes)** ⬇
Reduce robbery by 14% by 2005	6% decrease ⬇	15.9% decrease **(- 11 crimes)** ⬇
Reduce domestic burglary by 25% by 2005	8% decrease ⬇	10% increase **(+ 47 crimes)** ⬆
Reduce violent crime	15% increase ⬆	3% increase **(+ 37 crimes)** ⬆
Criminal damage (no target set)	9% increase ⬆	8% increase **(+ 152 crimes)** ⬆
TOTAL CRIME	**1% INCREASE** ⬆	**3.7% DECREASE (- 323 crimes)** ⬇

Reigate & Banstead Scoping Report – October 2005

Figure 1: Killed and seriously injured: percentage change over 1994 to 1998 baseline average
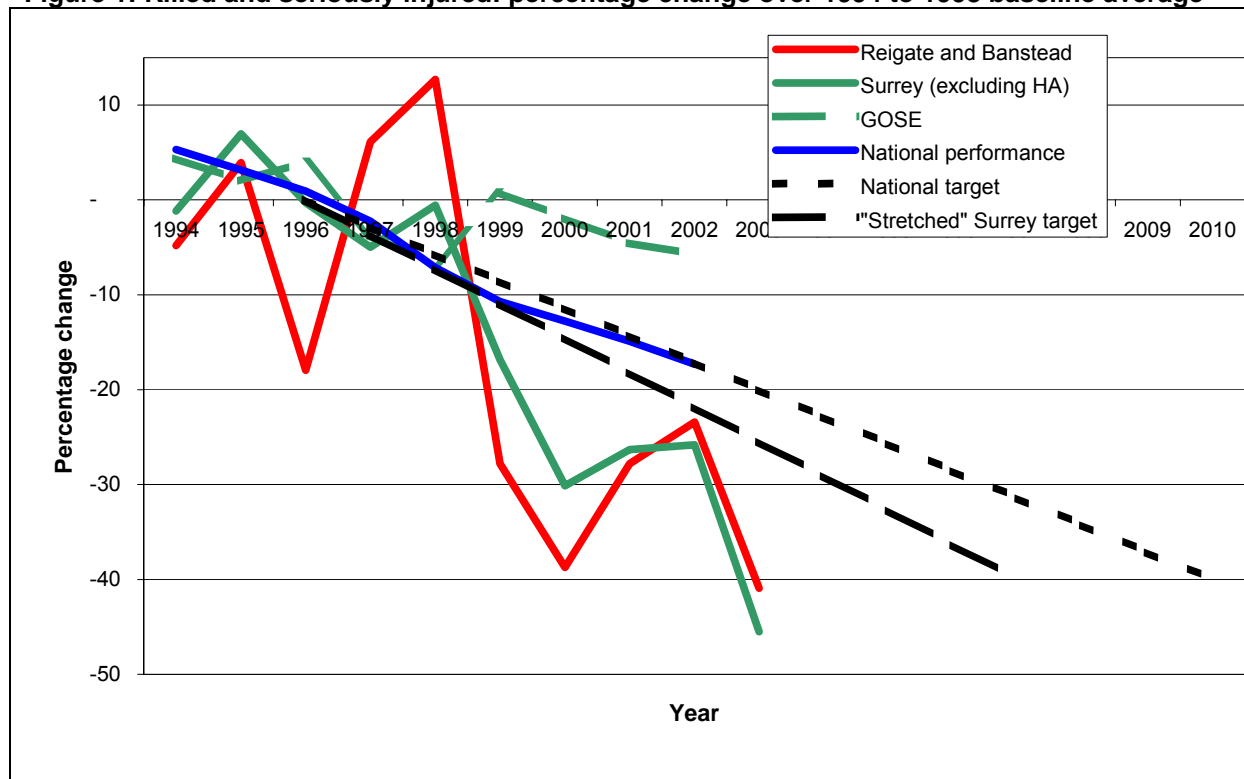
Reigate and Banstead KSI casualties (excluding Highways Agency roads)										
Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Pedestrians	19	19	13	15	16	8	8	14	16	12
Cyclist	11	8	7	6	8	9	8	6	4	4
Motorcyclist	21	16	12	17	19	9	14	14	13	15
Car	34	51	42	55	53	37	23	30	32	23
Other	2	1	1	4	7	3	3	2	5	0

Reigate & Banstead Scoping Report – October 2005

<u>Sustainability issues/problems/opportunities:</u>

Good design must be the aim of all those involved in the development process and should be encouraged everywhere. Current government planning policy strongly supports this principle and makes clear that community safety is an integral part of the design agenda. Planning Policy Guidance note 3 (PPG3) calls upon local planning authorities to: *promote design and layouts which are safe and take account of public health, crime prevention and community safety considerations.*

Many of the issues highlighted in the FOC relate to the need for natural surveillance and the creation of active neighbourhoods through the design and layout of buildings, a mix of dwelling types and tenure, mix of uses, and the creation of connected movement networks.

Busy movement routes provide informal control by citizens and a heightened sense of safety, a point highlighted in another. In particular, clear and direct routes through an area for all forms of movement are desirable. However, these should not undermine defensible space and the sense of ownership and responsibility inherent in well-designed neighbourhoods. Routes should be active and self-policing; the creation of underused and lonely movement routes is to be avoided.

Natural surveillance is a cornerstone in the achievement of community safety. Where the likelihood of being seen is low, the risks perceived by potential offenders are also low and the likelihood of crimes being committed will be higher. Ensuring that spaces around buildings, footpath routes, open spaces and parking areas in residential developments are open to view from adjoining occupied properties and/ or well-trafficked routes can assist in discouraging criminal activity, by increasing the risk of detection, reducing opportunities for crime and making potential offenders feel more vulnerable. The greater the level of use of public spaces by responsible citizens, the greater will be the degree of natural surveillance. This is one of the key mechanisms by which attracting more people to use communal spaces through investing in a high quality environment pays dividends in a reduced incidence of crime.

Other sustainability objectives (health, air quality etc) depend on providing many more opportunities for people to travel without the car. Public footpaths and cycleways form a vital part of the communications network in both urban and rural settings. They also often provide an important local (or strategic) recreational amenity, but awareness is needed of the potential problems that poorly located or poorly designed footpaths can have. The FOC already shows that poorly designed or sited footpaths may cause users to feel ill at ease and give rise to fear of crime, particularly after dark. They can, also provide opportunities for unobserved access to the rear of buildings, means of escape for offenders and opportunities for crimes against people, which is likely to lead to reduced levels of use, reducing the benefit to the community and will in turn exacerbate the problem. Well-designed, well-used and well-maintained footpaths on the other hand provide fewer opportunities for crime and are likely to feel safer. Footpaths and cycleways should be lit in built-up areas, except where the route is passing through woodland or an ecologically sensitive area, in which case an alternative lit route should be made available, such as a footway alongside a road;

There can be pressure to restrict access to a development to one main point, and although it is always advisable to carefully consider the desirability and design of secondary access routes, there may be conflict in achieving other sustainability aims.

Other concerns from the FOC point to the need for better lighting in certain streets areas. Different sources and patterns of lighting need to be considered for different Environments (for instance, ensuring that increased lighting levels avoid deep shadow). Where low-level lighting is used, fittings will need to be highly vandal-resistant. PPG15 suggests that high-pressure sodium lamps with well controlled light spillage may be preferable in environmentally sensitive areas. The use of additional lighting does, however, impact on other objectives (e.g. energy efficiency) Care must always be taken to ensure that the environmental (including astronomical) impact light pollution is kept to a minimum, and does not create problems for residents or motorists or have a harmful effect on the ecology or local character of an area.

Climate change could also potentially have an effect on crime figures, especially with respect to the predicted warmer summers. The increase in a more Mediterranean "café culture" is likely to increase the amount of on-street activity in the evenings. This could have either positive or negative consequences, depending a lot on design and planning direction. There is also likely to be increased pressure for the use of open-space, with people more likely to spend time out of doors; again, the consequences of this may potentially be positive. Home security as a result of rising temperatures, without adequate ventilation, will be to reduce security, as more people will choose to leave doors and windows open during hot periods, therefore increasing the risk of burglary.

Road safety is a significant cause for concern amongst residents and is frequently cited as the major barrier to increased levels of walking and cycling and is a response to the increasing volumes and speed of traffic.

Emerging evidence is beginning to highlight the impact of sport in relation to creating stronger communities and addressing issues of community safety, including reductions in anti-social behaviour, reductions in the propensity to commit crime, and reductions in the 'fear' of crime amongst the wider community. Sport can make an important contribution to the physical infrastructure of communities, providing a social focus for a community and affecting people's perception of their neighbourhood.

Summary:

- ➢ Reigate and Banstead is one of the safest areas in the country
- ➢ Crime has fallen in recent years, although some types of crime continue to be a problem
- ➢ Violent crime and criminal damage, especially alcohol related incidents in town centres, has shown an increase
- ➢ Fear of crime has increased since 2000, but the vast majority of residents feel safe on the streets both in the daytime and at night
- ➢ Key areas residents try to avoid are Redhill town centre; and parks, commons and open spaces
- ➢ Other urban areas also raised concerns: Reigate town centre, Merstham, Preston and Woodhatch

- Car parks, alleys/footpaths, railways stations; and lighting, were also highlighted
- Design and layout can help prevent and increase community safety
- Natural surveillance is the key to achieving community safety
- Well designed, well used footpaths and cycleways can help discourage criminal activity as well as make users feel more secure
- Increased lighting can lead to environmental disbenefits
- Predicted warmer summers is likely to mean increased levels of on-street activity in the evenings
- Road accidents continue to decrease, but road safety fears still predominate
- Sporting opportunities can help strengthen communities and reduce anti-social behaviour

Key Decision Aiding Questions:

- Will the option help to reduce crime levels?
- Will the option help to reduce the fear of crime?
- Will the option reduce concerns associated with specified urban areas?
- Will the option reduce concerns relating to other identified areas?
- Will the option help to "design out crime"?
- Will the option increase natural surveillance?
- Will the option improve road safety?

Social Progress that recognises the needs of everyone

Objective 5: To minimise the harm from flooding

Overview

Floods are natural occurrences, which can bring great benefits to the natural environment, however it 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.

Large areas of the Borough, south of the North Downs are subject to flood risk, and are to be found within the catchment of the River Mole and its tributaries (i.e. Redhill Brook; Burstow Stream and the Gatwick Stream).

The Environment Agency has produced indicative maps for the River Mole showing areas at risk of flooding from an event occurring once in one hundred years (1:100). Detailed flood risk maps have now been prepared for Horley, which also include a 1:100 year event, plus 20% to account for the likely extremes of climate change.

PPG25, the national planning guidance related to Development and Flood Risk, defines 1:100 year events as high risk and advises against residential or commercial development in undeveloped areas exposed to such risk. Many existing buildings already fall within the flood risk zone and redevelopment will need to be assessed carefully. Significantly, the EA is preparing new maps for lower risk events (1:1000 year events); the Surrey Structure Plan requires proposals for new residential developments in areas of low to medium risk to undergo flood risk assessments.

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. 23% (8,750 homes) of the proposed housing allocation in the SE Thames area is within the indicative floodplain.	This figure has increased after the release of the EA flood zones 2004 indicating a greater area at risk from flooding		
b. Number of new properties linked to sustainable drainage systems	Not collected at present					

Flood Risk Zones in Reigate and Banstead
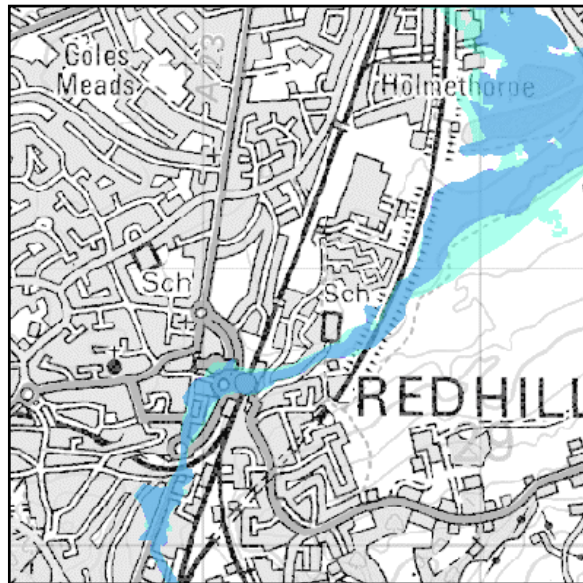
Map.1. Redhill town centre

Map.2. Merstham

Map.3. Earlswood

Map.4. Flanchford Road area

Map.5. Earlswood

Flood Risk Zones in Reigate and Banstead
(Extracts only - For full details refer to Environment Agency website)

Extent of extreme flood (1:200)

Flooding from rivers without defences (1:100)
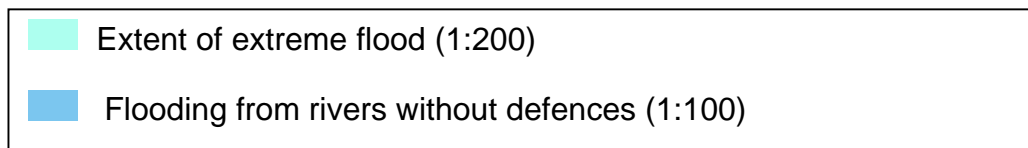
(copied from Environment Agency Flood Map 2004 - all maps are intended as a guide only)

INDICATOR (contd)	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
c. Number of properties or households that have access to the Environment Agency's flood warning service						Awaiting data from EA.

Revised Upper River Mole Floodline Prediction
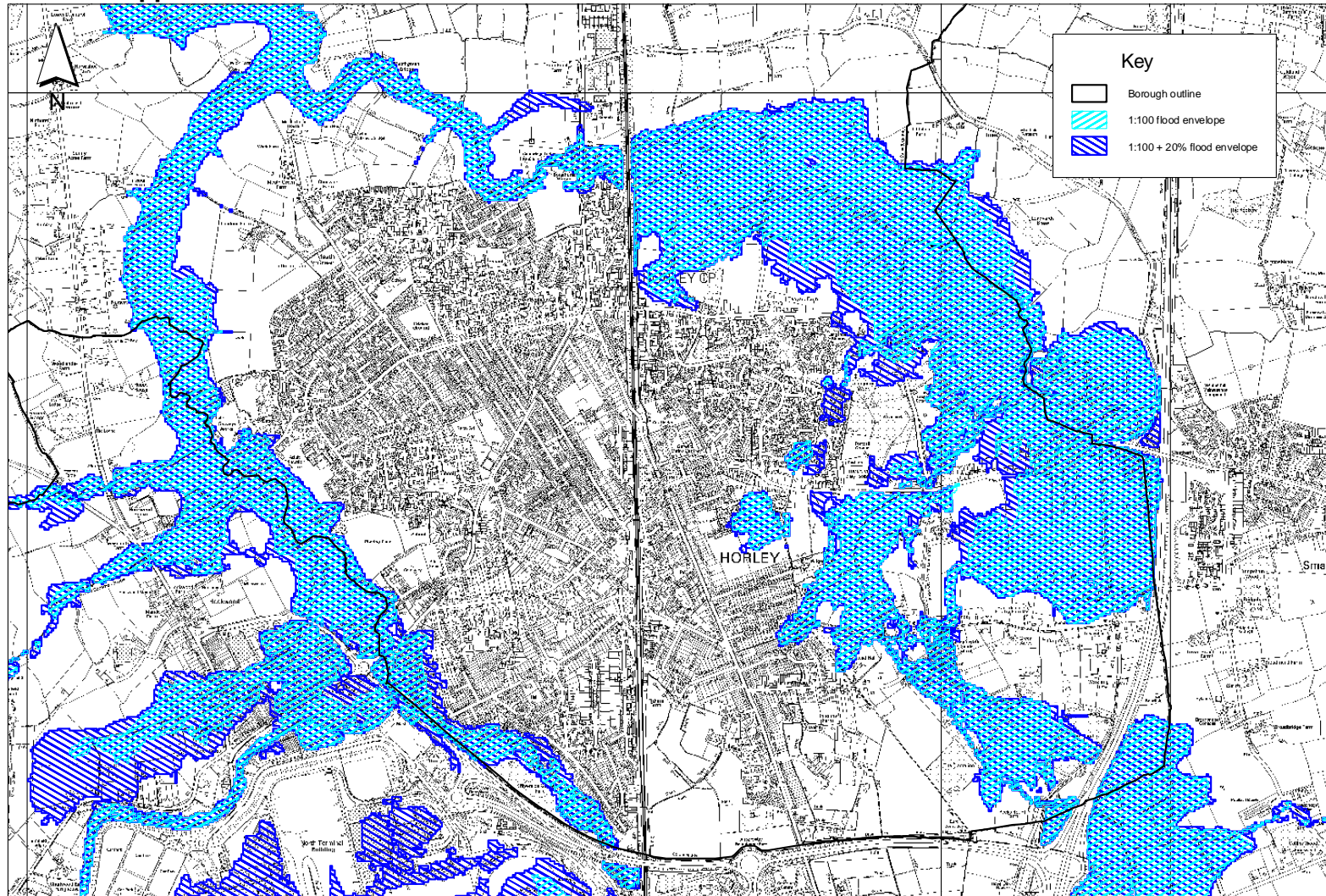
Key

Borough outline	
1:100 flood envelope	
1:100 + 20% flood envelope	

Scale 1:15000

Reigate & Banstead Scoping Report – October 2005

River Mole Strategic Options
Figure 4
DRG No 0000431404
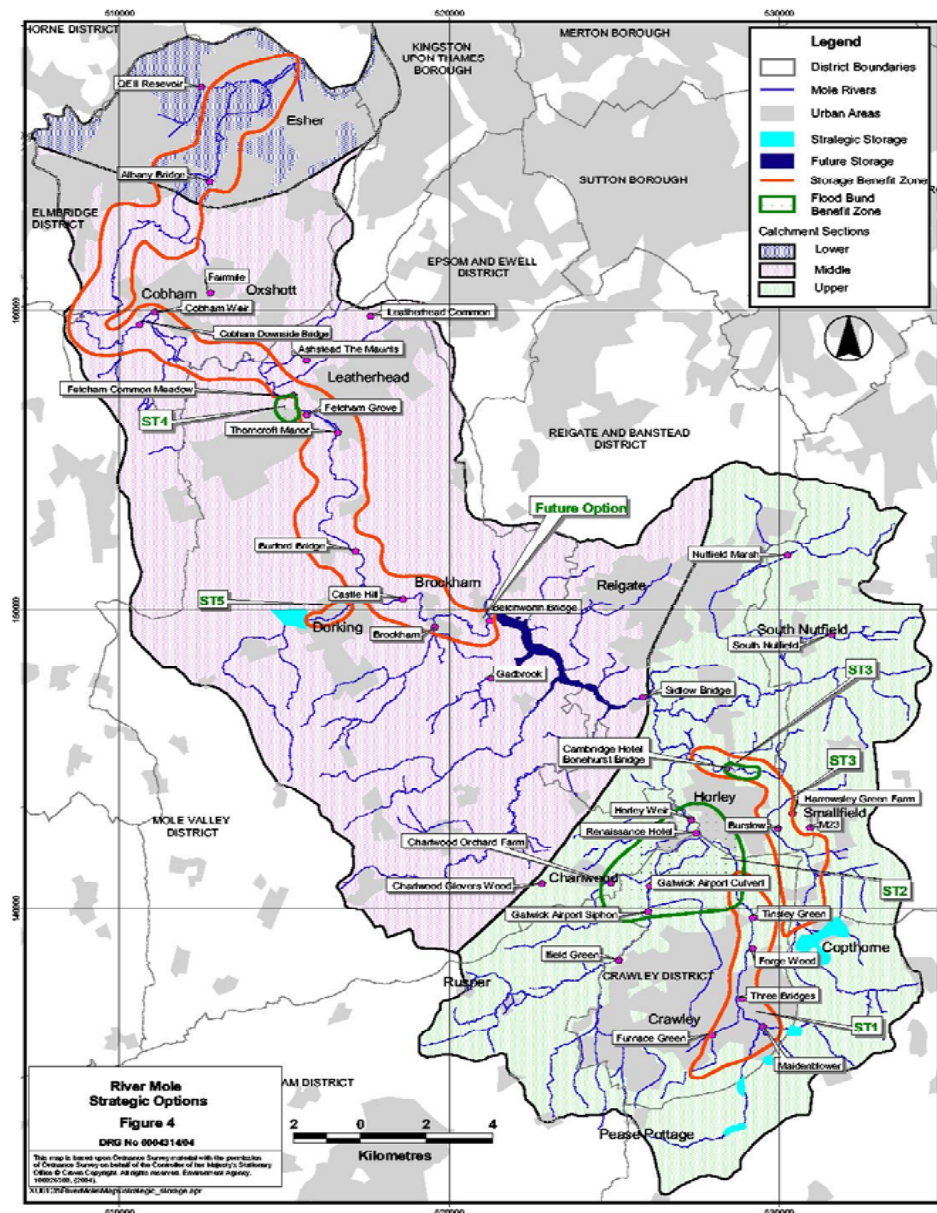
Sustainability problems/issues/opportunities:

The proposed development allocation throughout the South East Thames region indicates that 23% of homes are likely to fall within the indicative flood plain. Such development should only take place where appropriate measures have been taken (including taking into account the effects of climate change) and the flood risk to other areas does not increase.

Flooding is likely to damage infrastructure and disrupt services. Energy centres/sub-stations, water supply, sewers, and communication networks (including transport infrastructure) are all critical to maintain services. 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.

The use of traditional flood defences can cause problems elsewhere in the catchment. The natural function of undeveloped parts of flood plains need 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 floodplain woodlands, which as a result of their significantly higher water retention capacity, can have an important role in attenuating flood peaks, as well as providing other environmental benefits. Flood storage and similar options are presently under consideration in the Draft River Mole Strategy.

The combined pressures of new housing in the Borough and climate change may 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

Reigate & Banstead Scoping Report – October 2005

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 be resisted to minimise flood risk to adjacent areas.

In areas of risk, Sustainable Drainage solutions (SUDS) should be promoted widely so that the net contribution of run-off to the catchment as a whole creates an improvement to the existing situation. These could be applied to all developments involving an increase in the hard impermeable area; the EA should be consulted in all development on sites over 0.4 hectares or 10 dwellings. Building at higher densities may necessitate moving towards communal SUDS.

In areas outside of the River Mole catchment, the use of soakaways designed to recharge groundwater should be encouraged. However, within the catchment itself, any means to reduce the rate of flow into drains and water courses should be required, including the use of concrete voids; the use of rubble to serve this purpose should be prevented, due to the risk that contamination (such as oil etc) could not easily be reversed.

A variety of attenuation measures can be introduced at the level of the individual dwelling including "green roofs" and rainwater harvesting (utilising large underground water stores) and can help to meet other sustainability objectives (biodiversity, minimising water use, affordability). Any water-saving device will help to overcome problems at time of storm: external water-butts for extensions and other minor development can be a useful addition.

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. The potential pressures on combined sewers during times of storm means that, wherever possible, water companies should upgrade existing combined sewers. In this context, the use of sustainable drainage systems will help to reduce the pressure during periods of high rainfall and should be promoted.

Summary

> Large areas of the Borough south of the M25 are prone to flooding
> Flooding is likely to increase as a result of our changing climate
> New residential developments in areas of low to medium risk require flood risk assessments
> Opportunities to attenuate flood risk exist at the micro and macro level
> Development in, or adjacent to, identified flood risk zones should use SUDs so as to achieve no net increase in run-off
> 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?
- ❑ 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?

Effective Protection of the Environment

Objective 6.   To make the best use of previously developed land and existing buildings, encouraging sustainable construction.

Overview

Our homes and lifestyles have significant impacts on the environment. Our homes generate nearly 30 per cent of the UK's carbon dioxide emissions, and the construction industry accounts for around 85 per cent of timber used in the UK, with around 55 per cent being used for housing. Other impacts related to the construction of new homes include: quarrying to provide aggregates; the wasteful use of water; and the widespread use of toxic chemicals in materials, which can pose significant health risks for the occupants as well as having impacts on wildlife.

The rate of construction in the UK is set to increase. The Government's *Sustainable Communities Plan* seeks to accelerate the current house-building programme and increase the house-building target by about 200,000 on top of the 900,000 new homes planned between 1996 and 2016 in the South East. This new emphasis on growth represents an opportunity to shift development towards delivering more sustainable homes and construction.

New development needs to adopt increasingly rigorous standards to reflect this need to move towards sustainable construction. The focus must not be simply on new development, the same themes should be applied to renewal and upgrading of existing buildings.
Adaptations of lifestyle will also need to accompany these development changes. Attitudes and behaviour towards consumption will also require a step change if the target to stabilise the ecological footprint of the South East by 2010 is to be met.

The move towards implementing these more rigorous standards are already underway: the Government expects the voluntary Code for Sustainable Buildings to be rolled out as early as 2006; the South East Plan (consultation draft) proposes that local planning authorities should require Eco-Homes "very good" as a minimum standard for all new housing and BREEAM "very good" for commercial buildings; and the Surrey Structure Plan (supporting text to policy SE1) indicates that new development should be designed to achieve an Eco-Home/BREEAM standard of "excellent". (EcoHomes is an environmental rating for homes covering 7 areas including energy, pollution, materials, health and wellbeing)

Protection of greenfield sites predilect the use of previously developed land (PDL) for development. Surrey Structure Plan has two targets relating to PDL. The first relates to housing, where the aim is to build 90% of all housing on PDL in urban areas. Although 92% of all dwellings completed in Surrey in the 3-year period 2000-2003 were on land previously developed for urban use, only 68% were on previously developed land and in the urban area. The second target states that 80% of commercial development should occur each year on land previously used for commercial purposes, a target that has been achieved for ten of the last thirteen years.

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Percentage of dwellings built on previously developed land	2004-05: 87%		RBBC target: 85% Surrey Structure Plan: 90% in urban areas		The RBBC target will reduce to 80% in 2006, due to the fact that the new Horley sectors will be built on greenfield sites.	In house monitoring
b. The amount of commercial development built on previously developed land in urban areas	No commercial development in recent years		Surrey Structure Plan: 80% of additional major commercial development will be located in urban areas which have good access			In house monitoring
c. Average density on sites with 10 or more dwellings (Dwellings per Ha.)	Permissions 2004-05: 47.05	Surrey 2003/04 - 30.7	Surrey Structure Plan: new housing developments should be at least 35 dpha	Even small permissions in Reigate and Redhill are achieving densities of 35 – 36 per hectare		In house monitoring
d. Percentage of new build and retrofit homes meeting EcoHomes "very good" or "excellent" standard and the percentage of commercial buildings meeting BREEAM Very Good standard	Not presently required or measured	2000-04, 1,098 of the 6,665 housing units assessed were rated very good in the UK. 2002, 29 out of 35 commercial buildings assessed were rated very good or excellent in the UK.				Regional Framework, p.53 of data and trends. Contact Christina e-mail: breeam@bre.co.uk
e. The number of construction sites recycling or reusing demolition waste	Not rigorously monitored, although has taken place on several large sites		Requested as a matter of course with a standard informative			In house monitoring

Housing Density 2004-2005

(Dwellings per hectare)
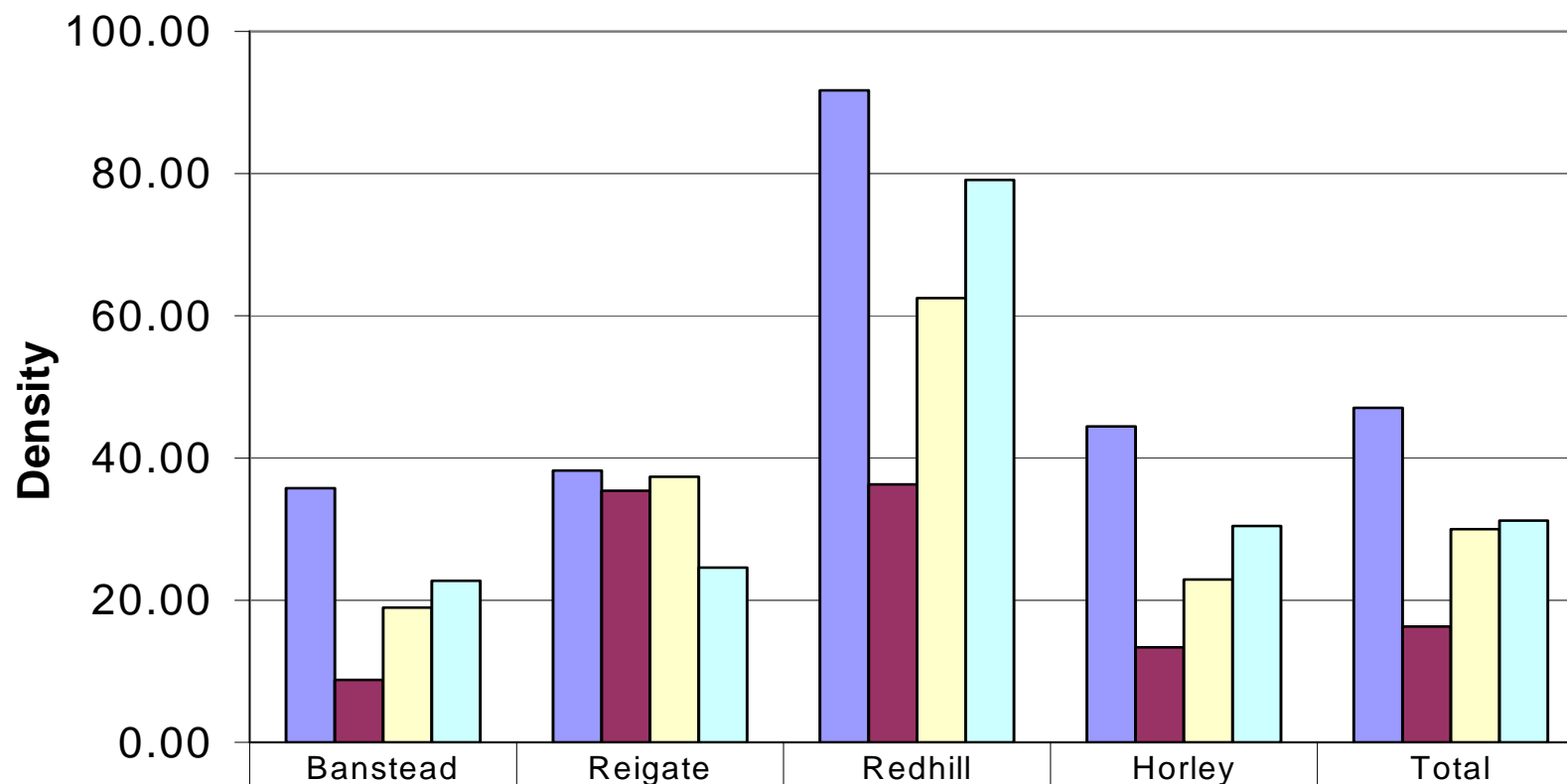
	Banstead	Reigate	Redhill	Horley	Total
☐ Large Permissions	35.74	38.21	91.71	44.44	47.05
☐ Small Permissions	8.76	35.38	36.28	13.38	16.29
☐ Total Permissions	18.94	37.35	62.50	22.93	29.99
☐ Completions	22.74	24.58	79.10	30.43	31.19

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 national and regional policy framework has become much clearer and leaves little room for doubt. The opportunity is now in place to introduce local policy, which clearly set out a planning-based definition of sustainable development and good design, which incorporates sustainable construction in the local context.

The challenge is to ensure that planning policies and guidance address sustainable construction as part of a package of sustainable development policies that "comprehensively and consistently" address the major environmental issues, encouraging higher standards of building performance than the minimum required through Building Regulations. Policies should set out the basis on which planning applications will be judged in relation to sustainable development. Permitted Development Rights could be introduced which would allow permission to be granted for specified types of sustainable construction.

Strengthening sustainability standards for specific sites is essential, since these sites will represent the vast majority of housing during the plan period; their environmental and social effects will last for decades.

Key sustainable development criteria relevant to new housing have been in part addressed by other sustainability objectives (e.g. energy efficiency) The cross-cutting nature of these other themes will help to establish a better understanding of what is required. It is essential to be aware of the major contribution that buildings make to our health and well-being (e.g. the availability of external space around, or close to, the home is one key aspect affecting the quality of life of occupiers). Although more intensive use of land can create sustainable communities and reduce the need for car travel, it should be noted that the benefits of building above certain densities could lead to a reduced quality of life.

There is a risk that the focus on the need for more housing will hide the fact that the promotion of a sustainable community necessitates a wider appreciation of other potential needs for previously developed land, such as the increasing needs to deal with waste (as a result of directives such as the Waste Electronic and Electrical Equipment Directive), the need to encourage better use of the railway network (e.g. development of freight hubs; bringing sidings back into service), development of energy plant in proximity to user sites etc.

The value of brownfield sites in terms of biodiversity should not be underestimated, furthermore as much previously developed land has been used for industrial purposes, there is 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.

Summary:

➢ The energy used in constructing, occupying and operating buildings represents approx. 50% of greenhouse gas emissions in the UK.
➢ The quantity of non-renewable, non-recyclable resources used in construction should be reduced to a minimum
➢ Buildings should be designed so that they minimise the use of resources in their day to day usage
➢ The Government's voluntary Code for Sustainable Buildings is due in 2006
➢ Eco Homes and BREEAM are becoming expected standards for new development, but have presently not been required
➢ What constitutes best use of previously developed land should not be presumed
➢ Previously developed land and buildings are part of the historic environment. Aspects may need protection and possibly enhancement

Key Decision Aiding Questions:

❑ Will the option encourage the re-use of existing buildings? *(see sustainability objective 10. regarding historic buildings)*
❑ Will the option help ensure that minimal non-renewable resources are used in construction?
❑ Will the option help minimise the "whole life cycle" use of natural resources?
❑ Will the option encourage the use of recycled products?
❑ Will the option make the best use of PDL, so as to deliver sustainable development?

Effective Protection of the Environment

Objective 7. To reduce land contamination and safeguard soil quality and quantity.

<u>Overview</u>

There are various ways of describing land where contamination exists and categorising the degree of contamination. Land is affected by contamination because historical land-management practices have led to the deliberate or accidental release or disposal of substances onto the land.

For the purposes of developing policy on its regulation in the UK, however, there is a statutory definition of Contaminated Land in Part IIA of the Environmental Protection Act 1990 introduced by the Environment Act 1995. This gives Contaminated Land as:

…*"any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that*

   a) *significant harm is being caused or there is a significant possibility of such harm being caused; or*
   b) *pollution of controlled waters is being, or is likely to be caused".*

Statutory guidance states how such land is identified and the steps necessary to secure its remediation. The statutory definition of contaminated land requires a contaminant source to be present, a pathway along which the contaminant can move and for that contaminant to be affecting, or potentially affecting, a specified receptor. Where a contaminant is present, but is not affecting a receptor, then that land would not meet the legal definition.

Much of the land that is contaminated has been used for industrial or commercial activities involving use, manufacture or storage of substances that are toxic, harmful or polluting. Sites that have been used for processing or disposal of industrial and household wastes can also be contaminated. However, contamination is not confined to industrial and waste disposal sites. It is possible that agricultural or greenfield land may have become contaminated by deliberate application of pesticides or herbicides as well. Land may also become contaminated as a result of migration of contamination coming from other sites nearby. This could occur through movement or seepage of surface water or groundwater, movement of gases through the ground, dust deposition or migration along drains or service trenches.

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.

Prior to the introduction of the Part IIA contaminated land regime, in July 1998, the UK Government announced a policy target that 60 percent of new housing should be constructed on brownfield sites. Brownfield land, more recently referred to as 'previously developed' land is that which is or was occupied by a permanent structure and associated fixed surface infrastructure. Meanwhile, derelict land is land that is so damaged by industrial or other development such that it is incapable of beneficial use without treatment. Brownfield and derelict sites may be affected by contamination, and may, or may not, meet the statutory definition of contaminated land.

When the Part IIA legislation was introduced in 2000, published estimates of the extent of land affected by contamination in the UK varied widely, from 50,000 to 300,000 hectares, amounting to as many as 100,000 sites. The Environment Agency has a statutory duty to report on the state of contaminated land in England. In its first statutory report (in 2002), the Agency estimated that between five and 20 percent of the previously estimated 100,000 sites may require action to ensure that unacceptable risks to human health and the environment are minimised.

The Part IIA regime places a duty on all Local Authorities in England and Wales to proactively search their areas for Contaminated Land. The guidance requires authorities to adopt a logical and thorough approach to the review of land in their area. The process involves a review of extensive data sets and the legal determination of Contaminated Land under Part IIA is a lengthy and complex process. Consequently there has been a lag time in Authorities determining sites as Contaminated Land. In March 2002, only 33 sites had been determined in England and Wales, and many of these were sites already known about when the regime was introduced. By March 2004, this number had grown to around 50 sites.

Managing land affected by contamination involves identifying any unacceptable risks posed by the presence of contaminants, then acting to reduce and control those risks to an acceptable level so that the land is "suitable for use". Part IIA is designed to deal only with contaminated land that poses an unacceptable risk to human health and the environment, based on the current use of the land. Where a site is affected by contamination, but its current use does not pose an unacceptable risk, then it will probably be dealt with under planning when the site is to be redeveloped. Alternatively, voluntary remediation may be carried out.

Contamination of land is a material consideration under the Town and Country Planning Act 1990. Planning permissions can impose conditions on a developer to ensure that any contamination is remediated to a standard suitable for the proposed use.

Potential for contamination in the Borough
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. 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 important local industries. Brick and cement making also became important to serve the expansion of London. To make these operations more profitable, many were subsequently used for landfill.
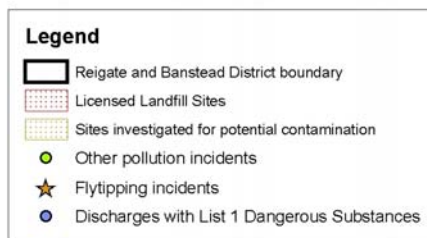
The Borough published its Contaminated Land Inspection Strategy in September 2002 setting out its approach to implementing the Part IIA regime. The Council has begun the process of implementing its strategy. So far, this has comprised of a review of a number of borough wide datasets such as historical Ordnance Survey maps and Trade Directories. Land uses of a potentially contaminative nature have been identified from these sources. Over 1500 such sites have been identified across the whole Borough. Over a third of this number relate to former mineral workings or other 'holes' in the ground that appear to have been infilled. The next stage of the process is to use specialist software incorporating GIS to prioritise these sites. This will provide a rough ranking of sites to guide the Council as to which sites are likely to represent the most risk, and thus, where the Council should focus its resources first.

The Council has not yet determined any land in the Borough as Contaminated Land under the statutory definition provided by the Part IIA legislation.

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Amount of contaminated land remediated to suitable use	No data at present		None at present		See text	In house monitoring
b. Area of grade 1, 2 and 3a agricultural land lost to development	Grade 1 or 2 agricultural land: none Grade 3a: ??not presently assessed	67.2% of Surrey Farmland is grade 4. There is very little grade 1 or 2 land in Surrey. 32.8% is graded 1,2 or 3 compared to 59.7% for England as a whole		The relative proportions of graded agricultural land in Surrey are unlikely to change		Surrey Farm Study 2003 www.magic.gov.uk

Industrial Sites and Pollution in Reigate and Banstead District

Legend

- Reigate and Banstead District boundary
- Licensed Landfill Sites
- Sites investigated for potential contamination
- ○ Other pollution incidents
- ★ Flytipping incidents
- ● Discharges with List 1 Dangerous Substances
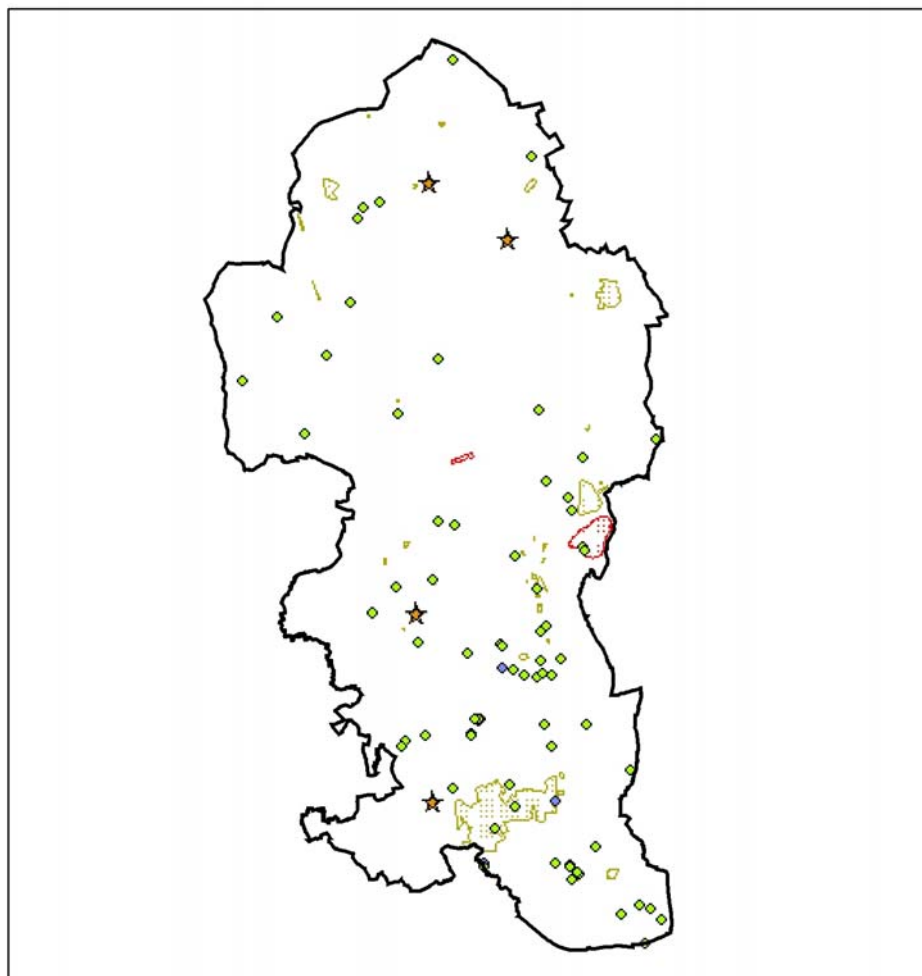
0 0.5 1 2 3 4 5 Kilometres

ENVIRONMENT AGENCY

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Sustainability Issues/ Problems/ Opportunities

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 determination is problematical.

Best Value Performance Indicators for Contaminated Land are being introduced in the 2005/06 financial year. This will comprise two indicators: BV 216a will be the number of 'sites of potential concern' with respect to land contamination; and BV 216b will be the number of sites for which sufficient detailed information is available to decide whether remediation of the land is necessary or not, as a percentage of all 'sites of potential concern'.

The national indicators obviously deal with numbers of site. On a local level it is proposed to have additional indicators that provide details of the area and proportion of the Borough inspected and/ or remediated back to 'suitable for use'. It will also be possible to discern the mechanism by which the remediation was achieved, that is, by the Part IIA regime, the planning system or through voluntary remediation.

Introduction of both the national and local indicators will mean that data is being generated for the first time to give an indication of the extent of, and progress in dealing with, land contamination. It is likely therefore that data will improve over time. Some data sets have not yet been reviewed and so the total number of sites will probably continue to grow over the next couple of years. A clearer picture of the extent and degree of land contamination within the Borough is likely to emerge once prioritisation has been completed.

Reigate & Banstead Scoping Report – October 2005

The planning system continues to be probably the most significant driver for remediating land affected by contamination. Annex 2 of the Planning Policy Statement (PPS) 23 Planning and Pollution Control, published in 2004, was dedicated to advising key parties on their role in the development of land affected by contamination. The Statement outlines best practice for Local Planning Authorities and promotes the concept of pre-application discussions or submissions. As pre-application discussions are championed, this should help smooth the assessing and remediating land contamination via the planning process. Mitigation problems are compounded if the presence of harmful substances is not identified or addressed until development is already under way. The Statement has also prompted a consultation exercise into a standard application form for all planning applications in England, with an assessment of contamination and historical uses of land likely to be one of the supporting documents that could accompany the form in appropriate cases.

With the implementation of the Landfill Directive, it is becoming much more expensive to dispose of contaminated soil; hazardous waste can only go to hazardous waste landfills (the closest to the Borough being in Wiltshire). Consequently on-site remediation is becoming far more popular. The development of soil treatment centres, where soils can be be sent imported for remediation and subsequent use, either on site or by export to another site, has been another positive outcome.

Summary:

> The Council has not yet determined any land in the Borough as Contaminated Land under the statutory definition
> Over 1,500 sites, that have had uses which potentially could have led to land contamination, have been identified across the Borough
> Previously developed land may require remediation before development can occur
> Permitting development may be a positive means to bring about remediation of contaminated sites
> On-site remediation can reduce the need for HGV movements and reduce landfill

Key Decision Aiding Questions:

❑ Will the option reduce the risk of creating further contamination?
❑ Will the option help to reduce the risk of contamination from designated sites?
❑ Will the option help to remediate contaminated sites?
❑ Will the option encourage on-site remediation?
❑ Will the option prevent soil erosion?

Effective Protection of the Environment

Objective 8: To ensure air quality continues to improve and noise/light pollution is reduced.

<u>Overview:</u>

Good air quality is vital for human health and environmental health and 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.

The Borough, in common with the rest of the South East, has few major industrial processes to generate air pollutants, however, allied to the fact that we are host to the M25, M23, A25, A23 and A217, road traffic emissions are significant. These are exacerbated by the location of Gatwick airport, which is 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 found that air pollution in most areas of the Borough is well below the Government limits for all pollutants. The pollutant identified as a potential problem in certain areas of the Borough was Nitrogen Dioxide (NO_2), and following computer modelling and subsequent monitoring the Council has five Air Quality Management Areas:

i) Along the M25
ii) Along the M23 to the south of the M25
iii) An area of south Horley near to Gatwick Airport
iv) An individual property on the A217
v) An individual property on the A23

The volume of motorised traffic running through, or adjacent to, the Borough means that the issue of noise is significant, however at present there is a deficit in quantified data available (with the exception of Gatwick noise contour maps); by the end of 2006 a UK wide noise mapping survey (which includes that near the M25) is due to be produced.

Light pollution is also a significant problem in the Borough and is getting worse; all areas are affected

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

1993

2000

High Wycombe

Milton Keynes

Margate / Ramsgate

Oxford

Greater London

Medway Towns

Reading

Guildford

Maidstone

Brighton

Crawley

Eastbourne

Portsmouth

Southampton
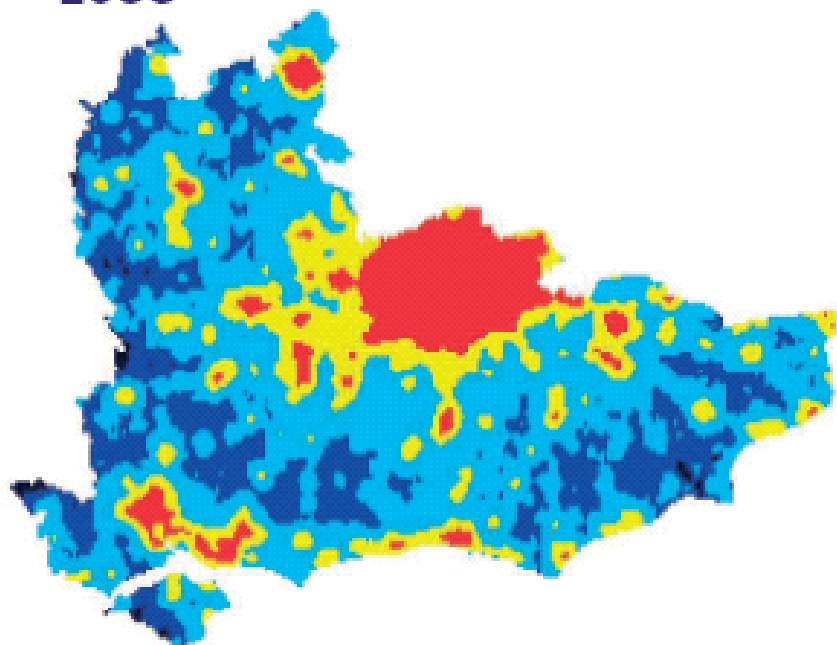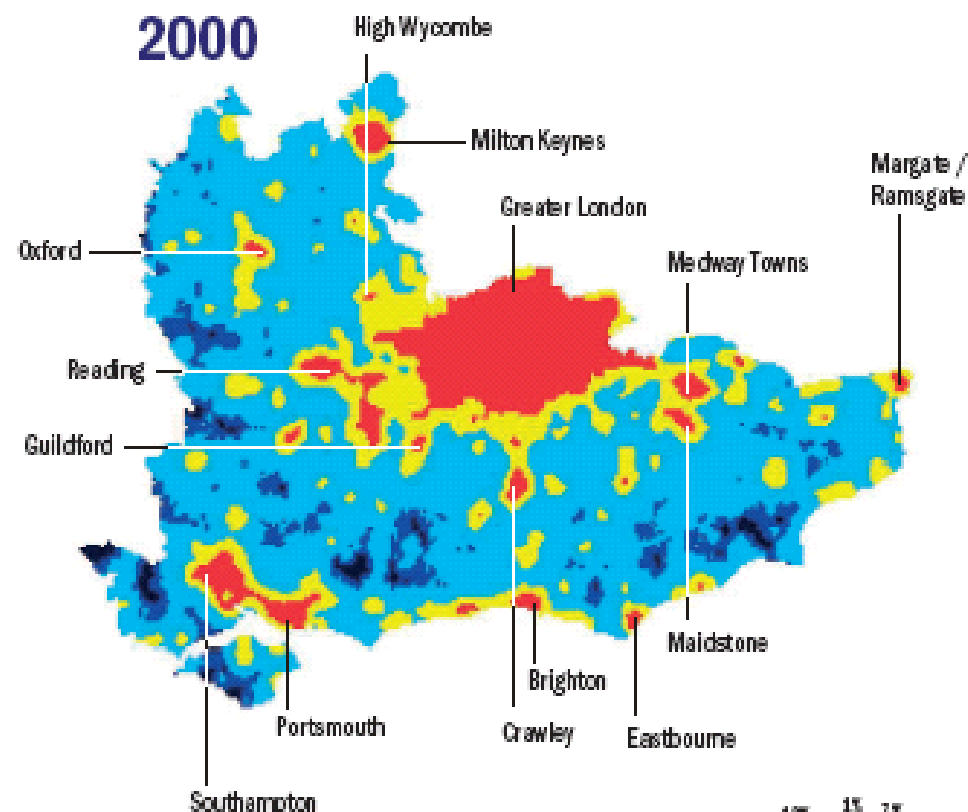
Key

These maps were created from pixels representing a square kilometre. They are a colour representation of satellite measurements of artificial light at night. The light is measured on a range from 0 to 255; 0 means the satellite is detecting no light in that pixel and 255 means the satellite's detector is saturated with light.

Campaign to Protect Rural England

- = 0-1.70 — Dark
- = 1.71-50
- = 50.01-150 — Brighter
- = 150.01-240
- = 240.01-255 — Saturated
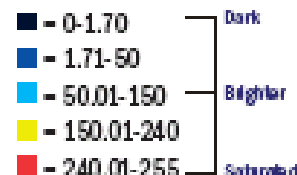
The South East in 2000

Only 1% of dark skies left

12%   1%   7%

10%

61%

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Annual average NO_2 concentration and for trend purposes the 3 year rolling average* within AQMAs relative to national standards	See table below for details of RBBC's 5 x AQMA		UK air quality objective for end of 2005 for NO_2 is an annual mean of <40ug/m^3	With the exception of Horley (close to airport) it is likely that the other 4 AQMAs will improve so as to come into national NO_2 standards	Growing number of flights from Gatwick	In house monitoring
b. The number of properties affected by poor air quality (i.e. within AQMA)	* see table below					
c. The monitoring of LEQ levels around airports	2002: 45.2 km^2 affected by leq of >57dbA (19.1 % decrease on 2001)		No increase in the extent of LEQ contours and no. of properties affected			http://www.dft.gov.uk/ stellent/groups/dft_avi ation/documents/pag e/dft_aviation_02274 4-04.hcsp
d. Number of new floodlighting instillations including the number of fittings installed which minimise light pollution	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
e. The percentage of population who receive benefit from new low noise road surfacing	To enquire of LTS					Surrey LTP County Transport Model

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

AQMAs	Properties affected	2003 Concentration (µg m^{-3})
Area 1: M25 as measured at RB27 and RB30	<5	43, 41 respectively
Area 2: M23 to the south of the M25	1	No data began monitoring mid 2004
Area 3: Horley near to Gatwick Airport (RB59, RB77)	approx 30 to 35	39.6, 40.6
Area 4: Rushworth Road	6	41 (based on 8 months data adjusted to 12 months).
Area 5: A23 Dean Lane (RB82)	1	45 (adjusted from a measured value of 46).

Reigate & Banstead Scoping Report – October 2005

2010 Annual Average NO$_2$ Concentrations in Horley near to Gatwick Airport.
Values based on scaled 2002/3 dispersion modelling and 2010 Emissions Inventory. For full methodology see NETCEN, 2004d).
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Key:
- 20.1 to 25 µg m^{-3}
- 25.1 to 30 µg m^{-3}
- 30.1 to 35 µg m^{-3}
- 35.1 to 40 µg m^{-3}
- 40.1 to 44 µg m^{-3}

North

0   250 m

Airport Related NO$_x$ Concentrations (µg m^{-3}) in 2005 and 2010.

Key:
- 2005
- 2010

N

0   200 m
Approx.

Bar Height = 48 µg m^{-3}

2005:
Total Airport: 45 %
Total Other: 55 %

- Background (43 %)
- Aircraft (12 %)
- APUs (9 %)
- Airside Vehicles (9 %)
- Misc. Airport (3 %)
- Airport related Road Traffic (12 %)
- Non Airport Road Traffic (12 %)
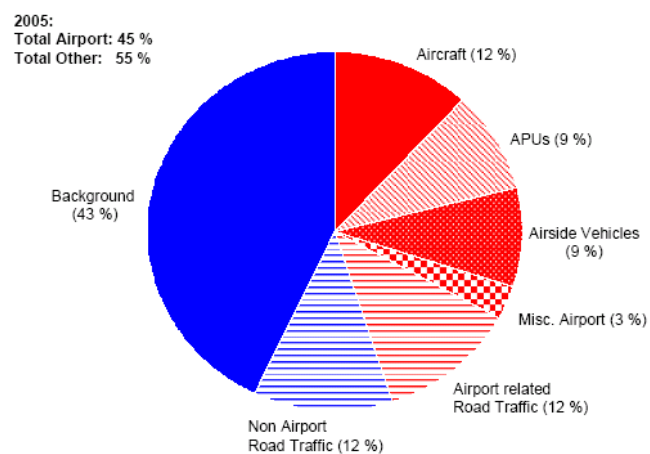
NO$_x$ Contribution by Source to RB59 in 2005 (NO$_2$ Concentration: 41 µg/m^3).

2010:
Total Airport: 58 %
Total Other: 42 %

- Background (33.5 %)
- Aircraft (27.5 %)
- APUs (10.25 %)
- Airside Vehicles (8.75 %)
- Misc. Airport (2%)
- Airport related Road Traffic (9.5 %)
- Non Airport Road Traffic (8.5 %)
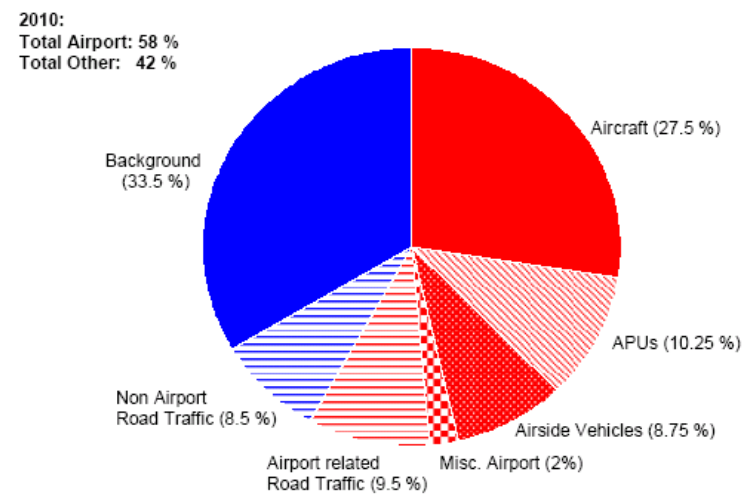
NO$_x$ Contribution by Source to RB59 in 2010 (NO$_2$ Concentration: 42 µg/m^3).

Four out of five of the Borough's AQMAs have been selected as a result of NO_2 emissions derived from road transport. The levels at all of these four sites are predicted to meet the government's air quality objectives by 2010 (primarily as a result of improvements in car engine technology).

The fifth site, however, is adjacent to Gatwick airport, and the resultant 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_x pollution from road transport within the Horley AQMA is predicted to be 'off set' by the increasing emissions from the airport (primarily from aircraft) leading to continuing poor air quality in the south of Horley.

In addition, the global increase in ground level ozone means that increasing amounts of nitrogen dioxide will be produced for a given amount of NO_x emitted in the future. 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.

Reigate & Banstead Scoping Report – October 2005
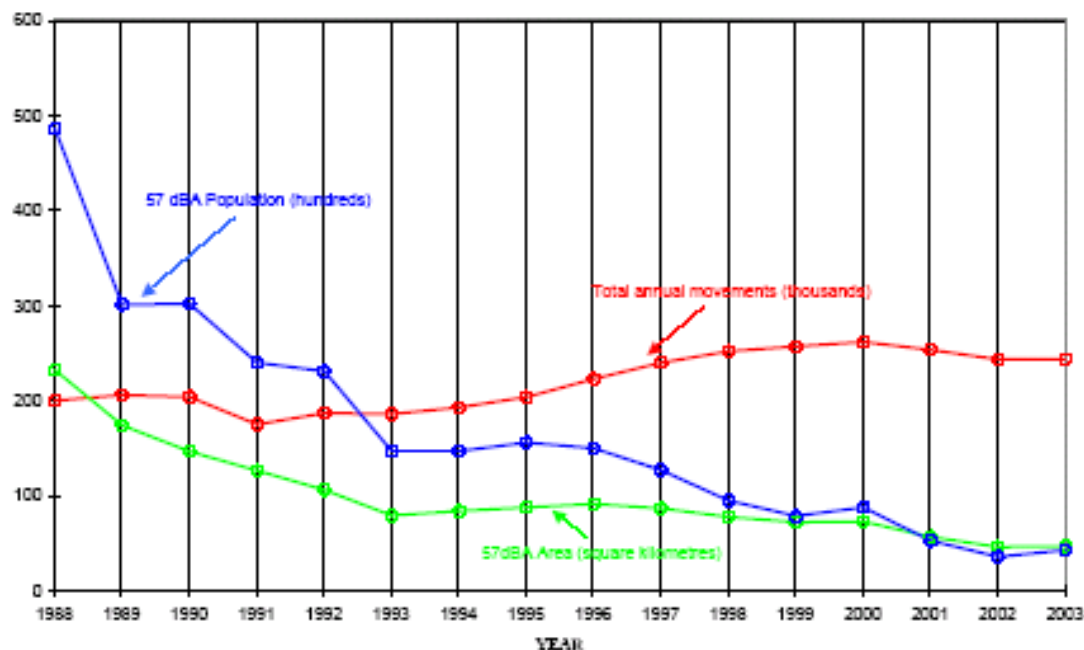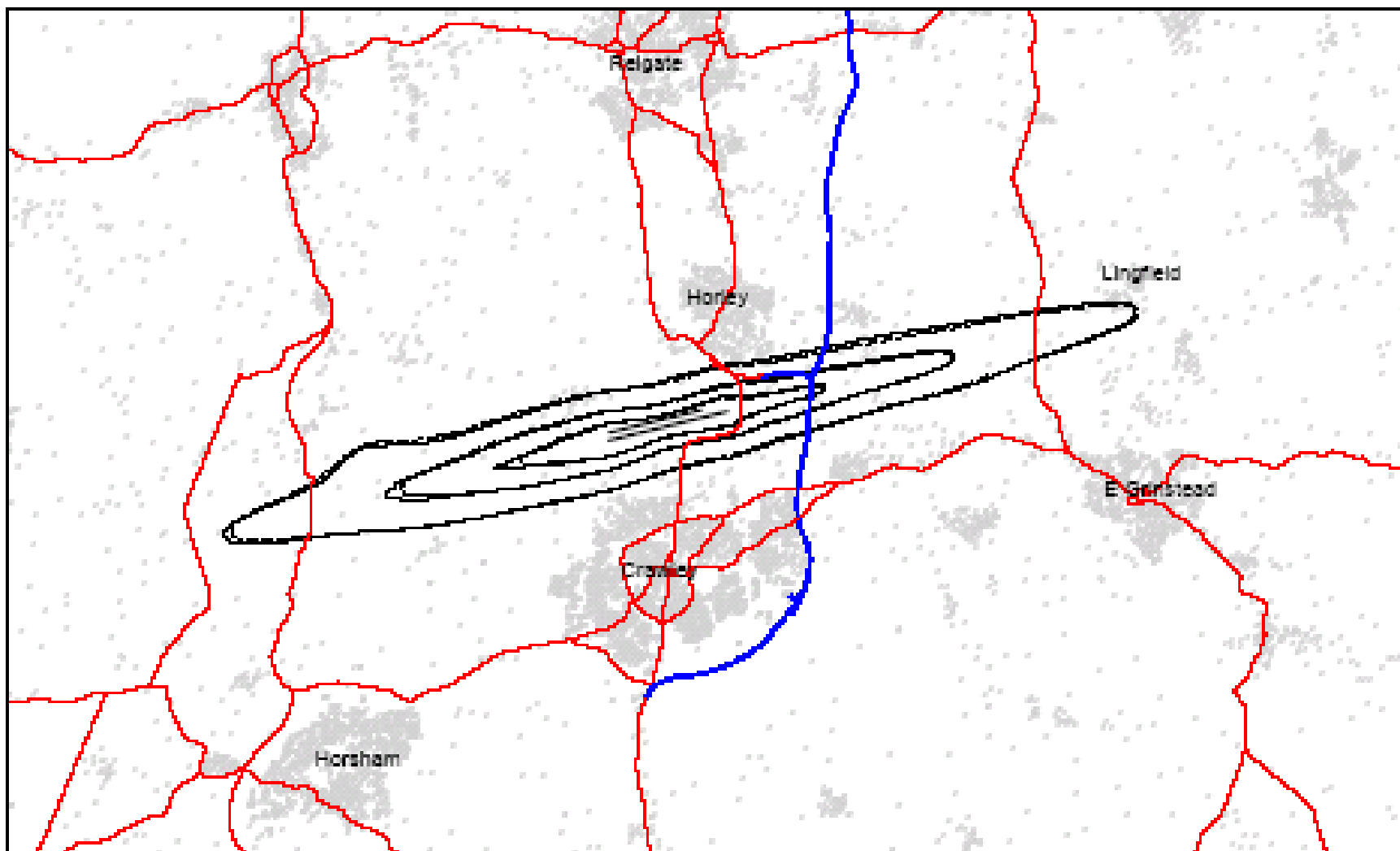
Gatwick Traffic and Noise 1988 -2003

Gatwick actual 57, 63, and 69 Leq Contours – 2002: dotted (71% west – 29% east); 2003 (including terrain adjustment): solid (6.2% west – 38% east)

Reigate & Banstead Scoping Report – October 2005

The population in the vicinity of Gatwick affected by noise in excess of 57dba has continued to drop since the mid-nineties and is now stabilised at about 5,000 – 3,500. These decreases are mainly attributable to the decrease in operations by large 1st generation Chapter 2/3 jets.

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

Tranquil Areas

Percentage of county covered by tranquil areas
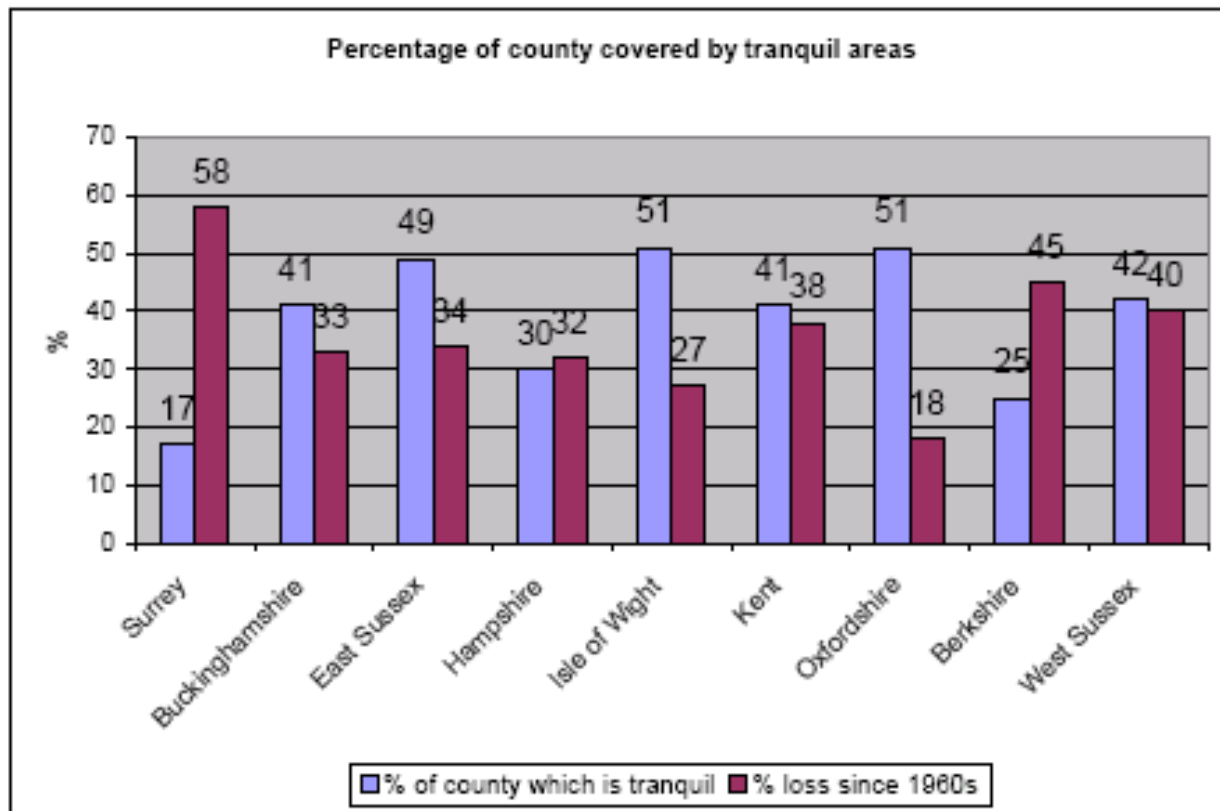
Source: CPRE tranquil areas maps

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.

Summary:

- Air quality exceeds Government limits for nitrogen dioxide in 5 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 due to efficiencies in engine technology, the exception being Gatwick where the increased number of flights is predicted to keep levels in the south of Horley above Government limits
- The frequency of heat waves risk due to climate change will potentially increase health risks from air pollution
- Tranquillity in the Borough has been vastly eroded since the 1960's, primarily as a result of traffic noise and aircraft
- The number of people affected by aircraft noise has continued to drop over the last decade
- Light pollution has continued to increase, affecting all parts of the Borough.

Key Decision Aiding Questions:

- Will the option help improve air quality?
- Will the option support specific actions in designated AQMAs?
- Will the option encourage the creation of tranquil areas?
- Will the option reduce light pollution?

Effective Protection of the Environment

Objective 9: To conserve and enhance biodiversity within the plan area.

<u>Overview</u>

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 UK has lost over 100 species this century; many more have declined in number, range, or both.

Biodiversity is a quality of life issue. It is an integral part of our surroundings, giving us pleasure, interest, knowledge, and contributing towards our health. All our food and some of our medicines come from animals and plants and promote human welfare in other ways (e.g. in its role in climate control and other environmental functions). Moreover, biodiversity is an indicator of the health of our environment, giving us an early warning of environmental disasters or failures in the functioning of natural ecosystems.

The variety of life has an intrinsic value that we have a moral responsibility to preserve.

The Borough contains a variety of designated sites of nature conservation. Part of the Mole Gap to Reigate Escarpment SSSI has recently been designated as a Special Area of Conservation (SAC), which are of European importance. 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 473 hectares, comprising 5% of the Borough's open countryside 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 and comprise approximately 11%; they cover a range of habitats including ancient woodland, wetland and herb-rich grassland.

At present 80% of SSSIs in the Borough are in an unfavourable condition, however the vast majority of these are presently recovering. This is because most of the Borough's SSSI's consist of chalk grassland, which was originally created though 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 English Nature to improve the condition of these sites via grazing and other appropriate management techniques. The percentage of favourable and unfavourable recovering is presently 93%, which compares well with the Government's target of 95% by 2010.

Approximately 78% of the Borough's open countryside is in private ownership; large areas fall within areas specifically targeted by the Countryside Stewardship Scheme, which supports, through grants, the conservation and enhancement of key wildlife and landscape features.

cSAC	SSSI	Local Nature Reserve	SNCI	SNCI (contd)
	Banstead Downs		Area adjacent to Banstead Downs SSSI	Three Arch Road
	Chipstead Downs		Nork Park	New Pond Farm/Felland Copse
Mole Gap To Reigate Escarpment	Mole Gap To Reigate Escarpment		Burgh Heath	Burnt Oak Farm
	Reigate Heath	Reigate Heath	Ruffett Wood Complex	Holmethorpe – Sandpits complex
		Earlswood Common	Earlswood & Redhill Common	Slipshatch Wood
			How Hills Golf Course	Great Hurst Wood
			Chiphouse Wood	Sandhill Wood
			Downs View Wood	Banstead and Walton Heath
			Little Hurst Wood	Gatwick Wood
			Margery Wood	Park Shaw
			Gatton Park	Grassland at Netherne Hospital
			Royal Alexandra and Albert School	Grasscuts Shaw
			Colley Copse/Colley Wood	

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Extent and condition of land designated as a Site of Special Scientific Interest (SSSI).	2000 – 2005: 606.6 ha SSSI (80% unfavourable; 20% favourable). 93% now favourable or recovering; 7% (presently unfavourable) either no change or declining (see table below)		No reduction in extent of SSSI and ensure that 95% of SSSI's are favourable or recovering condition by 2010 (target to reflect the national PSA target)	(see table below)	Quality of SSSI out of Local Authority control, primarily a land management issue.	QoLI: L4 English Nature website
b. Extent and condition of other key habitats for which Biodiversity Action Plans have been established (for example the area of habitat lost as a result of planning permissions)	Being gathered in the next year					SCC John Edwards
c. Number, area and condition of Sites of Nature Conservation Importance (SNCIs) and Local Nature Reserves (LNRs)	(see tables)			The number and area of SNCIs, potential SNCIs and LNRs is increasing		The Council's geographical information system ESRI. Condition to be established by resurvey and the SNCLG selection process
d. Extent and condition of ancient woodlands	Expected in due course		The council aims to preserve and protect these areas		Condition not generally monitored, may be appropriate to merge data with 9c	Andy Wright, Forestry Commission 01420 23337

SSSI	Main habitat	Unit number	Unit area (ha)	Latest assessment date	Condition	Trend
Banstead Downs	Calcareous grassland - lowland	1	43.94	13 Jun 2000	Unfavourable	recovering
	Calcareous grassland - lowland	2	49.30	29 Sep 2004	Unfavourable	recovering
	Calcareous grassland - lowland	3	33.43	13 Jun 2000	Unfavourable	recovering
Chipstead Downs	Calcareous grassland - lowland	1	16.78	27 Nov 2001	Unfavourable	recovering
	Calcareous grassland - lowland	2	5.52	27 Nov 2001	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	3	84.24	15 May 2002	Unfavourable	recovering
	Calcareous grassland - lowland	4	19.41	26 Oct 2004	Unfavourable	recovering
	Calcareous grassland - lowland	5	11.47	27 Nov 2001	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	6	9.95	27 Nov 2001	Unfavourable	recovering
	Calcareous grassland - lowland	7	10.48	01 Oct 2004	Unfavourable	recovering
Mole Gap To Reigate Escarpment	Broadleaved, mixed and yew woodland - lowland	1	7.50	21 Jun 2002	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	2	77.29	22 Dec 2004	Favourable	
	Broadleaved, mixed and yew woodland - lowland	5	19.41	12 Jun 2001	Unfavourable	no change
	Calcareous grassland - lowland	8	23.27	16 May 2000	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	17	21.38	25 May 2000	Unfavourable	recovering
	Calcareous grassland - lowland	23	39.85	18 Jun 2002	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	24	1.39	24 May 2000	Favourable	
	Broadleaved, mixed and yew woodland - lowland	25	19.91	18 Jun 2002	Unfavourable	recovering
	Broadleaved, mixed and yew woodland - lowland	26	8.33	18 Jun 2002	Unfavourable	no change

SSSI	Main habitat	Unit number	Unit area (ha)	Latest assessment date	Condition	Trend
	Broadleaved, mixed and yew woodland - lowland	26	8.33	18 Jun 2002	Unfavourable	no change
	Broadleaved, mixed and yew woodland - lowland	27	42.03	29 Mar 2004	Unfavourable	recovering
Reigate Heath	Broadleaved, mixed and yew woodland - lowland	1	3.10	13 Jun 2002	Unfavourable	declining
	Dwarf shrub heath - lowland	2	45.65	04 Dec 2000	Favourable	
	Neutral grassland - lowland	3	13.00	22 Feb 2001	Unfavourable	no change

Sustainability issues/problems/opportunities:

Although the Borough contains a variety of habitats that are designated, this only makes up 16% 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 greenspaces, 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 significant that this traditional habitat is fast being lost to hard-surfaced parking spaces.

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. Reigate Heath is an example of an area of national importance that is suffering from exactly this type of problem: the water table being affected by hydrology outside of its boundaries, which is now being compounded by Climate Change. Shagbrook, a site adjacent to Reigate Heath, has been identified as a known mineral deposit (sand) in the County's Minerals Development Framework. At this stage it is not known whether this site will be brought forward as a preferred option and if it were, there is presently no information as to how such a development would affect the local hydrology, however there is public concern that it could have a negative impact.

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 19 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).

Opportunities for new networks should be proactively planned: green grids; community forests; "doorstep greens"; short rotation coppice all provide new opportunities to build on the existing biodiversity. The wildlife in the Borough is likely to deteriorate in quality and diversity without the opportunity to rebuild, by restoration and enhancement, what has been lost. Moreover, protected species should form a special focus and measures introduced to shield them and their habitats from harm.

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 result in no net 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 world of 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. Not least, warmer summers and milder winters could increase proliferation of insects and growth of noxious weeds.

Access to greenspace is dealt with in greater detail under another Sustainability Objective (no.10). The economic and environmental value of greenspace should not be understated: its potential contribution to human health and wellbeing is significant. Although the application of open space standards by local authorities is widespread, traditionally such standards have focused exclusively on the provision of sport and recreation facilities to the exclusion of natural greenspace. Opportunities exist to develop greenspace strategies as a means of ensuring balanced greenspace planning, including the use of the Accessible Natural Greenspace Standards model to set locally-appropriate greenspace standards; the provision of adequate vegetated areas helps to ensure that urban areas continue to function ecologically.

Summary:

➢ Only 16% of the open countryside is designated formally for nature conservation
➢ The present condition of most local SSSIs is unfavourable, but the vast majority are recovering
➢ The lowland heathland and woodland at Reigate Heath has been in long-term decline due to lowering of the water table
➢ Urban biodiversity is significant: urban habitats collectively comprise the largest of all habitats in the Borough and as such should be actively maintained and enhanced.
➢ Habitat fragmentation should be avoided by the creation of "green networks"
➢ New development should aim to enhance biodiversity
➢ Climate change should be considered in decision-making related to biodiversity
➢ Application of Accessible Natural Greenspace Standards will help ensure that urban biodiversity is protected

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?

Effective Protection of the Environment

Objective 10: To protect, and where appropriate, enhance and make accessible the natural, archaeological and historic environments and cultural assets, for the benefit of both residents and visitors.

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 in its 2001 statement: "A Force for Our Future" sets out the historic environment's potential for regeneration, tourism and social exclusion as well as for conservation.

There are some 424 statutory listed buildings in the Borough including 5 Grade I (3 churches, Reigate Priory and Tadworth Court), 4 grade B and 18 II*. There are 149 curtilage structures that have been indentified as of interest by the Borough Council. There are 526 Locally Listed Buildings and 17 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 and the county Historic Landscape Character Assessment.

The historic environment should be seen as more than designations, therefore development decisions should also be based upon an understanding of the wider historic environment and its impact on the character and distinctiveness of areas.

The quality of the local countryside is reflected in the fact that a swathe is covered by AONB designation; it is heavily wooded in parts. The extensive Rights of Way network and the large areas of "open land" provide many opportunities for access and enjoyment.

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 (including Priory Park which is presently benefiting from a successful Heritage Lottery Fund grant), 34 children's' play areas, 22 allotment sites (presently underutilised) and 2 cemeteries.

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Number of listed buildings, ancient monuments and conservation areas	May 2005: Listed Buildings: Grade 1 - 5 Grade 2* - 18 Grade 2 - 424 Local List- 526 ancient monuments - 21 conservation areas - 17	4th 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 www.cipfastats.net Internal files
b. Proportion of statutory listed buildings at risk	May 2005: zero grade I or II* at risk (2.3% grade II,)	No other Borough in Surrey have 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

Reigate & Banstead Scoping Report – October 2005

c. Proportion of statutory listed buildings demolished or removed from the list owing to approved or unauthorised alternations.	2000-2004: 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	May 2005: 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 potential archaeological sites where acceptable archaeological assessment/recording took place.	County Figure (see Tony Howe)		Investigation and recording targets should be 100%			SCC Archaeology - David Bird
f. Proportion of conservation areas with an appraisal that has been reviewed within the previous 5 years (EH could set a period)	3 in progress		2 a year	2 a y ear	Additional funding for map preparation needed	
g. The number of unauthorised works undertaken within conservation areas in the previous four years that have been enforced against.	30 cases		To investigate all breaches and take action where expedient. To monitor quality of area on a 3 basis	Breaches are at a very low level due to rigorous enforcement	The absence of a historic building grant fund slows progress in remedying cases	In house Enforcement register
h. Number of properties open to the public on heritage open days	2005- 17+	Highest number of visitors in Surrey	To see this figure maintained			In house monitoring

g. Landscape conservation and enhancement or management of the urban fringe	Horley Crawley Management Project (HCMP) 2003-04: Project Delivery 5,086 hours (including 3,995 volunteer hours); on 21 sites Downlands Project: 2004-05 data available soon			HCMP up 10% on 2002-03		http://www.countryside-management.org.uk/ggp/HorleyCrawley03-04AR.pdf http://www.countryside-management.org.uk/dcmphome.htm

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, one with which the whole of society can identify and engage. The historic environment can play an important role in wider sustainability issues: 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 advantage 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.

Public spaces create the basis for the buildings in our towns and cities; they are the syntax that articulates our streets. As much as buildings it is open spaces that define our environment and shape the landscape of our surroundings. But more than that they help to determine the quality of life in urban areas; they constitute urban lungs in which people congregate and spend time. Often these spaces are identifiable symbols of the town itself and maintaining them to high standards not only reflects the confidence with which the community sees itself but can be effective springboards for more widespread regeneration and urban renaissance.

The case for landscape character as a contributor to "quality of life" is not in dispute, but the need to accommodate necessary change without sacrificing local character means that characterisation (Landscape Character Assessments) should be used as a proactive tool.

The urban rural fringe can benefit from a network of new and improved park, woodlands and other green spaces linked to the urban centre and wider countryside by footpaths and cycle ways. Continuous green corridors between town and county, which allow more people, regardless of social circumstances, to easily and safely enjoy a high quality countryside experience close to where they live is invaluable in creating respite from the stresses of urban living, as well as meeting other sustainability objectives (e.g. Horley Riverside Green Chain). The opportunity to take full benefit in this fringe area is unfortunately reduced at present through the legal status and physical barriers to both cyclists and the disabled.

The ability to access quality open space outside of urban areas is not always possible. Although the Borough contains many major assets which help meet this need e.g. Priory Park, these individual sites of high quality are not easily accessible to everyone. While there is continuing pressure to contain development within urban areas (so as to protect the countryside from further suburban development), there is a consequential need to make towns more attractive places to live. The conflicting demands on brownfield sites makes it essential that appropriate standards for access to greenspace and quality built environment are instated. English Nature's " Access to Natural Greenspace standards (ANGSt)" is designed to ensure that everyone can enjoy everyday contact with nature in safety, without having to make any special effort or journey to do so. They also play a key role in supporting other sustainability aims: helping safeguard wildlife and geological features; giving everyone an excellent chance to learn about nature and to help protect it in practical ways; providing adequate vegetated areas helps to ensure that urban areas continue to function ecologically. It is also reported that people living in greener environments have fewer health complaints, better perceived general and mental health.

The opportunities to use Borough managed land to meet a multiplicity of sustainability aims is in little doubt. Parks, allotments and other open space can support a vibrant culture of healthy living. Conservation volunteering and allotments can help meet the needs of social contact, inclusion and exercise (so-called "green gyms") that will benefit the aims of maintaining health and independence.

It could be desirable to enhance biodiversity by providing natural areas within existing managed areas. This is important as unmanaged open spaces can sometimes give the impression of being potentially unsafe, and create a disincentive to visit.

ANGSt model*

Level IV

10 km

500 ha

Level III

5 km

100 ha

Level II

Level I

Area of deficiency
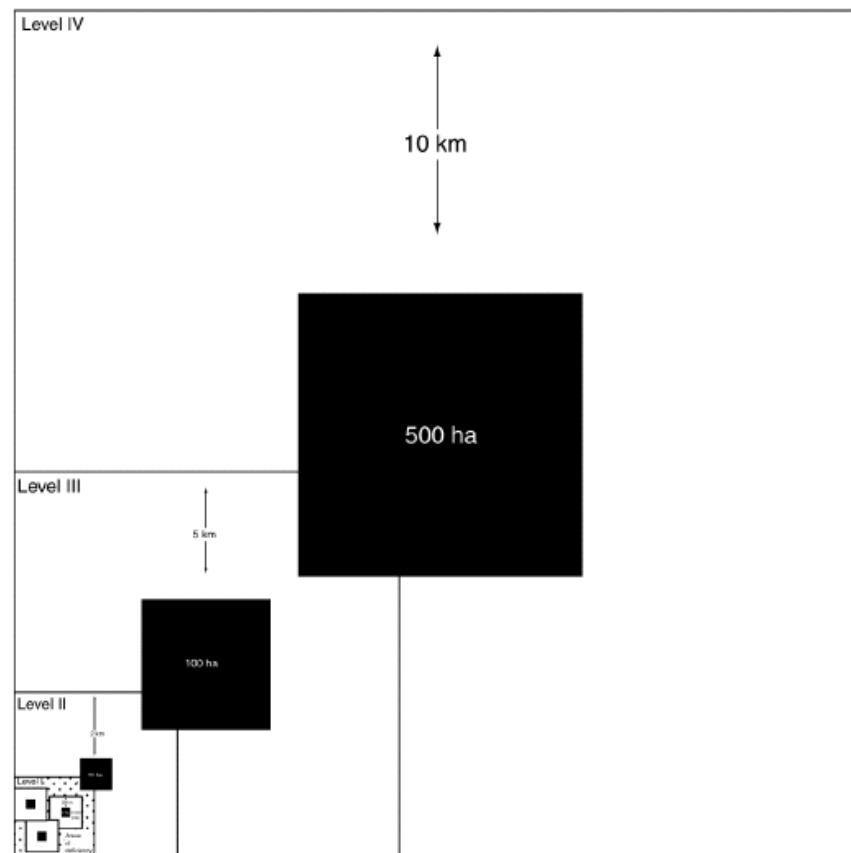
* the hierarchic levels are not to scale

The ANGSt model requires:

- that no person should live more than 300m from their nearest area of natural greenspace of at least 2ha in size;
- provision of at least 1ha of Local Nature Reserve per 1,000 population;
- that there should be at least one accessible 20ha site within 2km from home;
- that there should be one accessible 100ha site within 5km;
- that there should be one accessible 500ha site within 10km.

Although, ANGSt are much more likely to protect and enhance biodiversity, there is a risk that there may be conflicting demands with the National Playing Fields Association's "Six acre standard". Policies would need to ensure that "natural greenspace" is provided as a result of development, and defended from alternative development' in the same way as playing fields.

Diagram of the ANGSt model

There is scope to use the planning system in innovative ways to support the aims of the ANGSt model (i.e s106 agreements), in connecting together and improving small or relatively poor quality greenspaces, and in the promotion of new concepts such as green roofs and walls in areas where other options are not feasible.

The impact of climate change is probably the major issue that will need to be addressed in maintaining and enhancing the natural and historic environment. The impact on wider biodiversity is covered elsewhere, but the effects on parks and other open spaces should not be underestimated: the British lawn will be particularly effected which could become increasingly difficult and costly to maintain and some traditional garden features may have to be replaced by new ones, more suited to changing conditions. Green and open spaces may also be used more intensively with more outdoor living; there may be needs to mitigate potential negative effects of disturbance to habitats and species.

For the heritage sector, a big challenge will be the long-term care of historic parks and gardens. Existing plant collections and planting effects, originally developed in climatic conditions that will no longer exist. Rising temperatures are already being highlighted as being of major concern to native tree species such as the beech; non-native species, such as sweet chestnut, which originated in warmer climates may become dominant.

Climate change will also have other significant effects on the historic built environment: wetter winters and drier summers could adversely affect older properties, with more rain causing flooding and dry summers causing subsidence. Heat intensity may also have deleterious effects to the fabric and the ambient environment. The enjoyment of much of the historic and natural environment will be greatly reduced (with consequent economic impacts) if passive (i.e. tree shading) and/or active measures for cooling are not developed.

Policy for both the natural and historic environment need to be developed that focus on the need for adaptation measures. Decisions that make it more difficult to manage climate risks in the future need to be avoided.

Map 1. Reigate and Banstead Open Space Study 1985

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
➢ The urban fringe can be an area of great benefit to the majority who live in towns, but access is often restricted by legal status and/or physical barriers
➢ The Borough contains some high quality urban open spaces e.g. Priory Park, but the protection, enhancement and equitable access to other urban open spaces can be a major contributor to physical and mental wellbeing.
➢ Access to Natural Greenspace standards (ANGSt)" could be promoted through planning conditions to enhance the existing provision
➢ Underuse of open space e.g. some allotment sites, could be improved by more accessible location
➢ Heritage sites and landscapes need to be adapted so as to withstand the changing climate

Key Decision Aiding Questions:

❑ 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?
❑ Will the option protect and enhance the Borough's natural urban greenspace?
❑ Will the option enhance access to natural urban greenspace?
❑ Will the option ensure the effects of climate change are considered?

Effective Protection of the Environment

Objective 11. To reduce road congestion and pollution levels

<u>Overview</u>

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. These concerns include the cost of delay to the economy (estimated at £600m across Surrey as a whole); and the cost of accidents to the community. 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.

The County's Local Transport Plan 2001/2 to 2005/6 contains the strategies for dealing with these problems. A major target within the LTP is the reduction of traffic levels back to the 1998 levels by 2016; this would represent a decrease of more than 20% on the otherwise predicted unrestrained growth. The LTP Annual Progress Report 2004 has noted that there has been continued progress towards this and all of the other target areas (with the exception of cycling). The current LTP has been revised and submitted to DfT in July 2005. The objectives of the second LTP largely mirror those of the first LTP, but has latterly emphasised the need to improve the management and maintenance of the transport network and focus more attention on combating congestion.

New transport infrastructure continues to be built; the Fastway guided bus system is due to be operational in Horley by August 2005; new and improved bus stops have been delivered throughout the Reigate area; and many safe routes to school schemes have improved walking and cycling opportunities. Development related contributions have made noteworthy assistance in bringing many of these schemes forward.

The Council, in partnership with the County Council, has recently introduced Decriminalised Parking Enforcement (DPE) measures throughout the Borough, which is successfully reducing congestion in specific locations. This action is seen to be the precursor to a wider parking management plan, possibly using a zonal approach, as another means to control traffic and restrain the need for travel.

The number of children killed and seriously injured has continued to fall across the County since 1997, however this has to be seen in the context of the continuing low levels of walking and cycling. Opportunities exist to designate home zones, quiet lanes and 20mph zones to improve the road safety environment for these activities. At present only two such areas exist in the Borough (Earlswood 20mph zone; Nutley Lane home zone).

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

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Level of vehicle emissions (100% in 1999) ▪ Hydrocarbons ▪ Total oxides of nitrogen ▪ Particulates ▪ Carbon monoxide		Surrey 2003/04 54.0% 60.0% 77.0% 56.0%	 Limit emissions to 35% of 1999 levels by 2006 Limit emissions to 45% of 1999 levels by 2006 Limit emissions to 80% of 1999 levels by 2006 Limit emissions to 35% of 1999 levels by 2006	Surrey is on track to meet the 2006 targets	Data is shown at a County level. Districts would require raw data.	Surrey LTP Annual Progress Report 2004 RTRA Target 4 p.29 data in annex 3
b. Traffic reduction (Percentage of 1998 value)		Surrey 2003/04: 104%	To limit traffic growth to 107% of the 1998 levels	Surrey is on track to meet the 2006 targets		Surrey LTP Annual Progress Report 2004 Target 1 p.27
c. Proportion of travel to work by mode ▪ Car ▪ Rail ▪ Bus ▪ Motor cycle ▪ Bicycle ▪ Walking ▪ Other ▪ Works at home	2001 64.3% 11.7% 2.2% 1.2% 1.6% 8,4% 0.4% 10.1%	2001 Surrey 64.5% 10.6% 2.3% 1.2% 2.2% 8.0% 0.5% 10.7%				Census
d. Proportion of major developments located in accessible urban areas (LTP target 6)			Surrey target: AT least 80% of additional commercial (=b1-b8 floorspace over 300sqm) development each year will be located in town centres or on sites within the urban area that have good access by public transport, cycling and walking			Surrey LTP Annual Progress Report 2002 Target 6 p.16
e. Proportion of schools with current	May 2005: 42%					http://www1.surreycc.gov.uk/srs/srs-initiative.htm

travel plans						
f. No of businesses with travel plans	Approximately 50					
g. Length of cycle tracks and number of cycling trips	See table below for length of cycle tracks; 4 x cycle counters installed in R&B in 2005 – no data as yet.					
h. Accessibility by public transport, cycling and walking (percentage of population within 20 minutes travel time)		Surrey 2003/04			Data is shown at a County level. Districts would require raw data.	Surrey LTP Annual Progress Report 2004 Target 2 p.32
▪ accessibility by cycle				Surrey is :		
Town centres		58.4%	60% by 2006	on track to meet target		
Schools & collages		75.1%	77% by 2006	on track		
Railway stations		82.3%	83% by 2006	on track		
▪ accessibility by walking						
Town centres		22.9%	23% by 2006	on track		
Schools & collages		34.4%	35% by 2006	on track		
Railway stations		40.5%	38% by 2006	on track		
▪ accessibility by public transport						
Town centres		28.7%	40% by 2006	not on track		
Schools & collages		46.8%	54% by 2006	not on track		
Railway stations		48.9%	65% by 2006	not on track		
i. Household transport	2001	2001 Surrey				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	43.3%	45.4%				

households with 2 or more cars / vans									
j. LA to have implemented a Local Parking Management Plan	No target date set			Have the plan implemented by 2006				Policy DN3 of the Structure Plan 2004

Length of Cycle Route (Km) by district (as at Feb 2005)

District	On-carriageway cycle lanes	Shared facilities	Cycle Tracks	Cycle Trails	Signed only
	Category A	Category B(ii)	Category B(i)	Category C	
Elmbridge	9.1	3.3	9.5	15.3	1.8
Epsom & Ewell	1.2	10.3	0.6	46.2	20.8
Guildford	11.2	19.9	8.0	35.1	50.1
Mole Valley	1.1	14.9	0	35.3	73.5
Reigate & Banstead	3.3	3.4	7.5	29.3	23.7
Runnymede	1.2	17.0	2.6	11.6	15.7
Spelthorne	10.2	6.4	0	8.1	13.6
Surrey Heath	0.9	6.6	0	24.4	4.6
Tandridge	9.5	2.0	16.5	8.6	52.5
Waverley	0.6	2.8	16.0	28.0	66.0
Woking	7.2	9.3	0	15.1	17.3

Sustainability issues/problems/opportunities:

Despite the seemingly excellent progress being made towards most of the LTP targets, the significant culture of car-dependence that has developed in the Borough remains a big problem. The rate of new development in the Borough along with the continuing growth in passenger

numbers using Gatwick Airport will undoubtedly place a strain on the surrounding transport network. It is therefore essential that development does not take place without adequate transport infrastructure either in place or firmly committed.

High car ownership and use is having an effect on many facets of the local community. Although the car is a valuable workhorse for uses such as shopping, it has become seen as the essential commodity, it is becoming a cause of major concern relative to other environmental and social aims e.g. obstructing/damaging footways; paving over of front gardens. In 2005, the Council introduced DPE, this has led to some shifting of parking problems to nearby streets, which has led to increased calls from local people to introduce residents parking zones.

At a different level, 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.

Cycle Trips – Surrey Local Transport Plan
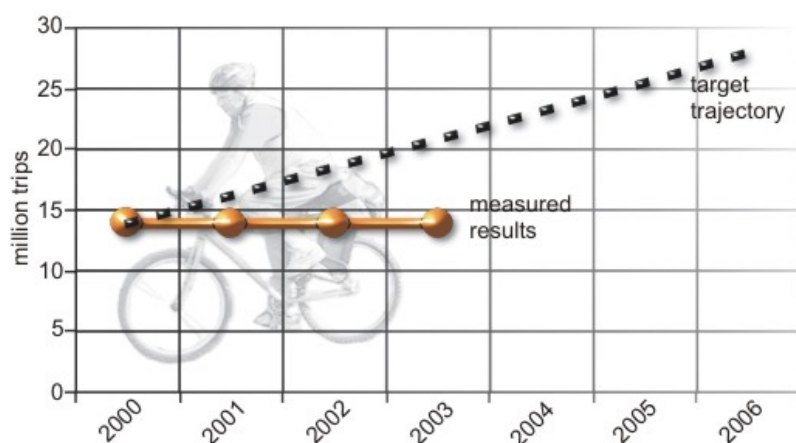
Cycling and walking can provide a practical, genuine and healthy alternative to car travel, particularly for shorter distance trips. It is therefore disconcerting to see that the LTP target for cycling is failing to be met year on year. This finding indicates the need to identify pedestrian and cycle routes and safeguard land for the purpose (Surrey Structure Plan, Policy DN5); the continuity and user-friendliness of facilities is paramount: cycle and walking routes are still often subservient to motorised traffic, with the inevitable consequence of non/under-use. 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 and in this respect Redhill/Reigate is recognised as a regional hub in the Regional Transport Strategy. However, there are major concerns relating to the ability of these services to accommodate the increasing demands as a result of the new growth expected in the Borough. Rail services have been eroded in recent years due to the line's lack of capacity: the Victoria-Brighton rail line is at capacity and any move to improve 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. Opportunities to improve network utilisation capacity have recently been put forward by the Strategic Rail Authority, and could help guide development. The Borough Council and Surrey have made representations to SEERA to the effect that Reigate should not be included in the regional hub, due to its shortcomings as a transport hub.

Bus services have recently been victim to cuts in funding that have resulted in no evening nor Sunday services in/to the north of the Borough; the lack of a comprehensive bus service compounds the tendency towards car reliance. In contrast to this, the Fastway guided bus service will be operational from Crawley to Horley by August 2005, with some aspiring to further develop this service northwards to Redhill. However, the general dilemma regarding the lack of a comprehensive bus service has led to the recent introduction of Demand Responsive Transport through a multi-agency partnership (although this does not cover the whole of the Borough). The seeming success of FastWay proves the value of bus priority measures, the absence of which create ongoing problems for the efficiency and effectiveness of other bus services which are delayed in traffic.

Where bus services are particularly good is in the transport of secondary school children, however this success can still be seen to come at some disbenefit, with many shorter, walkable/cyclable trips being made by bus, for want of a walking/cycling route that engenders confidence with parents.

Non-traditional "soft-measures" continue to provide opportunities to bring about notable change at low cost e.g.Travel Plans. Moreover, recent pilot studies show that personalised travel planning has been shown to be highly effective in reducing the amount of commuting by car. Other more controversial measures to address congestion and pollution, such as workplace parking charges and road user charges, are considered in the LTP and have the potential to form an important part of the package of measures which could help to fund a Travelcard scheme, aimed at improving and integrating Public Transport services.

Other non-traditional opportunities also exist, that are presently being piloted in some areas; these include "car clubs". Car clubs are able to reduce the need for car-ownership and can provide the conditions to reduce the parking requirement within a development, allowing the equivalent space for more sustainable uses.

The relative impacts of freight also need to be highlighted: in 1998, transport by lorry was responsible for around 38% of all CO2 emissions from UK road transport and it is recognised that rail freight has a material advantage over road freight in terms of these emissions (CO2 emissions per tonne kilometre of rail freight is 23g whereas, for HGVs, it is 178g). The forecasts of an 80% growth in rail freight made in the Government's 10 Year Transport Plan, in as much as that it a less polluting alternative to road freight, should be welcome. However, it is accepted that this cannot be achieved without the provision of more rail linked distribution buildings. Local Planning Authorities, in conjunction with rail freight operators, should identify and safeguard sites suitable for development to support rail freight operations.

Summary:

- High car ownership and use conflicts with the achievement of many other Sustainability Objectives e.g. improvements in health; reducing social exclusion; reducing the likelihood of flooding
- Inconsiderate parking is causing a nuisance to local neighbourhoods and interfering with other travel modes
- Cycling and walking, both favoured modes of sustainable transport, have remained static over the period of the LTP (2000-2006)
- Cycle and pedestrian routes need to be identified within LDF
- Only one homezone and one 20mph zone exist within the Borough.
- Railway network is strained
- Brighton – Victoria railway line is at capacity; operators prioritise Gatwick.
- North Downs railway line needs enhancement
- Bus are underutilised; some evening and Sunday services have been cut
- Buses are delayed in traffic, causing unreliability, and encouraging car use
- Fastway opportunities exist to extend northwards
- Fiscal measures to control car use remain unused
- Traffic contributes to the poor air quality at Gatwick
- Travel plans are an extremely effective "soft" measure
- Car clubs reduce the need for car ownership and can facilitate the "release" of land
- Freight interchange facilities requirements have been mooted; Freight Quality Partnerships exist in four other Surrey districts.

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?

Effective Protection of the Environment

Objective 12: To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the District is prepared for its impacts [could include aviation and road transport].

Overview

The Earth's average surface temperature rose by about 0.6 deg C during the 20th Century and is set to continue. The average temperature in the South East has risen by a similar amount (0.5 deg C) over the same period. The resultant change in the climate is manifesting itself by: higher summer temperatures; wetter winters and drier summers; snowfall decrease and more intense rainfall.

Several other Sustainability Objectives are directly linked to the aim of reducing green house gas (GHG) emissions and although their has been a measured improvement from the UK as a whole, this has largely been due to the larger amount of energy generation from natural gas as opposed to the higher emitting fossil fuels: coal and oil. Already the trend is in decline, with aviation in particular, making a larger contribution; the UK is in line to meet its Kyoto targets, but the ability of the UK to meet its aspirational targets (20% below 1990 levels) for 2010 is in doubt.

No absolute measure of GHG emissions can easily be made, however the Borough's contribution can be estimated.

Although it is acknowledged that there is an urgent need to reduce GHG emissions, it is also clear that in the medium to long-term at least, the realities of Climate Change must be accepted and appropriate adaptation measures planned and implemented.

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Local estimate of CO2 emissions	2003: 1083 Kt CO2 8.6 t per capita (2.8 tonnes domestic)	UK greenhouse gas emissions (mainly CO2 from industry) fell by 12% between 1990 and 2001, but increased by 2% between 2000 and 2001 due to increase in road travel and increased use of cheap coal in power	reduce CO2 emissions by 20% by 2010 from 1990 levels (Defra PSA)			http://www.defra.gov.uk/environment/statistics/globatmos/regionalrpt/laregionalco2rpt20051021.xls

			stations.			
b. Capacity during 'critical periods' to supply water without the need for restrictions			No homes or businesses to suffer water supply restrictions.			
c. Number of homes damaged as a result of an extreme weather event (flooding, storms and drought) Frequency, extent of area affected and impact of such events	ABI – Sebastian Catovosky 0207 2167 513 - for data		No homes or business premises to be built in areas liable to flood. All development to be provided with adequate storm water run off capacity. All development to be built with adequate foundations.			Insurance industry subsidence, flooding claims. Number of homes located in high risk postcode areas. Env Agency 100 year flood risk maps. Geological maps showing areas at risk from subsidence (clay).
d. Number of sites of ecological interest where flora or fauna were damaged by an extreme or persistent weather event e.g. tree loss from storm, species loss resulting from habitat change caused by persistent dry or wet conditions			The ecological value of all sites to be capable of recovery following an extreme or persistent weather event.		The number of sites could be a useful indicator but there is no centralised control and many bodies would need to be contacted about this.	

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 GHG 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.

Reigate & Banstead Scoping Report – October 2005

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.
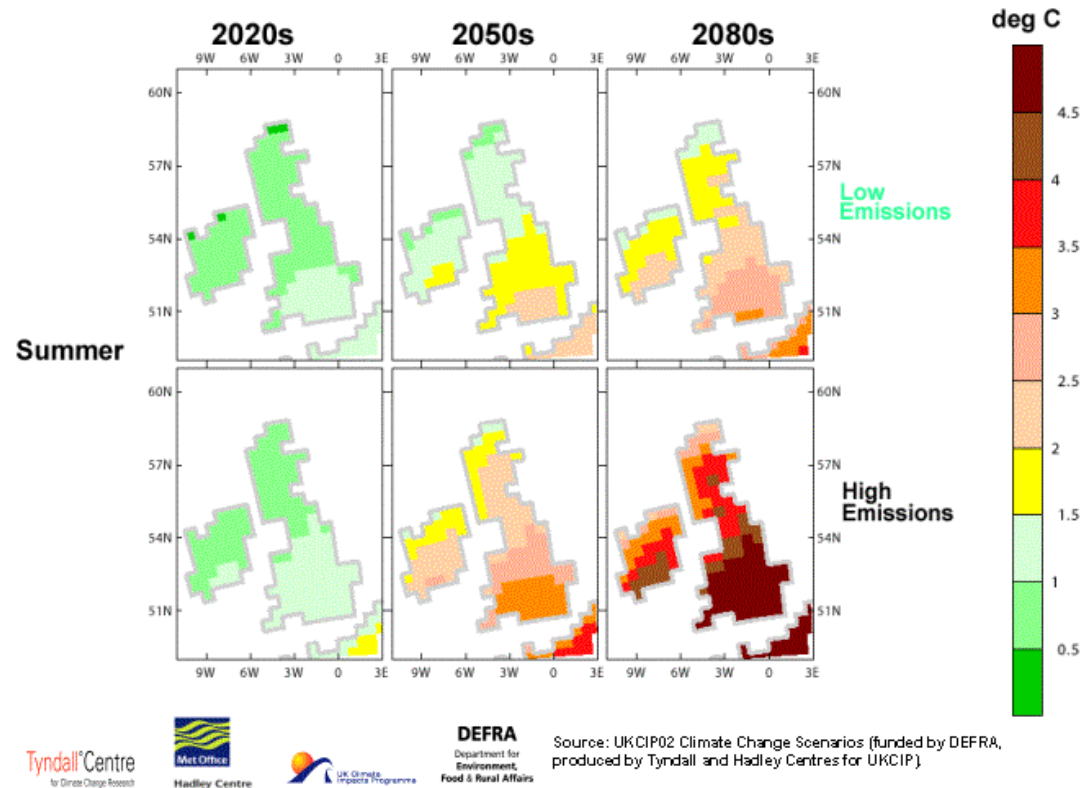
In developing buildings and communities, it is important to plan for the climate throughout the design life of the development (50-70+ years), especially with regard to its location and design. Climate Change could otherwise mean that the development proves to be too uncomfortable to live in, too expensive 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.

Mean temperature change

Source: UKCIP02 Climate Change Scenarios (funded by DEFRA, produced by Tyndall and Hadley Centres for UKCIP).

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.

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.
Telecomm- unications	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.

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. Blood-sucking ticks are already on the increase; these and other exotic insects may impose additional health risks.

Warmer, drier summers could significantly boost, and alter, tourism focus and demand for outdoor leisure facilities

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 need 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, even becoming 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?

Maintenance of a stable level of economic growth

Objective13: Maintain low rates of unemployment and high levels of economic activity

Overview:

The South East Economy is critical to the performance of the UK as a whole and will continue to play an essential role in maintaining the growth of the UK economy in the future.

While the South East global ranking improved from 35th out of 40 in 2001 to 34th in 2003, in terms of productivity it is still almost 26% below the average for these 40 regions. Major improvements will be necessary if the region is to achieve the aspiration in the Regional Economic Strategy for the South East to feature in the 15 top-performing regions globally.

The SE level of employment is consistently higher than the average for the UK, the region sustains the highest proportion of people in work; the Borough of Reigate and Banstead mirrors this regional trend.

Unemployment in the South East fell over the period 1997-2001, which reflected the relative buoyancy of the economy, and have now remained steady, perhaps indicating a near saturation/or 'full' level of employment for the current configuration of the regional economy. A further fall in the proportion claiming benefits is likely as the economically inactive rejoin the labour market.

SEEDA figures show that the South East is performing above the national average for the growth of VAT registered businesses. This is not surprising given the region's advantages (for example its skills base), which give it a greater capacity to develop new businesses. High levels of net new business formation have not been universal however, and Reigate and Banstead joins the number of exceptions, despite an employment rate change of more than 3% from 1999 to 2003.

The focus for economic activity is likely to continue to be in the town centres and industrial estates.

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Percentage of economically active people that are unemployed	Jan. 2004: 2.2%	Surrey Jan. 2004: 1% SE 2004: 3.9% UK 2004: 5.0%		Continuing low levels		QoLI: F2 NOMIS official labour market statistics

b. Proportion of people claiming unemployment benefits who have been out of work for more than a year	Jan 2004: 5.9%	South East Jan. 2004: 13.5%			QoLI: F3 NOMIS official labour market statistics
c. Percentage of population who are income deprived		Surrey Jan. 2004: 6%			QoLI: F9 http://www.odpm.gov.uk/stellent/groups /odpm_control/documents/contentserve rtemplate/odpm_index.hcst?n=4610&l= 3
d. Percentage of people of working age that are economically active	2002: 83.5%	South East 2002: 82.8			NOMIS official labour market statistics
e. The net change in the number of VAT registrations and deregistrations	2003: 0.2%	Surrey 2003: 1.1%			QoLI: F6 NOMIS official labour market statistics
f. Industrial breakdown of VAT registrations expressed as a percentage	2003	Surrey 2003:		Change in the number of VAT registered businesses 2002-03	QoLI: F5 NOMIS official labour market statistics
▪ Agriculture and fishing	2%	2%			
▪ Energy and water	0.0%	0%		Increase	
▪ Manufacturing	4%	6.50%		no change	
▪ Construction	12%	10.70%		no change	
▪ Wholesale and retail	18%	17.30%		Increase	
▪ Hotels and restaurants	7%	4.30%		increase	
▪ Transport and communications	4%	3.80%		decrease	
▪ Banking, finance and insurance, etc	1%	1.10%		no change	
▪ Real estate	45%	42.50%		no change	
▪ Public administration, other	6%	10.40%		no change	
				decrease	

▪ Education and health	2%	1.50%		increase		
g. Average annual earnings (AAE) for full time male and females working in the district	2003	Surrey 2003:		Net change in earnings 2002 - 2003		QoLI: F4 NOMIS official labour market statistics
▪ AAE - All males (full & partime)	Not available	£31,815.68		£4,291.04		
▪ AAE - All females (full & part)	Not available	£18,203.64		-£2,277.08		
▪ AAE - All employees (full & part)	Not available	£25,278.76		£1,296.88		
▪ AAE: fulltime males	£31,210.40	£33,488.52		£3,615.56		
▪ AAE: fulltime females	Not available	£24,317.80		-£3,087.24		
▪ AAE for all full timers	Not available	£30,059.64		£1,456.00		
h. The number of persons registered in adult education classes	* see table below for proxy indicator			Surrey LEA: Small decrease in those of working age qualified to level 2, but small increase in those qualified to level 4		
i. Number of persons receiving on the job training						
j. Growth in GDP and Value Added						GDP etc data from Regional Trends

(Maps 1 and 2 below - Source: National Statistics (from Nomis website: www.nomisweb.co.uk)
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Map 1: New Business formation in the South East, 2003

Source: NOMIS, 2004

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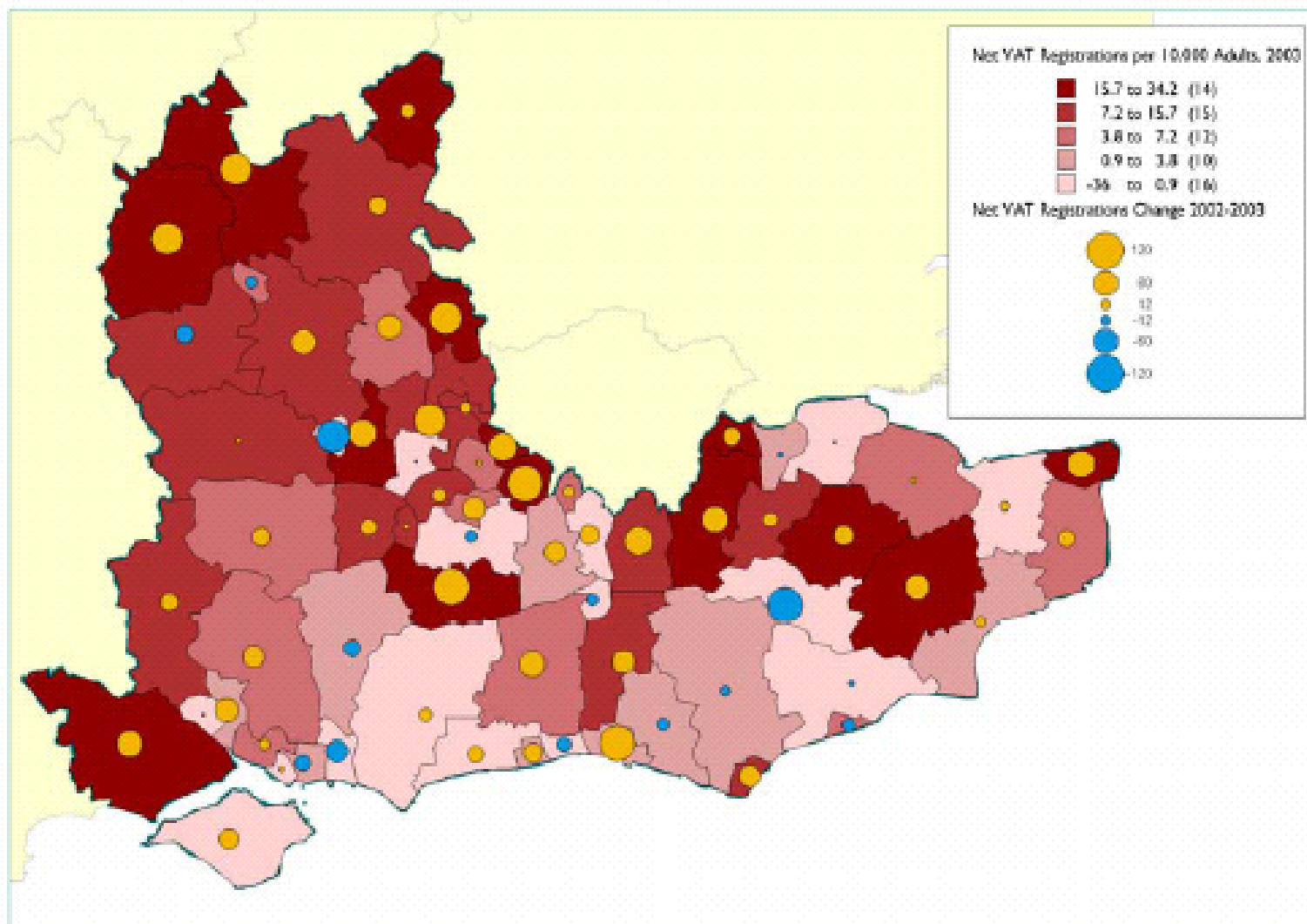
Employment Rate Change, 1999-2003

Employment rate = Proportion of the Working Age Population in Employment

Change = Percentage Point Increase/Decrease 1999-2003
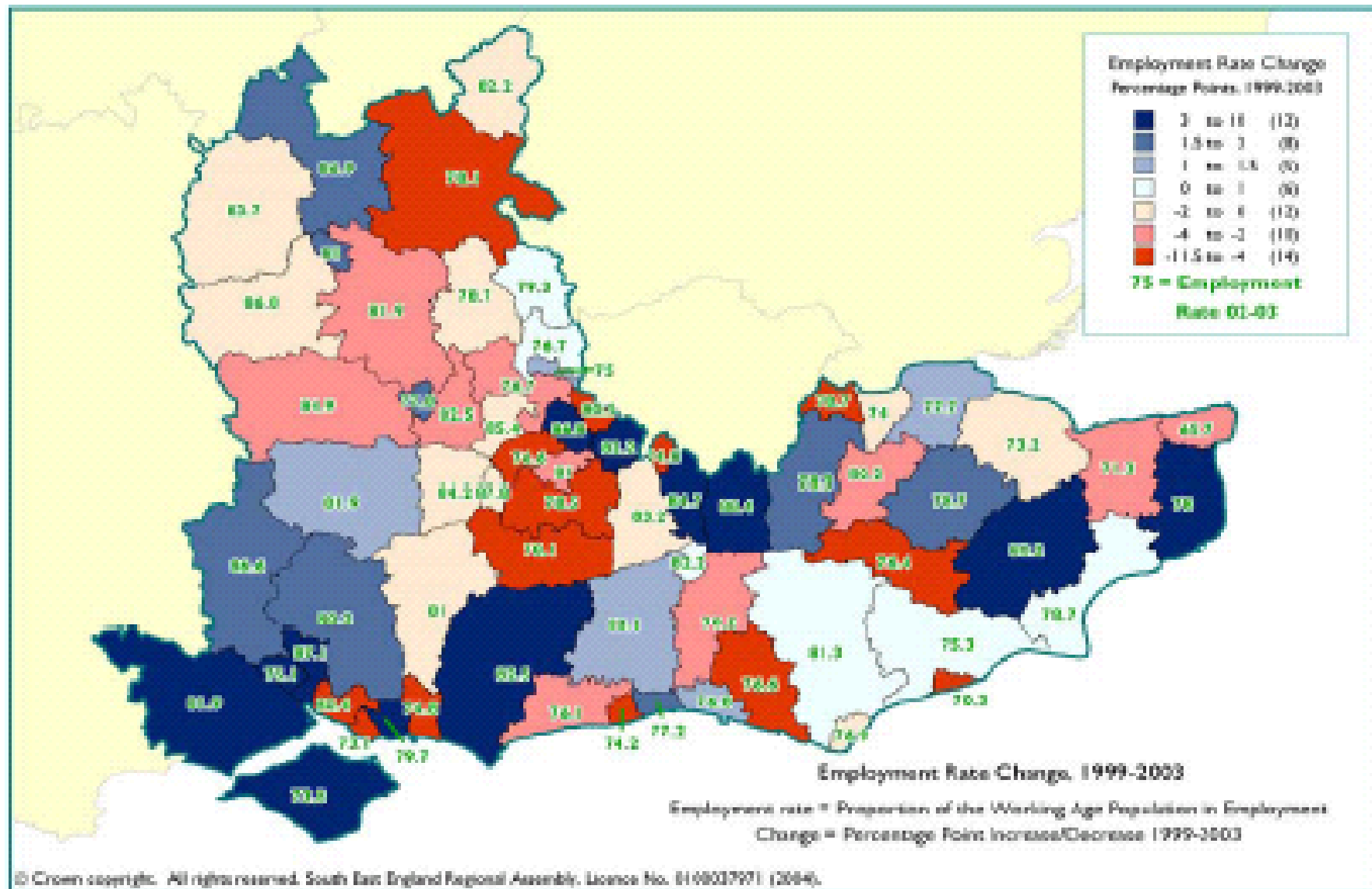
Source: NOMIS, 2004

Percentage of People of Working Age Qualified to Level 2 ⓘ

	2001/02	2002/03	% points difference
Surrey LEA	22.1	20.8	-1.3
South East Region	22.4	21.7	-0.7
England	21.8	21.9	0.1

Percentage of People of Working Age Qualified to Level 4 and above ⓘ

	2001/02	2002/03	% points difference
Surrey LEA	33.9	34.0	0.1
South East Region	25.8	27.7	1.9
England	23.1	23.9	0.8

Sustainability issues/opportunities:

Surrey, and the South East generally, have a prosperous economy and have enjoyed significant economic growth since the early 1990s. The economic environment has not been so positive over the past year and the world economy in general is likely to see low growth in the year ahead. However, it seems that the UK, and the South East in particular, is still in a relatively strong position, although has already been demonstrated that the South East is lagging in terms of international productivity comparisons.

The Borough Council, while supportive, presently do not take an active role in promoting economic development due to the relative good health of the local economy.

The impact of a faltering world economy will nevertheless act to dampen growth in Surrey. Forecasts produced in September 2001 suggest that 60,000 new jobs will be created in Surrey by 2010 (this is a reduction from a 1999 forecast of 120,000), which is challenging against a backdrop of 1% unemployment in Surrey. Surrey has a higher proportion of economically active people in the 50 to retirement age bracket than the rest of the South East, with reliance on a skills base of older workers in some sectors. Even so, skills shortages are reported across the region, with hard to fill vacancies in a number of sectors including business services, hotels and catering.

A clear symptom of the prosperous economy and low unemployment level has been recruitment and retention problems, reflecting both skill and labour shortages; 44% of Surrey companies reported recruitment problems last year. The lack of available people has often resulted in low numbers of potential recruits or even none at all, for jobs where relatively low levels of specific skills are required. These can be described as labour shortages. For some jobs, which have specialist skill content, employers have not been able to attract or retain staff. These are skill shortages. Surrey competes in particular with London for certain skills. There are also trends within some sectors where employers are finding it difficult to recruit younger staff, which is leading to a potential "time bomb" effect for those sectors with a predominantly older workforce - an example is the Engineering sector.

In order to increase wealth and compete effectively in a global economy, it is essential that the potential of human capital be exploited to its maximum potential. A key message for the region is that in order to maintain the high levels of growth, we need to fulfil the potential of the existing labour force and tap into the potential of those with few or no qualifications, removing any apparent barriers. The competitive advantages of skills, creativity and knowledge, are required to drive growth in productivity to vie with the cheap labour brought about by off-shoring.

Surrey has one of the highest staying on rates in full time education at age 16. Participation by Surrey 16 year olds in all forms of structured learning is above the national average (84% compared to 83%), but this falls below the national average for 17 year olds (73% compared to 74%) and still further below for 18 year olds. Surrey ranks 17th out of the 47 Learning and Skills Council areas at age 16 but 29th at age 17. The participation level in structured learning for 18 year olds is over 20 percentage points below that for 16 year olds, and the participation rate for young men is significantly lower than for young women (78% compared to 83%).

Of those 16-18 year olds not involved in structured learning, almost all are in jobs (all bar 0.5% of the 16-18 year old population). Currently Surrey young people's participation in Government supported training (Modern Apprenticeships and other vocational training leading to NVQs) is well below the average for the South East Region. There is a cultural bias towards academic courses of study and a poor perception of the merits of vocational learning.

These factors all have major implications for how we increase levels of participation for 16-18 year olds

Raising the skills levels in the existing workforce is also key to maintaining economic progress. A Surrey Skills Audit recently showed that 12% of the workforce, or around 70,000 people, were studying for a qualification. And there are, of course, many more learners who are not studying for a qualification, including over 20,000 enrolments annually in Surrey County Council's Adult and Community Learning Programme. The Skills Audit also showed that, while nearly half of those surveyed had done some form of training in the past year, around a quarter had not had any training in the past 10 years. Half of these claimed never to have had any training, while around three quarters considered that they had no training needs. Further and higher educational establishments are vital to the delivery of these training and educational needs and should plan for an increase in demand, with a potential need to expand provision.

Age discrimination legislation will come into force in 2006 will help to maintain and increase the available workforce, as well as retaining business critical skills amongst more experienced employees. Other issues are also very important to increasing the available "indigenous" workforce; central to these is the need to address the work- life balance and family friendly policies (e.g. childcare).

Summary:

➢ Low levels of unemployment means that increasing labour demand will be hard to meet
➢ 44% of Surrey companies reported recruitment problems last year.
➢ Increased labour demand could be met partly by increasing the number of economically active residents in the borough.
➢ Surrey has an older age profile than other parts of the South East - for example, 48% of Surrey's population is over 40, while in Oxfordshire it is 44% and in Berkshire 41%. There is also increasing growth in the older groups i.e. those nearing retirement and the elderly.
➢ Knowledge-based skills need to be increased to compete effectively in a global market place
➢ 75% of the Surrey workforce believe they have no skill development needs
➢ There is a significant drop in participation in structured learning by those more than 18 years old
➢ Legislation relating to age discrimination will come into force in 2006, maintaining and potentially increasing the local workforce.

Key Decision Aiding Questions:

❑ Will the option encourage the provision of jobs accessible to residents?
❑ Will the option help maintain the supply of labour?
❑ Will the option help increase knowledge based skills?
❑ Will the option improve and encourage facilities for life-long learning, and access to them?
❑ Will the option promote a work-life balance?
❑ Will the option contribute to enhancing the vitality, viability and attractiveness of town/local centres?
❑ Will the option provide opportunities for the provision of care for dependants? *(see sustainability option 2 – social inclusion)*

Maintenance of a stable level of economic growth

Objective14: Provide for appropriate commercial development opportunities to meet the needs of the economy.

Overview:

A successful economy is an important key to ensuring a good quality of life. However, economic growth must be encouraged in a sustainable way; this means planning in a way that avoids the unwanted pressures that economic success can bring. Economic wealth needs to be created which are "uncoupled" from these damaging effects on the environment and society: the stock of employment land should not be expanded ("spaceless economic growth") and the need for travel reduced. Mixed-use development in and around town centres will help to address these issues; re-using suitably located land should be the primary way of meeting future economic growth. It is also important that the economy grows in a balanced way by ensuring that a range of sizes and types of premises are available.

The Surrey Structure Plan has a target that at least 80% of additional commercial development each year will be located within town centres or at other sites within the urban areas which have good access by means other than the car.

The present trends in Reigate and Banstead show that commercial floorspace commitments are at their highest level since 1994. This trend is mirrored by the availability of Gross Floorspace. The majority of commercial activity has been successfully directed to employment areas, but offices are tending to replace industrial uses, to the extent that there is presently a significant oversupply of office space, which is at its highest ever level.

The vast majority of commercial commitments (over 70% since 1994) are notably in Redhill, whereas; those in the other three town centres have remained largely static for the past decade.

The significant employment growth in the Borough has led to some recruitment and skills shortages, with the consequence that some employment land (in line with Planning Policy Guidance 3) has been released to housing e.g. Holmethorpe sand works; Park 25; Hooley Lane Goods Yard.

Although Surrey is not considered to be a major contributor to UK agriculture (less than 1% of the UK's agricultural land) nevertheless this sector is responsible for around 37% of the land in Surrey. In Reigate and Banstead there are 134 agricultural holdings representing less than 7% of the county's total.

Reigate & Banstead Scoping Report – October 2005

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. The number of granted planning permissions for commercial development	Current commercial commitment (as at March 2005): 106,126 m2					In house monitoring
b. The area of employment sites lost to other uses	Holmethorpe sand pit; Park 25; Hooley Lane Goods Yard					
c. The number of rural diversification schemes	Presently unknown					

Sustainability issues/opportunities:

An awareness of the spatial constraints in the Borough is needed. The efficient use of commercial and industrial property needs to be promoted along with development opportunities for the re-use and conversion of existing premises or redundant/ vacant properties.

The recent change of some large employment sites to housing risks reducing opportunities for some types of economic growth in the future; the need to protect a core stock of employment land remains a pragmatic approach to the issue.

Physical expansion of businesses needs to be planned carefully, considering alternative options, and the effects this might have on travel behaviour. Utilising new technology and ICT may overcome the need for physical space. The present glut of office space is indicative of the future need to consider their potential for adaptation to other uses during their lifetime.

Ten per cent of residents presently work at, or mainly from, home. At present there is a negligible number of live-work units in the Borough, however further increases in this proportion might result in a different impact.

Farming in the Borough are struggling in the current climate, the sector still being distressed from the foot and mouth epidemic. The large number of small units (87% less than 20 hectares) strengthens the case for diversification. The Commission into the Future of Food and Farming points to opportunities in this area, which actively support the sustainability agenda, including the production of local products (e.g. Surrey Hills brand), supporting healthy eating, farmers' markets and growing short rotation coppice and other energy crops. However, farmers

believe that difficulties in gaining planning permission (cited by 41%) is still the most significant barrier to diversification, although lack of capital, cash flow problems and recruiting staff are also problems. Policy should take account of the need to support diversification which assists the achievement of other Sustainability Objectives (e.g. renewable energy; sustainable consumption)

Summary:

> Over 70% of commercial commitments (since 1994) have been in Redhill
> There is presently a significant oversupply of office space
> Three sizeable employment areas in Redhill, surplus to present needs, are being developed for housing
> The potential to adapt commercial development in the future should be considered
> Although agricultural holdings are few in number (134), the relatively small size of the majority lend themselves to diversification

Key Decision Aiding Questions:

❑ Will the option provide for the needs of economy, especially local business?
❑ Will the option encourage rural diversification?

Maintenance of a stable level of economic growth

Objective 15: Provide additional commercial development in urban areas (stimulating economic revival in priority regeneration areas).

Overview:

The concept of smart growth driven by productivity growth and little associated development is not entirely clear or proven. Although there is a major shift to different ways of working, traditional forms of employment still predominate. Moreover, flexible working practices and the amount of work taking place outside the physical confines of the traditional workplace does not automatically translate into the need for less "workspace". The changing economic structure requires different types of employment land; plans will need to make provisions for flexibility to allow for transformation to suit market requirements. So as to effectively compete in a global context, increased productivity is likely to require further development as well as smart growth.

There is also an increasing demand for more low-skilled jobs in the service sector due to rising disposable incomes and the ageing workforce, which will not only require appropriate level skills, but additional employment land for business services, retail, restaurants and leisure activities. Where appropriate, this additional provision can be used to stimulate economic revival in identified regeneration areas.

Additional commercial development should look to intensify the use of existing sites and minimise loss or damage to environmental capital. More efficient use should be made of existing sites and premises which are not fully used because they are unsuited to modern business needs

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. The number of commercial developments within urban areas			80% of new commercial development will be in town centres or urban areas with good access by public transport, cycling and walking. (Structure Plan target 4)			SCC (DEMONS) - SEERA return
b. Percentage of vacant employment frontage	March 2005: 5.9%	Surrey 2000-01: 7%		Increased in Redhill (6.4%) and Horley (12.4%) to highest level in 5 years	High number of vacancies in Redhill and Horley is partly due to new	Town Centre monitor

					mixed developments not yet attracting tenants.	
c. Shop surveys (growth/change in frontage & vacancy rates) Reigate ▪ A1 ▪ A2 ▪ A3 Redhill ▪ A1 ▪ A2 ▪ A3 Banstead ▪ A1 ▪ A2 ▪ A3 Horley ▪ A1 ▪ A2 ▪ A3	March 2005 624.7 111.6 69.0 1396.0 256.3 112.1 632.9 146.5 59.3 642.2 221.5 49.5			Retail accounts for 95% or more of shopping frontage in all the town centres. The proportion of A1 frontage ranges from 61% in Horley to 72% overall in Redhill. A2 use is highest in Horley at over 21% of frontage and A3 is highest in Reigate at 8.3% of shopping frontage. In 2005 the use class of 30 or 45% previous A3 (restaurants and cafes) premises change- 14 to A4 (drinking establishments) and 16 to A5 (hot food takeaways)		SCC/Districts (last survey in 2002) http://www.iggi.gov.uk/towncent/index.htm In House town centre monitor
d. The number of retail developments within and around town centres			90% of additional retail development will be in/around town centres (Structure Plan Target 5)			SCC (DEMONS)

Sustainability issues/opportunities:

The development needs in order to maintain a sustainable local economy faced with global competition is in many ways uncertain. The growing issue of off-shoring and the increasing flexible work practices delivered by technological advances will undoubtedly have a significant effect on the size, and requirements, of the workforce. The need to maintain appropriate levels of extra employment land to promote choice and flexibility

Summary:

- ➢ The future requirements for additional commercial development is in many ways uncertain
- ➢ The knowledge economy is creating an increased demand for low skilled jobs and associated infrastructure e.g. retail
- ➢ Off-shoring and flexible work practices will have a significant effect on the size of the workforce

Key Decision Aiding Questions:

- ❏ Will the option enhance the viability, vitality and attractiveness of urban centres and encourage their commercial renewal?

Maintenance of a stable level of economic growth

Objective16: Balancing the needs for employment and housing to reduce the need to travel.

Overview:

The rationale behind this objective is to increase the "self-containment" of the local economy: matching the local workforce to local jobs. Broad structural changes in the economy over the last two decades has seen long term growth in well paid service sector jobs that are attractive to a wide pool of labour. If the economy continues to grow, Surrey will increasingly have to rely on in-commuting to satisfy labour demand because the increase in the resident labour force is expected to decline for demographic reasons.

Figures for Reigate and Banstead in the table below demonstrates that the significant growth of in-commuters has continued to grow in the decade 1991-2001 at a similar rate as the previous decade, with over half the workforce now commuting to the Borough. Outward commuting, which forms the traditional view of Surrey workers, has shown a much smaller change, even though there has been a notable increase over the previous decade.

Self-contained towns in terms of local economies tend to be those larger freestanding towns away from the London fringe, such as those in Reigate and Banstead; however, the statistics below indicate a continuing trend away from this position. The identification of Reigate/ Redhill as a regional hub in the South East Plan, and Redhill as a centre of strategic importance is likely to add to the labour demands.

Reigate and Banstead Census Data	Living & working in the Borough	Living in the Borough, working elsewhere	Percentage living in Borough, working elsewhere	Working in the Borough, living elsewhere	% **residents** working locally	% **workers** living locally
1981	27,560	25,910	48.5%	15,140	52%	65%
1991	28,000	27,470	49.5%	20,660	50%	58%
Change 81-91	440	1,560	**+1.0%**	5,520	**-1%**	**-7%**
2001	30,651	33,533	52.2%	27,260	48%	53%
Change 91-01	2,651	6,063	**+2.7%**	6,600	**-2%**	**-5%**

Reigate & Banstead Scoping Report – October 2005

2001 Census: Commuting

	Resident population aged 16-74	Residents aged 16-74 in employment	Lives in area and works outside area (out-commuters)	Lives and works in area	Lives outside area and works inside area (in-commuters)	Lives in area and does not work	'Workplace' population aged 16-74	'Daytime' population aged 16-74	Net commuting
Elmbridge	86,527	58,786	33,271	25,515	25,079	27,741	50,594	78,335	-8,192
Epsom and Ewell	48,482	33,199	20,364	12,835	14,624	15,283	27,459	42,742	-5,740
Guildford	96,928	67,097	30,635	36,462	31,707	29,831	68,169	98,000	1,072
Mole Valley	57,527	39,164	18,804	20,360	19,636	18,363	39,996	58,359	832
Reigate and Banstead	90,991	64,184	33,533	30,651	27,260	26,807	57,911	84,718	-6,273
Runnymede	58,112	39,037	22,169	16,868	26,939	19,075	43,807	62,882	4,770
Spelthorne	66,451	46,924	28,819	18,105	20,729	19,527	38,834	58,361	-8,090
Surrey Heath	59,079	42,608	23,988	18,620	24,112	16,471	42,732	59,203	124
Tandridge	56,711	39,166	22,569	16,597	12,512	17,545	29,109	46,654	-10,057
Waverley	82,834	56,396	27,994	28,402	19,112	26,438	47,514	73,952	-8,882
Woking	64,984	46,258	24,499	21,759	19,218	18,726	40,977	59,703	-5,281
Surrey	768,626	532,819	190,901	341,918	145,184	235,807	487,102	722,909	-45,717

Source: National Statistics (from Nomis website: www.nomisweb.co.uk)
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2001 census - standard tables

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date		2001
	43UF : Reigate and Banstead	**Total km (minimum levels)**
S130:1 (ALL PEOPLE : Total)	57,913	
S130:2 (ALL PEOPLE : Less than 2km)	10,183	10,183
S130:3 (ALL PEOPLE : 2km to less than 5km)	8,327	16,654
S130:4 (ALL PEOPLE : 5km to less than 10km)	10,071	50,355
S130:5 (ALL PEOPLE : 10km to less than 20km)	9,779	97,790
S130:6 (ALL PEOPLE : 20km to less than 30km)	3,558	71,160
S130:7 (ALL PEOPLE : 30km to less than 40km)	2,017	60,510
S130:8 (ALL PEOPLE : 40km to less than 60km)	2,269	90,760
S130:9 (ALL PEOPLE : 60 km and over)	1,848	110,880
S130:10 (ALL PEOPLE : Works mainly at or from home)	9,861	
Total kilometres		508,292

Reigate & Banstead Scoping Report – October 2005

Data:

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. The number of live work units constructed	Data presently unavailable					In house monitoring
b. Balance between labour supply and labour demand	2001: Job density of 0.9	Surrey 2002: Job density of 0.91				ABI of LFS (from NOMIS)
c. Number and direction [and distance] of journey to work movements	64,184 residents in employment in 2001 30,651 work in R&B	532,880 residents in employment in Surrey 342,084 work in Surrey		An increasing number of commuting journeys are being made. There is a significant increase in the number of in-commuters	Data only available every 10 years. Distance is yet to established	Census Journey to Work - % who live and work in district of residence.
d.Total travel distance of workforce (minimum)	2001: 508,292 km					
e. Number of residents working at, or from home	2001: 6,475 this amounts to 10.1% of residents in employment	11% of Surrey residents in employment work from home	Increase in home working			LFS and Census Journey to Work

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 people working in the borough accounts for (a minimum) of one million kilometres each day, which is responsible for a significant environmental disbenefit. Moreover this figure does not take account of the people living within the Borough who work outside of it.

Reigate & Banstead Scoping Report – October 2005

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 meet the needs for labour without increasing the need for travel?
❑ Will the option increase the likelihood of local jobs being filled by local people?
❑ Will the option encourage mixed-use development?

Prudent Use of Natural Resources

Objective 17: To reduce the global, social and environmental impact of consumption of resources

Overview

Increasing prosperity in the South East, the UK and across the world had allowed many people to enjoy the benefits of goods and services, which were once available to just a few. Nevertheless, the environmental impacts from our consumption and production patterns remain severe, and inefficient use of resources is a drag on economy and business. A major shift is needed to deliver new products and services with lower environmental impacts across their lifecycle, while at the same time boosting competitiveness. It is also necessary to build on people's growing awareness of social and environmental concerns, and the importance of their roles as citizens and consumers.

Current patterns of consumption and production in developed countries could not be replicated worldwide: some calculations suggest that if this was the case then three planet Earths would be required to provide the necessary resources. The total ecological footprint from all consumption related activities in the South East (in 2000) was 29 times greater than the physical land area of the region (this equates to 6.8 global hectares per person; for comparison, the global capacity is 1.9)

The 2002 World Summit on Sustainable Development set new global commitments on sustainable consumption and production, but pressures on the global environment continue to grow. In the South East these pressures are largest and fastest from areas such as household energy, water consumption, food consumption, travel and tourism.

Appropriate indicators for this objective are not presently well formed, but those associated with the production of local products and attainment of environmental business accreditation are pertinent to the achievement of this aim.

Some moves have been made towards the establishment of a local market in food: The Surrey Hills marketing plan encourages a policy of local businesses using local produce, which would assist the development of a diversified agricultural sector, however this is still in its infancy.

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Number of businesses producing local food	Primary and secondary. 2005: 6	Total 83 businesses across Surrey		Uncertain	Less rural extent may account for small number of businesses	SCC monitor

b. Number of businesses actively engaged in the Sustainable Business Programme	Presently being collated					
c. Ecological footprint of the South East	2000: 6.8gha per person		Global capacity: 1.9gha per person SE Plan target: to stabilise the SE ecological footprint by 2010	Negative trend in the South East looks set to continue	New housing and overheated economy looks likely to exacerbate the exploitation of the natural resource base	

Sustainability issues/problems/opportunities:

Much of current consumption remains unsustainable. There is a pressing challenge that the traditional consumption associated with growing prosperity should not be accompanied by rising environmental impacts or social injustice – it will be necessary to consume more efficiently and differently. The challenge is big, but so too are the opportunities for innovation: building new markets, products and services.

It is unlikely that people will voluntarily reduce consumption if they believe that this will reduce their standard of living. Solutions to the problem need to have a win-win basis focussing on:

- ➢ Sustainable consumption and resource management as a generator of social welfare, human needs fulfilment and quality of life
- ➢ Sustainable production and resource management as a generator of economic competitiveness, added value and employment

Policy approaches should be based on combining resource efficiency with business viability and meeting consumer demand:

Reduce primary resource inputs:
Business success will depend on the ability to meet growing consumer expectations of higher environmental and ethical standards and to cut out the negative impacts of growing resource consumption. Businesses that anticipate this trend and develop "resource light" goods and services will avoid growing financial penalties from high material/energy use and waste production and be better placed to enhance their competitiveness.

Self-sufficiency:
Transport is a major component of the ecological footprint, therefore encouraging self-sufficiency should be encouraged. This self-sufficiency may only be relative in a global economy, but areas such as food and aggregates could be targeted.

Reigate & Banstead Scoping Report – October 2005

<u>Whole life-cycle responsibility:</u>
There is need to shift the concept of waste as rubbish to one of potential resources; markets need to be created for re-cycled materials and products.

<u>Integrated materials management:</u>
Awareness of opportunities for increased eco-efficiency and productivity is needed in all sectors. The potential to manage greater collaboration within and between regions, aiming to match supply and demand more closely needs to be improved.

The SEEDA supported "Taking Stock" project points to a rethink of attitudes to the use of materials and resources so as to maintain our quality of life and to enable future generations to do the same. A "Factor Four" scenario, which delivers a doubling of resource efficiency and halving of resource use (a 75% reduction in the use of energy and materials), needs to be achieved over the next 50 years. Evidence suggests that this de-coupling of economic growth from the ever-increasing use of resources, "Smart Growth", far from imposing a constraint, will stimulate whole new areas of opportunity.

Many sustainability objectives are inter-related with the goal of reducing consumption. These synergies need to be proactively exploited to ensure the achievement of multiple benefits.

<u>Summary:</u>

- ➢ The total ecological footprint of the South East is 29 times greater than the physical land area for the region
- ➢ The draft South East Plan has a target to stabilise the ecological footprint by 2010
- ➢ A major shift is needed to deliver products and services with lower environmental impacts
- ➢ Primary resource inputs should be reduced
- ➢ Regional self-sufficiency needs to be encouraged to reduce transport needs
- ➢ Waste needs to be viewed as a resource

<u>Key Questions:</u>

- ❑ Will the option help reduce the environmental impacts of products and services?
- ❑ Will the option help stabilise the Borough's ecological footprint?
- ❑ Will the option encourage self-sufficiency?
- ❑ Will the option encourage the use/supply of sustainable and/or local products/services?
- ❑ Will the option reduce the use of primary resources, or create markets for recycled materials?
- ❑ Will the option increase residents' awareness of the environmental impacts of their lifestyle choices?

Prudent Use of Natural Resources

Objective 18: To reduce waste generation and disposal, and achieve the sustainable management of waste.

Overview

The emphasis both nationally and regionally is on the reducing *growth* of waste. The Landfill Directive, which came into force in 2005, will oblige the increasing removal of organic waste from landfill. Moving waste management up the waste hierarchy remains a key objective of Government policy, but most importantly a key focus is on the need for communities to take responsibility for their own waste: to become "self-sufficient" by applying the "proximity principle". The introduction of the Landfill Allowance Trading Scheme means that failure to meet these targets will result in heavy "fines".

Some 28.5M tonnes of waste is managed in the South East and although it has the highest recycling rate, 50% of this waste still goes to landfill. A step change in the way waste is handled is required which will require new facilities throughout the region.

Surrey County Council (SCC) is the Waste Planning Authority as well as the Waste Disposal Authority and is presently working on the Waste Development Framework (WDF); the Borough Council is the Waste Collection Authority.

The incineration of municipal waste, as an option, continues to be opposed by a massive majority of Borough residents (and the Surrey Local Government Association) who remain concerned about the potential impacts on human health. In the last decade, two planning applications to site a large-scale incinerator at the Copyhold site in Redhill have been rejected.

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Amount of waste disposed of in landfill	200 35715	RBBC 2003/04: 35,909 tonnes		Slight decrease	Number of households have increased	QoLI: L6 In
b. Waste collected per capita	2004/05: 377.5 Kg	RBBC 2002/03: 391.4kg		Decreasing for last 3 years		QoLI: L5 In house
c. Percentage of waste recycled	2004/05: 25.1%	England 11% RBBC 2003/04: 23.1%	RBBC 2005/06 target: 30%	Increasing		QoLI: L6 In house
d. Percentage of waste composted	2004/05: 3.3%	RBBC 2003/04 1.7%		Increasing		QoLI: L6 In house

Sustainability issues/problems/opportunities:

The waste crisis is with us now. Central Government has set, in the context of European Directives, a range of targets, which will require a radical rethink of how the issue of waste is addressed. To achieve these outcomes without the risk of Government intervention requires a holistic approach.

London will continue to have a limited ability to deal with its waste up until 2016 (and possibly beyond), some of which will inevitably need to be managed within the South East. The medium to long-term aim is to create a net balance in waste movements between London and the London Fringe, with imports improving the viability of recovery/reprocessing activity (consistent with the proximity principle). Consequently, beyond the need to deal with waste arising from the authority's own sub-region there is a continuing need to plan for a sub-regional apportionment from London (and possibly waste from adjoining sub-regions both within or adjoining the SE region).

Sub-regional self-sufficiency, and the ability to manage other apportionments, are limited by criteria such as: surplus of void space over and above that required to meet the sub-region's own needs; suitability of geology and/or engineering (taking into account groundwater protection policy).
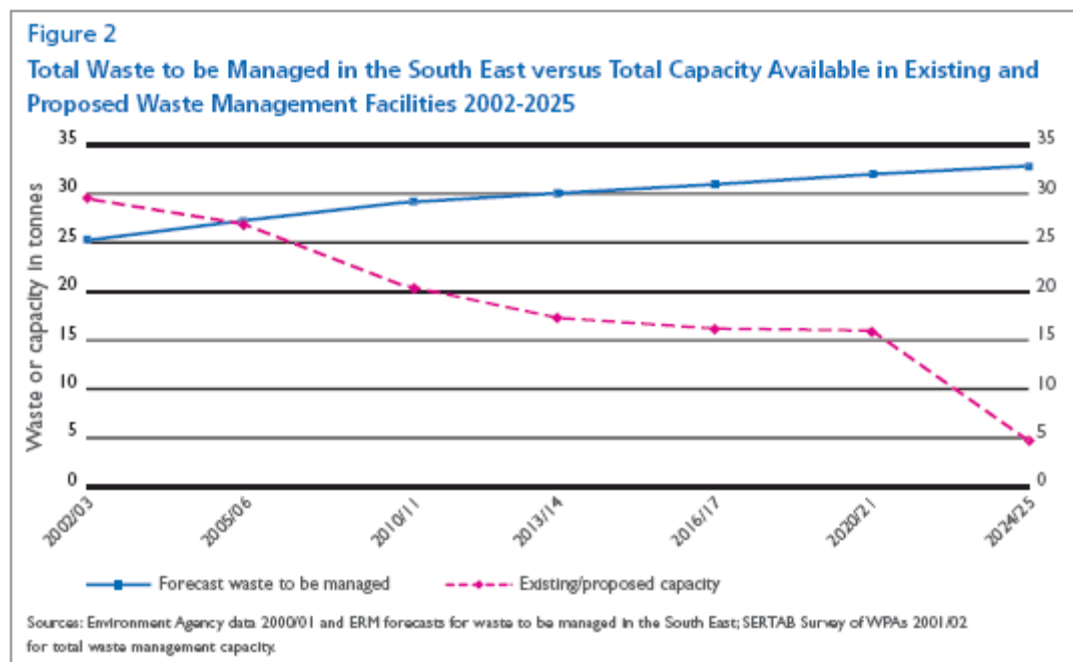
(Figure 2 – copied from No Time to Waste, Proposed Alterations top RPG9)

The SE region targets for diversion from landfill are demanding: 74% by 2015 (compared to 21% now), with a 50% target recycling and composting (which compares with 19% presently). This will require a rapid increase in management capacity to reduce the present reliance on landfill; by 2015 Surrey will have a shortfall of landfill void capacity of 3.5Mt. Implicitly, there is a need for a rapid development of the necessary infrastructure, the urgency is compounded by the long lead in times and difficulties in obtaining planning permissions. Sites will need to be identified for this necessary expansion, which will inevitably be of an industrial nature. These sites will be required for both the processing and storage (for instance of source separated materials) and will need to be developed close to the source of waste and hence will generally be close to urban areas.

The challenging targets are likely only to be met by an integrated approach to waste management involving a mix of technologies. Anaerobic digesting (AD) is one of the newer technologies, attracting wide support, being advanced as a means to help achieve this performance level. The benefit of this type of process is that, although akin to composting (being considered by Government for entry into the composting category of Best Value) it produces methane as a by-product that can be used to generate renewable energy in Combined Heat and Power plant. The resultant heat and electricity from this process can potentially supply adjacent development, however the siting of new plant near to suitable land-uses has clear potential for conflict. Furthermore, the digestate from the AD process at present has a limited market, although the development of short rotation coppice as part of a wider objective of producing renewable fuel might provide opportunities for "recycling" the by-product locally as a fertiliser for this purpose. Residual waste could be reduced in volume through gasification and promoting the re-use of the resultant material in the construction industry (again, energy can be recovered, where possible, through combined heat and power thereby using it in the most environmentally advantageous way.) This type of approach has a positive synergy for the development of CHP (energy efficiency/renewable energy objectives) to help meet the Government's targets; CHP is presently non-existent within the Borough.

The approach to organic waste required by the forthcoming Biowaste Directive (final adoption expected 2006), and the potential means of treatment, is likely to oblige Waste Collection Authorities to make separate collections of household biodegradable waste. The Animal By-products Directive, which requires the elimination of pathogens during the treatment of organic waste means that food waste will have to be treated at high-temperatures (such as in AD or gasification). Garden waste collected for low-temperature composting would have to remain uncontaminated.

Identification/safeguarding sites that can meet the infrastructure demand, is a role for the WDF, and although controversial, has to be an early consideration (including sustainable transport infrastructure); the Borough Council needs to be involved. Urban sites may meet this need; a network of small, local facilities could help in ensuring that waste was managed close to its origin. However, development in the Green belt should not be precluded (where this is consistent with the proximity principle and there are no suitable alternative sites, or where this would not cause harm to Green Belt objectives) which could include agricultural buildings. Industrial land and existing waste sites (i.e. sewage treatment works; landfill sites) provide particular opportunities for hybrid activities (i.e. co-digestion of wastes; dis-assembly etc), but would require good transport links and accessible to existing/major new or planned development.

Construction and demolition (C&D) waste forms half of the total controlled waste stream and could increase if there were pressures to increase demolition rates so as to improve the quality and energy efficiency of the housing stock. Minimisation of this waste stream by re-using C&D materials is key: sustainable demolition that minimises waste production needs to be emphasised; policy should seek to reflect this design need.

Summary:

- Limited landfill capacity and the demanding requirements of the Landfill Directive make alternative options to waste management inevitable. Existing/proposed capacity will be virtually exhausted by 2025.
- Challenging targets for the sustainable management of waste mean that the urgent, rapid development of necessary infrastructure (including bulk transfer, sorting and treatment) is progressed
- Opportunities exist to use organic waste to produce renewable fuels
- The proximity principle demands that waste is managed close to where it arises, minimising transport impacts
- The principle of self-sufficiency requires that sufficient management capacity is provided to manage the waste arisings
- Hybrid activities can be encouraged on appropriate sites to achieve multiple benefits
- Waste from construction and demolition should be minimised by appropriate design and re-use
- Layouts and design should facilitate storage (multiple bins), re-use, recycling and composting

Key Decision Aiding Questions:

- Will the option promote reuse and recycling of materials?
- Will the option allow the efficient storage and collection of waste?
- Will the option facilitate the provision of additional sustainable waste management capacity, avoiding the need to landfill?
- Will the option allow waste to be managed close to where it arises?
- Will the option minimise the production of waste?
- Will the option provide opportunities to use waste as a resource, or renewable fuel?

Prudent Use of Natural Resources

Objective 19: To maintain and improve the water quality of rivers and groundwater and to encourage the sustainable use of water.

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.

The rivers and watercourses themselves also act as an important part of the Borough's environment and ecosystems and can act as wildlife corridors in fragmented habitats.

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.

Data

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		QoLI: B5 http://www.environment-agency.gov.uk/maps/

|	Local data	SE / Regional data	Target / Objective	Trend / Commentary	Notes	Source
				measured length		
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
c. Security of supply index banding	2003-04: Planned service: A Reference Service: A				Banding A indicates no deficit against target headroom in any zone	
d. Household per capita consumption (PCC) of water	2003-04: Sutton + E Sy Measured 155 Unmeasure 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. Water supply and demand balance	(see table below)	South East 2000/01:				
f. The number of water meters installed	2004: 56,075 (20.7% of total of 270,420) 1,400 brought into charge during 2003-04		Water company plans suggest over 55% of the SE region will be metered by 2020	A further 23,000 meters are expected to be installed over the next 5 years. 18,000 of which will occur due to change of occupancy		Sutton and East Surrey Water plc www.waterplc.com
g. Estimate of amount of water lost through leakage in mains system.	2003-04: Water loss through mains leakage 24.4 Mega litres per day, or 91 litres/prop/day	Industry average 2003/04: 154 l/prop/day	Sutton and East Surrey leakage target for 2005-10 is 25 Mega litres/day	2005-10 Leakage target already being met		Sutton and East Surrey Water.

Description	Units								
Water Sales and supply/demand balance		2002-3	2003-4	2004-5	2005-6	2006-7	2007-8	2008-9	2009-10
Billed water delivered	Ml/d	143.95	146.12	147.07	147.94	148.71	149.57	150.54	151.51
Water available for use	Ml/d	187.51	187.51	192.31	196.91	201.91	201.91	201.91	201.91
Distribution input (dry year)	Ml/d	168.67	169.68	170.70	171.64	172.51	173.46	174.49	175.52
Total leakage	Ml/d	24.41	24.40	24.40	24.40	24.40	24.40	24.40	24.40

<u>Water supply/demand balance – Sutton and East Surrey Water Business Plan 2004</u>

<u>Sustainability issues/problems/opportunities:</u>

The South East consumes more water per person than other regions, but receives one of the lowest amounts of rainfall. A huge 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.

The mounting effects of climate change are compounding the problem of meeting this growing demand, from the larger number of small households. The rapid emergence of drought in autumn 2003 has now been replicated in the spring 2005 with a hose-pipe/sprinkler ban being instigated by Sutton and East Surrey Water as early as April. Climate Change is predicted to reduce summer rainfall by 15 – 60% by the 2080's, which is likely to increase the frequency of drought.

Difference for the previous 36 months

Difference in actual rainfall against LTA
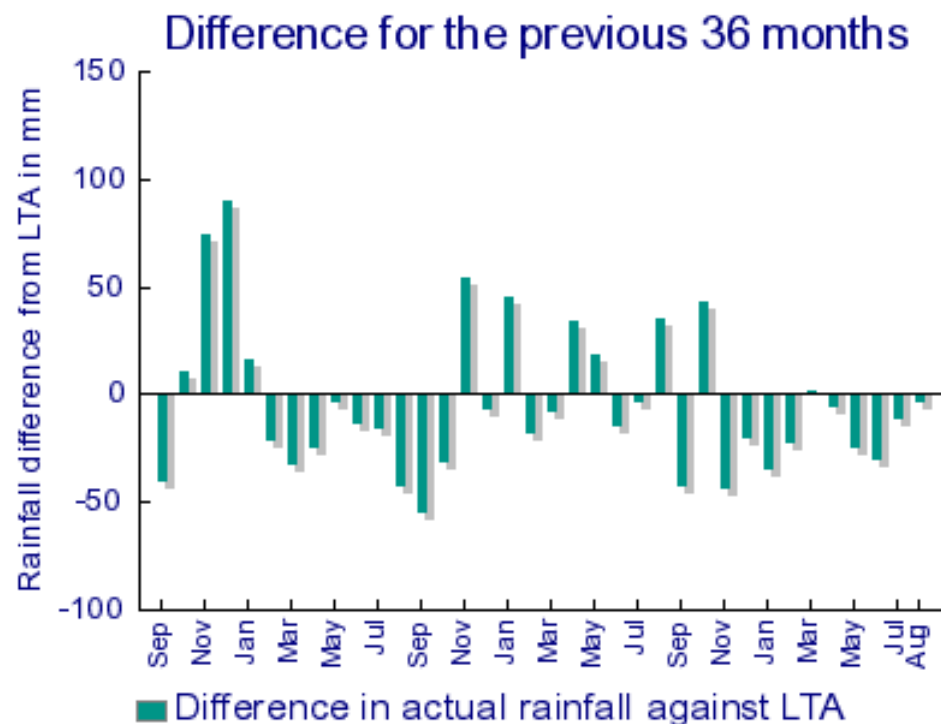
Public water supplies in the Borough (and wider region) are at a critical level with demand close to exceeding supply. This makes the management of water resources a major issue: the need for water storage, aquifer recharge, water transfers, demand management and new sources of supply will become imperative. This increasing competition for water inevitably risks damage to the natural environment.

Climate Change will also impact on the capacity of rivers to dilute treated sewage effluent as a result of reduced river levels in the summer months; the need to consider additional/alternative solutions to sewage management are likely to be required to manage demand from new development. New infrastructure for treatment (and supply) may be controversial, costly, and require substantial lead in times.

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 Urban 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.

Eutrophication of river courses and water bodies from high levels of nitrates and phosphates, primarily from agricultural activity and sewage treatment works (STW) continue to cause ecological harm. The entire Borough falls within a Nitrate Vulnerable Zone, which indicates that the land area drains into surface water or groundwater with nitrate levels currently, or likely to exceed 50mg/l, or into freshwaters that are likely to become eutrophic.

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 derive from both sewage treatment works and Gatwick holding ponds. STWs at both Horley and Earlswood are destined to 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.

Security of water supply to meet the housing growth needs detailed in the South East Plan can only be achieved if 8% water efficiency can be achieved in new build, and then only if a number of provisos are met, including the validity of climate change predictions and extent of metering.

Unrealistic expectations regarding the capacity of existing sewerage and water supply should be avoided. Additional needs for infrastructure both within and without the Borough's boundaries should be established with the relevant utility companies in shaping plans for new development; its adequacy may well affect the viability and/or timing of development. Before any part of the development is commenced a water and water waste strategy, including both on site and off site works, shall be submitted by the Developer.

Development on culverted sites can allow for their removal thereby providing new opportunities to improve water quality, flood conveyance and amenity value.

<u>Summary</u>

- ➢ 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

<u>Key Decision Aiding Questions</u>:

- ❑ 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 provide adequate utilities infrastructure to service development to avoid unacceptable impacts on the environment?

Prudent Use of Natural Resources

Objective 20: 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 additional 15-25Mt Carbon savings that the UK are likely to need by 2020.

The energy efficiency of the Borough's homes has traditionally been measured through a cyclical Housing Stock Condition Survey. Recently this information has been supplemented by comprehensive information collected through a Home Energy Survey (supplied by 60% residents). This information indicates that the Borough's housing stock has 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). The English Home Condition Survey 2001 indicates that those homes with SAPs of less than 30 represent 39% of the total living in fuel poverty (defined as spending greater than 10% of its income on fuel to maintain a warm home), this amount would translate into a borough-wide figure of 7,600 households being affected by fuel poverty.

To date, no de-centralised supply of energy, through Combined Heat and Power, is known to exist within the Borough.

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Energy use per capita	Data will be available in the future	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		http://www.southeast-ra.gov.uk/our_work/planning/sus_dev/irf_2004/irf_data_trends_final.pdf http://www.dti.gov.uk/energy/inform/energy_stats/total_energy/dukes1_1_4.xls
b. Improvement in dwelling SAP rating across district	2004: SAP 54 (all housing stock)	Average SAP rating in England (2004): 50. Regulations take effect	The Government's target, by which Fuel Poverty will be eliminated, is to	An increase of SAP rating of 2 occurred across the whole housing stock		Local authority home energy conservation officer

		April 2005. Structure Plan target 11 requires all new homes to be built at BRE Ecohomes 'excellent' standard by 2010.	achieve a SAP rating of 65. The target date for this achievement is 2016	between 2003-2004.		
c. Installed capacity of CHP	Not available at present	CHP installation doubled in the 90's, but has slowed as a result of recent market conditions	Government target: 10,000MWe by 2010 Current central projection is around 8,500 MWe by 2010		Domestic micro-CHP market is not expected to be significant in the short-term, but larger micro and mini- CHP have considerable potential in the small business sector.	http://www.dti.gov.uk/energy/inform/energy_stats/chp/dukes6_1-6_2.xls

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 that 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 January 2006 and will apply more stringent standards; policy needs to support these moves and push the boundaries further. 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

Reigate & Banstead Scoping Report – October 2005

(14% nation-wide) are unable to be upgraded, are "unhealthy" (as defined by the Housing Health and Safety Rating System)) and could benefit from being demolished. The national demolition rate needs to be increased to four times current levels to make a significant impact.

While construction and demolition processes all use energy, the amount is relatively small compared to the energy in the use of the buildings. Using local, plant-derived materials can reduce energy in construction; moreover the re-use of building materials needs to be considered at the design stage of new construction. (The Government is developing with industry a Code for Sustainable Buildings, which will establish stretching voluntary standards for resource efficiency on key issues.)

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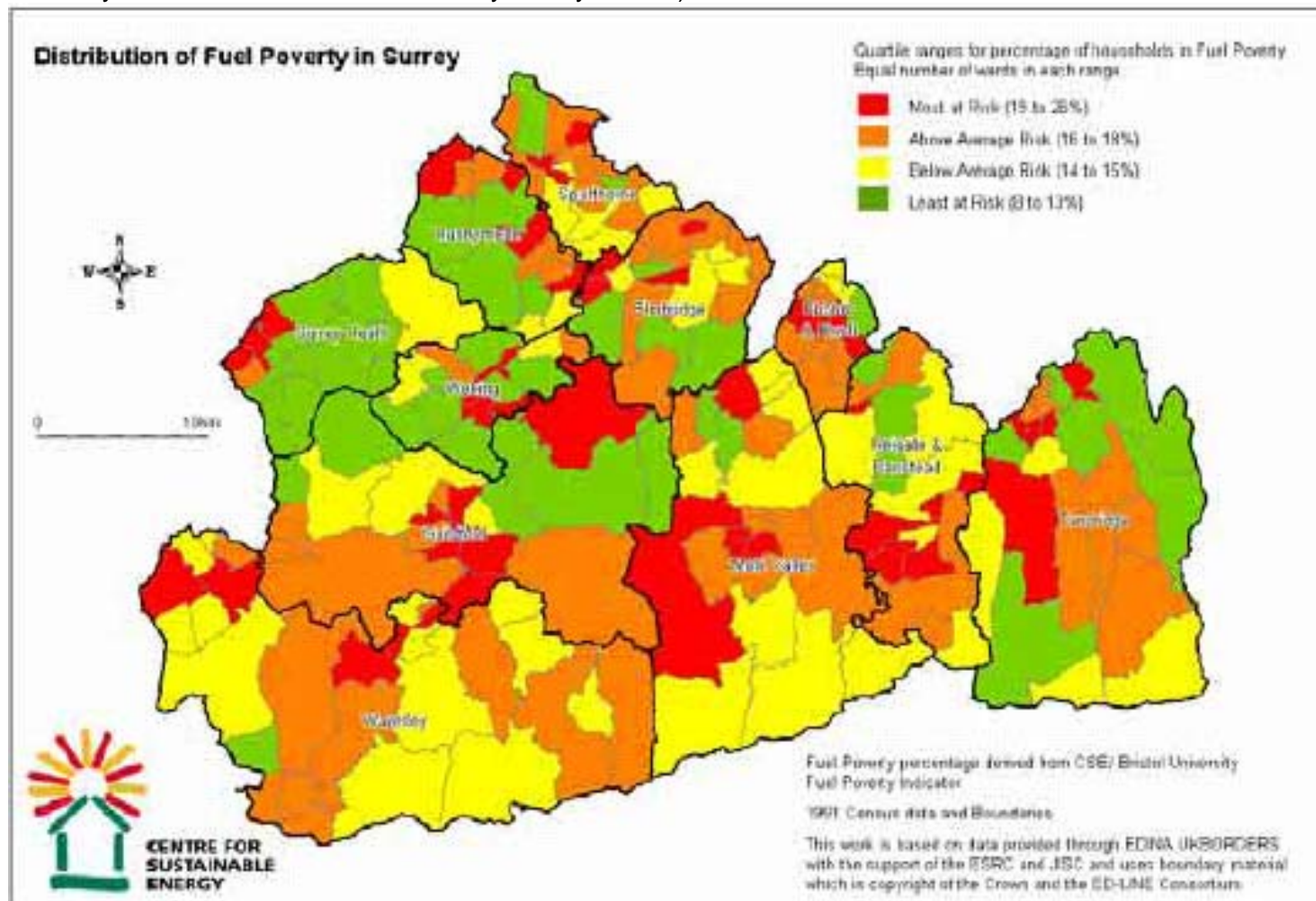
Much of the current housing stock is able to accommodate larger households than it does at present. It is estimated that 45% of owner-occupiers in England have two or more rooms above the "bedroom standard" (ODPM 2004), which is a factor in causing and compounding fuel poverty.

Energy efficiency is becoming increasingly linked to the need for cooling. Eighty-three percent 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 appliance will reduce the peak demands for electricity and hence reduce the need for generating capacity and infrastructure. A policy position could help promote residential CHP.

The promotion of mini- or larger scale CHP in other situations (e.g. new office blocks; nursing homes; leisure facilities) is inherent in new 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:

➢ The present SAP rating of the Borough's housing stock is 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
➢ 5.5% of the housing stock have SAPs of less than 30, which means that potentially 7,600 households in the Borough suffer from fuel poverty
➢ Many homes that are energy inefficient cannot be remediated; these unhealthy homes could benefit from being replaced.
➢ Energy use is likely to increase due to cooling needs. Passive measures can help reduce energy needs
➢ De-centralised supply of energy will improve energy efficiency
➢ Installed CHP plant in the Borough is negligible
➢ CHP needs to be promoted to boost energy efficiency
➢ Mini and micro CHP is for small developments and individual homes is now 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?

Prudent Use of Natural Resources

Objective 21: To increase the production and use of renewable energy/fuels

Overview

The Government has accepted the Royal Commission on Environmental Pollution's recommendation that the UK should put itself on a path towards a reduction in carbon dioxide emissions of 60% from current levels by about 2050. Early, well-planned action is needed to ensure that this challenge can be met.

The second challenge is the 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 within 10 years. By around 2006 we will be a net importer of gas and by around 2010 of oil. 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).

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.

At present very little renewable energy is generated in the whole of the South East Region. Reigate and Banstead is not different in this respect, with the exception of 3MW of installed capacity fuelled by landfill gas at Biffa's Redhill site. Less than 0.5% of electricity generated in the region in 2003 was from renewable sources (this equates to 60MW, of which 54MW was from landfill gas); the target for 2010 is 5.5% (620MW) of which 510MW is prospectively from biomass (including anaerobic digestion), wind and photovoltaics.

Data

INDICATOR	Quantified data (for RBBC)	Comparators	Targets	Trend (RBBC)	Problems/ Constraints	Source
a. Installed capacity for energy production from renewable sources (MWe) (Biomass,	2004: 3MWe (landfill gas)	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			http://www.see-stats.org/thamesvalley.htm

biogas/sewage gas, solar PV, wind, hydro)			[2016]. Structure Plan target: 10% of energy requirement to be met from renewable resources. TV Energy R&B notional target (excluding Landfill gas and hydro): 2.8MWe for 2010; 1.47Mwe biomass 0.68 MWe wind 0.36 MWe AD 0.28 MWe PV 0.11 MWe Hydro (across Surrey)			
b. Annual electricity production from renewable sources (MWhe)	No data at present – likely to be negligible					
c. Installed capacity for heat generation from renewable sources (MWth) (Biomass, biogas/sewage, solar thermal, ground source heat pumps)	No data at present – likely to be negligible					
d. Annual heat production from renewable sources (MWhth)	No data at present – likely to be negligible					
e. Greenhouse gases displaced annually by total (heat & power) renewable energy generation (tonnes CO2 equivalent) Multiply annual	No data at present – likely to be negligible					

amount of electricity saved by 0.43 tCO2/MWh; amount of coal saved by 0.32; amount of oil saved by 0.27; amount of natural gas saved by 0.19. Take the sum of these, minus 0.025 tCO2/MWh times amount of biomass used, as the amount of GHGs displaced					
f. Area of land planted with short rotation coppice (hectares) i.e. willow, miscanthus	None				
g. Area of land planted with energy crops for transport biofuels (hectares) i.e. oilseed rape for biodiesel, wheat/sugar beat for bioethanol	No data at present – likely to be negligible				

Sustainability issues/problems:

The above overview and baseline data clearly demonstrate the challenge posed to meet the sub-regional RE target for 2010 and beyond. The policy framework, however, has recently been established at national (PPS22), regional (RPG9) and county level Surrey Structure Plan (SSP) that should enable significant progress towards the target.

The SSP policy, SE2, requires that 10% minimum RE is generated on-site in new development. However, the implementation of the policy seems likely to be hindered by a range of issues, including: conservative attitudes to energy generation; paucity of technical knowledge among decision-makers; deficiencies in the supply of renewable fuels; and lack of businesses set up to deliver energy services (Energy Service Companies, or ESCos).

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. 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), it is likely to present a significant barrier.
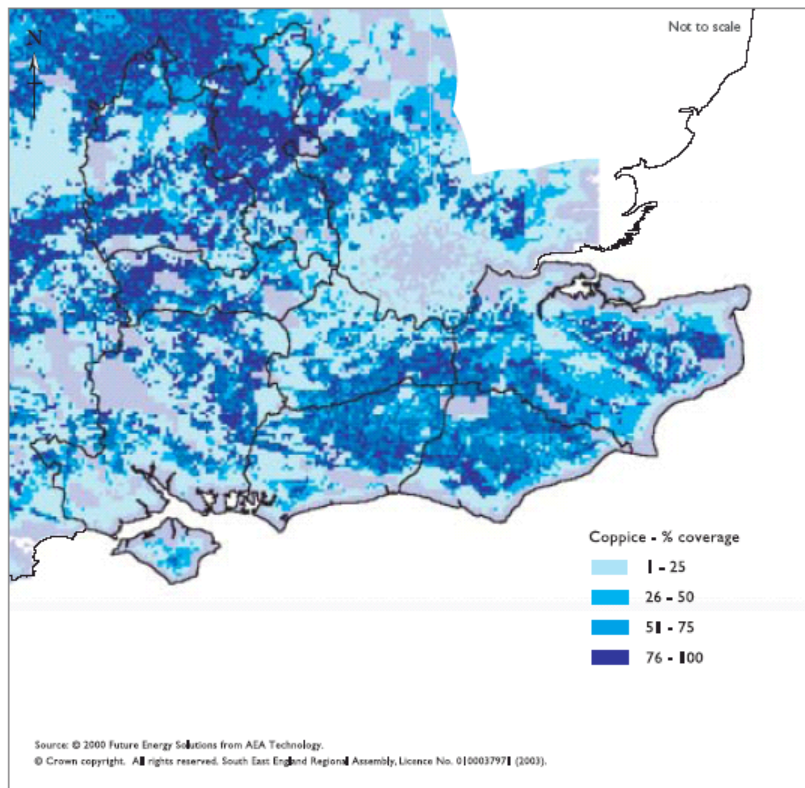
Smaller roof-mounted turbines (1.0 -1.5KW) are just coming on to the UK market, but would presently require planning permission. Like all new infrastructure of this type, there will undoubtedly be concerns about visual intrusion/conflict with local distinctiveness. The amount of electricity generated from these devices indicate a short pay-back period, especially as they currently attract government grant funding, and could provide a means to help address fuel poverty.

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 present planning position relating to their installation is still ambivalent, which adds to overall costs (through the need to seek authorisation); their integration into new build and renovated buildings could be established as a matter of course (comparison: new planning laws introduced in Spain in 2005 make inclusion of solar water heating compulsory and will effect 500,000 homes per annum) Other less mature technologies such as photovoltaic (PV) cells and ground source heat pumps could also be introduced, the former being cost-effective if used also to replace building fabric, the latter when excavation means the easy introduction of underground piping.
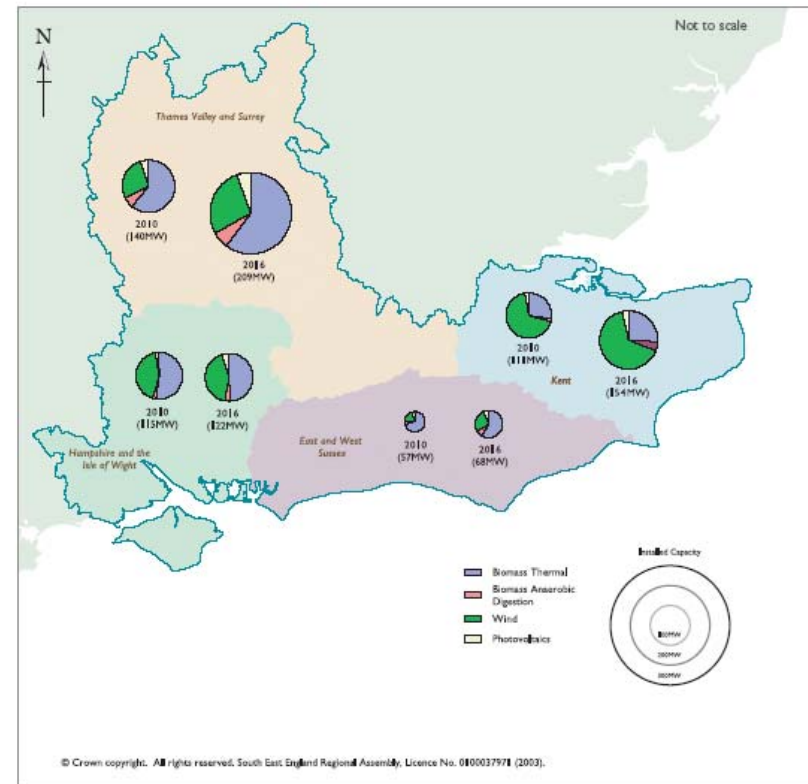
The distribution of both heat and electricity (from CHP and district heating) is also strongly encouraged through policy SE2, and is expected to be the norm in large development exceeding 5,000m2. The ability to fuel this type of plant renewably depends on the development of a biomass supply chain (wood waste/energy crops etc) and ideally the exploitation of the potential for new short rotation coppice in the area. If the 2010 targets for Thames Valley and Surrey are to be met, 60% of the energy will need to be generated from biomass; the technical potential for this growth (as short rotation coppice) is demonstrated in the above maps.

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.

Coppice - % coverage
- 1 – 25
- 26 – 50
- 51 – 75
- 76 – 100

Installed Capacity
- Biomass Thermal
- Biomass Anaerobic Digestion
- Wind
- Photovoltaics

The additional opportunity to use heat from these CHP processes for both heating and cooling (using "absorption chill" technology) tends towards siting 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 processes, although fuel storage (which is inevitably larger) is a necessary consideration (in some European countries this is achieved by underground storage).

Reigate & Banstead Scoping Report – October 2005

Summary

➤ Presently very little installed renewable energy capacity in the Borough
➤ Sub-regional targets point to the need to increase RE capacity one-hundred fold by 2010
➤ 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?

5. Next Steps for Sustainability Appraisals

5.1 Following the consultation on this preliminary scoping report it may be necessary to amend the document to take account of comments made. It will then be necessary to carry out a SA of the LDF documents that the Council will be publishing for public consultation purposes. The SA may recommend that options within those documents are refined or deleted.

5.2 However it is not the role of the SA to determine which of the options should be chosen as a basis for consultation. The role of the SA is to assist in the identification of appropriate options by highlighting the sustainability implications of the different options and by putting forward recommendations for improvement.

5.3 The results of each SA will be published as a SA Report and for each DPD will be consulted upon at the same time as the Preferred Options paper, pursuant to Regulation 26 of the Town and Country Planning (Local Development) (England) Regulations 2004, or for each SPD when the draft SPD is published for public consultation, pursuant to Regulation 17 of the Town and Country Planning (Local Development) (England) Regulations 2004. The SA Report will incorporate the draft Environment Report, which is required by the SEA Directive, and specific reference will be made to where the components of this Directive are met.

5.4 In addition to the information supplied in this Scoping Report, the SA Report will include a more detailed methodology of the appraisal process and how this was used to compare and appraise the issues and options against the sustainability objectives; and justification for rejection of options and any proposed mitigation measures.

5.5 It is envisaged that the methodology to carry out the Sustainability Appraisal is likely to follow the format detailed in Annex 8 of the ODPM guidance (2004), as summarised in the table 3 below, (NB. the final matrix may vary from that shown below).

Table 3 Example of matrix for documenting the appraising of a plan policy

Sustainability Objective and Indicator	Predicted effects		Justification for assessment
	Nature of effect	Assessment of effect – in short, medium and long term	
1			
through to			
21			

5.6 The table will be required to assess each of the DPD options or draft SPD against the sustainability objectives. Each option will be appraised by using a table similar to that shown above which will look at the effects on the current baseline or its contribution towards meeting any targets. The outputs from each table can be compared to help decide on the Preferred Option or final SPD.

5.7 The appraisal of the DPD Issues and Options will be carried out via the process of "peer review", conducted by officers from at least two other local planning authorities with an independent consultant to oversee the process. This means that the assessment remains independent from the policy formation whilst the consultant provides an objective input to the assessment, consistency of approach and a verification of the process.

5.8 At the Issues & Options stage for each DPD an initial SA reporting on progress will be published. The public and other consultees will be able to read the Initial SA Report in conjunction with the Issues and Options papers in order to see what the possible impacts of pursuing a particular option might be.

5.9 With a draft SPD, a Sustainability Appraisal will be published alongside to inform responses to the consultation.

5.9 The SA should focus increasingly on key significant impacts and identify reasonable alternatives and how they have been considered. The focus for significant effects will emerge. As it progresses the SA will need to clarify reasons for omissions and how conflicts are to be resolved through precedence, policy development and legal requirements. Later appraisal work will also address synergies and conflicts more definitively, and develop the consideration of tensions and inconsistencies.

5.10 Any comments made will be considered along with the Initial SA Report to inform the development of the "preferred options" for each DPD. These will be the subject of further SA and further consultations, where again a Sustainability Appraisal Report will be published alongside the Preferred Options paper. After this, the Council will submit the final version of the SA Report along with the submission version of the DPD, to the Secretary of State to be considered at a Public Examination, and again invite further representations.

5.11 On adoption of a DPD a statement of how the SA process has been taken into account will be made available. On adoption of a SPD a statement summarising how sustainability issues have been integrated into the document, how the sustainability appraisal and consultation has been taken into account, and the reasons for choosing the document as adopted in light of other reasonable alterations, will be made available.