



London Borough of Richmond upon Thames

Local Plan

**Draft REVISED
Sustainability Appraisal
Scoping Report
for the Local Plan**

For consultation

NON-TECHNICAL SUMMARY

1 Introduction

This document forms the Scoping Report for a Sustainability Appraisal (SA), incorporating the requirements for a Strategic Environmental Assessment (SEA), of the London Borough of Richmond upon Thames Local Plan.

The primary purpose of the Sustainability Appraisal (SA) is to promote sustainable development through the better integration of sustainability considerations in the process of preparing and adopting plans. SA is an iterative process allowing us to identify and report on the likely significant effects of the plan, and the extent to which the implementation of the plan will achieve the social, environmental and economic objectives by which sustainable development can be defined.

A Scoping Report is a consultation document for the three statutory consultees with environmental responsibilities in England. Other relevant stakeholders with a sustainability remit or a local interest are also invited to review the report.

This is an updated Scoping Report, based on the version produced for the Site Allocations Plan in July 2013.

1.1 The Purpose of the SA/SEA

The purpose of the SA (incorporating SEA) is to ensure that environmental, social and economic considerations have been integrated into the preparation of the Local Plan. The SA will:

- Ensure compliance with the SEA Directive, SEA Regulations and guidance on SEA/SA;
- Review the Local Plan's relationship with other plans operating at a national, regional and more local level with regard to their policies and programmes;
- Establish the baseline environmental, social and economic characteristics of the area;
- Identify any current environmental constraints, issues and problems;
- Help develop viable options and alternatives; and
- Review the sustainability impacts of the options, and of any preferred SPD option.

1.2 The Local Plan

In Richmond upon Thames, Local Plans are managed through a portfolio of documents, which are individually known as Local Development Documents. These Local Development Documents or 'Plans' are either statutory (Development Plan Documents) or non-statutory (Supplementary Planning Documents). Development Plan Documents (DPDs) carry more weight as they are subject to an independent examination by a Planning Inspector before they are adopted. Supplementary Planning Documents are not subject to such an examination.

The previously adopted Core Strategy, adopted Development Management Plan and consultation draft Site Allocation Plan were all appraised using previous SA Scoping Reports.

1.3 Methodology

The SEA/SA process consists of the following stages and is being undertaken in accordance with government guidance contained within Planning Practice Guidance (PPG):

<http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/strategic-environmental-assessment-and-sustainability-appraisal-and-how-does-it-relate-to-strategic-environmental-assessment/>

The methodology is as follows:

- Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope
- Stage B: Developing and refining options
- Stage C: Appraising the effects of the plan
- Stage D: Consulting on the plan and the SEA/SA report
- Stage E: Monitoring Implementation of the Plan

The inter-relationship of the SA and Local Plan preparation process is set out in the diagram on the following page.

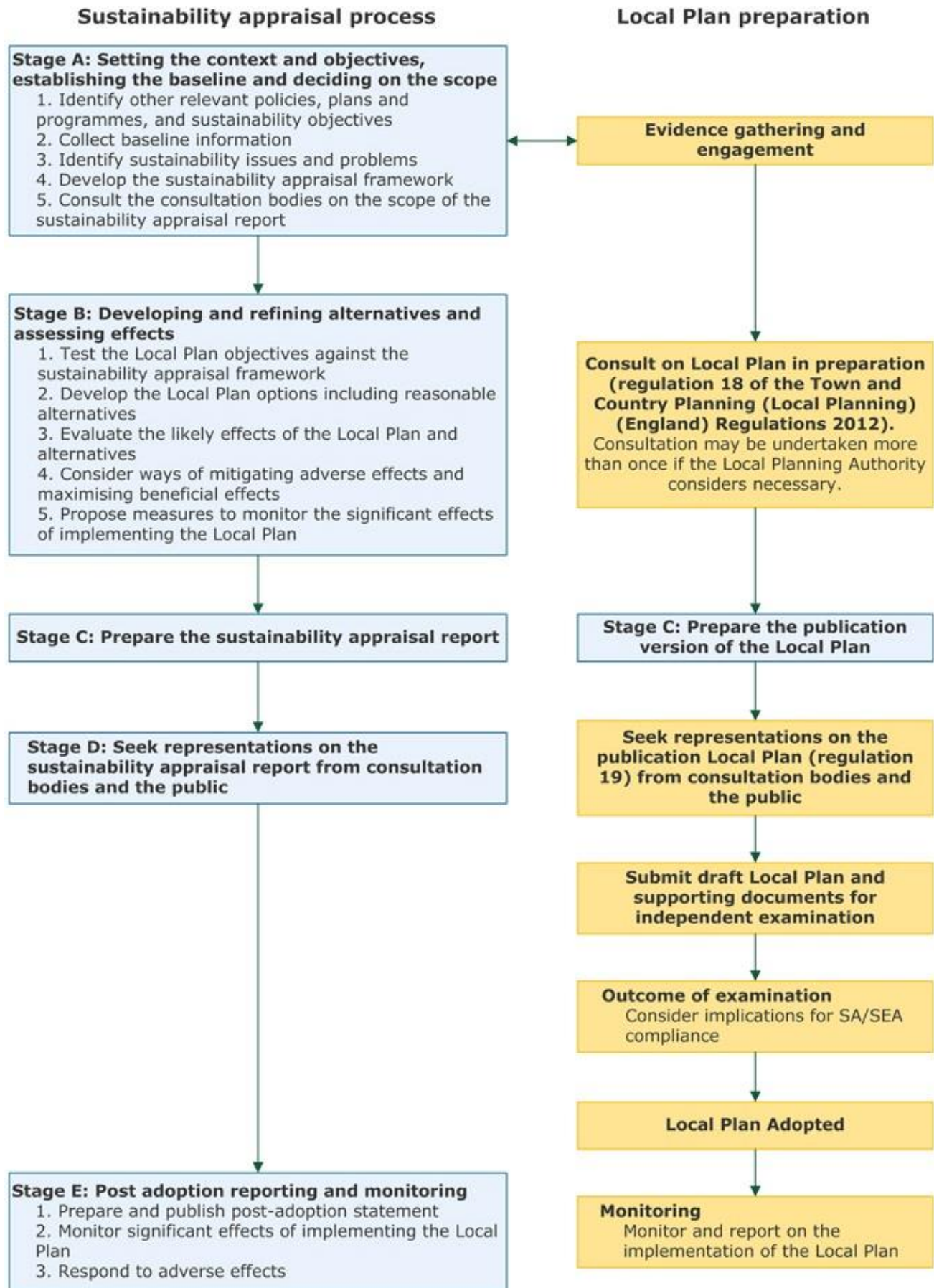
This report summarises and completes Stage A of the Sustainability Appraisal process. In the Scoping Report, Stage A of the methodology is further divided into five key tasks and Stage A5 will be undertaken when this report is made available to the statutory consultees and other relevant stakeholders.

STAGE A: Setting the context and objectives, establishing the baseline and deciding on the scope	
Stage A1	Identify other relevant plans, programmes and sustainability objectives that will influence the Local Plan
Stage A2	Collect and develop relevant social, environmental and economic baseline information and define the character of the area
Stage A3	Identify key sustainability issues for the Plan to address
Stage A4	Develop the SA framework, consisting of the SA objectives, indicators and targets.
Stage A5	Consult on the scope of the SA

It should be noted that SA is an iterative process and some stages may need to be undertaken more than once.

1.4 Scope of the SA/SEA

Baseline data and the development of the SEA/SA framework has been organised in accordance with the topics required by the SEA Directive and as outlined in the PPG. The scope of the baseline review has been refined to cover the broader spectrum of sustainability issues which reflect the combination of both SEA and SA assessments.



2 Setting the context and objectives, establishing the baseline and deciding on the scope

2.1 Task A1: Identify other relevant plans, programmes and sustainability objectives

The development of the Plan may be influenced by other plans or programmes and by external environmental objectives such as those laid down in policies or legislation. Part of SEA Directive Annex 1a (e) requires an outline of the relationship with other relevant plans and programmes. Therefore, as part of this baseline review, a description of the policy context has been included in order to enable potential synergies to be highlighted and any inconsistencies and constraints to be identified.

2.2 Task A2: Develop relevant social, environmental and economic baseline information

Baseline data has been collected for the criteria required by the SEA Directive and PPG. This data has been fed into the sustainability baseline. This scope of this data collection has been expanded to include several additional social and economic topic areas in order to address the full spectrum of sustainability issues.

2.3 Task A3: Identify key sustainability issues

Within Richmond borough, certain sustainability issues are more significant than others. These issues will need to be highlighted as areas of concern within the Sustainability Appraisal. The key sustainability issues have been divided into social, environmental and economic.

2.4 Task A4: Develop the SA framework

A sustainability framework with decision making criteria to test the performance of the Plan has been developed. This framework assists in comparing the various policies, options and proposals for the area in general and for identified sites, in particular in relation to their spatial location, proposed scale of growth and mix of land uses.

The objectives developed for the Sustainability Appraisal of the Core Strategy have been subsequently reviewed as part of the Development Management Plan, Twickenham Area Action Plan and emerging Site Allocations Plan. For the purpose of preparing this report, the objectives have been reviewed again and compared to other national, regional and local documents. The objectives for the SEA/SA can be viewed in this report. Some of the objectives have been amended to reflect previous comments from stakeholders, but the general thrust of the SA objectives remains the same. The objectives may be refined further based on consultations with statutory bodies.

2.5 Task A5: Consulting on the scope of the SA

The scoping report will be issued to the statutory consultees with a covering letter clarifying their input and requirements within the statutory five-week period. Specific consultation questions have been included within this document to assist consultees with their responses. The Scoping Report will also be made available for comment as part of the first Local Plan Review consultation from 4 January until 1 February 2016.

Sustainability Appraisal Scoping Report

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1 INTRODUCTION

1.1 Strategic Environmental Assessment / Sustainability Appraisal

- 1.1.1 Sustainability Appraisal is a requirement of Section 39(2) of the Planning and Compulsory Purchase Act 2004 and encompasses social and economic considerations, as well as the environmental factors considered by Strategic Environmental Assessment under the Strategic Environmental Assessment (SEA) Directive (European Directive 2001/42/EC).
- 1.1.2 This document forms a Scoping Report for the Sustainability Appraisal (SA) of the London Borough of Richmond upon Thames Local Plan, previously referred to as Local Development Framework (LDF).
- 1.1.3 A Sustainability Appraisal is a systematic process that attempts to predict and assess the economic, environmental and social effects that may arise from the Local Plan. The SA should¹:
- Take a long term view of how the area covered by the Plan is expected to develop, taking account of social, environmental and economic effects of the proposed plan;
 - Provide a mechanism for ensuring that sustainability objectives are translated into sustainable planning policies;
 - Reflect global, national and local concerns;
 - Provide an audit trail of how the plan has been revised to take account the findings of the SA;
 - Form an integral part of all stages of plan preparation, and incorporate the requirements of the European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”, the SEA Directive.²
- 1.1.4 The purpose of this Scoping Report is to:
- Identify environmental, social and economic objectives contained in other plans and programmes that are relevant to the Local Plan;
 - Draw together and analyse the broad environmental social and economic characteristics of the London Borough of Richmond upon Thames, and how these are changing;
 - Consider, in light of the above, key issues and problems arising from this report that the Local Plan should address;
 - Set out the appropriate objectives & targets for draft policies and options, and establish indicators against which progress towards meeting those objectives can be monitored in the future;
 - Test the plan objectives against the sustainability objectives and ensure they are consistent with one another;
 - Consult on the scope of the SA.

¹ CLG Plan Making Manual: <http://www.pas.gov.uk/pas/core/page.do?pagelId=152450> 1 National Planning Policy Guidance: Strategic environmental assessment and sustainability appraisal (2013), , accessed on 22/09/2015

² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001, “on the assessment of the effects of certain plans and programmes on the environment”.

1.1.5 The five stages to be carried out during the Sustainability Appraisal are set out in Figure 1 below.

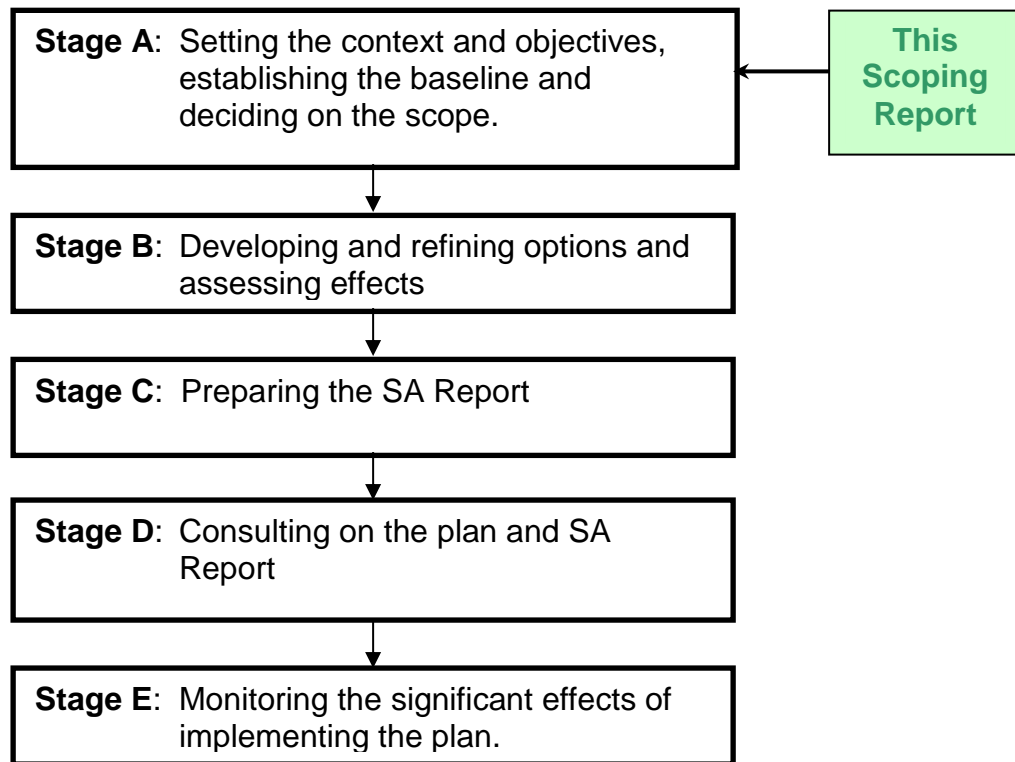


Figure 1: Five stages to SA

1.1.6 The first stage (Stage A) of the SA process consists of five key tasks, which are set out in Table 1 below.

STAGE A: Setting the context and objectives, establishing the baseline and deciding on the scope	
Stage A1	Identify other relevant plans, programmes and sustainability objectives that will influence the Local Plan
Stage A2	Collect and develop relevant social, environmental and economic baseline information and define the character of the area
Stage A3	Identify key sustainability issues for the SA / Plan to address
Stage A4	Develop the SA framework, consisting of the SA objectives, indicators and targets.
Stage A5	Consult on the scope of the SA

Table 1: Key tasks of Stage A

1.2 This Scoping Report

1.2.1 This Scoping Report is required to set out the findings of the first stage of the process (Stage A) and describe what happens next in the process. This Scoping Report will be sent to the three statutory consultation bodies with environmental responsibilities

in England, namely the Environment Agency, Natural England and Historic England (as required by the SEA directive). Other key stakeholders and relevant bodies with a sustainability remit or local environmental interest, such as Thames Water (see Task A5) are also invited to comment on the report as part of the Local Plan review scoping consultation. The scoping process is explained in the subsequent sections, and in line with the Council's Statement of Community Involvement (SCI), it has also been placed on the Council's website. The Scoping Report will also be made available for comment as part of the first Local Plan Review consultation from 4 January until 1 February 2016.

- 1.2.2 Specific consultation questions have been included within the document and on a separate form to assist consultees with their responses.
- 1.2.3 This Scoping Report is based on the Scoping Report originally produced for the Core Strategy in 2007³ as well as the revised and updated Scoping Report produced for the Twickenham Area Action Plan in May 2011⁴ as baseline. In addition, the Scoping Report has again been reviewed for the emerging Site Allocations Plan and was subject to public consultation from 15 March until 19 April 2013. It was amended in line with the consultation responses. The SA baseline information, evidence and analysis are continually under review in an attempt to be as up to date as possible in order to inform the production process of the Local Plan. Due to current Government changes to the planning system and ongoing reviews of Government guidance, it cannot be guaranteed that all the data and documents used for this report are up to date. In addition, whilst this Scoping Report has been specifically produced to support the Local Plan, it may also be used to support the appraisal of other future documents prepared under the Local Plan.
- 1.2.4 The Authority's Monitoring Report (AMR)⁵ will be the means of monitoring the SA indicators identified on a regular basis. As well as the baseline information included in this report, research may be undertaken for the Local Plan, which will form the evidence base for the Plan. The results of this research will be fed into the SA process and AMRs when available.

1.3 The Local Plan

- 1.3.1 LBRuT has commenced a review of its principal planning policy documents that will guide development across the borough over the long term. This review will involve the production of a planning policy document, termed as the Draft Local Plan, whereby it is anticipated that the Core Strategy (adopted in April 2009) and the Development Management Plan (adopted in Nov 2011) will be amalgamated into one document, together with site-specific proposals for key sites in the borough. This revised and updated Scoping Report will be used to appraise the policies and proposals that will emerge as part of the Local Plan review. More information on the Local Plan can be viewed on the Council's website⁶. This includes the Local Development Scheme which sets out the programme for the production of documents (see Table 2).

³ http://www.richmond.gov.uk/sustainability_appraisal_ldf

⁴ http://www.richmond.gov.uk/sustainability_appraisal_ldf

⁵ http://www.richmond.gov.uk/authority_monitoring_report.htm

⁶ <http://www.richmond.gov.uk/home/environment/planning/planningpolicy.htm>

- 1.3.2 The existing **Local Plan**⁷ for the London Borough of Richmond upon Thames sets out how and where development in the Borough will be delivered in the future and is currently made up of a series of documents, as shown in Table 2 below.

Plan	Function	Status
Core Strategy	Vision and strategic policies	Adopted in April 2009
Development Management Plan	Detailed policies for the management of development	Adopted in November 2011
Twickenham Area Action Plan	Policies and proposals for Twickenham	Adopted in July 2013
Joint West London Waste Plan	Planning for waste	Adopted in July 2015
Saved Unitary Development Plan	Saved site-specific proposals	Adopted in March 2005
Site Allocations Plan	Site-specific proposals	Draft (pre-publication consultations in 2013 and 2014)

Table 2: Existing adopted and draft Development Plan Documents (DPDs)

- 1.3.3 The Core Strategy (**CS**)⁸ outlines the vision, spatial strategy and includes 20 core planning policies on topics such as climate change, housing, employment and retailing. It provides the framework for the development of other DPDs within the Local Plan to build upon.
- 1.3.4 The Development Management Plan (**DMP**)⁹ builds on the objectives and principles of the Core Strategy and includes more detailed policies for the management of development. The DMP was adopted in November 2011.
- 1.3.5 The Council adopted the Area Action Plan for Twickenham Town Centre¹⁰ in 2013, which sets out detailed policies and proposals for Twickenham town centre.
- 1.3.6 The six West London boroughs (Brent, Ealing, Harrow, Hounslow, Hillingdon and Richmond upon Thames) including the Old Oak Common and Park Royal Development Corporation, have prepared together the West London Waste Plan¹¹. It sets out a strategy for the sustainable management of waste and also identifies and allocates sites for managing the area's waste over the period up to 2031.
- 1.3.7 The saved Unitary Development Plan (**UDP**)¹² has largely been replaced by the Local Plan (i.e. the Core Strategy and Development Management Plan). The only parts of the UDP that remain saved and have not been superseded are the Proposal sites.

⁷ www.richmond.gov.uk/local_plan

⁸ www.richmond.gov.uk/core_strategy.htm

⁹ www.richmond.gov.ukdevelopment_management_plan.htm

¹⁰ www.richmond.gov.uk/twickenham_area_action_plan.htm

¹¹ www.wlwp.net

¹² www.richmond.gov.uk/unitary_development_plan.htm

- 1.3.8 The Council commenced work on the Site Allocations Plan¹³ in December 2012 with a ‘Call for Sites’ consultation. Subsequently, pre-publication consultations were undertaken in 2013 and 2014. Work undertaken to date includes the following:

What	When
Evidence gathering	From September 2012
“Call for sites”	December 2012 – January 2013
Pre-publication Consultation	October – November 2013
Pre-publication - consultation on additional sites	June – July 2014
Pre-publication - consultation on new educational sites	August – October 2014

Table 3: Work undertaken to date on the draft Site Allocations Plan (2012 – 2014)

- 1.3.9 The Borough Community Infrastructure Levy (**CIL**)¹⁴, although not a formal Development Plan Document, is of relevance to the Local Plan as it sets out the Council’s rates of CIL that apply to certain types of development in the borough.

- 1.3.10 The subsequent chapters go through the various tasks of the scoping exercise.

2 CONTEXT REVIEW

2.1 Strategic Environmental Assessment / Sustainability Appraisal

- 2.1.1 Sustainability Appraisal is a requirement of Section 39(2) of the Planning and Compulsory Purchase Act 2004 and encompasses social and economic considerations, as well as the environmental factors considered by Strategic Environmental Assessment under the Strategic Environmental Assessment (SEA) Directive (European Directive 2001/42/EC).

Task A1: Identify other relevant plans and programmes and sustainability objectives that will affect or influence the plan

2.2 Plans, Policies and Programmes

- 2.2.1 Task A1 involves establishing the context in which the Local Plan is being prepared. According to the guidance:

“The review should consider guidance at the international, EU or national level on sustainable development, as well as other policy documents such as Planning Policy Statements. Note should be made of any targets or specific requirements included within them, and what these relate to”.

¹³ www.richmond.gov.uk/site_allocations_plan.htm

¹⁴ www.richmond.gov.uk/borough_cil.htm

2.2.2 The list of plans considered is in Table 3 below. Note that no list of plans, policies or programmes (PPPs) can be definitive and the list will be kept under review during the SA process and updated if required. The London Borough of Richmond upon Thames will also consider other PPPs if they become relevant and will include them.

Level: International / European Context
Conservation of Natural Habitats of Wild Fauna and Flora Directive 92/43/EEC
The Wild Birds Directive 2009/147/EC
The Convention on Biological Diversity 93/626/EEC
The EU Water Framework Directive 2000/60/EC
Ambient air quality assessment and management Directive 1996/62/EC
Limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air Directive 1999/30/EC
Air Quality Directive 2008/50/EC
Environmental Noise Directive 2002/49/EC
Approval of the Kyoto Protocol on Climate Change Decision 2002/358/EC
Allocation of emission levels under the Kyoto Protocol Decision 2010/778/EU
Landfill Directive 1999/31/EC
EU Renewable Energy Directive 2001/77/EC
EU Energy Efficiency Directive 2012/27/EU
EU Flood Risks Directive 2007/60/EC
Pan-European Biological and Landscape Diversity Strategy 2003
Mainstreaming sustainable development into EU policies: Review of the European Union Strategy for Sustainable Development 2009
European Spatial Development Perspective 1999
Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, White Paper 2011
European Landscape Convention 2000
Proposal for a new EU Environment Action Programme to 2020 - "Living well, within the limits of our planet" 2012
The Johannesburg Declaration on Sustainable Development 2002
Living Planet Report 2012 – Biodiversity, biocapacity and better choices
Level: National Context
National Planning Policy Framework 2012
National Planning Practice Guidance 2014
National Planning Policies on: Waste, Travellers, Planning for Schools Development, Sustainable Drainage Systems, Parking, and Starter Homes 2011-2015
Historic Environment Good Practice Advice in Planning Note 1, 2 and 3, 2015
Planning for climate change – guidance for local authorities 2012

Localism Act 2011
Public Services (Social Value) Act 2012
'Reuniting health with planning: healthier homes, healthier communities' 2012
UK Sustainable Development Strategy "Securing the Future" 2005
Conservation of Habitats and Species Regulations 2010
Biodiversity 2020: A strategy for England's wildlife and ecosystem services 2011
UK Biodiversity Action Plan (UK BAP) 1994
UK Post-2010 Biodiversity Framework 2012
Transport White Paper – "Creating Growth, Cutting Carbon: making sustainable local transport happen" 2011
Draft aviation policy framework 2012
The Wildlife and Countryside Act (as amended) 1981
Sustainable Communities Act 2007 (as amended 2010)
UK Energy Efficiency Strategy 2012
Climate Change Act 2008
UK Climate Projections 2009
The Air Quality Strategy (Volume 2) 2007
Air Pollution: Action in a Changing Climate 2010
National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England 2011
Natural England Corporate Plan 2012 – 2015
Historic England Corporate Plan 2015 – 2018
Tall Buildings: Historic England Advice 2015
The Water Resources Act 1991
The Water Act 2003
Flood Risk Regulations 2009
Flood and Water Management Act 2010
Healthy Lives, Healthy People: Our Strategy for Public Health in England 2010
CL:AIRE Definition of Waste: Development Industry Code of Practice 2011
The Plan for Growth 2011
A Practical Guide to the SEA Directive 2006
Level: Regional Context
The London Plan: Spatial Development Strategy for Greater London 2011 Incorporating Further Alterations and Minor Alterations 2015
The Mayor's Housing Strategy 2012
The Mayor's Transport Strategy 2010
The Mayor's Ambient Noise Strategy 2004
The Mayor's Air Quality Strategy 2010
The Mayor's Biodiversity Strategy 2002

The Mayor's Cultural Strategy 2010
The Mayor's Economic Development Strategy 2010
The Mayor's Climate Change Mitigation and Energy Strategy 2011
The Mayor's Climate Change Adaptation Strategy (draft) 2010
London Biodiversity Action Plan 2001
Sub Regional Development Framework for the south sub region 2006
Thames Waterway Plan 2006-2011
Thames Corridor Catchment Abstraction Management Strategy 2004
Thames River Basin Management Plan 2009
Thames Catchment Flood Management Plan 2009
The Thames Estuary 2100 Plan 2012
The Lower Thames Flood Risk Management Strategy (draft) 2010
Environment Agency (2014) River Thames Scheme
London Borough of Richmond upon Thames (2014) Local Flood Risk Management Strategy
London Strategic Parks Project 2006
Transport Assessment Best Practice Guidance 2010
A New Way to Plan – Travel planning for new development in London 2010
Managing Freight Effectively: Delivery and Servicing Plans 2010
The Mayor's Equality Framework 2009
Level: Local Context (London Borough of Richmond upon Thames)
Core Strategy 2009
Development Management Development Plan Document 2011
Unitary Development Plan 2005
Village Plans 2012
Community Plan 2007-2017
Air Quality Action Plan 2003
Richmond Biodiversity Action Plan 2005
Children and Young People's Plan 2009-2013
Local Implementation Plan for Transport 2011-2014
Housing Strategy 2008-2012
Homelessness Strategy 2012-2016
Tenancy Strategy 2012
Climate Change Strategy 2009
Director of Public Health's Annual Report 2011-2012
Joint Strategic Needs Assessment 2010-2012
Strategic Flood Risk Assessment 2010
Preliminary Flood Risk Assessment 2011

Surface Water Management Plan 2011
Contaminated Land Strategy 2001
Employment Land Study 2013
Retail Study 2006 and 2009 update
Local Economic Assessment 2010
The Urban Wastewater Treatment Directive (UWWTD)
Infrastructure Delivery Plan 2012
Borough's sport, open space and recreation needs assessment 2008
The Thames Landscape Strategy 2012

Table 4: List of relevant policies, plans, programmes, strategies and initiatives reviewed, September 2015; Source: LBRuT analysis

- 2.2.3 The results of the analysis of the relationships with the plans, programmes and policies (PPPs) are summarised in Appendix 1. These represent legislation from international to local level and in general terms the lower level plans at national and regional level will have increasing relevance, and bearing on the emerging plan. In most instances lower-tier PPPs would already reflect the higher tier requirements, unless they have been more recently produced or revised.
- 2.2.4 The comprehensive review of relevant PPPs is carried out in order to ensure that the objectives in the Scoping Report are not in conflict with those in other PPPs and to highlight areas of potential conflict, which may need to be addressed, such as meeting development needs whilst protecting biodiversity and heritage.

2.3 Key findings from the PPP analysis

- 2.3.1 All of the plans and programmes will influence emerging DPDs to some degree. However, the London Plan, as the spatial strategy for London, the various Mayoral strategies as well as the already adopted Richmond plans, strategies and guidance (i.e. the Core Strategy and the Development Management Plan), including the Community Plan and Village Plans, are of particular relevance. The objectives contained within these will provide the direction for spatial planning within Richmond borough. Many of the objectives of these plans are related to the sustainability objectives set out in this report. These sustainability objectives will provide a framework within which the policies formulated within the DPDs should produce the desired outcomes of these plans in a sustainable manner.
- 2.3.2 There is a clear hierarchy of plans and programmes in certain areas descending from the international/European and/or national level through to the local level. The implications for the DPDs generally tend to become more specific and precise at the local level. The requirements and objectives of the higher level plans and programmes should in most cases have already been incorporated in the more local level plans and programmes.
- 2.3.3 Several issues are highlighted in the analysis of the plans and programmes as detailed in Appendix 1. It will be important for DPDs to reflect this context and to incorporate the requirements of these other plans and programmes as appropriate and for the

Sustainability Appraisal to consider the sustainability implications during the appraisal process.

2.3.4 The key findings from the PPP analysis are set out below:

- **Sustainable Development**

Local Plan documents should be based upon the principles of sustainable development and provide a sustainable spatial vision and objectives. There are three dimensions to sustainable development: economic, social and environmental. Sustainable development requires economic growth that supports social progress and respects the environment; economic growth, social cohesion and environmental protection therefore must go hand in hand. The NPPF is a key planning document, whereby at its heart is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking. Key areas of sustainable development are building a strong and competitive economy, ensuring the vitality of town centres, promoting sustainable transport, delivering a wide choice of high quality homes, requiring good design, promoting healthy communities, mitigating and adapting to climate change, protecting and enhancing the environment, ensuring social cohesion and inclusion, and managing natural resources more prudently and responsibly. Sustainable development should therefore be at the heart and core principle of all Local Plan documents.

- **Climate Change**

The Local Plan should focus on reducing carbon dioxide emissions to assist the UK in meeting its legally binding target of 80% reduction in emissions (of 1990 levels) by 2050, and the London-wide target of 60% (of 1990 levels) by 2025. Policies should address climate change and ensure that all new developments reduce carbon dioxide emissions, and encourage existing developments to reduce their emissions. The overall aim should be to create sustainable communities with low carbon emissions that are resilient to the effects of climate change and to the volatile energy market through focusing on climate change mitigation, including energy efficiency, as well as climate change adaptation. The costs associated with taking preventative action will be much less than those associated with dealing with consequences if action is not taken now. Therefore, the Local Plan should aim to reduce carbon dioxide emissions to mitigate the effects of climate change, and ensure that predicted changes are taken into account in order to create adaptable communities and buildings.

- **Flood Risk**

The Local Plan should aim to reduce the risks of flooding to communities (people, properties and infrastructure) and ensure that flooding is given appropriate weight when considering the location and design of new development. A Strategic Flood Risk Assessment should inform the Local Plan policies and decisions on the location and design of development. The Local Plan should not promote development in unsustainable locations, such as in areas with high flood probability, and should not allow development that might increase the risk of flooding to others. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure (also see below).

- **Biodiversity and nature conservation**

The nature conservation status of designated areas in the borough must be taken into account. An Appropriate Assessment will be required of the potential environmental

impacts of the Local Plan on sites designated under the Habitats Directive. Policies should ensure that areas designated for nature conservation purposes, threatened species and habitats are protected and that development does not have any detrimental impacts on biodiversity. The aim should always be to enhance biodiversity wherever possible. Local Plans should also plan positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

- **Energy and renewable energy**

The Local Plan needs to consider the way energy is supplied and encourage zero- and low-carbon energy technologies. The aims should be to reduce the contribution to climate change by minimising emissions of carbon dioxide through energy efficiency, combined heat and power, renewable energy and other technologies. Government expects all new residential developments to be zero carbon by 2016, and all non-residential development to be zero carbon by 2019. This can be best achieved through the application of the energy hierarchy (as set out in the London Plan and in Richmond's Development Management Plan) whereby development should maximise energy efficiency, use low carbon technologies and reduce carbon dioxide emissions through the use of renewable energy. This should also align with the Council's and Government's aim of tackling fuel poverty.

- **Waste Management**

The Local Plan policies should reflect the principles of sustainable waste management, which is to Prevent/Reduce, Reuse, Recycle & Compost, Recovery of energy, and disposal as the last resort. The Local Plan must contribute to the national commitment to cut biodegradable municipal waste going to landfill to 50% of 1995 level by 2013 and 35% of 1995 level by 2020. The Local Plan policies will need to support these targets and encourage waste reduction, efficient use of raw materials, increased use of recycled materials and composting in the borough.

- **Pollution and contamination**

Local Plan policies should ensure there is no additional pollution (pollution of land, water, air and noise) from new development and road traffic, and the discharges to the environment associated with any development should be considered and mitigated. The issues of pollution are closely linked with the key areas of water quality, air quality and noise (see below). Policies in the Local Plan should also consider any contamination effects of development as well as encourage remediation and the re-use of contaminated land.

- **Water quality and resources**

Improving water quality, which includes surface water, ground water and rivers, should be a core aim within the Local Plan. Policies should ensure that water quality is protected and improved where possible, and that developments do not have any detrimental impact on both water quality and water resources. The Local Plan should also help to deliver the aims and objectives of the Water Framework Directive and Thames River Basin Management Plan. The Local Plan should assist in achieving the target for the ecological status of the borough's rivers, which is "good ecological potential" by 2027. In addition, policies should ensure that developments meet challenging water consumption targets in order to address the issue of water scarcity in London.

- **Air Quality**

The Local Plan should consider the potential that new development, buildings and transport may have adverse impacts on the air quality and potentially increase air pollution. It should take into account the Richmond upon Thames Air Quality Action Plan to meet the targets set out in the Mayor of London's strategy and the national strategy on air quality, which focus on reducing PM10 and NO2 pollution levels.

- **Noise**

Measures to reduce and mitigate noise impacts on people, noise-sensitive land uses and biodiversity are required. Appropriate measures should be considered for reducing and mitigating noise around people and noise sensitive land uses. Local Plan policies should address noise implications by considering location, design and layout of development. The Local Plan should also be in line with the Mayoral Strategy on Ambient Noise, the aim of which is to minimise the adverse impacts of noise on people living and working in, and visiting London using the best available practices and technology within a sustainable development framework.

- **Transport**

Sustainable travel and the promotion of sustainable modes of transport should be integral to and a core principle of the Local Plan. Policies in the Local Plan should focus on sustainable transport and include reducing car-dependent development, increase other forms and choice of transport modes and promote vibrancy and economic activity in town centres. The Local Plan should facilitate more walking and cycling, improve linkages and ensure there are sufficient public transport linkages between homes, work places, local services and amenities. Making transport systems more efficient and safer, dealing with direct and indirect impact of road traffic, providing travel choice and accessibility for all are key issues to consider in the Local Plan. Sustainable modes of transport will also help to achieve the objectives in relation to mitigating climate change and reducing carbon dioxide emissions as well as in relation to reducing air and noise pollution.

- **Housing**

The Local Plan should aim to create sustainable, high quality homes and consider issues such as design, mixtures of housing types and tenures, associated open amenity spaces and proximity to local centres. The Local Plan should also maximise the provision of affordable accommodation that meets the needs of the community. Policies should promote the redevelopment of sites that provide a housing mix and good design that benefit the community as a whole while minimising environmental impact. All buildings, including new homes, should achieve high levels of environmental ratings to mitigate and adapt to climate change.

- **Economic development**

The Local Plan should promote the development of positive strategies to underpin the planning and development of town centres. It should take account of existing evidence base to inform policies on employment land and premises, including future supply. There is a strong case for the Local Plan to protect all existing employment sites unless they are inherently unsuitable. Well-planned tourism development, such as the regeneration of urban areas, can bring many benefits for local economies and the environment. Policies on economic development also need to consider the potential impacts on the natural environment that could arise from creating new industry and commerce. All buildings, including non-domestic buildings, should achieve high levels of environmental ratings to mitigate and adapt to climate change.

- **Open spaces and recreation**

Open and recreational spaces are essential to the concept of sustainable development and place-making. Therefore, Local Plan documents should focus on the protection and enhancement of open spaces and recreational facilities, ensure that facilities are accessible to all and promote social inclusion and health and wellbeing. The network of multi-functional green spaces delivers not just a wide range of environmental and biodiversity benefits, but also benefit to local communities.

- **Historic environment and heritage**

The Local Plan and its policies should recognise the unique place the historic environment holds in this borough, including the multiple ways that the cultural and historic heritage supports and contributes to the local, regional and national economic as well as to the community. The conservation of these historic assets should be a key priority of the Plan and policies should be in place that ensure that no damages or losses occur. The Local Plan should encourage developments that enhance creativity and culture within the borough and any potential impacts of developments on the historic environment and cultural heritage should always be taken into account.

- **Social environment, health and wellbeing**

Decisions made in spatial planning have direct and indirect impacts on and affect the quality of life, including the social environment as well as the health and wellbeing of the population. Planning can for example contribute to an enhanced social environment by improving the liveability of streets and community cohesion, reducing inequalities that exist in access to housing and increasing opportunities for physical activity by improving access to open spaces, sport and recreation facilities, including the provision of walkable mixed-use neighbourhoods. Therefore, Local Plan documents should focus on facilitating the improved health and wellbeing of the population, including access to health, education, sport, leisure and recreation facilities. Improved health of the population is also interlinked with reducing air, noise and water pollution as well as a reduction in carbon dioxide and other emissions.

Consultation question:

1. Are there other relevant policies, plans and programmes that will affect or influence the Local Plan/Sustainability Appraisal, which haven't been included in the list?

3 COLLECTING BASELINE INFORMATION

Task A2: Develop baseline information and characterise the borough

3.1 Introduction

- 3.1.1 Both the SA Guidance and SEA Directive requires the collection of baseline information on environmental, social and economic characteristics of the area to provide the basis for predicting and monitoring effects and aid the identification of sustainability issues and alternative ways of dealing with them. The following text as well as the information under the key sustainability issues in the next section summarises the baseline data and uses it to characterise the borough. Because SA/SEA is an iterative process it may be that future stages identify other data that need to be collected and monitored.

3.2 Summary

- 3.2.1 The London Borough of Richmond upon Thames is a prosperous, safe and healthy borough that covers an area of 5,095 hectares (14,591 acres) in southwest London. It is the only London borough spanning both sides of the Thames, with river frontage of 21.5 miles. It contains over 100 parks; this includes two Royal Parks, Richmond and Bushy, the Royal Botanical Gardens at Kew and many other wildlife habitats. There are also many conservation areas and listed buildings, which reflect the rich historic character of the borough. The local community has a clearly expressed view that the borough's natural and built environment should be protected and enhanced. The main town centre is Richmond and there are four district centres at Twickenham, Teddington, East Sheen and Whitton. Richmond borough is one of the least deprived areas in the country. It also has maintained a consistently higher employment rate than that of London as a whole since the onset of the economic downturn in late 2008. A large proportion of the population of Richmond work in managerial, professional and technical jobs, meaning that the residents are generally highly skilled. Median annual earnings for residents of Richmond are considerably higher than the London average, which reflects the borough's position as a desirable place to live and to commute from for well-paid jobs. Whilst any 1 people commute out of the borough for work, at the same time, many non-residents come into Richmond to work each day. Overall, Richmond is an enterprising borough, whereby the enterprise stock has grown faster than in London since 2000 and business density levels are high. The visitor economy in Richmond supports a large amount of jobs. Major attractions like Kew Gardens, Hampton Court, Richmond Park and Twickenham stadium help to bring in around 3 million visitors per year. Whilst the borough has been relatively resilient to the economic pressures of recent years, there are some economic challenges. A significant constraint to growth is the physical infrastructure of the borough and the limited availability of employment land and good quality office space. Richmond is also the most expensive Outer London borough to buy in and private rents are high. Affordability is a key issue affecting residents in Richmond both in the ability to rent privately or buy property.

3.3 Population

- 3.3.1 According to the 2011 Census, the borough has a usual resident population of 187,000. This indicates that there was an 8.5% increase in population over the ten years since the 2001 Census, which gave a figure of 172,300 people living in the borough. The Census is the most complete source of information about the population that we have, and is used as a base for the population estimates and future projections between census years. The estimated age breakdown is summarised below.

Census 2011 Population and GLA 2014 Projections for 2015 (by age)

Age	ONS 2011 Census			GLA 2014 Round (SHLAA Long Term) based Projections for year 2015		
	Male	Female	Total	Male	Female	Total
0-4	7200	6800	14,000	7,400	7000	14,400
5-14	10600	10300	20,900	12,200	11,800	24,000
15-24	9000	9300	18,200	8,500	9,000	17,500
25-34	13800	14700	28,500	14,100	14,400	28,500
35-44	16600	16800	33,300	17,300	17,300	34,600
45-54	13100	13200	26,300	14,100	14,600	28,700
55-64	9900	10200	20,200	10,000	10,000	20,000
65-74	6200	6800	13,000	7,300	8,100	15,400
75+	4700	7500	12,200	5,200	7,700	12,900
Total	91,100	95,800	187,000	96,100	100,000	196,200

Note: Figures in this table may not add exactly because they have been rounded to the nearest 100.

Table 5: Sources: Office for National Statistics; ©Crown Copyright 2012; GLA projections ©Greater London Authority

- 3.3.2 When compared to London, the Census reveals Richmond has a significantly lower percentage of people aged 20-24 (4.9% in Richmond and 7.7% in London) and 25-29 (6.5% in Richmond compared to 10% in London). Overall, Richmond has a smaller percentage of the population in all the age quintiles between age 10 and age 34 compared to London but a higher percentage of the population in age quintiles 49 and over. This mirrors our understanding of Richmond as an attractive place to live for families with children and older people while the relative affluence can mean it is difficult for young people to move into the borough.
- 3.3.3 The average age of a Londoner is 35.8 compared to 40 for the UK as a whole. The average age of Richmond resident is 37.1. The median age (where half the population is older and half younger) of Richmond resident's is older than London in general and more in line with the rest of the UK at 38.4. Half of Londoners are 34 or younger while the equivalent age for the UK is 39.

Household and Family Type

Type of household	Number	%	London %	E & W %
One person	26008	32.6	31.5	30.2
Married or same-sex civil partnership couple	28502	35.7	28.1	33.2
Co-habiting couple	8288	10.4	8.7	9.8
Lone parent -with dependent children	3882	4.9	8.5	7.2
Lone parent - with non-dependent children only	2382	3.0	4.1	3.5

Type of household	Number	%	London %	E & W %
Other households	10773	13.5	14.9	7.9
Lone pensioner households-	9434	11.8	9.5	12.4
Number of occupied households	79,835			
Average household size	2.31	-	2.47	2.36

Table 6: Household and Family Type; Source: Table KS105EW Household Composition © Crown copyright

3.4 Indices of Multiple Deprivation

- 3.4.1 The [English indices of multiple deprivation 2015](#) combines a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England. This allows each area to be ranked relative to one another according to their level of deprivation.

Richmond upon Thames is one of the least deprived areas in the country, and the least deprived within London (IMD 2015). There are no areas in the Borough ranked in the most deprived decile of local authorities in England i.e. the 10% most deprived areas. This illustrates our understanding of Richmond as a fairly affluent area with high house prices, a skilled population and relatively high residential earnings. However, there are small pockets of deprivation across the borough and one small area, in the ward of Hampton North in the far south west of the borough, falls into the second 20% most deprived small areas in England. This is significant as in 2010, no areas fell within the 20% most deprived in the country. There are concentrations of relatively deprived areas in the ward of Hampton North, Heathfield and Barnes. In particular, when looking at the change between 2010 and 2015, there are a cluster of small areas in Hampton North ward which have become relatively more deprived during this period. The number of LSOAs in Richmond falling into the least deprived 10% in the country is up from 17 in 2010 to 20 in 2015.

LSOA Name	Ward this area falls within	National rank of IMD score (1 = most deprived)	IMD decile this falls within	Richmond LSOA ranking (1 = most deprived)
E01021988	Tendring, Essex	1 (most deprived in England)	1	-
E01003832	Hampton North	5,864	2	1
E01003841	Heathfield	8,955	3	2
E01003819	Ham, Petersham and Richmond Riverside		3	3
E01003829	Hampton North	9,415	3	4
E01003803	Barnes	10,425	4	5
E01003907	Whitton	11,775	4	6
E01003826	Hampton	11,950	4	7
E01003900	West Twickenham	13,114	4	8
E01016709	Wokingham	32,844 (least deprived in England)	10	-

Table 7: The most deprived LSOAs in Richmond, IMD 2015

- 3.4.2 In these areas there are concentrations of less well-off residents facing higher levels of unemployment, worklessness, lower skill levels and poorer physical and mental health. A targeted approach is being developed to improve opportunities for all.
- 3.4.3 More information on the English Indices of Deprivation 2015 can be found at <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

3.5 Ethnicity

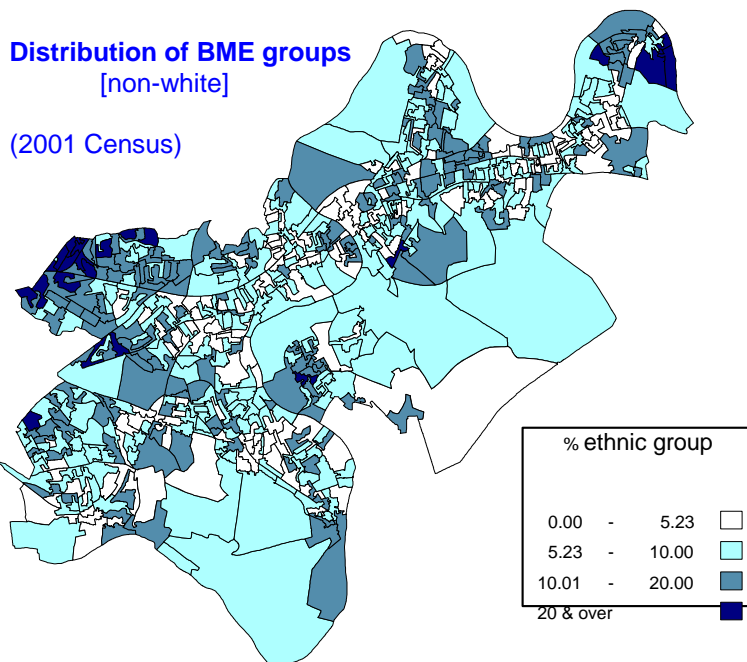
- 3.5.1 Richmond is similarly diverse as the rest of England and Wales but it is one of the least ethnically diverse boroughs in London. The non-white population is similar to the average for England & Wales with just over 14% of the borough's population in 2011 made up of non-white minority ethnic groups, the largest of which is Indian – 2.8%.

Ethnic groups

	Richmond Borough		London	England & Wales
	Numbers	%	%	%
White: British	133,582	71.4	44.9	80.5
White: Irish	4,766	2.5	2.2	0.9
White: Other White	22,282	11.9	12.6	4.4
White: Gypsy or Irish Traveller	95	0.1	0.1	0.1
Mixed: White and Black Caribbean	1,250	0.7	1.5	0.8
Mixed: White and Black African	731	0.4	0.8	0.3
Mixed: White and Asian	2,857	1.5	1.2	0.6
Mixed: Other Mixed	1,942	1.0	1.5	0.5
Asian or Asian British: Indian	5,202	2.8	6.6	2.5
Asian or Asian British: Pakistani	1,163	0.6	2.7	2.0
Asian or Asian British: Bangladeshi	867	0.5	2.7	0.8
Asian /Asian British: Chinese	1,753	0.9	1.5	0.7
Asian or Asian British: Other Asian	4,622	2.5	4.9	1.5
Black or Black British: Caribbean	840	0.4	4.2	1.1
Black or Black British: African	1,643	0.9	7.0	1.8
Black or Black British: Other Black	333	0.2	2.1	0.5
Other ethnic group: Arab	1,172	0.6	1.3	0.4
Other ethnic group: Any other ethnic group	1,890	1.0	2.1	0.6

Table 8: Ethnic groups; Source: Census of Population 2011, Key Statistics Table KS201EW Ethnic group, local authorities in England and Wales © Crown copyright

- 3.5.2 In 2001, Heathfield ward has by far the largest concentration of non-white ethnic minority groups (16.2%) living in the borough. Whitton and West Twickenham are also more ethnically diverse compared to the borough average, whereas Hampton is the least diverse.



A closer inspection of the data at a smaller geographical area (Super Output Area Level) reveals concentrations below ward level in Whitton, Heathfield, Ham & Petersham and Barnes.

Figure 2: Distribution of BME groups
Source: 2001 Census, Table KS06 © Crown copyright

3.6 Disability

3.6.1 The 2011 Census data shows that 11.8% of the borough's population has a limiting long term illness, health problem or disability which limited their daily activities or the work they could do (includes problems that are due to old age).

3.6.2 2.03% of the working age population are permanently sick or disabled. The England & Wales average for long term limiting illness is 4.05%.

3.7 Qualifications

Highest level of qualification (March 2011)

	Richmond (persons)	Richmond (%)	London (%)	England & Wales (%)
Level 4 and above	79584	53	37.7	27.2
Level 3	15920	10.6	10.5	12.3
Apprenticeship	2304	1.5	1.6	3.6
Level 2	15916	10.6	11.8	15.3
Level 1	11075	7.4	10.7	13.3
Other	9338	6.2	10.0	5.7
No qualifications	15915	10.6	17.6	22.7

Table 9: Numbers and % are for those of aged 16 and over % is a proportion of resident population of area aged 16 and over; Source: ONS Census 2011, KS501 EW.

3.8 Economy and employment

3.8.1 A measure of the number of employee jobs (i.e. not all jobs) is the Annual Population Survey (APS). This sample survey relates to the characteristics of people

living in an area. The APS is the largest regular household survey in the United Kingdom. It includes data from the Labour Force Survey (LFS), plus further sample boosts in England, Wales and Scotland. The survey includes data from a sample of around 256,000 people aged 16 and over.

Employee jobs in Richmond upon Thames

	Richmond		London	Great Britain
	(employee jobs)	(%)	(%)	(%)
Total employee jobs	76,200	-	-	-
Full-time	53,800	70.6	73.8	68.3
Part-time	22,400	29.4	26.2	31.7
employee jobs by industry				
Manufacturing	1,900	2.4	2.4	8.5
Construction	2,500	3.2	3.1	4.5
Total Services	71,500	93.9	94.0	85.6
Wholesale and retail , including motor trades	9,600	12.6	12.6	15.9
Transport & storage	2,200	2.9	4.8	4.5
Accommodation and Food Services	6,600	8.7	7.6	7.1
Information and Communication	7,000	9.2	7.9	4.1
Financial, other business activities	21,500	28.2	33.0	22.2
Public admin, education & health	17,600	23.1	23.0	27.4
Other services	7,000	9.2	5.1	4.4
-	Data unavailable			
Note	Employee jobs percentages are based on total employee jobs Totals do not always correspond because of confidentiality measures employed by ONS.			

Table 10: Employee jobs in Richmond upon Thames (2014); Source: ONS business register and employment survey.

- 3.8.2 Between July 2009 and June 2010, approximately 92,200 residents had jobs; of these 20,500 (16.0%) were self-employed workers. This is a much higher proportion than in London (10.7%) and England (9.0%). 11% of Richmond residents worked mostly from home compared to around 9% in London and England and this is likely to be underestimated.
- 3.8.3 68% of Richmond working age residents work in managerial, profession and technical jobs. Only 2.9% work in 'elementary' positions such as manufacturing processing and cleaning. There was a good supply of office premises in Richmond although the dense nature of the borough limits the availability of potential new developments. Following the introduction of the Prior Approval process to allow offices to be converted into residential without planning permission, around a quarter of the Borough's office stock has been earmarked by developers for conversion to high value residential premises. The supply of smaller cheaper office accommodation is likely to be severely diminished. For more information see Monitoring reports.

- 3.8.4 The resident population is highly skilled with 53% of the workforce having NVQ4+ and only 6% having no qualifications. The level of qualification of the resident workforce in managerial, senior official positions and professional occupations is well above the London and UK average and the workforce in elementary occupations is significantly below the London and UK average. Richmond's resident weekly earnings are on average 23% higher than in London as a whole and 49% above the national average at £747 per week.
- 3.8.5 However, a highly skilled, high earning, articulate population conceals the fact that there are those less fortunate: without work; with health problems; in fuel and housing poverty and those living in the scattered pockets of relative deprivation across the borough.
- 3.8.6 Many local people commute out of the borough to work and at the same time, many non-residents come to work in Richmond each day. In 2001, the Census told us that 62% (55,500 people) of all employed residents commuted out of the borough to work – most significantly to The City, Westminster, Hounslow and Kingston. 38% (34,000 people) of the resident workforce both lived and worked in the borough, and 50% of the borough's workforce (34,500 people) commuted into the borough to work.

Labour force characteristics of working age population (July 2014- June 2015)

	Richmond upon Thames				London			Great Britain
	Males %	Females %	Total (numbers)	Total (%)	Males %	Females %	Total (%)	(%)
Economically active [†]	87.0	79.2	105,900	83.0	85.0	69.9	77.4	77.5
In employment [†]	83.5	74.7	101,000	79.0	79.4	65.0	72.2	73.1
Employees [†]	64.9	62.2	80,300	63.5	62.4	56.3	59.3	62.5
Self employed [†]	17.9	12.0	19,900	14.9	16.5	8.5	12.5	10.1
Unemployed (model-based) [§]	#	5.4	4,900	4.6	6.4	6.8	6.6	5.7
#	Sample size too small for reliable estimate (see definitions)							
†	numbers are for those aged 16 and over, % are for those aged 16-64							
§	numbers and % are for those aged 16 and over. % is a proportion of economically active							

Table 11: Labour force characteristics; Source: ONS annual population survey

Benefits Claimants

Working-age client group – key benefit claimants (February 2015)

	Richmond (numbers)	Richmond (%)	London (%)	Great Britain (%)
Total claimants	7,790	6.2	11.1	12.5
By statistical group				
Job seekers	1,280	1.0	2.1	2.0
ESA and incapacity benefits	3,990	3.2	5.5	6.3
Lone parents	640	0.5	1.2	1.1
Carers	720	0.6	1.1	1.5
Others on income related benefits	170	0.1	0.3	0.3
Disabled	770	0.6	0.8	1.1

Bereaved	230	0.2	0.1	0.2
Key out-of-work benefits [†]	6,070	4.8	9.0	9.7
† Key out-of-work benefits includes the groups: job seekers, ESA and incapacity benefits, lone parents and others on income related benefits. Note: % is a proportion of resident population of area aged 16-64				

Table 12: Benefit claimants; Source: DWP benefit claimants - working age client group

- 3.8.7 Although unemployment rose significantly during the recession, it remains relatively low. In September 2015, 1.0% of the borough's residents were claiming unemployment benefit, lower than in London and Great Britain. Fewer Richmond residents experience long-term unemployment: 0.2% of residents have been claiming for over 12 months compared to 0.5% in London and 0.4% in Great Britain.

JSA claimants by age and duration September 2015

	Richmond (No)	Richmond (%)	London (%)	Great Britain (%)
By age of claimant				
Aged 16-64	1,240	1.0	1.8	1.6
Aged 18-24	180	1.5	2.4	2.2
Aged 25-49	685	0.9	1.7	1.7
Aged 50 to 64	375	1.1	2.1	1.3
By duration of claim				
Up to 6 months	795	0.6	1.1	0.9
Over 6 up to 12 months	185	0.1	0.3	0.3
Over 12 months	260	0.2	0.5	0.4
Note: % is number of persons claiming JSA as a proportion of resident population of the same age.				

Table 13: JSA claimants by age and duration September 2015; Source: ONS claimant count - age duration with proportions**Employment of usual residents aged 16 to 74 by occupation (July 2014 – June 2015)**

(Standard Occupational Classification)	Richmond		London	England & Wales
	Number	%	%	%
<i>Soc 2000 major group 1-3</i>	73900	73.5	53.2	44.3
1 Managers, directors and senior officials	17,100	16.9	11.6	10.3
2 Professional occupations	30,600	30.3	23.6	19.7
3 Associate professional & technical	26,100	25.9	17.6	14.0
<i>Soc 2000 major group 4-5</i>	13,300	13.2	17.7	21.5
4 Administrative & secretarial	9,300	9.2	10.2	10.6
5 Skilled trades occupations	4,000	3.9	7.5	10.7
<i>Soc 2000 major group 6-7</i>	7,100	7.1	14.9	17.1
6 Caring, leisure & other service occupations	4,600	4.6	7.9	9.2
7 Sales and customer service occs	2,500	2.5	6.9	7.7
<i>Soc 2000 major group 8-9</i>	6,200	6.2	14.2	17.2
8 Process plant & machine operatives	#	#	4.3	6.3
9 Elementary occupations	4,900	4.8	9.8	10.8

Table 14: Employment of usual residents aged 16 to 74 by occupation; Source: ONS annual population survey.

Note Due to definitional differences, and because the census questionnaire is self-completed, the census estimates of people in employment may differ from other sources as, for example, some respondents may include voluntary work when asked about employment. The most authoritative and up to date estimates of the labour market status including employment and unemployment are the labour market statistics that ONS publishes monthly. The census is valuable in providing a detailed picture at the time of the census of the characteristics of the economically active population. For a full explanation of the how the SOC is categorised please use the following link: http://www.statistics.gov.uk/methods_quality/soc/section1.asp

Business births

- 3.8.8 The Office for National Statistics released on 28th November 2008 a one-off National Statistics series on business births, deaths and survival rates. See <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15186> .

LBRuT Business Counts – Total Enterprises					
Industry	2011	2012	2013	2014	2015
1 : Agriculture, forestry & fishing (A)	20	15	15	15	10
2 : Mining, quarrying & utilities (B,D and E)	10	15	15	20	20
3 : Manufacturing (C)	265	275	285	290	290
4 : Construction (F)	610	640	650	670	740
5 : Motor trades (Part G)	115	120	120	115	120
6 : Wholesale (Part G)	370	365	355	345	350
7 : Retail (Part G)	760	770	765	790	775
8 : Transport & storage (inc postal) (H)	140	135	135	135	140
9 : Accommodation & food services (I)	425	450	440	455	490
10 : Information & communication (J)	1,645	1,755	1,810	1,865	2,020
11 : Financial & insurance (K)	165	170	185	175	180
12 : Property (L)	350	360	390	395	415
13 : Professional, scientific & technical (M)	3,010	3,215	3,340	3,485	3,840
14 : Business administration & support services (N)	800	820	785	855	1,070
15 : Public administration & defence (O)	0	0	0	0	0
16 : Education (P)	190	190	210	245	240
17 : Health (Q)	375	405	410	455	500
18 : Arts, entertainment, recreation & other services (R,S,T and U)	1,170	1,175	1,160	1,170	1,240
Column Total	10,410	10,875	11,070	11,475	12,440
Table 15: LBRuT Business Counts – Total Enterprises, ONS Crown Copyright Reserved [from Nomis on 17 December 2015]; Figures may differ by small amounts from those published in ONS outputs due to the application of a different rounding methodology.					
Disclosure control methods were revised on 6th October 2015. Users may notice minor changes to some cell counts when comparing with data downloaded prior to this date.					
In 2015, ONS extended the coverage of businesses to include a population of solely PAYE based businesses that were previously excluded because of the risk of duplication. For more information, see http://www.nomisweb.co.uk/articles/ref/UKBusinessCoverage.pdf .					

3.9 Transport and Communications

3.9.1 The Mayor's Transport Strategy¹⁵ identifies Richmond as a Major Town Centre, and strategic transport corridors (of sub-regional importance) are identified into/out of the borough; these include: links to and from Heathrow and Richmond then through to Kingston, Sutton and Croydon; links northeast towards the centre of London; and links southwest into Surrey.

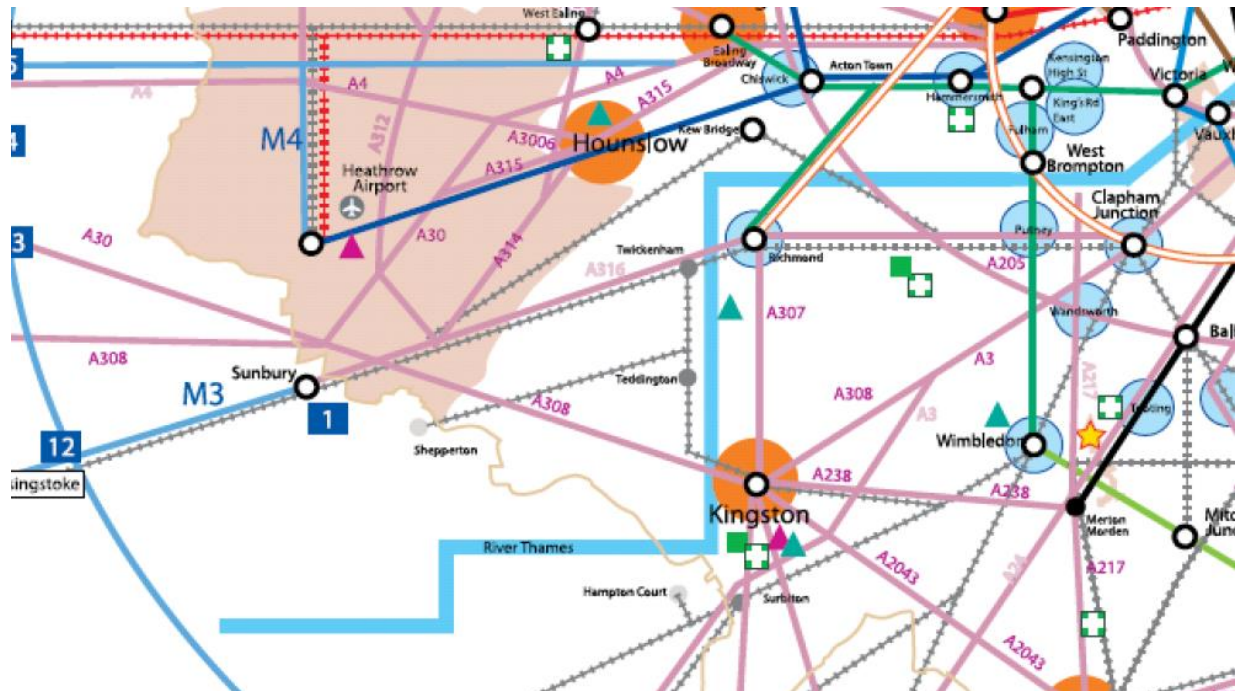


Figure 3: Richmond's Sub-Regional Context; Source: LBRuT LIP2

3.9.2 The Council's Local Implementation Plan (LIP2)¹⁶ sets out the Council's transport objectives and delivery proposals for 2011/12 to 2013/14 and provides direction of travel on longer term proposals to implement the Mayor's Transport Strategy (MTS2)¹⁷ over the 20 year horizon, 2011-2031.

3.9.3 The objectives of the Richmond LIP2 will guide the way the Council will deliver transport improvements across Richmond over the lifetime of Richmond's second LIP:

1. To support and maintain the economic vitality of local shops and the Borough's thriving town and local centres.
2. To improve the local environment and quality of life for all residents of the Borough.
3. Improving safety for all road users.
4. Enhancing transport choice and reducing congestion.

¹⁵ Mayor of London – Transport Strategy (2011-2031), May 2010; <http://www.london.gov.uk/publication/mayors-transport-strategy>

¹⁶ LBRuT Second Local Implementation Plan for Transport (2011-2014); http://www.richmond.gov.uk/second_local_implementation_plan.pdf

¹⁷ Mayor of London – Transport Strategy (2011-2031); <http://www.london.gov.uk/publication/mayors-transport-strategy>

5. Developing a transport system that is resilient and reflective of local needs and aspirations.
6. Deliver the “Uplift Strategy” for the regeneration of five particular areas of relative deprivation across the Borough.
7. Improve the accessibility, efficiency and attractiveness of transport Borough wide, thus increasing social inclusion.

3.9.4 The River Thames and the Royal Parks act as barriers to through routes in the borough, and as a result, high volumes of traffic are being channelled onto a small number of local roads. In particular, the transport network is a particular barrier in the north of the borough adversely affecting the areas of Sheen, Mortlake and Barnes. The rail lines also cause further difficulties. The severance to local communities caused by the A205 South Circular, the River Thames and railway lines is already a significant issue.

Modal share

3.9.5 High car ownership within the borough combined with high rates of through-commuting results in congestion on local roads. The 2001 Census suggests that 76% of households in the borough have access to a car. (England & Wales average of 73.2%). Overall, between 1993 and 1997 there has been a 7% increase in vehicle flows on roads in Richmond upon Thames.

3.9.6 The following figure demonstrates the modal share of Richmond trips by borough of origin, trips per day and shares by main mode, average day (seven-day week) 2007/08 to 2009/10.

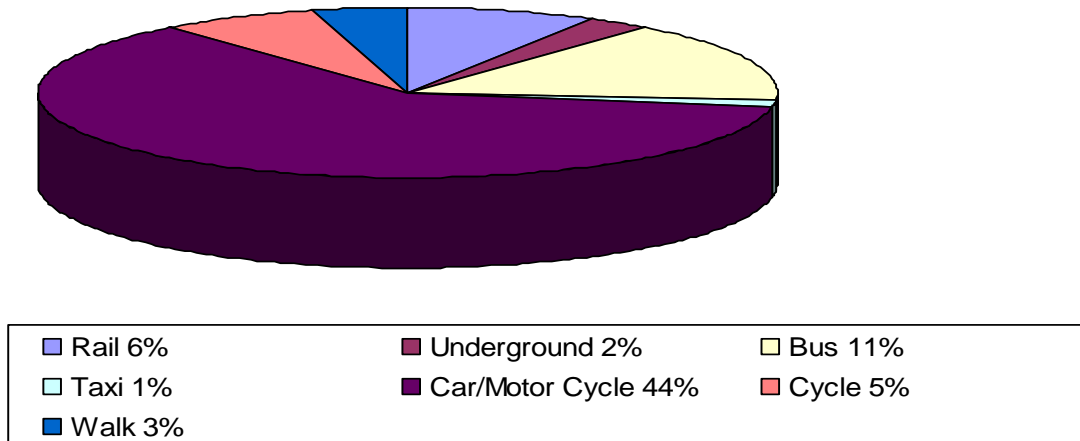


Figure 4: Modal share of Richmond trips (2007/08 to 2009/10); Source: LBRuT LIP2

Road network

3.9.7 The proximity of the M3, M4 and M25 provide good road communication to the South West, West and Midlands, as well as to the rest of London and the South East. Heathrow Airport nearby means international communications are very good. As an outer London Borough the transport facilities are well developed, with the A316 (Great Chertsey Road) and A 205 (South Circular Road) trunk roads (part of the Transport for London Road network). There is a total of 393 kilometres of public highway in the borough including 13 kilometres of the Transport for London Road Network (TLRN). The

Council is the highway authority for all but the TLRN and Crown Roads. The hierarchy of roads is used as the basis for land use planning, traffic and environmental management measures; the road hierarchy is based on the following broad categories:

- a) Transport for London Road Network (TLRN)
- b) Strategic Route Network (SRN)
- c) London Distributor
- d) Local Roads
- e) Local Distributor Roads
- f) Local Access Roads
- g) Crown Roads – Those roads running through the Royal Parks

3.9.8 There are high levels of traffic, including through traffic, which has led to significant road congestion particularly in the morning and evening peaks.

3.9.9 Around 24% of households do not have a car. This accounts for approximately 41,500 people. Whilst much of the area has good public transport accessibility levels (PTAL), there are a few areas with lower levels, such as parts of Ham and Petersham, and areas in the extreme west of the borough.

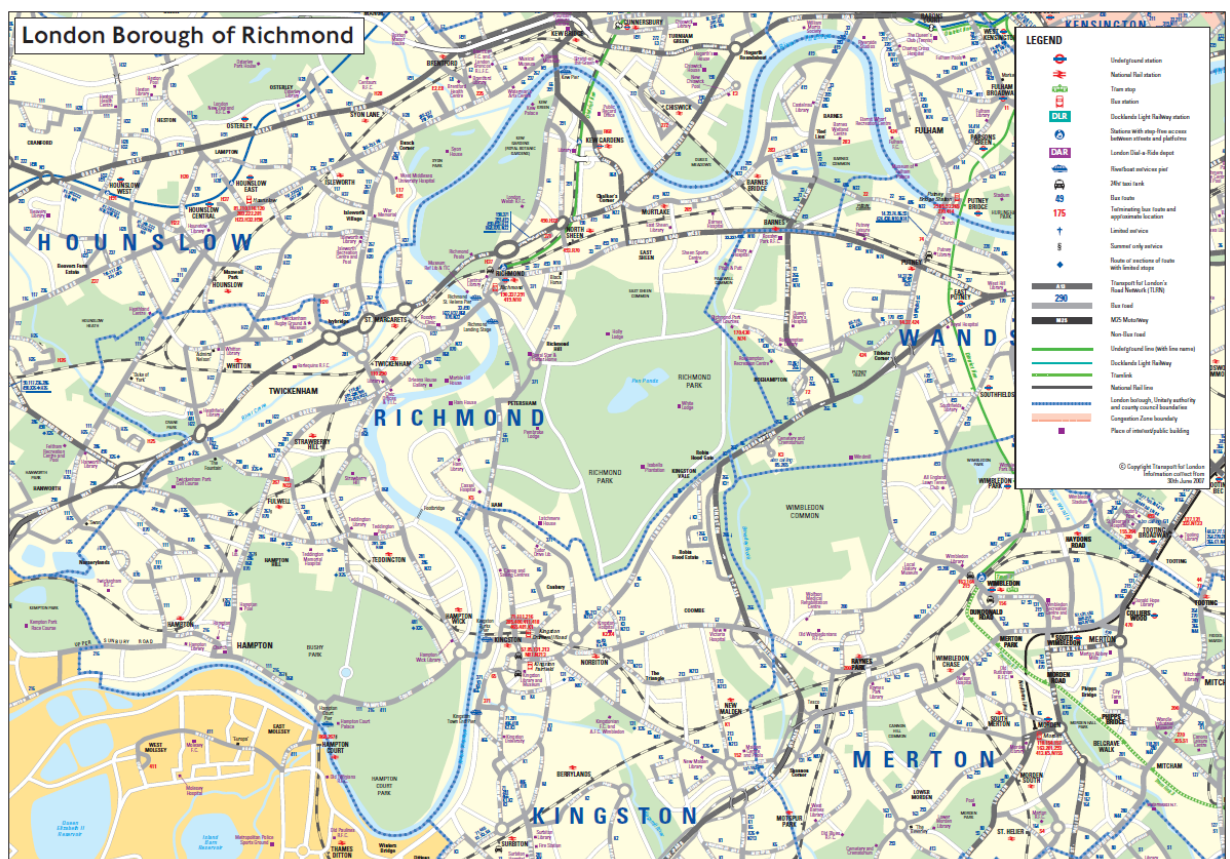


Figure 5: Multimodal map of Richmond Borough, Source: LBRuT LIP2

Rail network

3.9.10 The rail network is good with 14 stations across the borough, but they are largely radial with overland (Waterloo and North London lines) and underground (District Line) rail links. The South West Trains National Rail network serves 13 of the 14 stations within

the borough: Barnes, Barnes Bridge, Fulwell, Hampton, Hampton Wick, Mortlake, North Sheen, Richmond, St Margaret's, Strawberry Hill, Teddington, Twickenham and Whitton. The fourteenth station, Kew Gardens, is used by London Overground Services to and from Richmond and also District Line trains stop at Kew Gardens. In July 2011 a new contract was agreed to deliver an upgraded District Line throughout London, including the branch that serves the borough. New signalling will allow longer trains to run more often on the District Line and so significantly raise the lines capacity servicing the borough.

- 3.9.11 Whilst the majority of the stations serve as local interchanges with bus services, some of them are isolated from areas of major activity and suffer from safety and security issues, which can be either actual or perceived. These issues have been address under the Station Access Programme.
- 3.9.12 Work has been carried out on behalf of South West Trains to install secure cycle parking at several stations in the Borough. Restricted cycle parking has been installed at Twickenham Rail Station, making cycle parking far more secure. A cycle hire scheme has been introduced at Richmond Railway Station, a partnership between the Council and South West Trains, launched June 2010.
- 3.9.13 Rail freight will be encouraged where practicable and suitable, and where the impact on adjoining land and buildings is of an acceptable level.
- 3.9.14 Network Rail has published the final London & South East Route Utilisation Strategy (RUS)¹⁸ on 28 July 2011. The RUS forecasts an increase of over 30% in the numbers of commuters using the National Rail services into the capital during the weekday morning peaks up to 2031. Network Rail and its industry partners believe that this RUS provides a robust strategy for the rail industry in the coming years.

Bus provision

- 3.9.15 The bus network coverage in the borough is extensive; there are around 30 bus routes that provide services to most parts of the borough. The major bus interchanges are located at the Richmond, Twickenham and Teddington town centres. In addition, a bus garage is located at Fulwell.
- 3.9.16 The new generation of Countdown service sign, as well as new media channels and formats to reach more passengers than ever before in a cost effective way, are supported by the Council. TfL has confirmed that it is replacing all Countdown signs in the Borough will be replaced with the new generation of sign. This is the next step in London Buses' provision of real time bus service information for passengers.

Cycling network

- 3.9.17 The topography, layout of the road network, large amount of green spaces and high levels of bicycle ownership in the borough (compared with other parts of Outer London) make it conducive to cycling. The borough's cycle network includes an extensive

¹⁸ Network Rail, London & South East Route Utilisation Strategy, July 2011;

<http://www.networkrail.co.uk/browseDirectory.aspx?dir=%5CRUS%20Documents%5CRoute%20Utilisation%20Strategies%5CRUS%20Generation%202%5CLondon%20and%20South%20East>

network of routes linking district centres, railway stations and green spaces. Many of these routes follow quieter residential roads, with some facilities on busier main roads to cater for different types of users and cycling abilities. However, the road network generally should be regarded as a facility for cyclists as much as for vehicular traffic. It is recognised that cyclists can and will use the highway network as a whole for their highly individual trips and to link with the formal cycle route network.

- 3.9.18 The River Thames offers many opportunities for recreation and cycling trips with public access to approximately 27 kilometres of the riverbank. In addition, National Cycle Network Route 4 (Thames Cycle Route) passes through the borough running between Hampton Court Palace and the Wildfowl and Wetland Trust at Barnes via Kingston Bridge, Teddington Lock, Richmond Park and Barnes.

Pedestrian provision

- 3.9.19 Walking plays an important part in urban life and is a part of almost all journeys, whether as the complete journey or as a link between other modes of transportation making up longer trips. While there are parts of the borough where the condition of the footways, the signing and the street furniture could be improved, there is a generally good basic walking infrastructure within the borough. The majority of the borough's signal-controlled junctions now have pedestrian phases and the majority of the borough's 305 public rights of way are adequately accessible.

- 3.9.20 There are also a number of long distance recreational walking routes that are signed and promoted. There are three strategic walking routes within the borough and they include sections of the London Outer Orbital Path, the Capital Ring and the Thames Path.

- 3.9.21 The 27 km towpath along the River Thames provides a very important regional recreational function. In general, the River Thames, its towpath and the recreational areas along the river are well used by local communities, residents, workers as well as by visitors.

River transport

- 3.9.22 The River Thames meanders for 34 km through a landscape of historic and royal parks, heritage sites, a variety of wildlife habitats, residential and employment areas through this borough. It links major visitor attractions of the borough including Hampton Court Palace, Ham House, Marble Hill House, Richmond town centre and Kew Gardens with central London. This borough is the only one in London that is bisected by the Thames and therefore has one of the longest river frontages and recreational areas along the Thames (on both banks). Also see the Thames Landscape Strategy Hampton to Kew¹⁹.

3.10 Education

- 3.10.1 The London Borough of Richmond upon Thames has one nursery school and 17 nursery units, 44 primary schools, and ten secondary schools. Of the 44 primary schools, 17 are church schools, 33 are all-through (ages 4 to 11) primary schools, five

¹⁹ Thames Landscape Strategy, Hampton to Kew: <http://thames-landscape-strategy.org.uk/arcadianthames>

are infant schools (ages 4 to 7), five are junior schools (ages 7 to 11), one is a nursery school, and two are free schools.

- 3.10.2 The local authority maintained schools and academies have 24,769 pupils on roll: 16,750 primary and nursery pupils; 8,019 secondary and sixth form pupils; and 140 pupils attending special schools.
- 3.10.3 The proportion of pupils living and attending a school in Richmond upon Thames who are eligible for Free School Meals (FSM) was 7.9% in 2015, decreasing from 9.1% in 2014. The proportion of FSM pupils was 17.1% in London and 12.8% in England in 2015.
- 3.10.4 The majority of pupils attending the borough schools are from white ethnic backgrounds (76.8%), with the largest minority ethnic groups being pupils from mixed backgrounds (9.5%) and pupils from Asian/Asian British backgrounds (8%). The diverse range of pupil backgrounds is evident from the fact that pupils speak over 140 languages other than English.
- 3.10.5 Standards achieved in Key Stage 2 tests taken by 11-year-old pupils in Richmond primary schools are above national averages. In 2014:
- The proportion of pupils living and attending a school in Richmond upon Thames achieving Level 4+ in Reading was 94.9% in 2014, increasing from 93.6% in 2013. In 2014, the proportion of pupils achieving Level 4+ in Reading in Richmond upon Thames was higher than London (90.0%) and higher than England (89.0%)
 - The proportion of pupils living and attending a school in Richmond upon Thames achieving Level 4+ in Writing was 92.4% in 2014, increasing from 90.7% in 2013.
 - In 2014, the proportion of pupils achieving Level 4+ in Writing in Richmond upon Thames was higher than London (88.0%) and higher than England (86.0%)
 - The proportion of pupils living and attending a school in Richmond upon Thames achieving Level 4+ in Maths was 96.4% in 2014, increasing from 95.5% in 2013
 - In 2014, the proportion of pupils achieving Level 4+ in Maths in Richmond upon Thames was higher than London (89.0%) and higher than England (86.0%).
- 3.10.6 At Key Stage 4, 16-year-old pupils in Richmond maintained secondary schools and academies achieve GCSE and equivalent results above national averages. In 2014: The proportion of pupils living and attending a school in Richmond upon Thames achieving 5 or more A*-C GCSEs including English and Maths in Key Stage 4 was 76.9% in 2014, compared to 85.6% in 2013. These levels dropped both locally as well as both regionally and nationally due to the Department for Education changing the way the reported on Key Stage 4 performance, primarily due to pupils re-sitting GCSEs no longer being included the overall results.
- 3.10.7 The standards attained by pupils in Richmond's primary and secondary schools and academies are above the national average. This data is based on pupils' home postcodes and therefore only refers to children who live and attend schools in Richmond upon Thames. This data does not include privately educated school children or children attending schools outside the Borough
- 3.10.8 Since March 2014, three free schools have been approved for opening within the borough, and one primary school, Sheen Mount, has been approved for permanent

expansion. Two two-form entry primary schools were approved, , to open in September 2015: Richmond Bridge Primary and Twickenham Primary. A five-form entry 11-16 secondary school Richmond upon Thames College free school, proposed by Richmond upon Thames College, Richmond Council and Harlequins Rugby Club has been approved to open in September 2017 on the Richmond upon Thames College site in Egerton Road, Twickenham. Whilst these new schools will meet some of the basic need for school places and will be very welcome within the local family of schools, more places will be required to meet longer-term forecast demand, particularly in the primary phase.

3.10.9 The section below provides detailed information about early years education, primary education, secondary education and special needs education. The figure below shows the distribution of primary and secondary education in the borough.

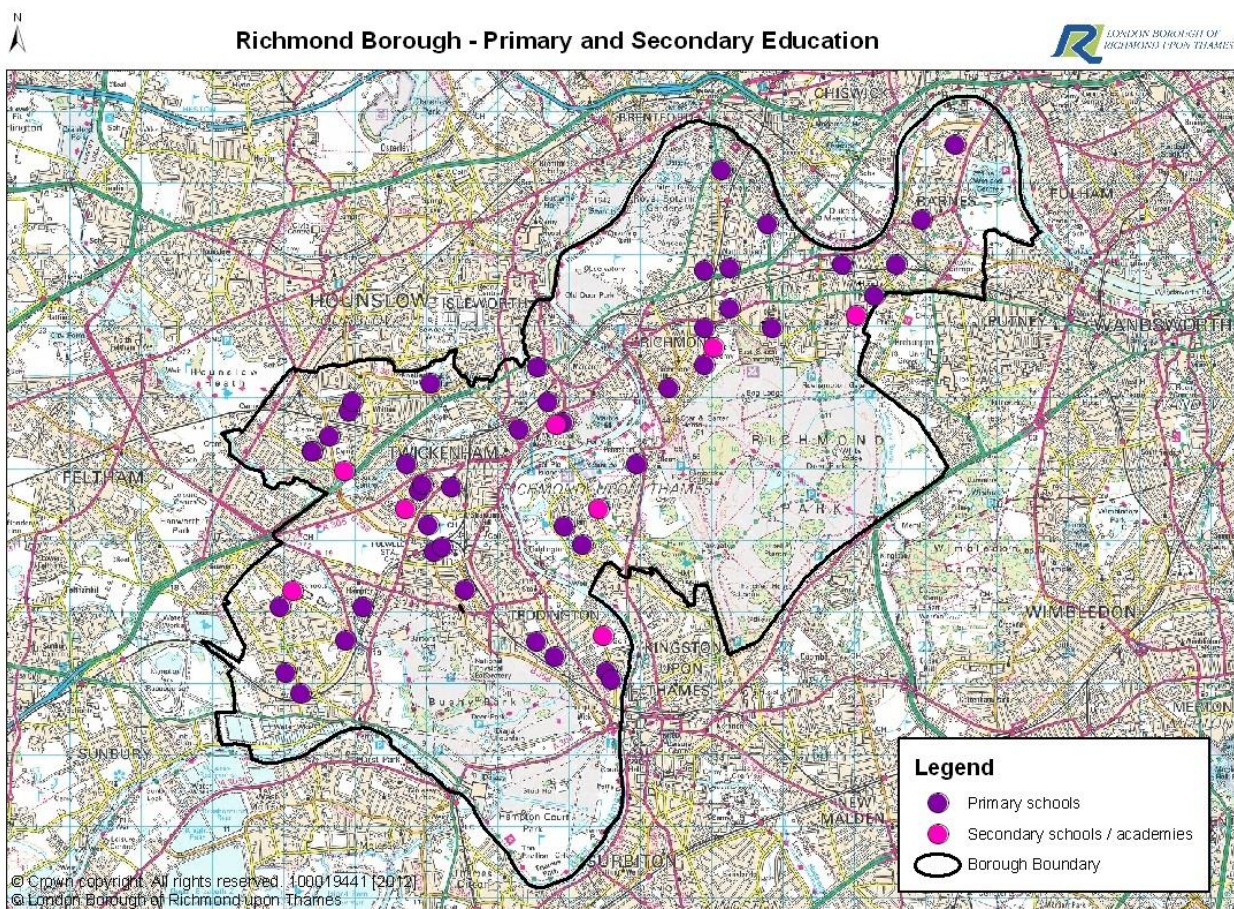


Figure 6: Richmond Borough primary and secondary schools/academies, Source: LBRuT

Early Years Education

3.10.10 All childcare supporting children from birth until the age of 5 follows the Early Years Foundation Stage Framework. As part of the EYFSF, there are private daycare nurseries from approximately 3 months old, pre-school education is provided for children from the age of 3 in private and voluntary nurseries and pre-schools, independent schools and by the Local Authority who has one nursery school and sixteen primary schools with nursery units for this age group.

- 3.10.11 Children's centres are a partnership between the Council, schools, the Primary Care Trust, Richmond Housing Partnership, the Metropolitan Police, the voluntary and community sector, Jobcentre Plus, the private sector and local families. They offer a range of services and facilities including early years provision. There are five in the borough: Ham Children's Centre, Heathfield Children's Centre, Mortlake Hall and Castelnuovo Community Centre, Norman Jackson Children's Centre (Hampton Hill), and Welcare (Twickenham). In January 2012, the Council has opened a new children's centre at the former Tangle Hall building for the Hampton North area, following an £80,000 refurbishment since it was closed as a day care unit for elderly people.
- 3.10.12 Demand for places at maintained nurseries and pre-schools is high, and it is considered likely to remain high in the future.

Primary Education

- 3.10.13 The borough has 44 primary schools, of which 17 are church schools. Of those 44, 33 are all-through (ages 4 to 11) primary schools, five are infant schools (ages 4 to 7), five are junior schools (ages 7 to 11), one is a nursery school, and two are free schools. The Council has a duty under section 14 of the Education Act 1996 to ensure that sufficient schools are available for their area for providing primary education. The Council's overarching education strategy, School Place Planning Strategy 2015-2024 October, 2015, outlines plans for key educational priorities, including the provision of sufficient numbers of high-quality primary school places.
- 3.10.14 Between 2000 and 2007, the number per year of live births in the borough rose by 21%, from 2,384 to 2,884, and has since (by the end of 2010) risen by a further 4.5%, to 2,992. The local birth rate is predicted to rise from 2,935 live births in 2011 to 3,100 live births in 2021. Richmond Borough's primary schools have been top of the national Key Stage 2 league tables throughout that period. As a result, since the 2004/2005 school year, when there was a considerable amount of spare capacity, demand for places in reception has increased by almost 500 children; with a large leap in numbers in 2007/2008, and which, further exacerbated by the economic downturn, has increased in all subsequent years.
- 3.10.15 The number of applications for reception class places in the borough's primary schools for 2010/2011 entry increased by almost 23% to 2,325 from the 2006/2007 figure of 1,896. Demand has been, and continues to be, highest in three areas: Richmond/East Sheen; St Margarets/Central and East Twickenham; and Teddington. However, demand has increased in all areas of the borough, with the results that the 'cut-off' distances have shrunk considerably for schools which use 'home to school distance' as the main oversubscription criterion, and those what were traditionally less popular schools are now over-subscribed. Between 2000 and 2013, an extra 21 forms of entry, providing a total of 4,410 places, have been provided on a permanent basis within the borough
- 3.10.16 In the medium- to long-term, it is possible that there will be a need to consider additional provision in the East Sheen, Ham/Petersham, Hampton/Hampton Hill, Heathfield/Whitton and Richmond areas. Feasibility of options for expansion will need to be undertaken. If demand were to be exacerbated by variable factors – e.g. continuing economic difficulties altering the proportion of children in private school, large 'pupil

yields' from housing developments at Twickenham Station, the former Royal Mail Sorting Office site in Twickenham, Stag Brewery in Mortlake etc., and further improvements in standards across the borough's primary and secondary schools – then the projections of pupil numbers could be higher than anticipated.

- 3.10.17 Free Schools are non-profit making, independent, state-funded schools. The Secretary of State for Education gave the proposers of St Mary's Hampton Church of England Primary the go-ahead to open their free school in September 2013, with an initial intake of 30 pupils but eventually growing to 210 places. Thomson House School was also given the permission to open in September 2013, with an initial intake of 48 pupils, eventually growing to 336 additional places. It would be imprudent of the Council to diminish its own planning for providing additional school places on the presumption that any such submissions for free schools will be approved. As such, plans are annually reviewed in the light of changes in birth and admissions data, and the establishment of free schools will also be taken into account.
- 3.10.18 Richmond Council bought the Clifden Road Site in Twickenham, whereby it will lease parts of the site to the Diocese of Westminster for new Catholic primary and secondary schools.

Secondary Education

- 3.10.19 There are eight secondary schools in the borough, all of which have converted to academy status, within the framework offered by the recent broadening of the Government's academies programme. Academies are publicly funded independent local schools. They are all-ability schools, which aim to raise standards by innovative approaches to management, governance, teaching and the curriculum.
- 3.10.20 It is considered that a new secondary free school, providing at least six forms of entry, will be needed in the eastern half of the borough by September 2019; otherwise there would be up to c.150 children unplaced within the eastern half of the borough. That number is likely to rise to c.250+ by 2022. It is therefore probable that additional places will be needed within existing schools as well as a new school.
- 3.10.21 There are also 23 private schools within the borough (such as Hampton School, Lady Eleanor Holles, St Paul's, St Catherine's School, the German School and the Swedish School) catering, between them, for all age groups, and in addition some Borough pupils attend private schools outside the Borough. The percentage of borough-resident children educated privately varies over time and is sensitive to factors such as the economic climate and the performance and popularity of state-funded schools, and is therefore a factor influencing demand for state-funded schools within the borough.

Special Needs Education

- 3.10.22 The Council is committed to improving the educational outcomes of children with special educational needs (SEN) and this is a key priority in the Children and Young People's Plan. It actively supports schools so that the majority of pupils' needs can be met within mainstream settings. To further this aim the authority is increasing the number of provisions within mainstream schools designated for children with statements of special educational needs and several building projects for SEN provision have been delivered in 2011/12. The borough also maintains two special schools that provide more

specialist support if it is required – Clarendon School, Hampton (for pupils aged 7-16 who have moderate learning difficulties) and Strathmore School, Petersham (for pupils aged between 7-19 who have severe, profound and multiple learning difficulties).

3.11 Health and Wellbeing

3.11.1 Overall Richmond is healthy, safe and rich in assets. Life expectancy is increasing and the number of people dying prematurely is lower than other areas. There are low levels of crime and accidents and many green spaces, good schools and high levels of volunteering. For many in Richmond, health and wellbeing is already much better than average.

3.11.2 However, although the overall picture compared to the rest of England is positive, this can hide the fact that there are large numbers with health and wellbeing issues. The local Strategic Needs Assessments process (JSNA)²⁰ examines a broad cross-section of data and reveals needs which might otherwise be overlooked. The particular priorities identified by staff, patients and members of the public in focus groups, meetings and surveys are to: Give children a good start; Integrate health and social care to increase independence and manage patients with long-term conditions out-of hospital; Adopt a systematic approach to prevention and self-care; Look out for hidden risks and harms and be ready to address them when they become known. Snapshots of need in Richmond include the following:

3.11.3 Health inequalities

- There is a 5 year difference in the life expectancy of the best and worst in Richmond.
- There are eleven small areas in Richmond that have above average levels of deprivation (IMD 2015) and over 3,140 children living in poverty.
- Educational achievement varies considerably across the borough.

3.11.4 Hidden risks and harm

- About 12% of older people are carers and 1% of all carers known to the Local Authority are under 18 years.
- A high proportion (51%) aged 75 and over live alone compared with 35% London-wide.
- In 2013/14 there were 107 hospital admissions as a result of self-harm in those aged 10-24 years, the highest rate in London .
- Alcohol-related hospital admissions are increasing (especially in older age males), as well as increasing mortality from liver cirrhosis.
- Childhood immunisation coverage is below herd immunity and recently measles cases were rising.
- Prevalence of diagnosed HIV is 41st out of 151 PCTs in England but 40% of cases are diagnosed late.

3.11.5 Prevention opportunities

²⁰ <http://www.richmond.gov.uk/jsna.htm>: A JSNA is the vehicle through which local authorities and PCTs describe the health, care and well-being needs of local populations to inform the strategic direction of service commissioning and delivery.

- Over 17,000 adults smoke, and 200 deaths per year are attributable to smoking.
- Over 3,300 children are obese, with prevalence increasing from 18% in reception to 24% in year 6. In the 1980s childhood obesity was about 2%.
- There are large numbers of people with undiagnosed long-term conditions, e.g. diabetes.
- Young people's risky behaviour often includes more than one issue, i.e. sexual health, mental health, drugs and alcohol.
- Chlamydia screening uptake in high-risk groups is low.

3.11.6 Increasing numbers of older people with multiple long-term conditions

- The number of people with physical long-term conditions and with mental health conditions including dementia, is expected to increase as the population increases.
- The proportion of people with more than one long-term condition is expected to increase by an estimated 30% over the next ten years.
- Whilst overall emergency admissions are relatively low, around 16% (worth around £5 million) of emergency admissions are for potentially preventable conditions.
- In 2009/10 the emergency admission rate for hip fractures was significantly higher compared with London and England averages.
- In 2008, 61% of deaths occurred in hospitals. Since the implementation of the End of Life Care Strategy there has been a decrease of 6% of in-hospital deaths.
- There are 20 care homes in Richmond which is high relative to other boroughs. 7% (£1.7 million) of spend on emergency admissions is attributable to care homes. 30% of emergency hospital admissions from care homes are short stay (0 or 1 days) suggesting there is potential to reduce admissions. Quality and safety measures have been identified for care homes.
- An estimated 30% of all people with a long term condition also have a mental health problem. Older people in particular tend to have multiple long term physical health problems which combine with mental health concerns.
- Co-morbidity is particularly high among older people in acute general hospitals. Also many residents in care homes are likely to have depression or dementia.
- Carers of people who have a physical or mental health condition are particularly vulnerable to experiencing psychological distress as well as having chronic physical illness.

Health care infrastructure

3.11.7 From April 2013, Primary Care Trusts (PCTs) have been replaced across England by more than 200 GP-led organisations called Clinical Commissioning Groups (CCGs). GPs in Richmond are now working together as the [Richmond Clinical Commissioning Group](#), which offer free primary care health services for local people. Therefore, the new partners in relation to health care infrastructure are now the Richmond Clinical Commissioning Group²¹ (CCG) and NHS England²²; the PCT and NHS South West London have been abolished.

3.11.8 The nearest Hospitals for acute Accident & Emergency are outside of the borough – in particular West Middlesex University Hospital at Isleworth and Kingston Hospital.

²¹ <http://www.richmondccg.nhs.uk>

²² <http://www.england.nhs.uk/>

- 3.11.9 Community-based services to the population are provided over a number of different sites. One of these sites is the Teddington Memorial Hospital, based in central Teddington. Its services include a walk-in centre for minor ailments, consultant and GP-led outpatient services, a diabetes centre, diagnostics and community care. There are clinics in Teddington, Hampton, Twickenham, Ham and East Sheen, with over 30 GP practices across the borough. A total of 183,154 people were registered with GPs in the borough in April 2010 (data published February 2011). All NHS practices currently offer appointments during extended hours' sessions, providing patients with a range of early morning, evening and/or Saturday appointments.
- 3.11.10 A new state-of-the-art health and social care centre in Whitton that brings GPs, social services, mental health and other primary care services together under one roof, offering an integrated service for local residents, has opened in June 2012. The borough has 46 pharmacies all providing a full range of essential services, advanced services, enhanced services and locally commissioned services on behalf of Richmond Council and Richmond CCG. Richmond has 24 pharmacies per 100,000 population, which is higher than the London and England averages²³.
- 3.11.11 Hounslow and Richmond Community Healthcare²⁴ (HRCH) are the NHS organisation responsible for providing community healthcare to the 425,000 adults and children living in the boroughs of Hounslow and Richmond. They have a distinct role in enabling people to stay healthy and active in their communities and in preventing them from spending unnecessary time in hospital. This is part of an integrated health and social care system and can make significant improvements for patients but by working in partnership with primary care, social care, education, acute hospitals and with commissioners we can together go further, providing joined up, higher quality, personalised and efficient services that lead to better outcomes for patients. Richmond estate is in the process of transfer to HRCH NHS Trust.
- 3.11.12 The main provider of adult and children's mental health services is South West London and St George's NHS Mental Health Trust²⁵. A range of services are provided across sites, including Barnes Hospital, Richmond Royal Hospital, the Maddison Centre in Teddington, and the Kingston Lane Hostel in Teddington, with other outreach teams and services. The tiered model of care is designed to provide a single point of access, for adults and older people enabling an early assessment and initial consultation from a full range of qualified mental health professionals, and ensuring that service users are referred to the most appropriate service. The emphasis in each tier will be to provide discrete, personalised packages of care, provided by the right team, in the right setting at the right time.

²³ http://www.richmond.gov.uk/pharmaceutical_needs_assessment.pdf

²⁴ <http://www.hrch.nhs.uk/>

²⁵ <http://www.swlstg-tr.nhs.uk/>

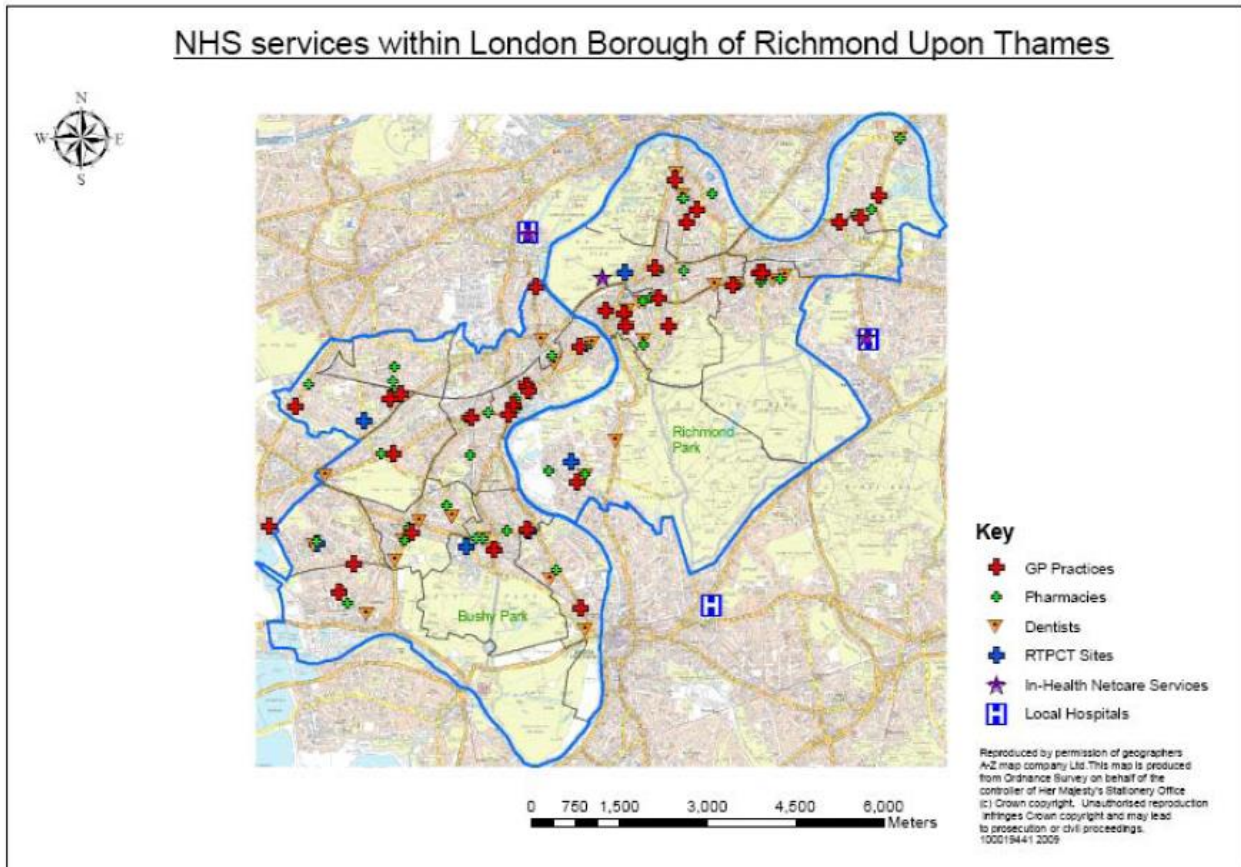


Figure 7: NHS services within borough, Source: Joint Strategic Needs Assessment 2009 Refresh

3.11.13 More information on the Health of the borough can be found at: Hounslow and Richmond Community Healthcare²⁶; the Joint Strategic Needs Assessment²⁷ (JSNA) is the comprehensive assessment of the health and well-being needs of the population of Richmond upon Thames.

3.12 Social Care

3.12.1 Richmond Social Services provides a range of services aimed at the most vulnerable within the community, including services for children and families, services for people with learning disabilities, services for adults, and services for people with mental health problems. There are various means of support for adults, including for those staying at home, including services run by the Council and those run by voluntary groups. Providers of retirement housing range from large mainstream housing associations, such as Richmond Housing Partnership (RHP), to small voluntary organisations. The Council no longer provides retirement housing but administers the Supporting People Programme, which helps to meet some of the costs of housing related support.

3.12.2 Extra Care Housing supports independent living for as long as possible and still gives the security and privacy of having their own front door. There are facilities that residents can share if they want to and a Scheme Manager and fully trained care staff are based

²⁶ <http://www.hrch.nhs.uk/>

²⁷ <http://www.richmond.gov.uk/jsna.htm>

on site, or on call, 24 hours a day to provide extra care and support (there are two such facilities in the borough – Twickenham, Sandown Court; and Hampton, Dean Road).

- 3.12.3 There are many different types of residential homes and nursing homes in Richmond providing for different types of care. These are not owned by the Council but are independently run by a variety of private and not-for-profit organisations.
- 3.12.4 The Council also directly manages a number of services for adults with a learning disability – residential homes/supported living homes/residential respite/shared lives service, as well as community support service, supported employment service and small businesses. The number of people with learning disabilities is expected to rise by 10% by 2025 in line with expected population increases generally, according to the Council's Learning Disability Commissioning Strategy 2010-2013²⁸. The total number of people with a learning disability is therefore estimated at 3,223 in 2025, with 741 with a moderate or severe learning disability.
- 3.12.5 The Council reviewed adult social care services in 2010/11 covering self-directed support contributions, fair access to care services eligibility criteria and changes to day services for older people. For new service users, people assessed with moderate needs will no longer be eligible to receive social care services and support and will receive general information and advice signposting to services elsewhere in the community e.g. luncheon clubs, hot meals, community alarms, befriending and handy person schemes and help with shopping; only those with substantial and critical needs will be eligible.
- 3.12.6 The Council runs the Woodville Centre at Ham (centre of excellence in dementia care) and Sheen Lane which provide intensive day care services with support, and the Access Project Specialist Day Centre a specialist day centre in Whitton. Homelink is a nurse-led day respite centre in Twickenham, run by St. Augustine's Community Care Trust, offering places for one day a week (which enables their carer to have a day's respite) although there is a waiting list which is on average 6 months long. There are also Day Centres, Luncheon Clubs and friendship groups around the borough run by local community or voluntary organisations. They provide a range of activities, a chance to socialise and meet friends and a meal for older people, who do not have specialist needs.
- 3.12.7 Age UK Richmond upon Thames (an independent charity) operate social centres at Twickenham Day Centre, Barnes Green Centre, Whitton and at the Dean Road Extra Care Scheme in Hampton, for activity and social venues for people over 50 years of age and offer many activities subsidised to make them affordable. The charity also provides a telephone helpline, welfare benefits advice and a handyperson service, and runs an outreach programme. Other centres offering activities include the Greenwood Centre in Hampton Hill, the Avenue Club in Kew, Linden Hall in Hampton, and Elleray Hall in Teddington. Richmond Carers Day Centre is located in Twickenham operating appointments, a drop in service at set times and a support telephone line. It offers training and events.

3.13 Housing

²⁸ http://www.richmond.gov.uk/ld_strategy_-_final_version_-_jan10_3_.pdf

3.13.1 At the time of the 2011 Census there were 79,835 households in the borough. This represents an increase of approximately 3,735 homes over the 2011 figure, which already reported an increase of just over 3,000 on the 1991 figure. The London Plan (2015) sets out the average annual minimum housing supply targets for each borough until 2025. These targets are informed by the need for housing as evidenced by the GLA's 2013 Strategic Housing Market Assessment (SHMA)⁴³ and London's housing land capacity as identified through its 2013 Strategic Housing Land Availability Assessment (SHLAA)⁴⁴. As a minimum the Council need to provide an extra 3,150 homes over the next ten years or a target of 315 homes per annum. The Council has identified a potential 1849 units over a 5 year period, which is 274 units more than the target supply in the Further Alterations to the London Plan.

Net additional dwellings 2003/2004 to 2013/14

Financial year	Units completed
2003/4	246
2004/5	582
2005/6	842
2006/7	230
2007/8	260
2008/9	436
2009/10	145
2010/11	399
2011/12	208
2012/13	695
2013/14	235
Total 2003/04-2007/8 (5 yrs)	2160
Average 2003/04-2007/8	432
Total 2008/9-2012/13 (5 yrs)	1883
Average 2008/9-2012/13	377
Total over 11 years	4278

Table 16: Housing completions in the borough 2003/2004 to 2013/2014

Source: LBRuT Decisions Analysis System: completions – Planning Policy Section Note: Figures are for net gains on site; Totals for 2004, 2006, 2008 and 2010 are unusually high because of completions on large sites (188 at Langdon Park in 2004, 536 at Kew in 2006, 192 units at Kew in 2008, 171 units at Richmond Lock in 2010)

3.13.2 From 30 May 2013 the Government introduced amended permitted development rights to allow for greater flexibility for the change of use of existing offices to residential, subject to a notification procedure with the local planning authority. (For further details see the Employment report which is the second in the series of documents making up the 2014 AMR, and can be viewed at http://www.richmond.gov.uk/authority_monitoring_report) Given the relatively recent introduction of these rights, implementation was low in 2013/14 but is expected to be far higher in future years.

3.13.3 In 2001, the average size household in the borough was 2.23 people, and over a third of households were single people. This has now risen to 2.31 (2011 Census). The average household size in London increased from 2.35 persons in 2001 to 2.47 persons in 2011,

challenging assumptions over the last 10 years that average household size is generally in decline. According to the 2011 census, the level of home ownership is 63.6%, with a further 21.8% renting from private landlords and another 13.3% (nearly 10,650) households renting from a registered social landlord.

3.13.4 In common with most of the rest of London, the cost of housing is extremely high. In January 2013, according to the Land Registry, the average house price in Richmond upon Thames was £489,741. Comparing average prices of houses across Greater London, Richmond is the most expensive Outer London borough to buy in and private rents are high. The median gross annual pay for residents in the borough was estimated to be £ £34,990 in the 2010 Annual Survey of Hours and Earnings.

3.13.5 The attractiveness of the borough as a place to live is also reflected in the rent levels found in the private sector.

Weekly rental values

Statistic	Room	Studio	1 bed	2 bed	3 bed	4+ bed
Lower quartile	£83	£150	£185	£242	£288	£462
Median	£103	£167	£203	£283	£346	£646
Upper quartile	£115	£208	£242	£334	£450	£923
Number of entries in database	322	189	678	1063	442	300

Table 17: Weekly rental values for lettings in the London Borough of Richmond upon Thames 2009 - 2010

Source: London Rents Map: <http://legacy.london.gov.uk/rents/>

Statistic	Room	Studio	1 bed	2 bed	3 bed	4+ bed
Weekly Rent (median figure) for 12 months to and including February 2014						
Median rent in LB Richmond upon Thames	£n/a	£194	£253	£335	£460	£715
Median rent in Greater London	£n/a	£185	£255	£315	£369	£564

Table 18: Weekly Rent

Source: London Rents Map: <http://legacy.london.gov.uk/rents/>

3.13.6 These figures are based on aggregate sample data supplied by the Valuation Office Agency (VOA) and are based on agreed market rents from private rented sector lettings collated between 1st Jan 2009 and 31st Dec 2010. The data is based on agreed rents rather than advertised and reflects the market rather than landlords'/estate agents' expectations, however in an improving market the London Rents data may be overly conservative as it's based on a 12 month rolling database and the expectation is that private sector rents will rise in the face of continued increasing demand.

	Richmond Upon Thames		Greater London	
	Total	%	Total	%
All Households	76,146		3,016,033	
Owned-Outright	22,244	29.2	665,054	22.1
Owned-Mortgage*	30,524	40.1	1,039,673	34.5
Social Rented	8,931	11.7	790,373	26.2
Private Rented	12,855	16.9	467,095	15.5
Living Rent Free	1,592	2.1	53,838	1.8

Table 19: Tenure breakdown in 2001

Source: Office for National Statistics, 2001 Census, Standard Table ST055. © Crown copyright
When the 2011 Census data has been analysed, this will be updated.

3.13.7 The wards which have the lowest private rental levels in the borough are also the wards with the lowest supply of private rental accommodation. As a result affordability is a key issue affecting residents and some may experience overcrowding or homelessness. The number of households accepted by the Council as homeless declined from 316 in 2003/04 to 130 in 2009/10, following regional and national trends. There was however a subsequent increase to 160 in 2010/11, again reflecting regional and national trends.

Affordable Housing

3.13.8 The Borough has one of the highest average house prices in the UK. Fewer than 12% of homes in the borough are in the social rented sector, the fourth lowest in London. The borough undertook a Large Scale Voluntary Transfer in 2000 with Richmond Housing Partnership (RHP) now forming the largest housing association in the borough with around 6000 units. Richmond upon Thames Churches Housing Trust also has significant stock at just under 2000 units. Other housing associations include London and Quadrant and Thames Valley, and a large number of other associations with fewer than 200 units each.

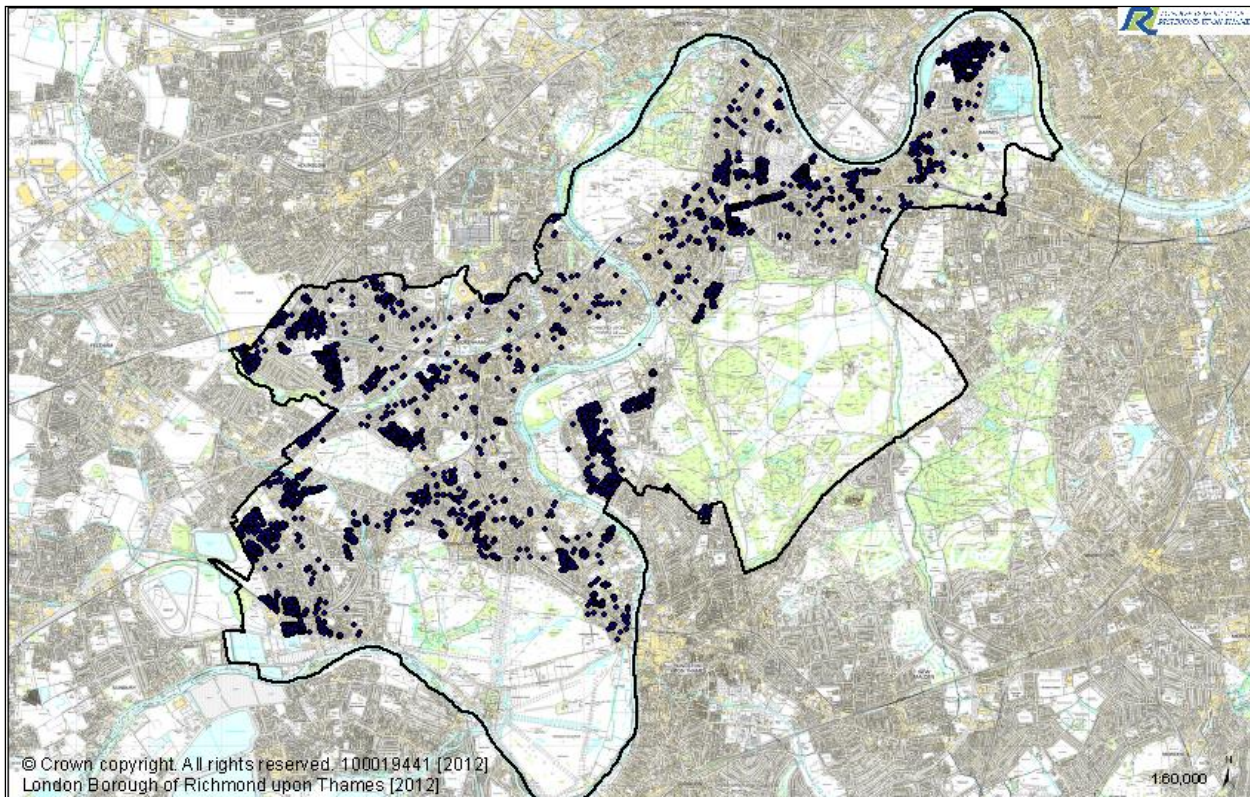


Figure 8: Location of Registered Provider properties across the borough; Source: LBRuT

3.14 Crime and community safety

- 3.14.1 Richmond remains one of the safest boroughs in London with a rate of 55.41 crimes per 1000 population for April to December 2014 (8,205 offences) and there has been no change in this position (currently fourth) from April to December 2013.
- 3.14.2 As actual crime levels are still very low in Richmond compared to London and neighbouring boroughs, any fairly small increase in crime numbers can have a disproportionate effect.
- 3.14.3 The table below shows the crime trends by type during the April to December 2014 period; there has been an increase overall in vehicle crime and in violent offences.

CRIME TYPE	TOTAL	CHANGE	POSITION
ALL CRIME	8205	Up 2% (+ 197 crimes)	4th/32
BURGLARY	1251	Down 5% (- 64 crimes)	19th/32
- Residential	575	Down 5% (- 30 crimes)	4th/32
- Non-Residential	676	Down 5% (- 34 crimes)	29th/32
VEHICLE CRIME	1214	Up 5% (+ 55 crimes)	9th/32
- Theft of	270	Up 19% (+ 44 crimes)	8th/32
- Theft from	782	Down 9% (- 80 crimes)	10th/32
VIOLENCE	1918	Up 33% (+ 476 crimes)	1st/32
SERIOUS ACQUISITIVE CRIME	782	Down 9% (- 80 crimes)	10th/32

Table 20: Crime Figures in Richmond upon Thames April to December 2014.

Latest Crime Figures for Richmond upon Thames	12 months to Sep 15 (year)		12 months to Sep 14 (year)	
	Richmond upon Thames	Met Total	Richmond upon Thames	Met Total
Total Crimes	10,828	724,756	10,436	696,918
Homicide	0	107	3	99
Violence Against the Person (Total)	2,788	212,240	2,162	174,966
Rape	70	5,331	55	4,723
Other Sexual	161	10,116	123	8,216
Robbery (Total)	148	21,968	154	23,884
Robbery (Person)	134	20,278	144	22,219
Robbery (Business)	14	1,690	10	1,665
Burglary (Total)	1,541	71,541	1,797	79,308
Burglary Residential	795	45,487	819	50,931
Burglary Non-Residential	746	26,054	978	28,377
Gun Crime	20	1,723	6	1,550
Motor Vehicle Crime	1,414	81,653	1,574	84,147

Latest Crime Figures for Richmond upon Thames	12 months to Sep 15 (year)		12 months to Sep 14 (year)	
	Richmond upon Thames	Met Total	Richmond upon Thames	Met Total
Domestic Crime	1,017	70,682	737	61,471
Racist & Religious Hate Crime	167	13,204	130	10,829
Homophobic Crime	15	1,725	13	1,358
Anti-Semitic Crime	7	483	5	299
Islamophobic Crime	9	818	1	499

Table 21: Latest Crime Figures for the London Borough of Richmond upon Thames (a Glossary for each of the crime types can be accessed by clicking on the name of the crime or on the Metropolitan Police's website); Source: Metropolitan Police Service

3.14.4 The following data summarises the police recorded Anti-Social Behaviour (ASB) levels for 2014-15 in the main town centre wards of Richmond Borough. The last two years have seen a significant decrease in all ASB reported to the local police. This has resulted in monthly ASB levels reaching their lowest in five years. As of December 2014, there were 3105 calls to the local police regarding ASB; this is a 25% reduction on the 4152 calls made during the same period in the previous year. Reasons for these reductions are not strikingly apparent but there has been 18 months of focused work by local police on repeat callers, as well as effective resolution of ASB flashpoints. The top wards are still South Richmond, Twickenham Riverside, Ham and Teddington. Rowdy and inconsiderate behaviour was the main ASB type and has been for over four years.

3.14.5 Local Authority collected data for Richmond Borough 2014-15:

- The main wards for ASB were Ham, East Sheen and South Richmond.
- For the period April -December 2014 there were 4465 reports compared to 4443 for April -December 2013, or an increase of 0.28%.

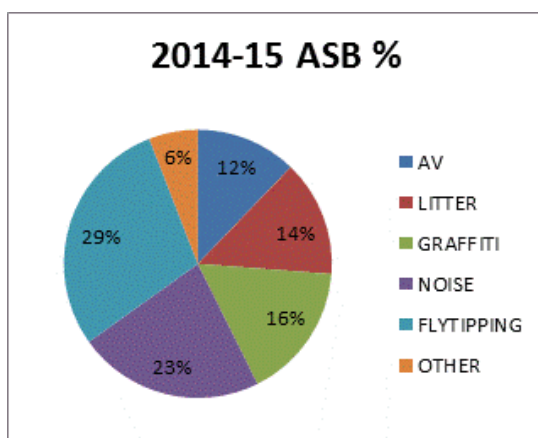


Figure 9: Anti-Social Behaviour

Note: AV stands for abandoned vehicles (It should be noted that meaningful comparisons between the Police and Local Authority data would be unreliable and would cause distortions to the data.)

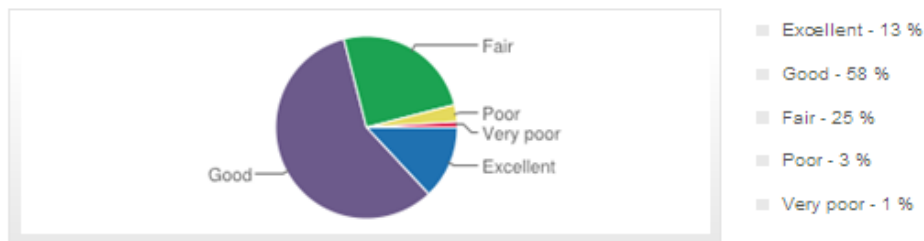
3.14.6 One of the main problems with ASB reporting in the borough is the “perception” issue where a lot of the reporting relies on subjective summaries of the situation that may differ from the objective reality. Unlike with calls to the Police regarding ASB, the

Council mainly deals with “Environmental ASB”, where the problems are connected with the physical locations rather than the human occupants. However one-fifth of calls related to Noise, which is nine times out of ten an issue with human interaction and tolerance levels.

Confidence Results – Richmond upon Thames

3.14.7 The figure below shows the confidence of the public in policing.

Taking everything into account, how good a job do you think the police in this area are doing?



To what extent do you agree that the local police are dealing with the things that matter to people in this community?

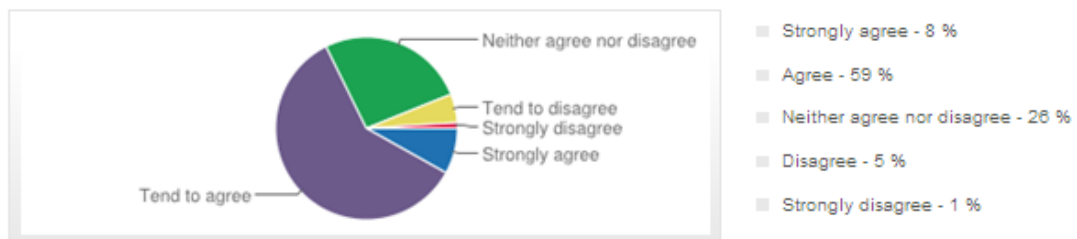


Figure 10: Confidence results for Richmond upon Thames; Source: Metropolitan Police Service Public Attitude Survey

3.14.8 More information on community safety in Richmond upon Thames can be found at the Borough’s Community Safety Partnership website:

http://www.richmond.gov.uk/community_safety_partnership.htm and on the Metropolitan Police Service’s website: <http://content.met.police.uk/Borough/Richmond>

3.15 Leisure

3.15.1 Residents and visitors to the borough can enjoy a great deal of cultural activity. Each year, over 1.4 million visits are made to our libraries, 900,000 visits to sports centres, 500,000 visits to galleries and museums, and 460,000 visits to theatres and performing arts venues. In the last year 4.5 million visitors to the Borough generated revenue of £496million. The Council’s tourism website www.visitrichmond.co.uk receives over a million hits per annum and produces information and guides for visitors to the Borough.

- 3.15.2 The borough has a varied arts scene making use of its many beautiful venues, and Richmond upon Thames Arts Council²⁹ (“artsrichmond”) is an umbrella voluntary organisation, which has many groups affiliated to it. All aspects of the arts are covered including visual arts and crafts, drama, music, literature and dance. The Rambert School of Ballet and Contemporary Dance (Twickenham) and the Royal Ballet School (White Lodge, Richmond Park) are both situated within the borough.
- 3.15.3 Richmond upon Thames contains the Orange Tree Theatre, London’s only permanent theatre- in- the-round; Hampton Hill Playhouse and Richmond Theatre, along with many drama groups. These range from amateur youth dramatics to the Richmond Shakespeare Society. The Royal Military School of Music, at Kneller Hall in Whitton, runs a series of open-air evening concerts every summer. Other open-air concerts also take place in Marble Hill Park and the Royal Botanical Gardens, Kew.
- 3.15.4 The Council’s Arts Service³⁰ works to deliver innovative and accessible arts for residents and visitors of the borough by organising and encouraging all forms of creative development to provide arts for everyone, including exhibitions in three galleries, a diverse range of festivals, events for families and an award winning education provision for all ages and needs.
- 3.15.5 ARThouse Open Studios Festival³¹ is Richmond upon Thames’ annual open studios festival, during which individual artists, community groups, schools and colleges open their homes, studios, classrooms and gardens to showcase a wide range of artwork created in the local area. The borough art collection is housed at Orleans House Gallery³², which stages a changing programme of temporary exhibitions. There is also the Stables Gallery and Riverside Gallery. The Arts Service continues to produce and promote an exciting programme of dance performance and participation with vibrant and varied activities and events in a host of venues throughout the borough. An annual Literature Festival, organised by the Council’s Arts Office, with workshops and readings by authors and poets, has been held in the borough since 1992.
- 3.15.6 There are 12 lending libraries, catering for all ages including IT training for silver surfers. Information and reference services and a local studies collection can be found in the Old Town Hall in Richmond. The libraries provide books, e-books, CDs, DVDs, newspapers, periodicals, community and council information, general reference books, internet access and education and study support. The libraries have regular children’s activities and class visits, and also provide access to computers and photocopiers.
- 3.15.7 There are a number of indoor sport and leisure facilities in the borough. The Council’s Sport & Fitness Service directly manages 5 dual use sports & fitness centres at Whitton, Teddington, Sheen, Hampton and Orleans Park. There are also various private facilities in the borough, catering for a wide range of residents. There are two large public indoor pools in Teddington and Richmond (Pools on the Park), where there is also an outdoor pool. Hampton outdoor pool is run by a charity and opens to the public, and there are various indoor and outdoor pools attached to schools. Twickenham is the home of the English Rugby Football Union (RFU) and the Harlequins Rugby Football Club at the Stoop Memorial Ground. Other clubs play at the Old Deer Park and Richmond Athletic

²⁹ <http://www.artsrichmond.org.uk/>

³⁰ http://www.richmond.gov.uk/home/leisure_and_culture/arts.htm

³¹ http://www.richmond.gov.uk/depts/opps/eal/leisure/arts/arthouse/arthouse_open_studios

³² http://www.richmond.gov.uk/home/leisure_and_culture/arts/orleans_house_gallery.htm

Ground St Mary's University, Strawberry Hill, hosted training on its grounds for teams in the 2012 London Olympics and the winning All Blacks (New Zealand) rugby football team practiced there for the 2015 Rugby World Cup held at Twickenham. There are a number of specialist centres in the borough catering for individual sports including Richmond Gymnastics Centre, Busen Martial Arts & Fitness Centre and the Anglo'-Japanese Judo Club.

- 3.15.8 In assessing the sports and open space needs there may be the need to balance expansion of buildings to meet educational requirements and the need to maintain land for sports. As well as the specific pressure on educational sites it is recognised that while the borough is generally well provided with green space and sports provision, the projected population growth (including growth in school pupils) and increased participation levels will increase demand. There is a need for 4 additional 3G pitches (i.e. long pile artificial turf pitch suitable for football/rugby) in the next 10 years to accommodate the need and future demand for football rugby union and league and in particular floodlit training facilities. There is currently no identified need for additional hockey pitches, bowling greens and tennis courts, although floodlighting for tennis courts remains an issue that, if resolved, could significantly extend the hours available to meet current demand.
- 3.15.9 The 2015 Indoor Sports Facilities Needs Assessment has found that there are 15 sports halls on 14 sites. There is a lack of daytime (during school hours) access to indoor sports hall provision, although there are various opportunities in neighbouring authorities. The report identifies opportunities for improvements, extensions and new indoor facilities in the borough to meet daytime demand. The consultant's report suggests unmet / latent demand, where East Richmond (Ham & Petersham) has the biggest shortfall in sports hall provision. There is significant pressure on the two existing public swimming pools due to high levels of demand for swimming. However, demand is being met through use of pools in private club facilities as well as in the independent schools. In addition, there are 32 swimming pools in neighbouring boroughs within 1 mile radius of the borough, which help to meet demand for swimming from Richmond residents. There is a shortfall in full size, specialist facilities for minority sports such as volleyball, handball, martial arts, badminton, futsal and netball. High charges have been referenced by some voluntary clubs as a barrier to hire and their ability to deliver sports development. There is no specialist indoor tennis provision in Richmond, but demand is being met by neighbouring commercial facilities, such as the National Tennis Centre in Roehampton and David Lloyd in Heston.
- 3.15.10 The parks' sports pavilions are generally in good condition, but some will need further investment. There are two main athletics facilities at Barn Elms (Barnes) and St Mary's College (Strawberry Hill), which is floodlit. All of the secondary and some of the primary schools also have athletics facilities. Various public or pay and play facilities are available in the borough, including Richmond Park and Amida Golf. The River Thames and Thames Young Mariners lake at Ham caters for a variety of water-based sports activities; there is also the Annual Oxford and Cambridge Boat Race and The Great River Race, which attract many spectators into the borough.
- 3.15.11 There are also a wide range of different types of community centres across the borough, from which are run many different activities and spaces available to hire. The opening of a new Community Building with arts facilities in Twickenham in 2016 will make a significant contribution to the cultural life of the Borough.

3.16 Natural environment

3.16.1 Richmond Borough is one of the richest boroughs in London in terms of the total area of public green space, quality and diversity of parks, open spaces, conservation areas and the wealth of different habitats and species. It has over 21 miles of River Thames frontage, the longest stretch of the River Thames of any London borough, and over 100 parks, commons and woodlands. This includes 16 Green Flag sites, two Royal Parks, Richmond and Bushy, containing herds of red and fallow deer, the Royal Botanical Gardens at Kew and many other wildlife habitats.

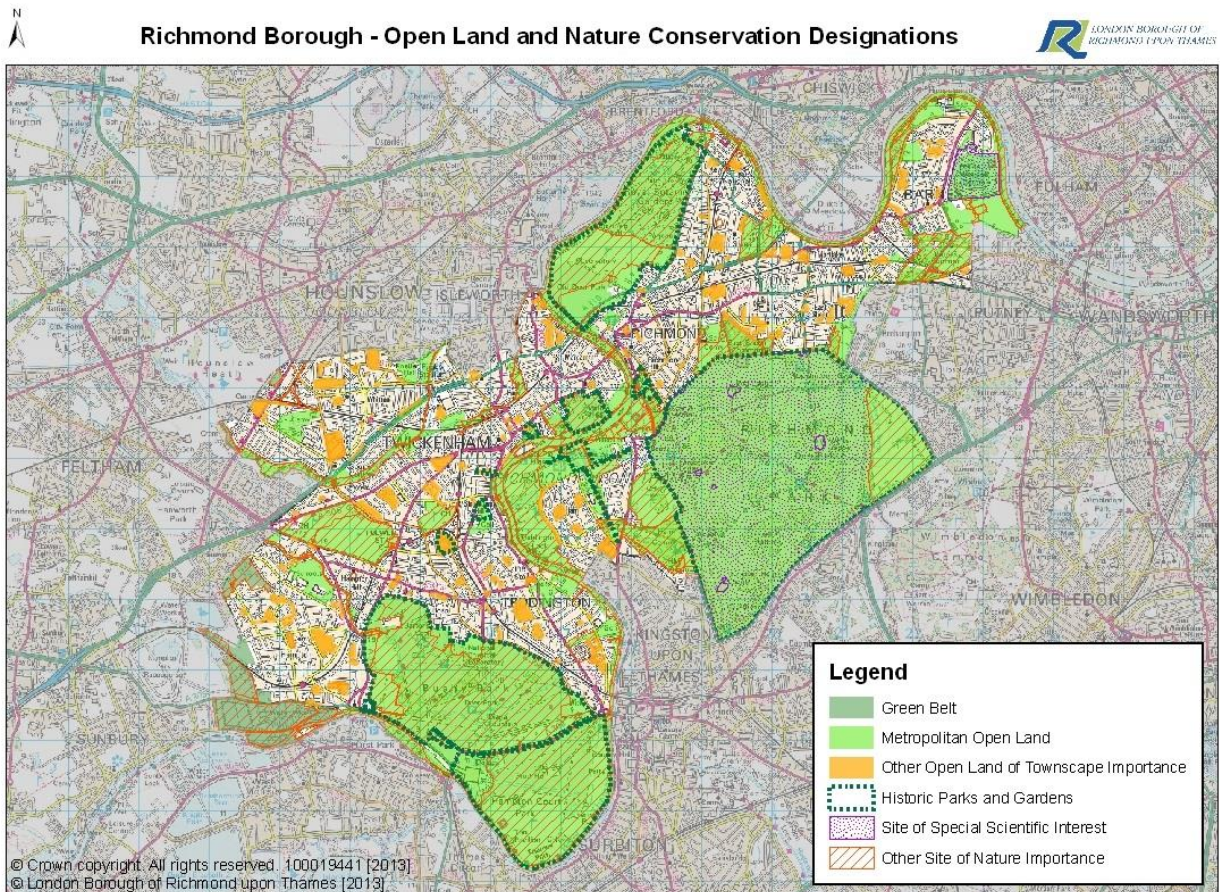


Figure 11: Land designated for open land and nature conservation purposes; Source: LBRuT

The key findings of the Borough's 2015 open spaces assessment included:

- In total there are 200 sites identified in the borough as open space provision. This is an equivalent of 527 hectares across the borough.
- Over four fifths of all open spaces (83%) score above the thresholds set for quality. Most noticeably, more play provision and natural and semi-natural sites score above the thresholds for quality compared to other typologies; reflecting the generally excellent standard of sites.
- Conversely civic space, cemeteries and amenity greenspace have fewer sites scoring above the threshold. For amenity greenspace this tends to be due to the smaller and less attractive appearance of provision.

- The majority of all open spaces (98%) are assessed as being above the threshold for value. A reflection towards the importance of provision in providing social, environmental and health benefits.
 - There are no gaps in play provision in the borough as there are 44 dedicated sites with play areas, of which 42 sites rate above quality threshold.
- 3.16.2 Around 135 ha within the borough are designated as Green Belt (30 ha of which is designated as a Major Developed Site in the Green Belt - Hampton Waterworks). A large contribution to the open space network are the areas designated as Metropolitan Open Land (MOL), which makes up around 60% (3054 ha) of the borough's area. Historic parks and gardens cover around 2026 ha of the Borough (generally on land also designated as MOL), whereby Richmond Park is 930 hectares and Bushy Park is 445 hectares. The borough has large areas of open grassland but many of these sites are not managed primarily for nature conservation, for example the sports pitches, recreational areas and playing fields. Sites designated as Other Open Land of Townscape Importance (OOLTI) are smaller pieces of open land; there are just over 160 sites designated as OOLTI.

Biodiversity, geodiversity, flora & fauna

- 3.16.3 Richmond has an enormous wealth of wildlife (biodiversity) and there are many important areas of land with statutory and non-statutory designations. These include three sites designated as Site of Special Scientific Interest (SSSI) (Richmond Park, Bushy Park and Barn Elms Wetland), and over 110 Other Sites of Nature Importance. (Note: Bushy Park was recently designated because of its invertebrates, veteran trees and acid grassland; it is among the top ten sites in England for decaying wood invertebrates).
- 3.16.4 The Local Biodiversity Action Plan (LBAP)³³, produced by many organisations and charities, including Richmond Council, London Natural History Society, London Wildlife Trust, Royal Botanic Gardens Kew, The Royal Parks, Thames Landscape Strategy and Wildfowl & Wetlands Trust, professional bodies, communities and local residents within the borough, sets out the framework for the protection, conservation and enhancement of wildlife within the borough. The list of habitats and species in this plan is not exhaustive, but it aims to concentrate on and prioritise those habitats and species, which are rare, in decline, or characteristic of Richmond, which will help raise the profile of biodiversity.
- 3.16.5 The priority habitats within this borough, which are also of regional and national importance, are: Acid Grassland, Ancient Parkland/Veteran Trees, Broadleaved Woodland, Reedbeds and Tidal Thames. The priority species, which are also of regional, national and international importance, are: Bats, Mistletoe, Song Thrush, Stag Beetles, Tower Mustard and Water Voles.
- 3.16.6 There are many important areas of broad-leaved woodland within Richmond borough, but most of them are secondary woodlands that have naturally regenerated and succeeded from heathland or acid grassland areas after grazing ceased, such as on Barnes, East Sheen and Ham Commons. There is no ancient woodland within the borough, although there are many magnificent ancient trees in Richmond Park and

³³ http://www.richmond.gov.uk/richmonds_biodiversity_action_plan.htm

The Copse in Ham. Ancient trees, standing deadwood and fallen timber contribute to one of our most important habitats for biodiversity, especially in Richmond Park. A lot of the borough's grasslands are acidic and the largest areas are contained within Richmond Park, Bushy Park and Home Park (Hampton Court). Other important acid grassland sites are the commons of Barnes, East Sheen and Ham. There are also some important sites within the borough that contain scrub, and these tend to be the Commons where grazing has ceased and succession has progressed, such as on Barnes Common but of importance is also Ham Lands Local Nature Reserve.

- 3.16.7 Richmond Park is a site of both national and international importance for wildlife conservation. It is London's largest SSSI, a National Nature Reserve and a Special Area of Conservation. The Park is a foremost UK site for ancient trees, particularly oaks. The trees and associated decaying wood support nationally endangered species of fungi, as well as a remarkable range of nationally scarce invertebrates. The Park is the third best site in Britain for decaying wood invertebrates, including the stag beetle and over 200 rare species of beetle can be found there.
- 3.16.8 Geodiversity is the variety of rocks, minerals and fossils together with the variety of soils, natural processes and landforms. Geodiversity is closely associated to biodiversity as it underpins biodiversity, with soils being the link between them. Therefore, the condition of geodiversity should be conserved, enhanced and where necessary restored.
- 3.16.9 There are many important wetland (flowing and standing water) areas within the borough. The most important is the River Thames, of which there are tidal and non-tidal sections in the borough, but also the London Wetlands Centre in Barnes, which has over 42 hectares of created lakes, ponds and marshes. The centre offers the opportunity to see rare and beautiful wildlife. More information on Richmond's biodiversity and nature conservation can be found at: <http://www.richmond.gov.uk/biodiversity> .

3.17 Water quality

- 3.17.1 The most important watercourse in the borough is the River Thames, of which there are tidal and non-tidal sections. Other watercourses include the River Crane, Duke of Northumberland River, Longford River and Beverley Brook. There are also wetland areas, which provide ideal habitats for many species, for example Leg O'Mutton reservoir and London Wetland Centre in Barnes as well as the Stain Hill reservoirs in Hampton and Pen Ponds in Richmond Park. The River Thames flows through the borough past open stretches of woodland and parkland, Victorian industrial waterfront and urban frontages. There is public access to much of the riverbank in the borough either by towpath or riverside open space.
- 3.17.2 The Water Framework Directive (WFD) is European legislation designed to protect and enhance the quality of our rivers, lakes, streams, groundwater, estuaries and coastal waters, with a particular focus on ecology. The Environment Agency is the lead authority on the WFD in England and Wales. We are required to plan and deliver actions that will improve our water environment. There are four designated river water bodies that extend across the borders of Richmond upon Thames:
- The River Thames
 - Beverley Brook

- The River Crane
- Port Lane Brook

3.17.3 The three tables below identify the current and predicted ecological status of the above watercourses and the breakdown of the physico-chemical and biological status.

WFD Ecological status

Water course	2009 Classification Status	2015 Prediction
River Thames (Egham-Teddington)	Poor	Poor
Beverley Brook (Motspur Park to Thames)	Poor	Moderate
River Crane (incl. part of Yeading Brook)	Poor	Poor
Port Lane Brook	Moderate	Moderate

Table 22: Ecological status - includes biological, physico-chemical and hydromorphological status; Source: Environment Agency

WFD Chemical water quality

Water course	Physico-chemical status	Dissolved oxygen	pH	Phosphate	Ammonia
River Thames (Egham-Teddington)	Moderate	High	High	Moderate	High
Beverley Brook (Motspur Park- Thames)	Moderate	Good	High	Bad	Moderate
River Crane (incl. part of Yeading Brook)	Moderate	Good	High	Poor	Good
Port Lane Brook	Moderate	High	High	Poor	High

Table 23: Chemical water quality - physico-chemical status under the Water Framework Directive; Source: Environment Agency

WFD Biological status

Water course	Biological status	Diatoms	Macro-phytes	Macro-invertebrates	Fish
River Thames (Egham-Teddington)	Poor	Poor	Good	Good	High
Beverley Brook (Motspur Park to Thames)	Poor	Moderate	Poor	Moderate	Poor
River Crane (incl. part of Yeading Brook)	Poor	Poor	Moderate	Moderate	Poor
Port Lane Brook	Poor	-	-	Poor	-

Table 24: Biological status under the Water Framework Directive; Source: Environment Agency

3.17.4 Under the WFD, these need to achieve good ecological potential by 2027. A programme of measures to improve the status is being developed. This will include a series of measures to address urban diffuse pollution in parts of London.

3.18 Water resources

3.18.1 The London Borough of Richmond upon Thames falls within the “London Water Resource Zone”. This zone is classified as being ‘water-stressed’. In Richmond upon Thames the average water consumption in 2010-11 was 167 litres per person per day. This compares to the five year average for the borough of 161 litres consumed per person per day between 2006/07 and 2010-11 (also see Figure below). 24% of households now have a water meter, which is an increase from 15% in 2000-01.

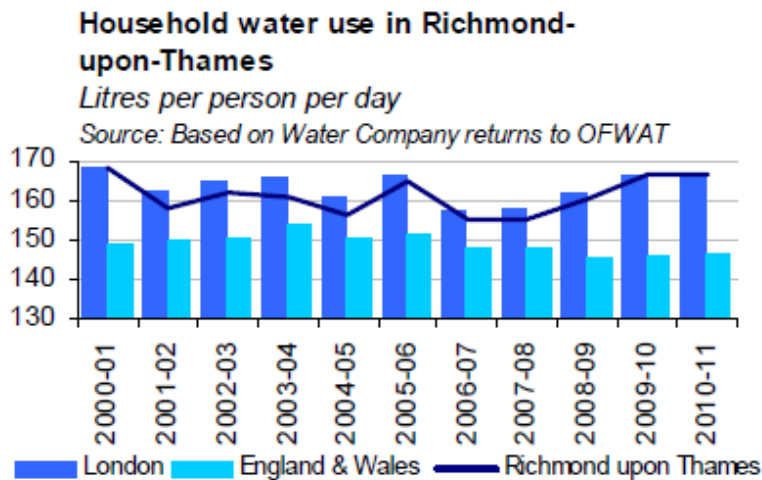


Figure 12: Household water use in Richmond upon Thames in litres per person per day;
Source: Environment Agency

3.18.2 The borough is in Thames Water's 'London water resource zone'; it is seriously water stressed. London's principal source of water is the Lower River Thames upstream of Teddington Weir; two thirds is from the River Thames, 22% from the River Lee and 15% from groundwater (the confined Chalk aquifer). There are 11 licensed abstractions, predominantly from groundwater sources. These are mostly for amenities like golf courses and sports grounds, but also for public supply and agriculture. Thames Water's Hampton Water Treatment Works (WTW) is located within this borough; it is one of the UK's largest WTW and provides a safe, dependable water supply for one third of London's inhabitants; 3 million people.

3.18.3 The River Thames, the Beverley Brook and the River Crane fall into the London Catchment Abstraction Management Strategy (CAMS) area. The main water resource is the confined chalk aquifer, which underlies most of London. This has been assessed as being over-licensed, but is managed so that groundwater doesn't flood any of London's deep infrastructure. The Beverley Brook and River Crane have water available for further abstraction subject to local assessment. The River Thames wasn't assessed as it is heavily influenced by the tide so any abstracted water is quickly replenished.

3.18.4 Thames Water Utilities Ltd are currently preparing their Water Resources Management Plan³⁴, which covers the period 2015-2040. In addition, Thames Water produces regularly Five-Year Asset Management Plans (AMP), which set out Thames Water's investment programmes and spending allowances based on a five year cycle; AMP5³⁵ is the current plan that runs from April 2015 to March 2020.

Pollution of watercourses

3.18.5 Water quality in the River Thames is vital for the survival of fish, especially in summer months. Storm water can overwhelm the sewers leading to high levels of organic matter discharging to the river, which is then oxidised by bacteria. If the river flow is low and

³⁴ www.thameswater.co.uk/cps/rde/xchg/corp/hs.xsl/5392.htm

³⁵ www.thameswater.co.uk/about-us/17481.htm

the temperatures high the oxygen content is rapidly depleted and fish die. The Rivers Crane and Duke of Northumberland are also of high wildlife value but there is room for improvement in those parts of the borough where the Crane has been channelled into a concrete-lined open conduit.

- 3.18.6 In addition, run-off from road surfaces carries contamination of oil and other hydrocarbons and metals from tyre rubber, exhausts and catalysts. In some areas run-off from major roads does cause harm to adjacent watercourses. However in Richmond upon Thames run-off from roads is taken into combined sewers to sewage treatment works and then to the Thames. Resulting pollution of the Thames from road-run off would therefore normally be minimal. During heavy rain episodes storm-water overflows do flow directly into the Thames and road run-off would make up part of the pollution burden.
- 3.18.7 The main factor influencing water quality of the River Thames is Mogden sewage treatment works (STW) and in the Kew to Barnes stretches, the combined sewage overflow (CSO) problem (see above). In these stretches acute water quality issues associated with dissolved oxygen may occur, leading to fish kills or levels preventing the movement of migratory fish. However, the quality of the River Thames has improved significantly over the past 20 years.
- 3.18.8 In addition, Thames Water has carried out a £140m upgrade at Mogden Sewage Treatment Works in west London (LB Hounslow) to extend sewage treatment capacity by 50%. This has significantly reduced the amount of storm sewage that overflows into the tidal stretches of the River Thames when the site becomes overloaded during heavy rainfall. The improvements will also help to meet tighter quality standards for the effluent that Thames Water discharges. The project will involve installing new equipment and upgrading the existing plant. As well as significantly reducing sewage discharges, these improvements are helping to reduce odour at the site, as the use of storm tanks has been reduced during heavy rain, and new and existing equipment has been covered over. Once complete, the extension will generate up to 40 per cent of its power requirements from renewable energy generated from 'poo power' - where electricity is generated by burning methane derived from sewage. Work was completed in 2013. The STW, in Isleworth, currently serves 2.1 million people but has made allowances for a six per cent population increase until 2021.
- 3.18.9 The Environment Agency has recorded the following pollution incidents in the borough:
- There were 2 major (category 1) pollution incidents to water in the borough between 2005 and 2010. These were the result of storm conditions which overwhelmed a sewage treatment works.
 - There were 8 significant (category 2) incidents during this period. The majority of these were also due to the release of sewage during storm conditions, where cause was identified.
 - The number of minor (category 3) incidents reported each year has fluctuated, ranging from 7 to 21, but fell between 2009 and 2010. The most common cause was storm sewage.
- 3.18.10 It is important to protect the borough's water resources and supplies and ensure there are no unacceptable threats to surface water and ground water quantity and quality. The Council has therefore adopted development management policies that ensure

water resources and associated infrastructure is protected. Policies also support the development or expansion of water supply facilities, either where needed to serve existing or proposed new development, or in the interest of long term water supply management. In addition, policies ensure that there is adequate water supply, or that extra capacity can be provided in time to serve the development, prior to new development being permitted.

- 3.18.11 The Thames Tideway Tunnel is the final and most challenging piece of the overall plan to tackle the million tonnes of sewage discharged into the River Thames each year from London's Victorian sewers. These discharges occur up to 60 times a year on average. Without tackling this, ten years from now the 39 million tonnes of sewage, which is currently discharged into the river in a typical year, is forecast to rise to 70 million tonnes. The Tunnel will deal with this problem for at least the next 100 years. It is a sewer the width of three London buses, which will run up to 20 miles from west to east London, up to 75 metres below ground, broadly following the route of the River Thames. It will connect up to the 34 most polluting sewer overflows, as identified by the Environment Agency, to capture sewage which would otherwise spill into the river, before transferring it to Beckton sewage works to be treated.
- 3.18.12 There is one site as part of the Thames Tideway Tunnel in the borough at Barn Elms. The main work site is in the south eastern corner of the Barn Elms Schools Sports Centre site. The surrounding area is a combination of mainly playing fields, but also residential and community facilities. The site will be used to intercept the West Putney Storm Relief combined sewer overflow. At this location, in a typical year, there would be 30 discharges of untreated sewage with a volume of about 35,000 tonnes into the tidal River Thames. When the tunnel is in operation it is expected that only one discharge will occur. In 2015 the site will start to be prepared for the main construction to begin in 2016.
- 3.18.13 For more information on water quality and water resources in Richmond upon Thames please see the Environment Agency's website: <http://www.environment-agency.gov.uk>.

3.19 Soil and land contamination

- 3.19.1 Impacts on soil include the loss of productive areas and erosion of soils due to construction activities and maintenance of the transportation infrastructure, as well as contamination from current use of de-icing and other chemical agents, and past contamination from lead in vehicle exhausts and other toxic land uses and processes.
- 3.19.2 Land contamination in particular can impact on the health of humans as well as animals and cause damage to the wider environment including: watercourses, aquifers (natural underground water stored within rocks) and even buildings. Land that has been contaminated means land affected by increased levels of hazardous substances such as heavy metals, non-metals (e.g. Lead, Mercury and Arsenic), organic compounds e.g. Petroleum Hydrocarbons and radioactive materials. Local Authorities have a statutory duty to deal with contaminated land within their area. The Town and Country Planning Act 1990 also gives powers to Local Authorities to ensure that land that is contaminated is cleaned up so that it is suitable for its proposed use.
- 3.19.3 Although the borough is primarily residential in character, historically there have been a range of industrial activities including: chemical manufacture, sewage treatment, gas

works and many more. Contamination may also arise from inappropriate disposal of household materials e.g. cleaning products (e.g. white spirits and bleaches), technical oils, paints, ash and pesticides.

- 3.19.4 Current government policies have led to increased pressure to redevelop brownfield sites (sites that have been previously developed). It is important to ensure that elevated levels of contamination identified on these sites are reduced to levels which no longer pose a significant risk to human health or the wider environment. Many sites in the borough have been remediated through the planning process as they were redeveloped. The Council works closely with developers to ensure that appropriate methods and controls are put in place to deal with land contamination. Richmond upon Thames's Contaminated Land Strategy³⁶ sets out the Council's approach to implementing our duties under the Environment Act 1995.
- 3.19.5 In addition, the Environment Agency also assists in bringing sites back into beneficial use through land contamination work. Risks to groundwater in the borough are low because the area does not have a significant industrial heritage. Also, the pathways for pollutants to enter the groundwater in the Chalk aquifer are limited due to the presence of the London Clay. Nevertheless, the Environment Agency has assessed 58³⁷ sites since 2000, reviewed well over 100 planning consultations and continued to protect groundwater in the vulnerable Secondary aquifer (River Terrace Deposits) and surface water in the River Thames by applying advice on sustainable drainage systems and applying the principles of the NPPF (previously PPS23, Planning and Pollution Control).
- 3.19.6 Between 2000 and 2009, 58 sites were investigated by the Environment Agency as a result of planning applications or voluntary submissions, of which
- 8 sites required no further remedial action;
 - 32 had unrecorded remedial status;
 - 3 sites were remediated (covering 2.6 hectares); and
 - at least 3 sites are under active investigation.
- 3.19.7 The Environment Agency has recorded the following land pollution incidents in the borough:
- There were no major (category 1) or significant (category 2) pollution incidents in the borough between 2005 and 2010.
 - The number of minor (category 3) incidents recorded each year has remained low with a maximum of 5 recorded in 2006. The two most common causes of incidents were fire and unauthorised activity such as fly-tipping or unauthorised discharge or disposal.

3.20 Flooding

- 3.20.1 Under the statutory duties and powers as set out in the Flood and Water Management Act 2010³⁸, the Council is legally required to take the lead role in managing local flood

³⁶ http://www.richmond.gov.uk/contaminated_land_strategy.htm

³⁷ Note that this figure only includes Environment Agency investigated sites. The Council will have investigated further sites through the planning process during the same time period.

³⁸ Flood and Water Management Act 2010: <http://www.legislation.gov.uk/ukpga/2010/29/contents>

risk (this includes flood risk from all sources except from the River Thames and its main tributaries, for which the Environment Agency remains the lead body). Local research has been undertaken to understand the flooding issues within the borough and to identify areas of high flood risk. The Council's Strategic Flood Risk Assessment 2015-2020 (SFRA)³⁹

- 3.20.2 builds on the outcomes of the London Borough of Richmond upon Thames Surface Water Management Plan (SWMP) and Preliminary Flood Risk Assessment (PFRA)⁴⁰, and incorporates information from the Strategic Flood Risk Assessment (SFRA). Parts of Richmond Borough have a particular susceptibility to surface water and sewer flooding due to the urbanised nature of the area and the complexity of the sewer system leading to a high potential for constrictions, blockages and failure. Therefore, in addition as part of the Drain London project⁴¹, led by the Greater London Authority, a Surface Water Management Plan (SWMP)⁴² was completed for the London Borough of Richmond. The SWMP is a borough-wide investigation, identifying areas that may potentially be at risk from surface water and groundwater flooding.
- 3.20.3 Flooding may also occur due to a failure in the sewerage infrastructure. Policy DM SD 10 of the adopted Development Management Plan requires developers to provide evidence that adequate capacity exists in the public sewerage and water supply network to serve their development in the form of written confirmation. Where capacity does not exist and to avoid overloading of existing infrastructure, a drainage strategy is required to show the necessary infrastructure and its funding.

Likelihood of flooding

- 3.20.4 A large proportion of the borough is situated in proximity to the River Thames and its tributaries, and not surprisingly therefore a relatively large number of properties within the borough are potentially at risk of flooding from rivers. The River Thames within this borough extends from Barnes to Hampton Court (upstream of Teddington Weir). Teddington Weir represents (formally) the tidal extent of the River Thames, and therefore the borough is at risk from both fluvial (river) and tidal flooding. Downstream of Teddington Weir, the borough is protected against flooding from the River Thames by the Thames Tidal Defence system, which provides protection against flooding through a combination of raised flood defences, flood proofing to riverside properties, and the Thames Barrier.
- 3.20.5 As shown in the flood map below, the borough has some land within flood zones 2 and 3, whereby flood zone 2 represents the 1 in 1000 year probability of flooding, and flood zone 3 represents the 1 in 100 year probability of fluvial flooding or 1 in 200 year probability of tidal flooding. Zone 3 is further sub-delineated into zone 3a and zone 3b, whereby zone 3b is also referred to as the functional floodplain.

³⁹ LBRuT Strategic Flood Risk Assessment: http://www.richmond.gov.uk/flood_risk_assessment.htm

⁴⁰

⁴¹ Drain London project, Greater London Authority:; <http://www.london.gov.uk/drain-london>

⁴² LBRuT Surface Water Management Plan:
http://www.richmond.gov.uk/surface_water_management_plan.htm

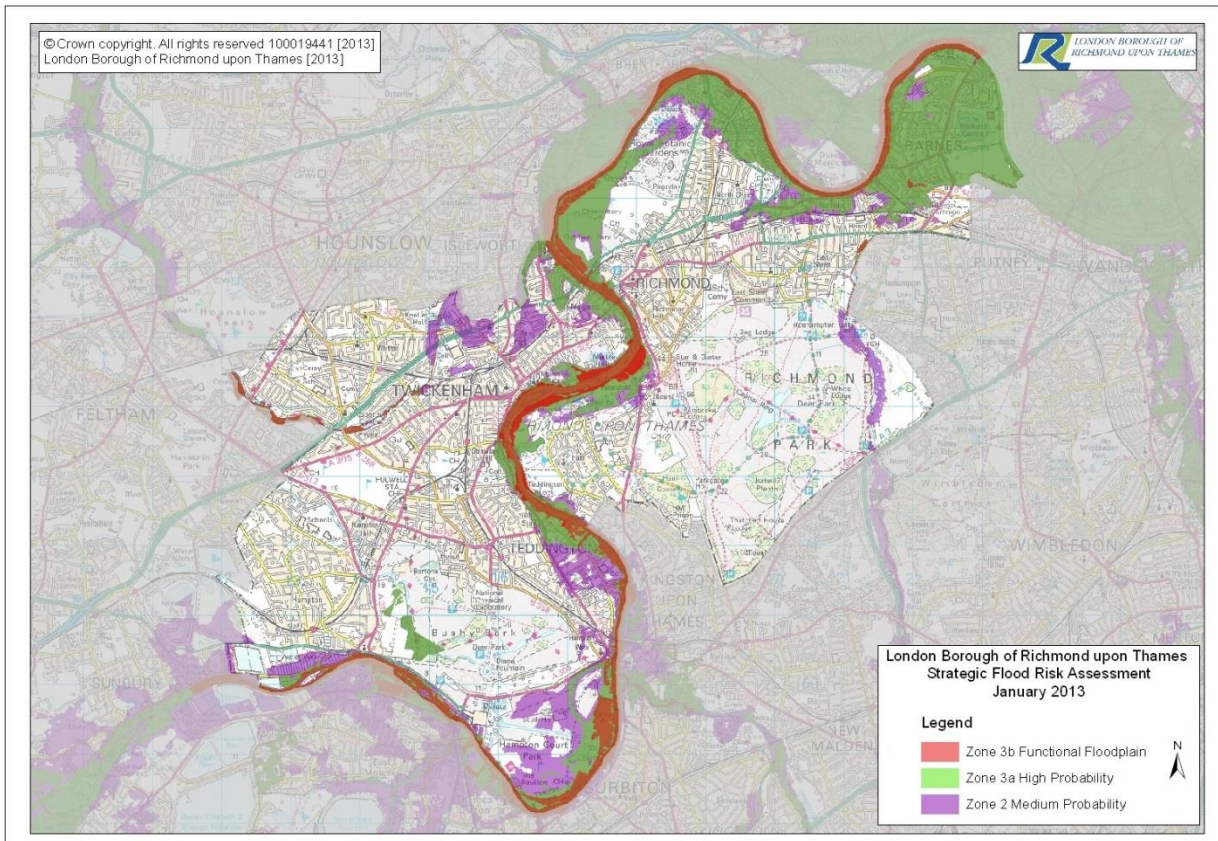


Figure 13: Flood map for the London Borough of Richmond upon Thames; Source: LBRuT

3.20.6 The existing sources of flooding within this borough are:

- Tidal from the Thames upriver of the Thames Barrier (probability of 0.1% per annum, barrier controlled); flood depths up to 2 m if the Thames Barrier failed.
- Fluvial and tidal/fluvial from the Thames (probability >1% per annum; flood depths up to 3 m).
- Fluvial flooding from Beverley Brook (probability about 10% per annum)
- Fluvial from the River Crane, exacerbated by backing up from the Thames (probability >1% per annum, flood depths up to 2 m). The River Crane has an extensive floodplain in the tidal/ fluvial interaction zone.
- Fluvial and tidal/fluvial from the Duke of Northumberland's River. The flood risk is believed to be small.
- Local drainage, e.g. as a result of surface water runoff or insufficient capacity in the sewerage system.
- Groundwater flooding from superficial strata, possibly connected to Thames levels.

3.20.7 In general, the drainage (sewer) network is typically designed to cater for no greater than a 1 in 30 year design storm. For this reason, any event that exceeds this probability can be expected to result in overland flow that may pose a risk of flooding to local properties and areas. The risk of flooding from surface water and/or the sewer network is difficult to predict accurately, and is heavily dependent upon local conditions during the passing of a storm (also refer to the section on surface and foul water drainage within this report). For example, leaves and/or a parked car may be blocking a gully, water levels within the receiving watercourse may be elevated preventing free drainage from (or backing up of) the sewers. Therefore, properties and infrastructure

within the borough are also at risk of flooding from other, more localised sources of flooding, such as surface and groundwater flooding, and sewer flooding due to surcharging of sewers and drains or due to the failure of infrastructure. Flooding could also occur away from the floodplain as a result of development where off-site infrastructure is not in place ahead of development. Areas that are particularly vulnerable to localised flooding have been identified and assessed in the Council's Surface Water Management Plan (SWMP), which also includes an action plan for the Council.

3.20.8 Existing flood risk management systems that affect flooding in this borough are:

- The Thames Barrier, to control tidal water levels.
- The Thames Barrier is also used to reduce fluvial flood levels.
- Secondary tidal defences along the Thames frontage.
- Beverley Brook flapped outfall.
- Beverley Brook bypass culverts that provide relief from fluvial flooding.
- The Crane gates that prevent high water levels in the Thames entering the River Crane. They are only effective when Crane flows are relatively low. When fluvial flows on the River Crane are high, the gates open even if the Thames water level is high.
- Local fluvial defences on the River Crane.
- Known combined sewer overflows (CSOs) for urban drainage flood mitigation.
- Flood forecasting and warning (provided by the Environment Agency).

3.20.9 There are no formal fluvial flood defences on the Thames. However, existing tidal defences, in particular the Thames Barrier, provide some protection against fluvial flooding downriver of Teddington. The current estimated standard of protection provided by these defences at Teddington is 3% per annum (1:30).

Properties at risk

3.20.10 Some areas within Richmond consist of a relatively narrow floodplain along the Thames, much of which flood regularly and are occupied by parks and gardens. Whilst the amount of property at risk is not significant (there are approximately⁴³ 20,500 properties including roughly 13,300 properties within Flood Zone 3 and around 600 properties in the functional floodplain, in areas at risk of flooding from fluvial and tidal sources; about 22% of all properties in the borough), there are some historic and important sites, including several schools, care homes, electricity substations, large residential areas, offices, major arterial routes and railway lines in areas prone to flooding. The Environment Agency's National Flood Risk Assessment (Nafra) shows that 62% of these properties are in areas where the likelihood of flooding is low. In addition, The Lower Thames Strategy, which is a long-term plan to manage flood risk in the Lower Thames area, identified 15,000 properties with a 1% annual (1 in 100 year) chance of flooding, from Datchet to Teddington.

- ⁴³ Analysis by overlaying Borough's LLPG records with EA flood maps (June 2015).

Properties at risk of flooding

Likelihood	% of properties at risk (2010)
Significant	23%
Moderate	15%
Low	62%

Table 25: Likelihood of properties at risk of flooding in 2010
Source: Environment Agency

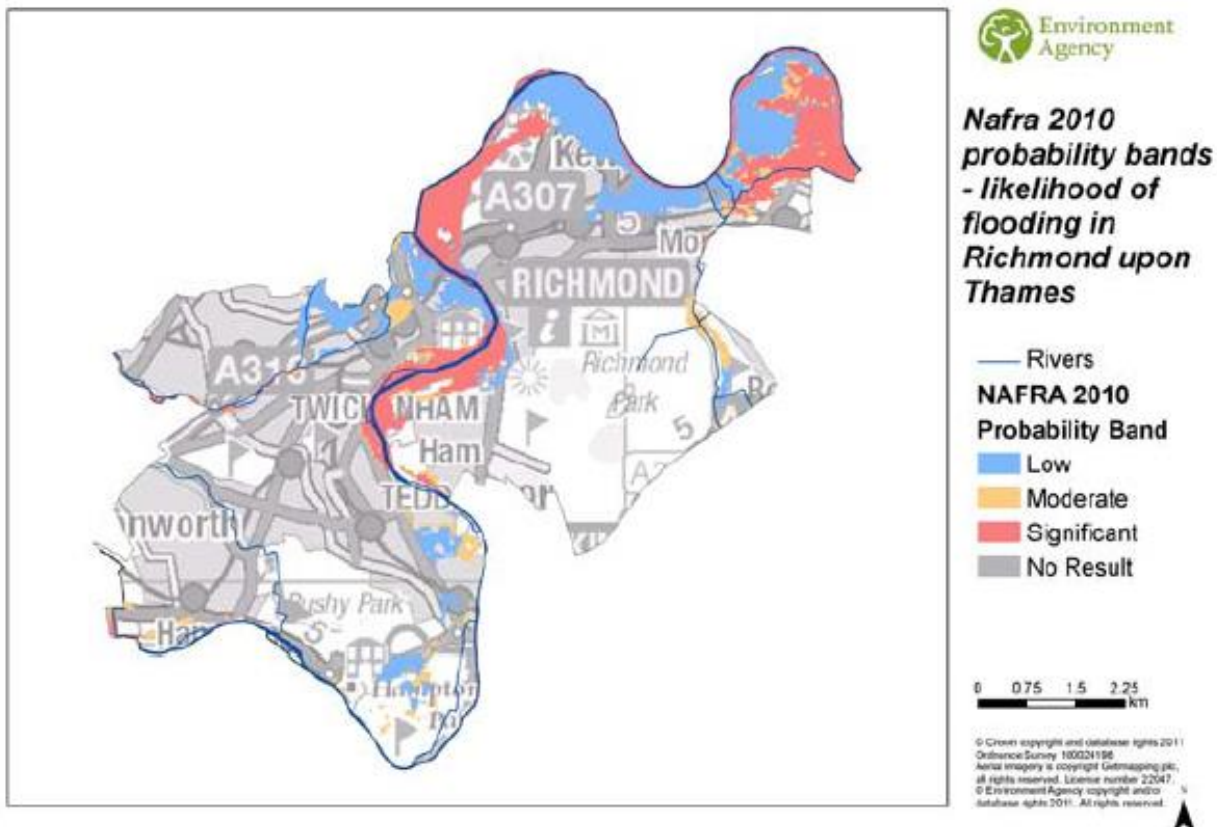


Figure 14: Environment Agency – National Flood Risk Assessment 2010 – Likelihood of flooding in Richmond upon Thames; Source: Environment Agency

Historic flooding events

3.20.11 Since 1947, when flooding occurred along the banks of the River Thames at Teddington, upstream at Hampton and along the Longford River, the borough has experienced flooding several times. Flooding has also occurred in 1965, 1974, 1988, 1990, 1999, 2000, 2003 and 2007. The flood events in 1965 and 1999 both occurred as a result of flooding from the River Crane, to the west of Richmond town. In 1974, a small area on the bank of the River Thames at Hampton flooded. The flooding in 1988, also occurred from the River Thames but was more extensive, stretching from Hampton to Teddington. Flooding at the confluence of the River Thames and areas further downstream on the Thames occurred in 1990. The more recent flood events, in 2000 and 2003, both occurred along the River Thames from Hampton to Teddington. There were also smaller areas of flooding along the Longford River. The summer 2007 flooding was largely due to surface water flooding as a result of heavy and intense rainfall. Flooding in January 2014 involved rainfall events occurring in rapid succession and therefore high flows were sustained over a long period resulting in the highest

recorded volume of water for any two and half month period since flow records began in 1883. The Thames Barrier was closed 50 times from 5th December 2013 to 5 March 2014. Of these closures, 41 have been classified as fluvial to protect west London from high flood flows arriving from upstream and 9 have been classified as tidal to protect London from high sea levels in the Thames estuary. Typically, reactive mitigation measures have been implemented in response to past flood events, usually with the construction of new drainage infrastructure. However, climate change and continued urbanisation are likely to increase flood risks in the future unless action is taken to mitigate or adapt to that risk

Flood warnings

3.20.12 The Environment Agency offers a free flood warning service, which gives advance warning⁴⁴ of flooding via phone, text, email, pager or fax.

Properties in Richmond borough that are signed up to flood warnings

July 2011	
Floodline Warnings Direct (FWD)	3,991
Extended Direct Warnings (EDW)	11,447
Total	15,438

Table 26: Number of properties receiving Environment Agency flood warnings (as of July 2011); Source: Environment Agency

Note: These figures do not include all homes at risk from tidal flooding. These properties receive flood warnings from other sources such as broadcasts on local radio, particularly LBC who have agreed to broadcast flood warnings in London.

3.21 Climatic factors and climate change

3.21.1 London and Richmond borough have experienced and will continue to experience significant changes in climate over the coming decades. These climatic changes can be summarised as follows:

- Hotter, drier summers;
- Milder, wetter winters;
- More frequent extreme high temperatures;
- Increases in rainfall and associated increase in fluvial flooding and surface water flooding;
- Increases in sea level rise and increases in storm surge height;
- Decreases in soil moisture content in summer;
- Possible higher wind speeds.

3.21.2 The UK Climate Projections (UKCP09)⁴⁵ provide information on how the UK's climate is likely to change in the 21st century, as it responds to rising levels of greenhouse gases in the atmosphere. The key findings for the UK are the following:

- All regions of the UK have experienced an increase in average temperatures between 1961 and 2006 annually and for all seasons. Increases in annual average temperature are typically between 1.0 and 1.7 °C, tending to be largest in the south and east of England and smallest in Scotland.
- There has been a slight increase in average annual precipitation in all regions of the UK between 1961 and 2006.

⁴⁴ <http://www.environment-agency.gov.uk/homeandleisure/floods/38289.aspx>

⁴⁵ <http://ukclimateprojections.defra.gov.uk/>

- There has been an increase in average winter precipitation in all regions of the UK between 1961 and 2006.
- There has been a slight decrease in average summer precipitation in most regions of the UK between 1961 and 2006.

3.21.3 The predicted changes in temperature and precipitation for the London region are set out in the following two tables below:

Predicted changes in temperature – London region

Predicted central estimate of changes in temperature for the London region for the 2020s for the low, medium and high emissions scenario			
Emissions Scenario	Low	Medium	High
Winter mean temperature	+ 1.3 °C	+ 1.3 °C	+ 1.4 °C
Summer mean temperature	+ 1.6°C	+ 1.6 °C	+ 1.5°C
Summer mean daily maximum temperature	+ 2.2°C	+ 2.1°C	+ 2.0°C
Summer mean daily minimum temperature	+ 1.7°C	+ 1.6°C	+ 1.7°C

Table 27: Predicted changes in temperature for London: Source: UKCP09

Predicted changes in precipitation – London region

Predicted central estimate changes in precipitation for the London region for the 2020s for the low, medium and high emissions scenario			
Emissions Scenario	Low	Medium	High
Annual mean precipitation	+ 1%	0%	0%
Winter mean precipitation	+ 6%	+ 6%	+ 7%
Summer mean precipitation	- 7%	- 7%	- 4%

Table 28: Predicted changes in precipitation for London: Source: UKCP09

3.21.4 The likely effects of climate change, such as the drier/hotter summers and the increased precipitation in winters can have various impacts on the borough, including:

- Higher probability of flooding as a result of the increase in precipitation during the winter, particularly the risk of surface water flooding but also fluvial flooding.
- Drier, warmer summers are likely to lead to pressure on water resources, possible drying out of grassland and parks, less evaporative cooling benefit from vegetation, increased demand on recreational outdoor activities, possible hosepipe bans and damages to infrastructure.
- Changes could also affect biodiversity, habitats and water quality, particularly during long spells of dry and hot weather; there may be changes in the abundance of species, which may need to adapt to changes in weather patterns and climate.
- Impacts on health could include heat stress to the old, poor and vulnerable communities and people, increased demand for cooling and ventilation for thermal comfort, which is likely to have knock-on impacts on the emergency services.
- The changes are also likely to have economic and financial impacts, for example the losses and damages due to flooding, subsidence, heat waves, increased cooling demand etc.

Ecological and carbon footprint

3.21.5 In 2008, the Stockholm Environment Institute (SEI) published experimental results by local authority⁴⁶ for the following indicators:

⁴⁶ The 2004 estimates have been generated using Version 2 of the Resources and Energy Analysis

- the ecological footprint in global hectares per capita,
- the carbon footprint in tonnes of carbon dioxide (CO₂) per capita, and
- the greenhouse gas footprint in tonnes of carbon dioxide equivalent (CO₂eq) per capita.

3.21.6 The *Ecological Footprint* is a calculation that estimates the area of the Earth's productive land and water required to supply the resources that an individual or group demands, as well as to absorb the wastes that the individual or group produces. A person's *Carbon Footprint* is the direct effect that the personal actions and lifestyle (such as the use of electricity in the home and travel needs) have on the environment in terms of the total amount of CO₂ emissions. The *Greenhouse Gas Footprint* is calculated by estimating not just the CO₂ emissions that any activity causes, but also any emissions of other greenhouse gases (such as methane and nitrous oxide).

3.21.7 It is an unfortunate fact that Richmond upon Thames has one of the highest ecological, carbon and greenhouse gas footprints in London and the UK (see Table below).

Estimated ecological footprint, carbon footprint, GHG footprint

	Ecological Footprint (gha/capita)	Carbon Footprint (tonnes CO ₂ /capita)	GHG Footprint (tonnes CO ₂ eq/capita)
UK	5.30	12.08	16.34
London	5.48	12.12	16.55
Richmond upon Thames	6.38	13.99	19.19

Table 29: Ecological, carbon and GHG footprint comparison; Source: SEI Experimental results, 2008: <http://data.london.gov.uk/datafiles/environment/environmental-footprint-data.xls>
Notes: The ecological footprint is in global hectares per capita. The carbon footprint is in tonnes of carbon dioxide. The greenhouse gas footprint is in tonnes of carbon dioxide equivalent (CO₂eq) per capita (CO₂) per capita.

3.21.8 The carbon footprint in Richmond upon Thames is 13.99 tonnes of CO₂ per capita⁴⁷. The sector with the highest contribution to this footprint is the domestic sector, i.e. housing, and more specifically the electricity, gas and other fuels used in the home. Large contributions are also associated with the transport and food sector. See the table and figures below for the estimated footprints by theme/sector:

Richmond upon Thames – Estimated footprint breakdown by theme

	Ecological Footprint Percentage Breakdown	Carbon Footprint Percentage Breakdown	GHG Footprint Percentage Breakdown
Housing	23%	29%	23%
Transport	18%	25%	22%
Food	27%	12%	20%
Consumer Items	14%	13%	13%
Private Services	7%	8%	8%

Programme (REAP).

⁴⁷ Resources and Energy Analysis Programme (REAP). *Footprint data, London*. REAP v2 Experimental release: 15-10-08. Published by SEI 2008. Available at <http://www.resource-accounting.org.uk/downloads>

Public Services	9%	11%	11%
Capital Investment	2%	3%	2%
Other	0%	0%	0%

Table 30: Ecological, carbon and GHG footprint in Richmond upon Thames by theme; Source: SEI Experimental results, 2008: <http://data.london.gov.uk/datafiles/environment/environmental-footprint-data.xls>

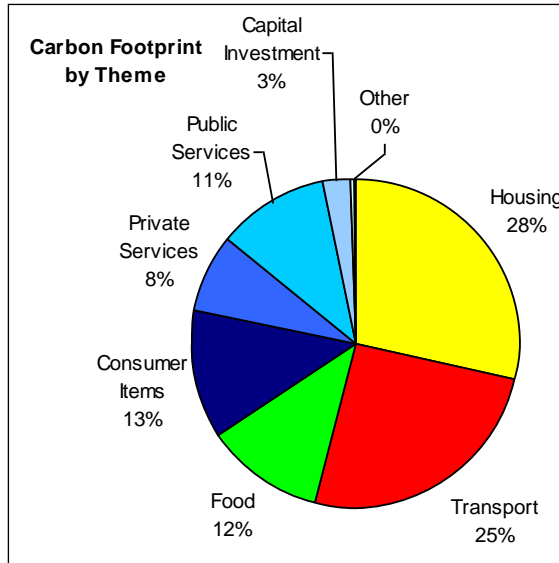


Figure 15: Carbon Footprint by Theme; Source: SEI Experimental results, 2008

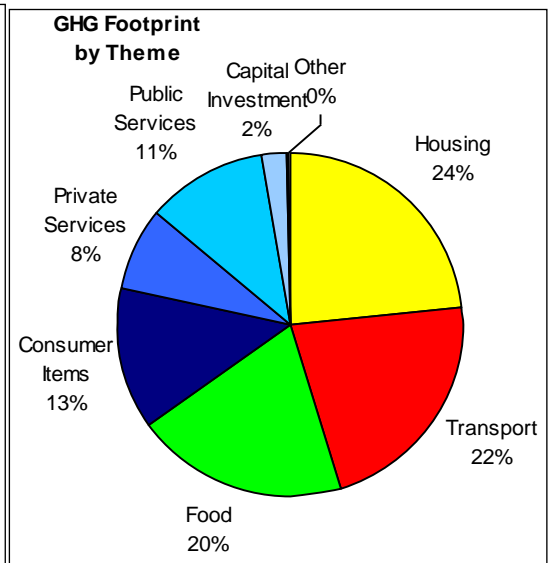


Figure 16: GHG Footprint by Theme; SEI Experimental results, 2008

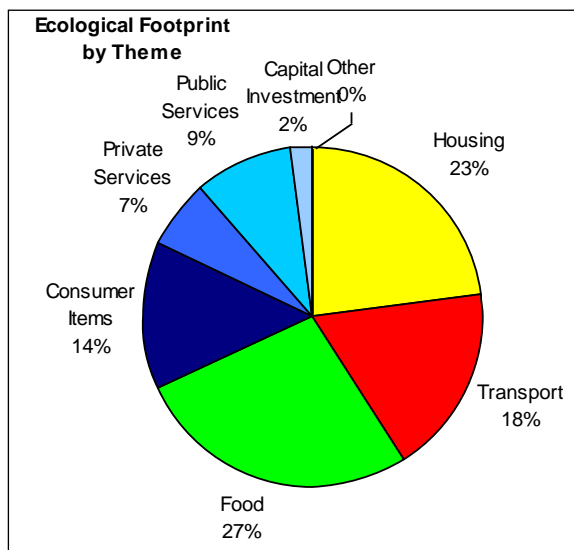


Figure 17: Ecological Footprint by Theme; Source: SEI Experimental results, 2008

Carbon dioxide emissions

3.21.9 The table below shows the summary data for CO₂ emissions within the scope of influence of Local Authorities (previously National Indicator 186: per capita CO₂ emissions in the LA area), sector and fuel details (Units: kt CO₂)

Year	Industry and Commercial	Domestic	Road Transport	Grand Total	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
2005	333.7	486.2	229.0	1,048.9	181.5	5.8
2006	339.4	484.5	224.0	1,047.8	182.5	5.7
2007	332.1	470.6	224.2	1,026.9	182.4	5.6
2008	319.1	473.4	208.4	1,000.9	182.9	5.5
2009	275.9	431.3	199.0	906.2	184.4	4.9
2010	280.7	465.9	195.4	942.1	186.3	5.1
2011	242.5	408.4	191.2	842.1	187.5	4.5
2012	255.8	455.8	193.6	905.2	189.1	4.8

Table 31: CO₂ emissions in the London Borough of Richmond from 2005 – 2012; Source: DECC

CO₂ emissions reductions in the London Borough of Richmond

Per capita	Reduction 2005 - 2015	- 20.83%
Kilotonnes CO ₂	Reduction 2005 - 2015	-- 15.87%

Table 32: CO₂ emissions reductions from 2005 – 2015 in the London Borough of Richmond; Source: LBRuT analysis

3.22 Air Quality

- 3.20.1 Poor outdoor air quality often leads to a reduced quality of life and can be a contributing factor to health problems, ranging from premature deaths caused by heart and lung disease to worsening of asthmatic conditions, as well as damaging ecosystems, biodiversity and valued habitats. Action to manage and improve air quality is largely driven by EU legislation. The 2008 ambient air quality directive (2008/50/EC⁴⁸) sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO₂).
- 3.20.2 The national Air Quality Objectives and EU limit and target values with which the UK must comply are summarised in the National air quality objectives⁴⁹ of the Air Quality Strategy⁵⁰. The Mayor's Air Quality Strategy⁵¹ sets out policies and actions for London.
- 3.20.3 The whole borough has been designated an 'Air Quality Management Area'⁵² (AQMA) for both nitrogen dioxide (NO₂) and PM10 (particles less than 10 microns), whereby the majority of air pollution derives from road traffic.
- 3.20.4 The Council monitors local air quality by the use of both continuous analysers and diffusion tubes. Diffusion tubes are located at a number of sites throughout the borough and monitor nitrogen dioxide, benzene and polycyclic aromatic hydrocarbons.

⁴⁸ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>

⁴⁹ http://uk-air.defra.gov.uk/documents/National_air_quality_objectives.pdf

⁵⁰ <http://www.defra.gov.uk/environment/quality/air/air-quality/approach/>

⁵¹ http://www.london.gov.uk/sites/default/files/Air_Quality_Strategy_v3.pdf

⁵² http://www.richmond.gov.uk/air_quality_action_plan.htm

3.20.5 Continuous analysers monitor air quality in the borough 24 hours a day; currently the Council has one mobile monitoring unit that is moved around the borough to different locations and two static units (one is located in Castelnau outside the Public Library and the other is at the Wetlands site in Barnes). The diffusion tubes measure and monitor NO₂; these are located at a number of sites throughout the borough. The two figures below show the measured NO₂ results in this borough for the year 2011. (Note that two charts are required due to the number of monitoring locations.) For historical NO₂ data and previous years monitoring result, please see: http://www.richmond.gov.uk/nitrogen_dioxide_results_diffusion_tube_sampling.htm

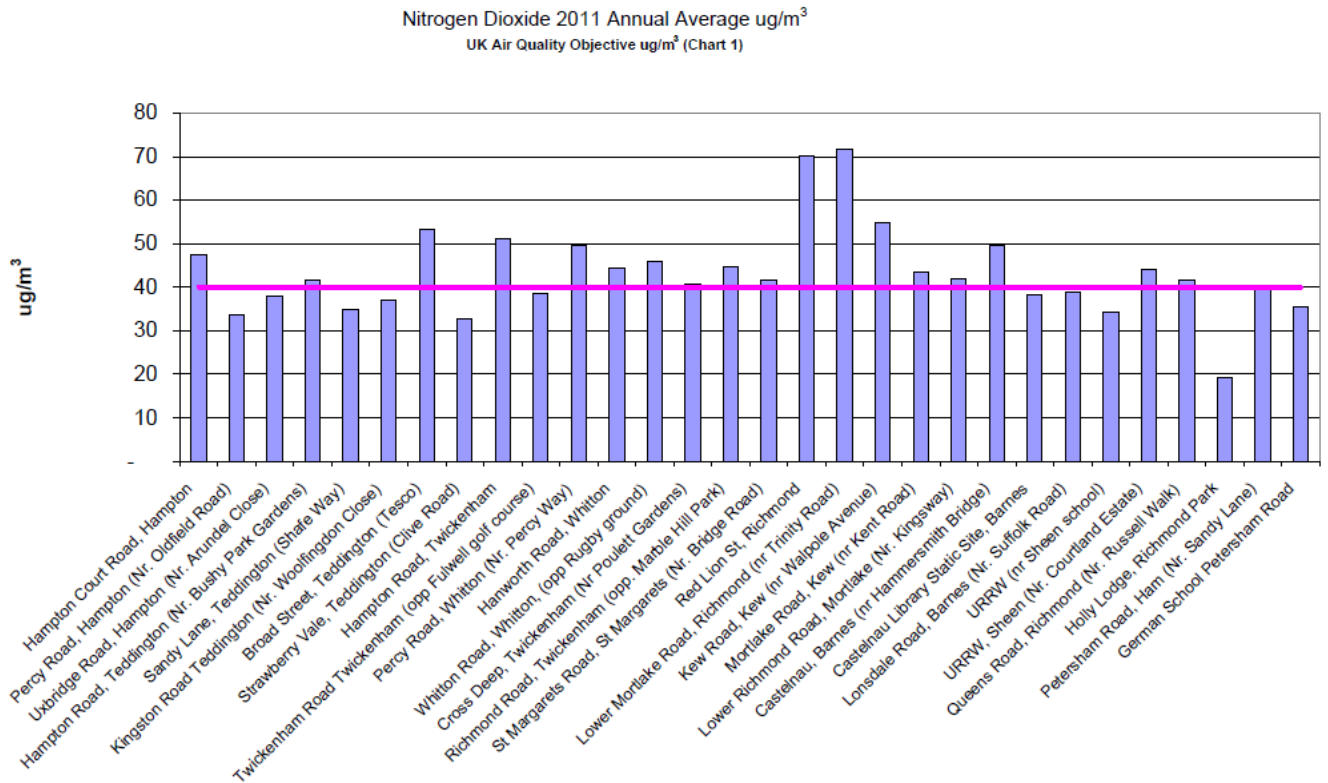


Figure 18: Chart 1 – LBRuT Nitrogen Dioxide 2011 Annual Average ug/m 3

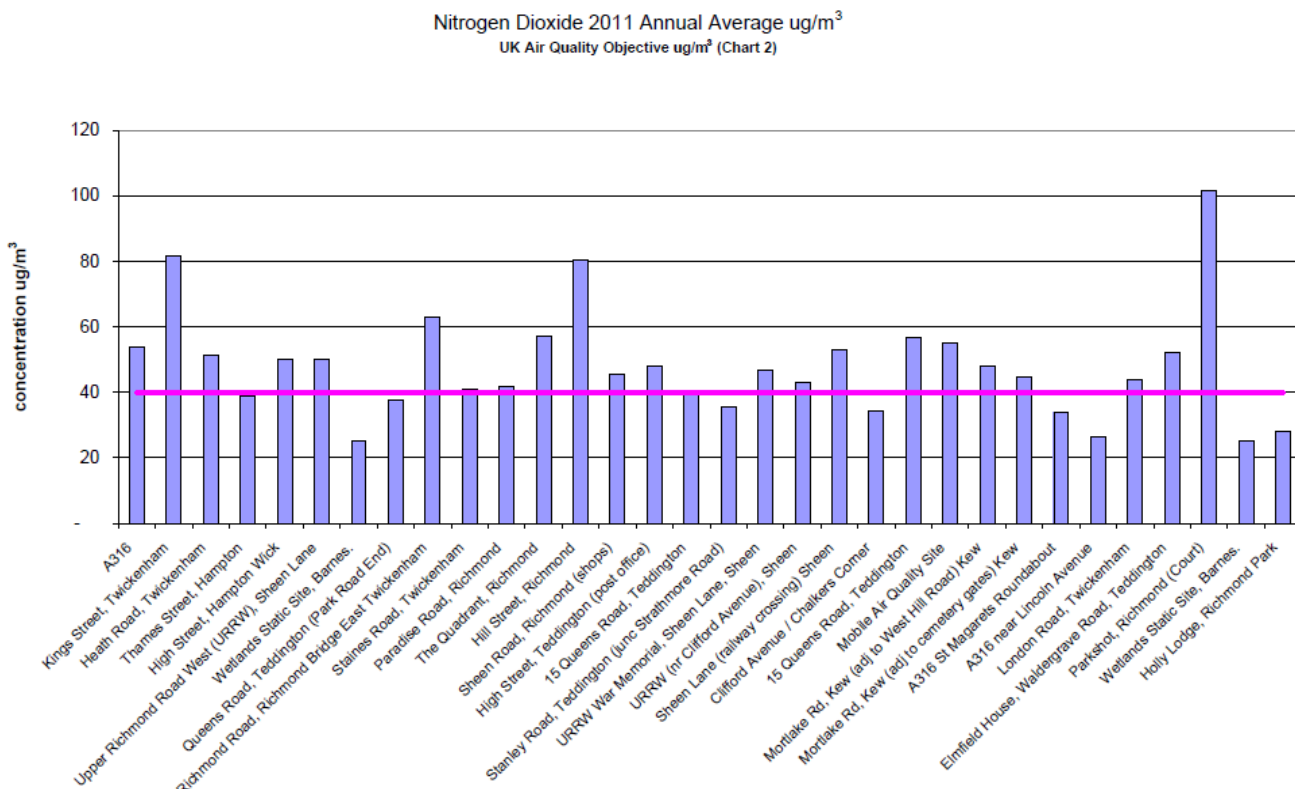


Figure 19: Chart 2 – LBRuT Nitrogen Dioxide 2011 Annual Average $\mu\text{g}/\text{m}^3$

3.20.6 Continuous monitoring is carried out for the following pollutants: nitrogen dioxide (NO_2), Ozone (O_3), Carbon Monoxide (CO) and Particulates (PM_{10}). The results of the air quality monitoring data can be found on:

http://www.richmond.gov.uk/historical_air_quality_monitoring_data.htm and
<http://www.londonair.org.uk/LondonAir/Default.aspx>

3.23 Waste and recycling

3.21.1 The London Borough of Richmond is a Waste Collection Authority and part of the West London Waste Authority (WLWA), which is the authority responsible for its waste collection, disposal and recycling. The other boroughs in the WLWA are Brent, Ealing, Harrow, Hillingdon and Hounslow. These boroughs along with Old Oak Common and Park Royal Development Corporation have adopted the joint West London Waste Plan (2015). This Plan identifies sites for the wide range of waste facilities needed to manage the waste produced in West London up to 2031.

3.21.2 Arisings of local authority collected waste in the WLWA in 2013/14 is 653,598 tonnes, down from the 733,313 tonnes in 2008/09.

Household Waste

3.21.3 Household waste accounts for around 600,000 tonnes or 87% of local authority collected waste arisings in the WLWA. Household waste in Richmond upon Thames accounted for around 77,000 tonnes of the WLWA total. The household waste collected per person in London has fallen by 13 per cent over the last four years, from 451 kg in 2006/07 to 391 kg in 2009/10. In Richmond upon Thames the household waste

collected per person per year increased by four per cent between 2006/07 and 2008/09. It rose from 432 kg per person to 451 kg per person, but then fell back to 403 kg (see Table below). Collected household waste per head has therefore remained fairly constant despite an increase in 2007/08 and 2008/09 (Defra, 2010).

Year	Collected household waste per person (Richmond upon Thames)	Collected household waste per person (London)
2006/07	432 kg	451 kg
2007/08	435 kg	444 kg
2008/09	451 kg	410 kg
2009/10	430 kg	391 kg
2010/11	422 kg	
2011/12	393 kg	
2012/13	403 kg	

Table 33: Household waste collections; Source: Defra

Landfill

3.21.4 There has been an overall reduction in the amount of local authority collected waste sent to landfill in recent years; from 79% in 2005/06 to 56% in 2010/11. However, landfill remains the primary waste disposal method used by the WLWA (Defra, 2011).

3.21.5 In 2009/10 the WLWA sent 289,128 tonnes of biodegradable municipal waste (BMW) to landfill. This is less than its target of 329,450 tonnes by 2009/10 under the Landfill Directive. The amount of BMW sent to landfill has fallen by 149,289 tonnes since 2005/06 (Environment Agency, 2010). Despite the improvement in recent years there needs to be a diversion of waste going to landfill to alternative methods of disposal.

Recycling and composting

3.21.6 There is a kerbside recycling collection for residential properties and recycling facilities are situated throughout the borough. Sites are available to recycle a range of materials, including glass bottles, newspapers, cans, books, textiles, aluminium and green waste.

3.21.7 Currently around 36 per cent of waste in the borough is recycled mainly at the Townmead Road waste transfer station in Kew. Once waste has been collected it is delivered to WLWA's Transport Avenue waste transfer station located in Brentford. The waste is compacted into ISO containers and loaded on to the railway and then taken by the Authority's rail transport contractor, EWS Ltd, for final disposal to a landfill site known as Sutton Courtenay, Oxfordshire operated by Waste Recycling Group PLC.

3.21.8 Recycling and composting of local authority collected waste in the WLWA increased from 21% in 2005/06 to 36% in 2009/10. Richmond upon Thames has one of the highest household recycling and composting rates in London, ranking 5th in 2010/11, at 43%. In 2009/10 it had the fourth highest rate in London, the same position it held in 2008/09, but down from third in 2007/08. The current rate of 43% is significantly higher than the London average of around 32%, and the WLWA rate of 38% (see Figure below). (Defra, 2010)

3.21.9 The household recycling and composting rate has increased steadily since 2000/01, aided by significant increases in composting. The 2010/11 rate can be split into 30% dry recycling and 13% composting (Defra, 2011).

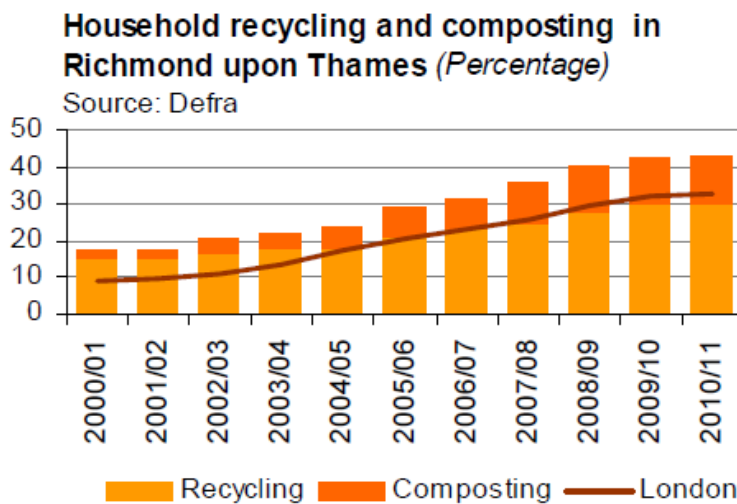


Figure 20: Household recycling and composting in Richmond upon Thames (Percentage); Source: Environment Agency, Defra

Hazardous waste

The volume of hazardous waste arising in Richmond upon Thames in 2010 was 2,295 tonnes. This accounted for less than 1% of all London's hazardous waste (Environment Agency, 2010). The primary disposal method was 'waste transfer', which was the fate of 51% of the borough's hazardous waste. This was closely followed by 'recycling and reuse' (28%).

Further information including detailed statistics on waste can be found on Defra's website: <http://www.defra.gov.uk/statistics/environment/waste/> and on the West London Waste website: <http://www.westlondonwaste.gov.uk/>.

3.24 Historic environment

Historical Context

3.22.1 Historically Richmond upon Thames attracted royalty as the Royal Parks and Hampton Court Palace testify. The royal connections to Richmond date back to Edward I (1272-1307), when the area was known as the Manor of Sheen. The various royal palaces at Richmond, Kew and Hampton Court were refuges for pleasure and from plague. In 1637 Charles I created a new park to continue his passion for hunting and field sports. This new park, Richmond Park, was given to the City of London after Charles I's execution. In 1683 the Earl of Rochester rebuilt Petersham Lodge into a mansion with a formal forest garden of walks and vistas on the hillside. Riverside villas and mansions expanded in the second decade of the 18th century based on the ideal of the villa as a classical retreat for man from the court and city. Henry the Eighth resided in Hampton Court Palace with five of his six wives, and his daughter Queen Elizabeth I lived in Richmond Palace. The areas around Richmond Town and Twickenham were home to many wealthy people, including, for example, Horace Walpole, who built Strawberry Hill House. In 1827, Queen Victoria opened Hampton Court and Bushy Park to the public

and by 1841 the two gardens of Kew were merged to form the Royal Botanic Gardens, Kew which were then opened to the public. Many of these historic houses and gardens are now within public ownership and many are undergoing restoration projects including Strawberry Hill House and Marble Hill House.⁵³

Heritage and designations

3.22.2 Today, the borough has 72 designated Conservation Areas⁵⁴. Each area is accompanied by a Conservation Area Statement, which explains why and when it was designated, plus a short history and a map showing the boundary. The borough's Conservation Area Statements and Studies include details of many of the most impressive buildings and include audits of streetscape items of heritage or aesthetic value in each area. There are also many protected trees within Conservation Areas and with Tree Preservation Orders.

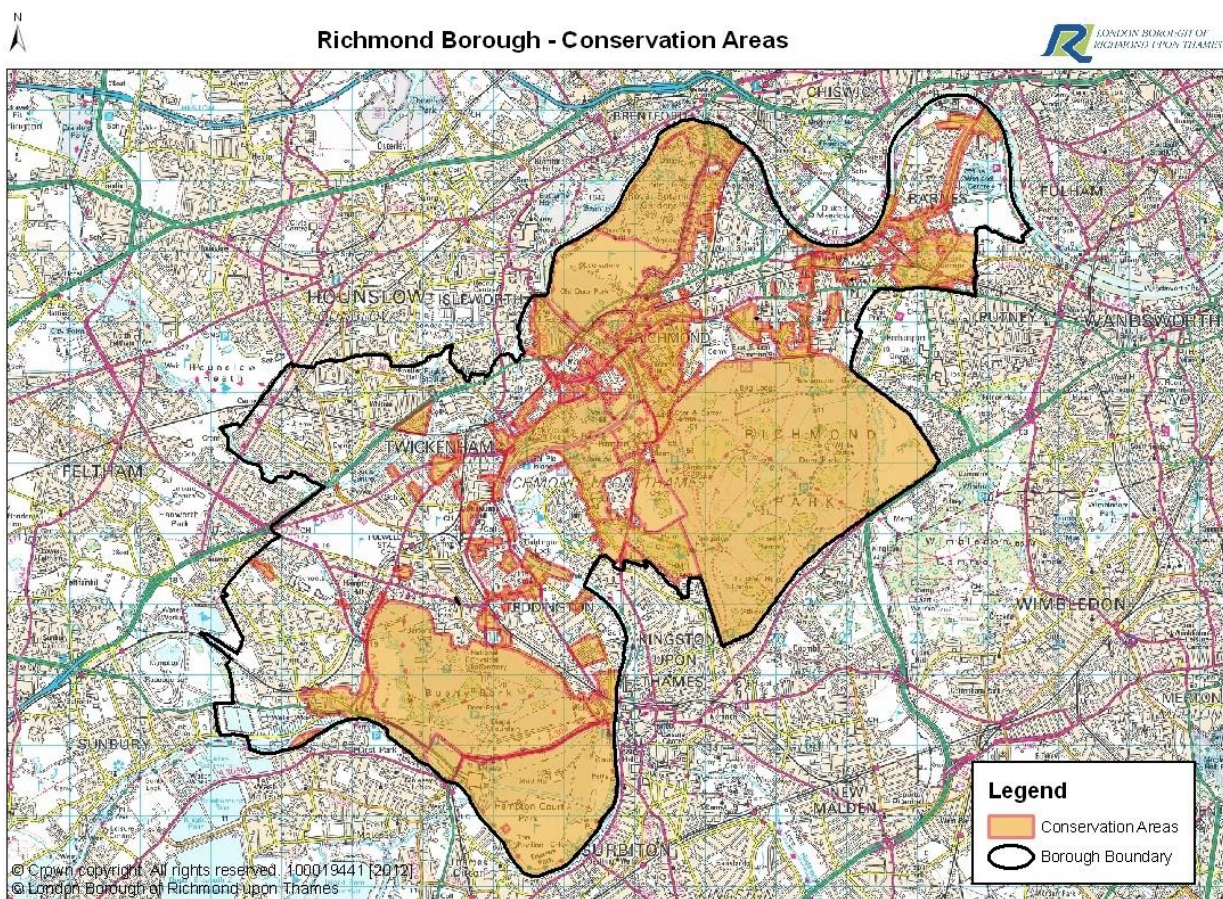


Figure 21: Designated Conservation Areas in the London Borough of Richmond; Source: LBRuT

3.22.3 Richmond upon Thames has the richest historic environment outside central London with approximately 1,600 listed buildings⁵⁵. A listed building is a building that has been designated as being of special architectural or historic interest. It is included in a list that is prepared by the Secretary of State for Culture, Media and Sport. Historic England, the

⁵³ All London Green Grid – Arcadian Thames Framework, Design for London, 2012

⁵⁴ Further information on the Borough's Conservation Areas and Conservation Area Statements: http://www.richmond.gov.uk/conservation_area_appraisals_and_management_plans

⁵⁵ Further information on the Borough's Listed Buildings: http://www.richmond.gov.uk/listed_buildings

National Trust and the Historic Royal Palaces all own properties within the borough. The heritage attractions within the borough include Hampton Court Palace, Ham House, Strawberry Hill House, Garrick's Temple to Shakespeare, Kew Palace, Marble Hill House and Richmond Theatre.

- 3.22.4 There are also four Scheduled Ancient Monuments in the borough; they include: The Brew House in Bushy Park; Ham House; Hampton Court Palace; and Kew Place. Royal Botanic Gardens Kew was inscribed on the UNESCO World Heritage Site List in 2003. In addition, there are 14 open spaces on the Historic England register of historic parks and gardens, including Richmond Park, Bushy Park, Hampton Court Park, Royal Botanic Gardens Kew (including Old Deer Park), Ham House, Marble Hill House, Strawberry Hill, Hampton Court House, Richmond Terrace Walk, Pope's Garden, York House Gardens, Terrace Gardens and Buccleugh Gardens (Richmond Hill) and Teddington Cemetery.
- 3.22.5 Richmond Borough contains an elaborate network of framed view lines, avenues and vistas along and from the River Thames and Richmond Hill. This visual network gradually evolved from the early 17th century, formed by key landmarks such as palaces, villas, the Royal Observatory, Kew Pagoda, obelisks, bridges, church towers and spires, and the planted avenues which still provide definition and structure to the landscape today. In the 18th century framed vistas directed from Richmond Hill were created, one looked down to the grand avenue of Queen's Ride to White Lodge, a hunting lodge built for King George I. The other looked out from King Henry's Mound across London to St Paul's Cathedral. This view towards St Paul's Cathedral is now one of London's strategic views, protected by government directive. The figure below provides an overview of the borough's network of protected views and vistas.

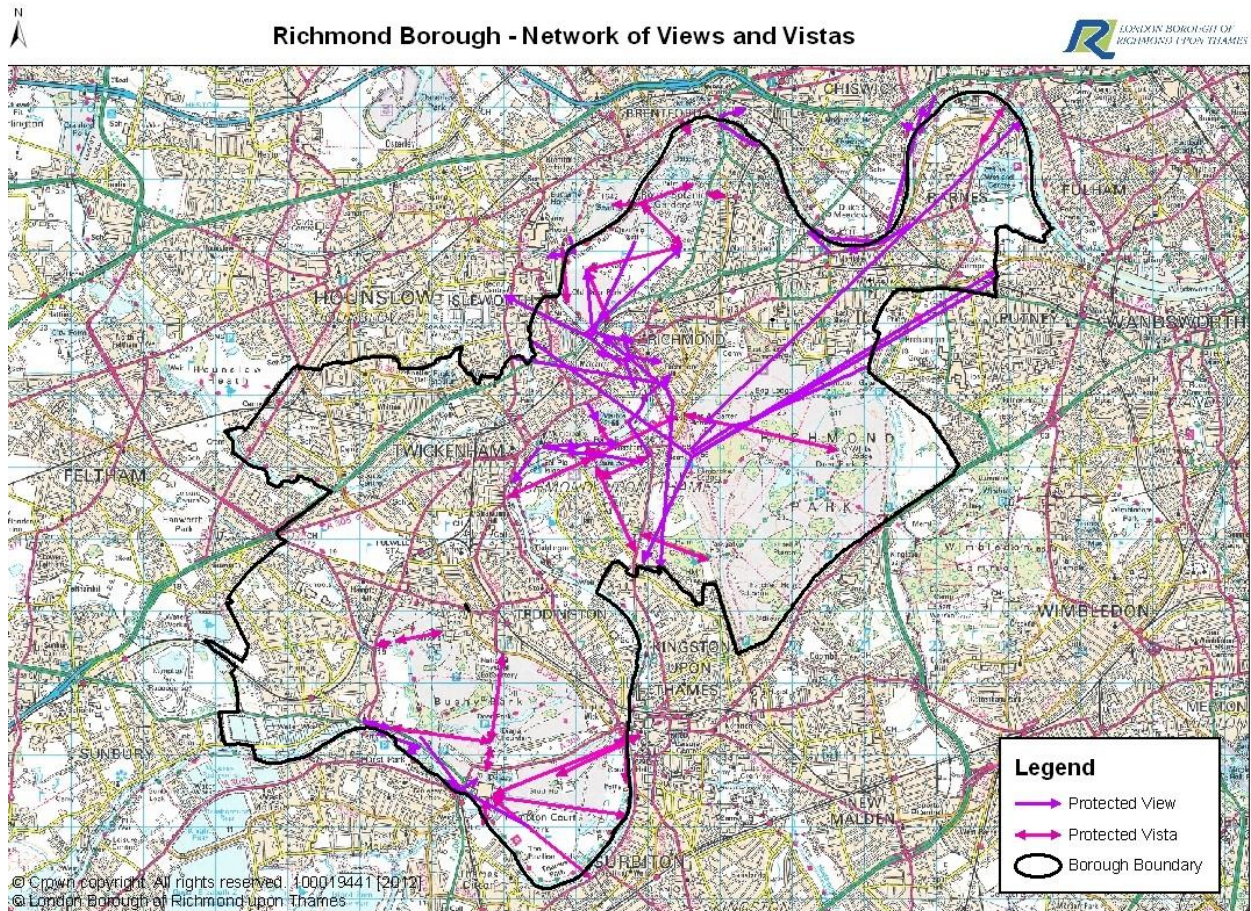


Figure 22: Richmond Borough's network of designated Views and Vistas; Source: LBRuT

3.22.6 Within the borough there are many buildings that due to their historical associations, architectural style, visual interest or siting within an area, are of significance to the history and character of the local environment. However, they may not possess sufficient interest to warrant statutory listing as being of 'special architectural or historic interest'. Instead the Council may, following consultation with owners, designate them as Buildings of Townscape Merit (BTM), the majority of which can be found in the 72 Conservation Areas. BTMs are buildings, groups of buildings or structures of historic or architectural interest which have been identified as contributing significantly to the townscape but are not on the statutory list. Many different types of buildings are now designated as BTM (over 4,000 in this borough), ranging from houses and cottages to shops, churches, public buildings, railway stations and industrial premises.

3.22.7 In addition, the borough's exceptional links to artistic, literary and sporting cultural heritage are also relevant and should be recognised. For example, the Blue plaques (such as that to Virginia Woolf) and other key locations such as Pope's burial location, Turner's House and Eel Pie Island are of importance within this borough.

Heritage at Risk

3.22.8 According to the Heritage at Risk Register⁵⁶, there are 12 entries:

⁵⁶ Heritage at Risk Register, Historic England : <http://www.english-heritage.org.uk/caring/heritage-at-risk/>

- Sandycombe Lodge, 40 Sandycombe Road, Twickenham, Richmond upon Thames, Greater London
- Pope's Grotto in grounds of Radnor House School, Cross Deep (east side), Twickenham, Richmond upon Thames, Greater London
- Temperate House, Royal Botanical Gardens, Kew, Richmond upon Thames, Greater London
- Garrick's Villa, Hampton Court Road, Hampton, Richmond upon Thames, Greater London
- Air Raid Shelter, St Leonard's Court, St Leonard's Road, East Sheen, Richmond upon Thames, Greater London
- Boat house No. 5 (easternmost 13 bays), Platts Eyot, Hampton, Richmond upon Thames, Greater London
- Doughty House, 142 Richmond Hill, Richmond upon Thames, Richmond upon Thames, Greater London
- The Gallery at Doughty House, 142 Richmond Hill, Richmond upon Thames, Richmond upon Thames, Greater London
- Loggia and grotto in grounds of Thames Eyot, Cross Deep, Twickenham, Richmond upon Thames, Greater London
- Platt's Eyot, Richmond upon Thames, Greater London – Conservation Area at Risk
- The Church of St Michael and St George, Wilcox Road, Richmond upon Thames, Greater London
- Wick House, Richmond Hill, Richmond upon Thames, Greater London

Heritage and trans-boundary issues

3.22.9 The Sustainability Appraisal takes a slightly wider view in relation to the historic environment and heritage assets and therefore trans-boundary issues are also being considered. It is important to have an understanding of these trans-boundary issues, particularly for any heritage assets that are located near or adjacent to the borough boundary or that are located just outside the borough. Proposals for sites within LB Richmond could potentially affect neighbouring authorities' heritage assets, including their setting, and vice versa. For example, the Royal Botanic Gardens of Kew World Heritage Site has a buffer zone, which falls partly within the neighbouring borough of Hounslow. In addition, Hounslow has a range of highly significant heritage assets close to the borough boundary, such as Syon House, Syon Park and Duke's Meadows near Chiswick. The Royal Borough of Kingston upon Thames also has highly significant heritage assets, such as the Clattern Bridge. Many nationally and regionally important heritage assets are located along/near to the River Thames in this part of London; they are also recognised in the Thames Landscape Strategy.

Archaeology

3.22.10 There are large areas within the borough where archaeological potential exists, such as Kew Gardens, Richmond Park, parts of Ham and Petersham, Hampton Court and Bushy Parks, parts of Twickenham riverside and Richmond town. Specialist bodies, normally Historic England⁵⁷ and the Greater London Archaeological Advisory Service⁵⁸, provide advice and guidance on areas where archaeological potential exists.

⁵⁷ www.historicengland.org.uk

⁵⁸ www.historicengland.org.uk/services-skills/our-planning-services/greater-london-archaeology-advisory-service/

3.22.11 Archaeological Priority Areas are areas with known potential for archaeological remains. They are identified using historical information on finds and current archaeological knowledge by Historic England and provided to the Council for planning purposes. These areas help protect archaeological remains that might be affected by development. The map below shows the areas identified as having archaeological potential.

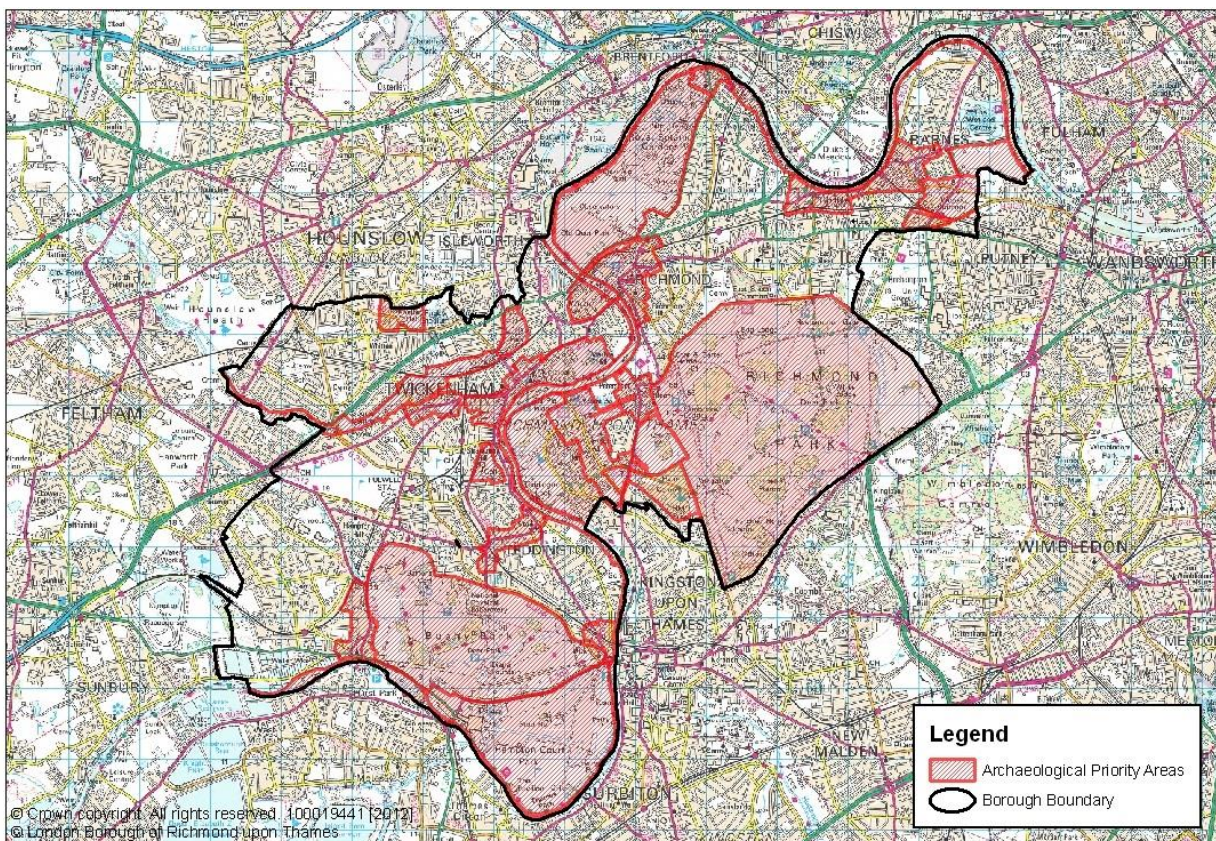


Figure 23: Archaeological Priority Areas within Richmond Borough; Source: Historic England

3.25 Environmental quality

3.23.1 In autumn 2012, an environmental quality survey of the main town centres in the borough (i.e. Richmond, Twickenham, Teddington, East Sheen, and Whitton) as well as the local centre Barnes was carried out. The following provides a summary of the environmental quality survey:

Richmond Town Centre

3.23.2 Overall, Richmond town centre has a number of open spaces, including three sites designated as Other Open Land of Townscape Importance, two Public Open Spaces as well as designated Metropolitan Open Land. Richmond riverside with its towpath is an important open area for this town as it provides a significant amount of high quality open space for recreation. No part of the town centre is within an Area poorly provided with Public Open Space. The town centre is rich in historic assets; it is the borough's town centre with the largest amount of Listed Buildings (106 Grade II, 12 Grade II*) and Buildings of Townscape Merit (297). In addition, it is also the only town centre in this

borough that is fully covered by Conservation Area designations (six different Conservation Areas cover various parts of the town), which is a reflection of the town centre's historic environment. Parts of Old Deer Park, a Registered Park and Garden, is also within the town centre boundary. An important factor to be considered in the environmental quality assessment of a town centre is the air quality. As Richmond town centre has the most urban areas of this borough, the air quality significantly exceeds the objective in most locations. There are five diffusion tubes within the town centre, whereby the worst air quality has been measured in George Street, followed by Hill Street, Red Lion Street and the Quadrant; Paradise Road shows the best air quality results in this town centre, which only slightly exceeded the objective.

- 3.23.3 For the purpose of the environmental quality survey, Richmond town centre has been sub-divided into eight areas: (1) Richmond Hill, (2) Riverside, Whittaker Avenue, Heron Square (3) Police station, bus station, cinema (4) George Street, Paradise Road, south of Sheen Road and Duke Street (5) Back areas of George Street and The Quadrant, including Ambassador House, Magdelene's Church (6) The Quadrant, north of Sheen Road and Duke Street (7) Richmond station and surroundings and (8) Parkshot / RACC, Kew Road, St Johns Road. See Appendix 4 for a map of the areas that have been surveyed.
- 3.23.4 **Richmond Hill (Area 1)** is despite the traffic-related issues (e.g. narrow roads, constrained parking) of very high environmental quality, with good quality and provision of vegetation/tree planting. There may be some room for environmental improvements, but this area is constrained due to its sloping nature. With the exception of Petersham Road, the roads and particularly the pavements are very narrow (especially along Hill Street) and somewhat uneven. There are no problems with street clutter, litter or fly-posting and graffiti. Overall, despite the congested and narrow roads, this area has a pleasant and nice atmosphere, including some very unique shops.
- 3.23.5 The **riverside area and its surroundings (Area 2)** have a very pleasant and welcoming atmosphere, offering a quiet retreat from the busy town centre. With the exception of some poor paving along the Riverside, which is in significant need of resurfacing, the condition and quality of the pavements and roads are good. There are no problems with litter, fly-posting, graffiti and fly-tipping, but there is some slightly dilapidated street furniture (e.g. benches) at the riverside.
- 3.23.6 The area by the **police station, bus station and cinema (Area 3)** is heavily influenced by traffic, in particular buses, and thus also very noisy. There is limited scope for planting along Hill Street, but trees and vegetation can be found around the bus and police station. There is generally good design and public realm quality, with the exception of some small areas e.g. parts of Castle Yard and there no problems with street clutter, litter, fly-posting, graffiti and fly-tipping.
- 3.23.7 **George Street (Area 4)** is also impacted by heavy traffic, noisy and busy; however it provides a very good environment for pedestrians with passageways and connections. At the time of the survey, paving works were still undertaken along Eton Street; George Street had already been resurfaced. Despite the limited scope for planting/vegetation, there are some mature trees and other tree planting in this area. There are no problems with street clutter, litter, fly-posting, graffiti and fly-tipping; however, there seems to be insufficient provision in street furniture (i.e. benches). Overall, this is an area of high aesthetic quality, offering a nice and pleasant environment.

- 3.23.8 The **back areas of George Street (Area 5)** are characterised by residential/gated developments with good passageways for pedestrians. In comparison to George Street, the paving and its quality is not as good and some uneven parts along Sheen Road are in need of resurfacing. There are no problems with street clutter, litter, fly-posting, graffiti and fly-tipping; however, there could be more provision of street furniture (i.e. benches) in the courts/open spaces. Very mature trees and street trees can be found in this area, which add together with the good design and welcoming atmosphere to the generally high environmental quality of this part of the town.
- 3.23.9 The **Quadrant (Area 6)** is like George Street also heavily impacted by traffic, therefore very busy and noisy. At the time of the survey, the road and pavements were about to be resurfaced as part of the Richmond Town Centre scheme. There are very minor issues with litter and no problems in relation to fly-posting, graffiti and fly-tipping. Despite the limited scope for planting and trees, the widened footways, high quality materials, removal of street clutter and improvements to the street furniture will ensure this part of the town centre is also of high design and public realm quality.
- 3.23.10 The busiest and most urban part of the town centre is the area of **Richmond Station (Area 7)**, which is characterised by very heavy traffic in a very constrained space, making it a very difficult environment for pedestrians. There is currently no tree planting in this area and the surfacing is very poor, but at the time of the survey, the roads and pavements were about to be resurfaced as part of the Richmond Town Centre scheme. There are some litter problems outside the station entrance, including fly-posting and graffiti, and the street furniture is insufficient and of poor quality. Overall, the public realm and environmental quality of this part of the town is very poor.
- 3.23.11 The **Parkshot site and Old Deer Car Park (Area 8)** are very different in terms of their atmosphere and environmental quality when compared to the parts of the town along the main road. There is good provision and quality planting/soft landscaping, but some surfaces are in need of repair. There are some litter problems in the car park and near the railway tracks, but there are no incidents of fly-posting, graffiti or fly-tipping. Overall, this area has a secondary town centre role (i.e. car parking, education) and its environmental quality is generally good.

Twickenham Town Centre

- 3.23.12 Overall, Twickenham town centre has 5 designated Public Open Spaces and 5 sites designated as Other Open Land of Townscape Importance, including some Metropolitan Open Land along the River Crane and River Thames. The town centre is also rich in historic assets with 35 Listed Buildings, 132 Buildings of Townscape Merit and a registered Historic Park & Garden (York House). In addition, approximately one third of the town centre falls within three different Conservation Areas. As Twickenham town centre has some very urban areas, the air quality exceeds in most locations the objective. There are three diffusion tubes within the town centre, whereby the worst air quality has been measured in King Street, followed by Heath Road and Civic Centre, which all have levels above the objective.
- 3.23.13 The environmental quality of Twickenham town centre has been assessed by dividing the centre into eight areas: (1) Heath Road, (2) King Street, Cross Deep, (3) Church Street, Twickenham riverside, embankment, (4) York Street, back of Church Street, (5)

Civic area, York House and Gardens, including Champions Wharf, (6) London Road (south of Regal House), York Street, Arragon Road, (7) Twickenham station and surroundings, including Regal House, and (8) Holly Road, including car park and Queen's House. See Appendix 4 for a map of the areas that have been surveyed. It should be noted that Twickenham is subject to the Twickenham Area Action Plan, which sets out policies, proposals and improvements for the town centre.

- 3.23.14 The western end of the town centre, **Heath Road (Area 1)** has been subject to a streetscape upgrade in 2004 and thus the paving, conditions and quality of pavements, roads and street furniture is generally good, with the exception of some patchy parts and forecourts that are at different heights. The traffic along Heath Road can be very heavy at times but there are several designated pedestrian crossings. There were no fly-posting or graffiti issues, but some minor litter and fly-tipping problems. Despite several green boxes, signs, boards etc., the area does not feel too cluttered. Overall, the environmental quality of this area is good with well positioned trees and good public realm; exceptions are the underpass at the end of Heath Road that feels slightly unpleasant and some dilapidated sites and shopfronts that need attention.
- 3.23.15 The **core of Twickenham (Area 2)** is pivotal in the town centre but it is heavily impacted by motorised traffic (particularly cars and buses). The environment for pedestrians is very unfriendly; there are some dangerous crossing points and pavements are of insufficient width, particularly by the bus stops and green grocer. There is very limited planting and street tree provision, thus providing a poor contrast to Heath Road. There are also lots of clutter and litter problems as well as some minor fly-posting/graffiti and fly-tipping issues. The majority of the street furniture is old and outdated, with the exception of the newly installed lighting and bus shelters. Overall, this area has a down market feel and the design and public realm of this area is of generally poor.
- 3.23.16 **Twickenham riverside, the embankment and Church Street (Area 3)** provide a stark contrast to the core of the town centre. Despite some congested and narrow lanes with insufficient vegetation, there are good passageways for pedestrians. Part of the embankment has recently been upgraded and is very welcoming and pleasant with good quality tree planting and soft landscaping; the other part is in need of upgrading. Church Street is considered to be the best townscape in Twickenham. No litter, fly-posting, graffiti, fly-tipping or street clutter problems were recorded, and the provision and quality of street furniture is good. Despite the area being impacted by traffic and car parking, it offers a retreat from the much busier core retail area.
- 3.23.17 The environmental quality of **York Street and back areas of Church Street (Area 4)** is reasonable, despite the area being impacted by traffic and containing some dull parts behind the shops. Some pavements are of insufficient width (e.g. by Barclays Bank) and there are some dangerous crossing points (pedestrian and vehicular conflicts). There is very limited tree planting and some of the street furniture is outdated (e.g. old railings). There are no significant issues in relation to street clutter, litter and no problems with regard to fly-posting, graffiti or fly-tipping.
- 3.23.18 The **civic area, York House and its Gardens (Area 5)** are considered to be very pleasant areas, with lots of parks and open spaces and some high quality historic buildings. Champions Wharf is however in need of upgrading and currently subject to a

Parks Improvement Programme. There are no issues in this area regarding litter, fly-tipping and street clutter.

3.23.19 **London Road (Area 6)** is a very busy, noisy and traffic-impacted environment. There is limited street tree planting, except outside Waitrose and some new landscaping by Premier House. Whilst the majority of pavements in Arragon Road have been resurfaced, the paving along London Road is very patchy and in need of upgrading. The street furniture is generally of moderate quality and London Road in particular has some street clutter problems (e.g. railings, green boxes, signs, board, adverts etc). Overall, the environmental quality of the area is moderate; there are some poor quality buildings along London Road and the open space in Garfield road is also very poor (this is now subject to a Parks Improvement Programme).

3.23.20 **Twickenham station and surroundings (Area 7)** is also very busy and traffic-dominated, with unpleasant noise levels. The pedestrian environment is unfriendly due to some difficult crossings, pavements of insufficient width and patchy surfacing. This area has litter problems and some graffiti was recorded on the station building. The street furniture is generally of poor quality and there is lots of street clutter, including cycles chained to railings that cause obstructions to pavements. Overall, the area feels somewhat unpleasant due to poor quality buildings (e.g. station, sorting office), neglected areas such as Station Yard and moderate public realm quality.

3.23.21 **Holly Road (Area 8)** is mainly a service area and plays a secondary town centre role. The road and pavements are very narrow and patchy. Given the constrained area, the vegetation and landscaping is generally good, particularly Holly Road Garden of Rest, which features some very mature trees. There are some major litter issues along the road as well as in Holly Road car park, which is the only area in this part of the town that has recently been resurfaced. On the day of the survey, fly-tipping was also recorded. Overall, there are some dilapidated buildings, “untidy” areas, particularly at the rear of buildings/shops, and therefore the area is rather unpleasant.

Teddington town centre

3.23.22 Overall, Teddington town centre has 3 designated Public Open Spaces and 5 sites designated as Other Open Land of Townscape Importance; a very small area in the west of the town is in an Area poorly provided with Public Open Space. The town centre has some historic assets (11 Listed Buildings and 108 Buildings of Townscape Merit); two Conservation Areas cover the eastern part of the town centre. In comparison to the other larger town centres, the air quality is reasonable in Teddington. There are four diffusion tubes within the town centre, whereby the worst air quality has been measured in Broad Street, followed by High Street – at both locations the levels exceeded the objective. However, the monitors in Queen’s Road and The Causeway showed results that have met the air quality objective.

3.23.23 The environmental quality of Teddington town centre has been assessed by dividing the centre into seven areas: (1) Memorial Hospital, Methodist Church, (2) Broad Street, (3) The Causeway, Church Road, (4) Station and surroundings (Station Road), (5) Waldegrave Road, (6) High Street, including Vicarage Road, and (7) Lower end of High Street and Ferry Road. See Appendix 4 for a map of the areas that have been surveyed.

- 3.23.24 The western part of the town centre, **Memorial Hospital and Methodist Church (Area 1)**, is a very pleasant area despite the busy junction. There is a good choice and provision of vegetation and soft landscaping; paving and road surfacing is generally of good quality. No problems have been recorded in relation to litter, fly-posting, graffiti or fly-tipping. The area does not feel cluttered and there is a good provision of street furniture, although some of it is slightly dated.
- 3.23.25 **Broad Street (Area 2)** is characterised by a busy road with lots of parking and loading activities. The paving and surfacing materials are very patchy and in need of repair at some locations; repaving is underway in some parts. There is limited scope for soft landscaping and tree planting. The area generally does not feel too cluttered and the provision and choice of street furniture is considered to be reasonable; the Council will look at replacing street furniture, subject to funding. Some minor issues were recorded in relation to litter and fly-tipping. Overall, despite the traffic impacts, this is considered to be a very busy and vibrant area with very few empty shops.
- 3.23.26 **The Causeway (Area 3)** is also characterised by a busy junction. There are currently repaving and repair works being carried out in this area. There is good provision of street trees and soft landscaping, including street furniture in this area. The Council will look at replacing street furniture, subject to funding. There are no associated problems with litter, graffiti or fly-tipping and overall, this is a very pleasant area given the traffic related impacts.
- 3.23.27 **Teddington Station and its surroundings (Area 4)** is a pleasant area with high environmental quality, a newly designed roundabout, new road surfacing on the main road and good quality and provision of trees/vegetation. Some sections off the main road are very patchy and in need of repair; this also applies to the tree-root-damaged pavement sections leading towards the station. There is good quality provision of street furniture and no issues have been recorded in relation to graffiti, fly-tipping or litter (except some minor incidents in the open space area).
- 3.23.28 **Waldegrave Road (Area 5)** is a very wide and busy road with lots of mature street trees and soft landscaping. Although the road is very patchy and some pavements are very narrow and damaged by tree roots, this is generally a pleasant area, with a small public space and good quality provision of street furniture.
- 3.23.29 **Teddington High Street (Area 6)** is a very pleasant area with high environmental quality, good quality provision of street trees and hanging baskets. The street furniture is of good quality and generally the area does not feel cluttered. Overall, the pavements are wide with the exception of some narrow sections and some minor damages to the surface. There are no problems associated with litter, fly-posting, graffiti or fly-tipping in this area.
- 3.23.30 The **lower end of the High Street and Ferry Road (Area 7)** is less busy and congested in comparison to the High Street, although the junction of Ferry Road and Kingston Road does lead to some build up of traffic. Whilst there are a number of signs and adverts near the Arts Centre, the area does not feel cluttered and has no litter, graffiti or fly-tipping problems. Overall, this part of the town is very pleasant due to its street trees, landscaping, wide pavements, open spaces and interesting buildings, and therefore considered to be of very high environmental quality.

East Sheen town centre

- 3.23.31 East Sheen town centre has no Public Open Spaces or other spaces designated for their local value/importance; approximately half of the town centre is within an Area poorly provided with Public Open Space. Some parts of the town centre fall within designated Conservation Areas, and there are also some historic assets (3 listed buildings and 109 Buildings of Townscape Merit). Four air quality analysers measure the air quality in the town centre, whereby three of them recorded levels that exceeded the air quality objective.
- 3.23.32 The environmental quality of East Sheen town centre has been assessed by dividing the centre into five areas: (1) Western part of Upper Richmond Road West, (2) Upper Richmond Road West core retail area, including Waitrose, (3) Sheen Lane and Mortlake Station approach, (4) Upper Richmond Road West (east of Sheen Lane), Sheengate Mansions, and (5) East Sheen – Mortlake Station and surroundings. See Appendix 4 for a map of the areas that have been surveyed.
- 3.23.33 In general, **Upper Richmond Road West (Areas 1, 2 and 4)** is a very busy road (TfL Red Route), and thus the centre is very impacted by traffic with lots of traffic-related noise, including noise from aircrafts. The core retail area (Area 2) has a very busy junction, providing extended waiting times for pedestrians to cross the road. However, given the constrained nature of the main road, there are many street trees (including some newly planted trees), some landscaped front gardens (particularly in Area 1) and hanging baskets, thus making the area quite pleasant. In general, the main road has been newly resurfaced within and to the west of the core retail area; the eastern part of Upper Richmond Road West is somewhat patchy and in need of repair. The pavements are of sufficient width for pedestrians and the buildings are generally of good design (there are only very few empty properties that may have an impact on the aesthetics of the area). There are only some very minor litter issues and fly-posting as well as fly-tipping has only been recorded as isolated incidents in the western part (Area 1). The street furniture has been upgraded (e.g. new benches) along the main road in the core retail area and to the west of it; in comparison, the eastern part of the road has poorer quality and less street furniture. There are planned improvements to Milestone Green (the public space by the war memorial), which has currently some outdated street furniture and paving. In general, the area along the main road does not feel cluttered, although there are some minor issues in relation to boards, signs, mobile access ramps to shops etc. Overall, Upper Richmond Road West, albeit very impacted by traffic, has a welcoming and pleasant environment.
- 3.23.34 **Sheen Lane and the approach to Mortlake Station (Area 3)** is less impacted by traffic in comparison to the main road, but is somewhat congested due to level-crossing downtimes at the station. This area provides a mixed picture in terms of vegetation/landscaping and paving; Sheen Lane Centre benefits from good provision of quality landscaping, including good paving and good quality street furniture, whereby along Sheen Lane the condition of the paving/surfacing is poorer and the vegetation is less, although there are still some mature trees along the road. There were generally no issues relating to fly-posting/graffiti and fly-tipping, and only some minor litter problems in the rear car park and some clutter along the road. Overall, the area is of good environmental quality, whereby the area along the road feels slightly unpleasant in comparison to the area by Sheen Lane Centre, which has very good public realm quality.

3.23.35 **Mortlake station and its surroundings (Area 5)** are heavily affected by the level-crossing downtime, which has knock-on impacts on the traffic along Sheen Lane, making the area feel very congested. Issues in relation to parking including insufficient parking spaces were also recorded. The roads and pavements are very patchy and there are lots of uneven surfaces, thus impacting on the public realm quality of the area. There is hardly any vegetation or soft landscaping; despite the constrained area, there is considered to be scope for some planting. Issues in relation to litter and street clutter were very minor, and no fly-posting/graffiti or fly-tipping has been recorded. The area is heavily affected by noise from trains, traffic (including stationary traffic) as well as aircraft. Overall, this area has in comparison to the other parts of the town centre the poorest environmental quality.

Whitton town centre

3.23.36 Overall, Whitton town centre has no Public Open Spaces or other spaces designated for their local value/importance; the majority of the town centre is within an Area poorly provided with Public Open Space. In comparison to other town centres, there are no historic assets in Whitton (except 1 Building of Townscape Merit) and no area of Whitton falls within a Conservation Area. There is one air quality analyser within the designated town centre boundary, which shows that the levels have exceeded the air quality objective.

3.23.37 The environmental quality of Whitton town centre has been assessed by dividing the centre into three areas: (1) Station surroundings, (2) High Street and (3) Telephone exchange, car park and library surroundings. See Appendix 4 for a map of the areas that have been surveyed.

3.23.38 The area at and surrounding **Whitton station (Area 1)** is generally of poor environmental and public realm quality, partly due to the poor quality design of the station building but also due to the constrained road layout and railway tracks underneath the road. There are hardly any street trees or other vegetation, but there is limited scope for additional planting. There are some problems associated with litter and the area has a slightly cluttered feel (green boxes, signs, adverts etc.). The environment for pedestrians is generally good, but the pavements as well as the roads are patchy/partly damaged and therefore in need of repair.

3.23.39 **Whitton High Street (Area 2)** is overall considered to be pedestrian-friendly due to the designated crossings and wide pavements. However, the surfaces of both pavements and roads are somewhat damaged and in need of repair. With the exception of some litter near bins, there are no problems in relation to fly-posting, graffiti and fly-tipping. In general, the High Street can be fairly impacted by traffic, and coupled with some poor quality design buildings and lack of public open spaces, the environmental and public realm quality is considered to be moderate to poor. There may be some scope for more street furniture in terms of new benches. Of note are the recently installed new lighting columns, which add to the aesthetics of the area. The High Street will be subject to a major street scene improvement project, which will include the repaving of footways, forecourts, street furniture enhancement and tree planting.

3.23.40 The areas off Whitton High Street, which include the **telephone exchange site, the car park and the library (Area 3)**, differ largely from the High Street. The back areas,

such as the service areas of the shops and the telephone exchange site, feel unpleasant. There are some significant litter problems, some fly-posting/ graffiti as well as dumped waste in the back roads. There is some soft landscaping at the car park and library. With the exception of the car park, the remaining surfacing is in need of repair. Overall, due the very poor quality of some of the rear buildings, including the run-down toilet facilities and litter problems, the public realm and environmental quality of this part of the town is very poor.

Barnes local centre

- 3.23.41 Overall, the assessed areas in Barnes have very limited amount of open spaces within them, but some major open spaces, such as Barnes Green and Barn Elms Playing Fields, are nearby and very close to the centres. The majority of the areas making up the Barnes local centre are within Conservation Areas and there are many historic assets, including 6 Listed Buildings and 104 Buildings of Townscape Merit. Whilst there are no air quality analysers within the designated areas, the two nearest monitors (at Castelnau Library and Wetlands Centre) show that in the past couple of years, the air quality objective has been met. In comparison to the other centres/town centres, Barnes has the best air quality.
- 3.23.42 The environmental quality of the Barnes local centre has been assessed by dividing the centre into three areas: (1) Barnes High Street, (2) Church Road, Grange Road, Kitson Road and (3) Church Road / Castelnau. See Appendix 4 for a map of the areas that have been surveyed.
- 3.23.43 **Barnes High Street (Area 1)** is of very high environmental quality, with good use of materials for surfacing and paving. There are no problems with street clutter, litter or fly-posting and graffiti. There may be some scope for more street furniture in terms of new benches. Whilst there are plenty of hanging baskets that add positively to the look and feel of the town centre, there is very limited tree planting, so there may be scope for more. Overall, although the area can be dominated by traffic, it is very pleasant with good quality design and public realm quality.
- 3.23.44 The small parade of shops at **Church Road (Area 2)** is a very pleasant and welcoming area. Whilst there is no space or scope for tree planting and other vegetation, Barnes Green is just opposite the road. This small area is generally too constrained for street furniture. At the time of the survey, there was only one empty shop in this parade, which looked a little bit run down, but generally this parade has been assessed as having a very high environmental quality.
- 3.23.45 The environmental quality of the parade/centre at **Barnes Church Road / Castelnau (Area 3)** is very similar to the other areas of Barnes. Whilst it can be somewhat impacted by traffic and the busy junction, it is very noticeable that recent improvements have been carried out. As such, the street paving, condition and quality of pavements are very good. The vegetation and landscaping is of very high quality, with plenty of hanging baskets, tree planting and the open space at St Mary's Churchyard.
- 3.23.46 These environmental quality surveys of the main town centres and Barnes date from 2012 and are the latest data available. There are, at present no plans to repeat the exercise in the near future.

3.26 Indicators

3.24.1 Generally speaking, baseline information is collected using **indicators**. Examples of indicators include the percentage of people in an area describing their health as not good or the number of unfit dwellings in a district or borough. If indicators are monitored over time, the resulting data can reveal *trends* in performance (i.e. whether something is getting better or worse). Indicator performance can also be gauged in relation to wider geographical areas (e.g. counties or regions) if comparable data is available. Indicator performance can also be assessed in relation to *targets* where these exist. Indicator data can be very useful for identifying the sustainability problems in an area to which a Local Plan may need to respond. The Authority's Monitoring Report will provide the basis for monitoring the Local Plan's effects.

3.24.2 Some baseline trends will occur in any case without the Local Plan. Some of these are listed below.

- **Increased air travel:** With potential airport expansion projects that could take place around London, the number of flights is set to increase and there will be corresponding increases in noise and emissions.
- **Vehicular emissions:** Increased efficiency of engines and emissions technology has reduced air pollution and the trend is expected to continue. However, vehicle numbers have not declined yet and if they continue to increase, pollution will begin to rise again.
- **River water quality:** The success of efforts made by the borough council to protect or increase water quality in the Thames is in part dependant on the efforts of those local authorities up stream and the efforts of the Environment Agency.
- **National and global economy:** Every local authority area contributes to the national and also to the global economy but local prosperity is in turn dependant of the state of the national as well as the global economy.
- **Population:** The total population and any influx of population into the borough will be subject to change dependant on national and global population and migration trends.

Consultation questions:

- 2) Do you agree that the baseline data collected is appropriate i.e. at the right level and sufficient coverage?
- 3) Do you know of any additional relevant baseline data, which should be added to the list?
- 4) Are there any mistakes in the data presented?

4 IDENTIFYING SUSTAINABILITY ISSUES

Task A3 Identifying key sustainability issues for the SA and Local Plan to address

- 4.1.1 The identification of sustainability issues and problems is an opportunity to define some of the key issues for the Local Plan to address⁵⁹. There are many possible sustainability issues but not all will be significant for the borough. The issues recorded are those acknowledged as a priority for the borough.
- 4.1.2 The sustainability issues confronting the London Borough of Richmond upon Thames have been identified from the following sources:
- Issues identified in review of PPPs (see Task A1);
 - Analysis of baseline data and trends (see Task A2 and Appendix 1);
 - Knowledge of officers working in the borough;
 - Previous responses on the SA Scoping Report and preliminary consultation with key organisations such as the Environment Agency, Historic England and Natural England.
- 4.1.3 The key issues are divided into the three main aspects of sustainability (Environment, Social and Economic) and are set out in the table below. It is recognised that many of the issues are cross-cutting and could have been placed under any one of the headings. However, for ease of discussion, and to link in with the sustainability objectives (identified in the Sustainability Framework – Task A4), they have been placed under one section only. As a result of the consultation on the Draft Scoping Report with the statutory bodies, some amendments may be made to the sustainability issues identified.

⁵⁹ ODPM: A Practical Guide to the Strategic Environmental Assessment Directive, 2005

Aspect	Sustainability Issue
Environment	Protection and enhancement of the natural environment and green infrastructure, including green and open spaces
	Protection and enhancement of the built environment, historic assets and heritage at risk
	High quality design and public realm
	Mitigation and adaptation to climate change, including flood risk
	Sustainable construction, energy efficiency and renewable energy
	Pollution (air, noise, water) and poor air quality
	Waste reduction, waste treatment and increased recycling
Social	Varying levels of poverty and affluence across the borough
	Lack of opportunities for the provision and adequate supply of affordable housing
	Need for housing opportunities for all
	Access to essential community facilities (health, education, local services, leisure etc)
	Creating a safe place to live
	Accessible public transport for all
Economic	Protection of employment land and premises
	Skills mismatch and small employment base within the borough
	Improve the resilience of businesses and the economy
	High car use and transport infrastructure at capacity during peak times; congestion on road network
	Need for education, training and local employment opportunities
	Protect and enhance the vitality and viability of town centre
	Adequate supply of hotels to support sustainable tourism

Table 34: List of sustainability aspects and key issues identified

- 4.1.4 The table below sources each of the sustainability issues (as set out in the table above), provides brief background information and outlines considerations to be taken forward in preparing the Development Plan Documents. It should be noted that the possible policy options or proposals for sites put forward are an initial view only. Policy options and options for sites will be developed as work on the Local Plan progresses and as information from the evidence base becomes available. The results of this consultation will help to shape the policy direction.

Consultation questions:

- 5) Do you agree that these are the key sustainability issues for Richmond upon Thames?**
- 6) Do you know of any other relevant issues, which should be added to the list?**
- 7) Are there any issues, which should be removed?**

Sustainability Issues in the London Borough of Richmond upon Thames

Sustainability Issues	Description	Possible policy option	Data Source
Environmental Issues			
Conservation and enhancement of biodiversity	<p>The borough contains some areas designated as being of international and national, regional and local importance. Most notably, Richmond Park, the Wetlands Centre, as well as Bushy and Home Park.</p> <p>Non-native invasive species introduced into the borough can damage the environment and biodiversity.</p> <p>Increased access to sensitive habitats, including designated sites, may potentially have negative impacts.</p> <p>The density of development around a park can increase its isolation resulting in a greater degree of fragmentation of the green spaces.</p>	<p>Ensure biodiversity is not adversely affected by development and enhance wherever possible. Ensure development around and in between the Royal Parks does not threaten their biodiversity value or lead to a degradation and fragmentation of the green spaces.</p> <p>Take account of the threat of non-native species when developing policies and proposals for sites.</p> <p>Whilst access to nature should be promoted, mitigation measures need to be identified for specific development schemes to mitigate any potential impacts where required.</p>	<p>Condition of SSSIs / Natural England</p> <p>Access to Nature / Natural England</p>
Conservation and enhancement of the built environment and historic assets and their settings, and heritage at risk	<p>Short-term visions for the development and demand for new housing and other needs can result in inappropriate development and demolition, which can affect the character of a historic area or individual building. Potentially, the loss of character by incremental change is the biggest pressure.</p>	<p>Continue protecting, and wherever possible enhancing, the borough's rich historic environment, including its Conservation Areas, Listed Buildings and Buildings of Townscape Merit. As and when opportunities arise, support and encourage the reduction of the number of sites at risk of loss.</p>	<p>Historic England LBRuT monitoring</p>
High quality design and public realm	<p>The quality of new developments and the quality of public realm, civic spaces and general soft/hard landscaping is of high importance to this borough.</p>	<p>Ensure development is of the highest possible design and quality that does not impact on the townscape and landscape character of the borough.</p>	<p>LBRuT monitoring</p>

Sustainability Issues	Description	Possible policy option	Data Source
Pressure for new development	<p>The riparian landscape, historic environment, proximity to good transport links and facilities make Richmond upon Thames an attractive location.</p> <p>The borough is centred around the River Thames. Four other major water courses run through the borough: River Crane, Beverley Brook, Duke of Northumberland's River and Longford River.</p> <p>There is potential for the character of the landscape and townscape to be harmfully affected by change, e.g. through insensitive housing development.</p> <p>There are 72 conservation areas, over 1,600 Listed Buildings and over 4,000 Buildings of Townscape Merit.</p>	<p>Protect and promote a high quality environment. Ensure that development needed for economic or social needs does not adversely affect the character of the borough.</p> <p>Development should be strictly restricted within 16 metres of the tidal sections of the River Thames, within 8 metres of non tidal main rivers and within 5 metres of all other watercourses (including ditches and drains).</p> <p>Direct inappropriate development (more vulnerable classification) away from areas of flood risk using the appropriate sequential and exception tests.</p> <p>Protect the most important buildings, including the listed buildings, and the character of the area.</p>	<p>LBRuT</p> <p>Environment Agency</p> <p>Conservation/Urban design monitoring</p> <p>English Heritage</p>
Climate change mitigation, sustainable construction, energy efficiency and renewable energy	<p>The main source of carbon dioxide is from combustion of fossil fuels i.e. through electricity generation, or vehicle emissions. Buildings are the biggest cause of carbon dioxide emissions in the UK.</p> <p>Richmond has one of the highest carbon footprints in London per capita.</p> <p>Need to conserve natural resources e.g. through energy efficiency, & conservation of materials and water.</p> <p>Communities and buildings have to adapt to the likely effects of climate change.</p>	<p>Developments must follow the Mayor's Energy Hierarchy (Lean, Clean, Green)</p> <p>Seek a reduction in traffic congestion and encourage sustainable modes of transport in order to reduce pollution.</p> <p>Criteria must be established that require low carbon and renewable energy within development proposals.</p> <p>Development should meet the highest standards of energy efficiency, sustainable design and construction possible, and ensure that buildings are designed to cope with the likely predicted changes in climate.</p>	<p>DECC</p> <p>EU Renewable Energy Directive</p> <p>EU Energy Efficiency Directive</p> <p>BREEAM</p>

Sustainability Issues	Description	Possible policy option	Data Source
Climate change adaptation and increasing threat of flooding due to	<p>Climate change is a key issue facing the borough. Buildings of the future will need to be able to adapt to increased temperatures, drier summers and wetter winters.</p> <p>Flooding both upstream (fluvial/non tidal) and downstream (tidal) of Teddington Weir is serious during extreme events and may well worsen in years to come as a result of climate change. Limiting run off from new development is an extremely important issue that will need to be addressed. All sources of flooding should be considered, including surface water and sewer flooding.</p>	<p>Development should be designed in a way so that it can adapt to the likely effects of climate change.</p> <p>Development should be limited in areas that are at identified as being likely to flood, especially residential (more vulnerable) and basement (highly vulnerable) developments, should be <i>strictly</i> limited in floodplain areas. In all areas of the borough consideration should be given to sustainable drainage systems (SuDS). Through the use of SUDS, runoff from new developments should be limited to that of equivalent Greenfield runoff rates. Implementation should be in line with the London Plan drainage hierarchy.</p>	<p>DCLG and DEFRA Flood and Water Management Act</p> <p>Environment Agency</p> <p>EU Floods Directive</p>
High pollution levels and poor air quality	<p>The main source of pollution is the large volumes of road and air traffic.</p> <p>The whole borough is an Air Quality Management Area</p>	<p>Ensure development does not exacerbate the existing air quality issue and seek to implement measures to reduce predicted exceedences.</p> <p>Development should be located where it may reduce distances travelled.</p>	<p>Days of air pollution</p> <p>Annual mean levels of NO2 and particulates</p> <p>Local monitoring</p>
Amount of household waste and recycling	<p>The Council will need to increase recycling rates and provide facilities for dealing with waste locally.</p>	<p>Avoid waste, promote the sustainable waste management hierarchy and ensure disposal and landfill is the last considered option</p>	<p>London Plan, GLA waste strategy</p> <p>DEFRA Municipal Waste Statistics</p> <p>WasteDataFlow Statistics</p> <p>EU Directive on Landfill, 1999</p>
Social Issues			

Sustainability Issues	Description	Possible policy option	Data Source
Varying levels of poverty and social exclusion	The borough is generally affluent with 24 super output areas (SOAs) included in the most prosperous 10% in England. However within the most affluent wards it is likely that there are pockets of local deprivation.	Address issues of social exclusion and accessibility for disadvantaged groups. Ensure that social and economic sustainability objectives are taken fully into consideration in key wards.	London Plan English Indices of Deprivation 2015 ONS Annual Population Survey
Lack of opportunities for the provision and adequate supply of affordable housing	The provision of housing, in particular affordable housing, is one of the most important issues affecting the borough.	Ensure that housing provision helps to provide sufficient homes for all sections of the community. Possible need to reallocate land for housing. The location of additional housing is important as it should be situated on previously developed land where possible and accessible to employment, facilities and public transport.	LBRuT monitoring Local Housing Needs Assessment (2006) Strategic Housing Market Assessment (2009) & (2010) Annual housing land supply update in LBRuT AMR
Need for housing opportunities for all, including issue of affordable housing price/earnings affordability ratio	House prices in the area are higher on average (£489,741) compared to the National Average (£162,441), according to Land Registry in January 2013. This makes it difficult for people to afford to buy homes. There is also a shortage of affordable (rented / part-owned) homes in the district. The Council's housing service indicates that the provision of family accommodation for social affordable rent is the main priority.	Policies to continue to provide for meeting affordable housing need. The location of affordable housing also has implications (see above).	NPPF London Plan ONS Annual Survey of Hours and Earnings Local Housing Needs Assessment (2006) Strategic Housing Market Assessment (2009) & (2010) Census 2011

Sustainability Issues	Description	Possible policy option	Data Source
Access to health facilities and services	<p>Generally the health of the borough is good with a high life expectancy.</p> <p>76.3%, 17.8% and 5.9% of borough residents reported their health to be respectively good, fairly good and not good.</p> <p>However the population is aging and this will require additional services and facilities to support its well-being.</p>	<p>Ensure that enough health care facilities are provided as part of new development and that there is comprehensive transport to health centres and facilities throughout the borough.</p> <p>Increasing health service provision to meet requirements for older age groups</p>	<p>Joint Strategic Needs Assessment</p> <p>Census 2011</p> <p>ONS Projections show a significant increase in the 85+ population over the next 12 years.</p> <p>NHS Richmond</p> <p>DWP Benefit Claimants</p>
Access to educational facilities and services	<p>Results from the borough's schools are generally above the England average. Due to increasing demand (often from outside the borough) many schools are operating at capacity.</p> <p>The population of Richmond upon Thames is generally well educated, with a well qualified workforce. There are problems due to lack of childcare facilities/after school clubs etc.</p>	<p>Need to ensure that sufficient educational facilities and choice is provided and are accessible to potential users.</p> <p>There are areas in the borough with a need for more primary school places.</p> <p>Childcare provision can be encouraged as part of new development.</p>	<p>Department for Education Performance Tables</p> <p>Choice and diversity: a policy paper for Education and Children's Services 2010</p>
Access to leisure facilities and local services	<p>Access to a range of accessible and inclusive activities can enhance the quality of life of residents and visitors.</p> <p>Access to local shopping.</p> <p>The River Thames is a popular and important natural attraction for locals and tourists alike. The Thames path should be safeguarded.</p>	<p>New housing and publicly accessible buildings and workplaces should be accessible for mobility impaired and disabled.</p> <p>Need to ensure there is sufficient provision of accessible leisure facilities as part of new housing development and that proposals are located in areas, which meet a requirement for local needs and do not harm amenity of residents.</p> <p>Protection of local shopping facilities and filling gaps where identified.</p> <p>Develop greater public access to waterways within the borough.</p>	<p>Labour Force Survey</p> <p>ONS Annual Population Survey</p> <p>Sport, Open Space and Recreation Needs Assessment</p> <p>LBRuT Town Centre & Retail Research</p> <p>LBRuT monitoring</p>

Sustainability Issues	Description	Possible policy option	Data Source
A safe place to live	<p>Fear of crime and antisocial behaviour (which is disproportionate to actual level of crime) could possibly lead to negative effects upon the health of residents.</p> <p>Disorder and anti-social behaviour especially related to crowds, weekends and evening in the borough's town centres is a concern. This could have a possible negative effect upon the economic well-being e.g. in town centres.</p> <p>Decrease in community cohesion.</p>	<p>Use of design and layout of development to reduce crime, vandalism, graffiti and fear of crime.</p> <p>Ensure a balanced town centre retail and evening economy. Potentially introduce areas of special control.</p>	Anti-social behaviour as recorded by LBRuT Crime rate (per 1000 population) recorded by the Metropolitan Police Authority
Accessible public transport for all	Approximately 24% of households do not have a car; this accounts for around 18,000 people. Whilst much of the area has good public transport accessibility levels (PTAL), there are a few areas with lower levels, such as parts of Ham and Petersham, and areas in the extreme west of the Borough.	<p>Reducing the impact of new developments through new traffic management funded by developer contributions; layouts will be designed that decrease the permeability of a new development at the same time increasing its pedestrian and cycle permeability.</p> <p>Travel assessments and travel plans, particularly for school and workplaces.</p>	LBRuT Highways monitoring Local Implementation Plan (2)
Economic Issues			
Protection of employment land and premises	There is a very limited amount of employment land in the borough. For the remaining employment land and premises, there is pressure from housing and higher value land uses to redevelop existing employment sites.	Protect all existing employment sites unless they are inherently unsuitable.	LBRuT Employment Land Study 2009 & 2013
Promotion of economic growth	Possible mismatch between land and property available for business development and demand.	Ensure employment land availability	Monitoring of consents Employment Land Study (2009)
Business start-ups and closures	Large numbers of small businesses & entrepreneurship.	Provide for the needs of local businesses on appropriate sites.	OND Business Demography APS data Local Economic Assessment (2010)

Sustainability Issues	Description	Possible policy option	Data Source
Skills Shortages and small employment base within the borough	<p>There are very low unemployment levels in the borough, with only 1.6% of the working age population (or 1,935 people) claiming Job Seekers Allowance; compared to 4.4% in London and 4.8% in the UK as a whole. Claimant count has remained more or less static since late 2010.</p> <p>Only a small proportion of the local population is classified long term unemployed.</p> <p>The high house prices have lead to a shortage of low paid and key workers living in the area.</p>	Ensure affordable housing targets are met including the provision of sufficient rented and shared ownership accommodation for lower paid workers.	Unemployment rate for the borough from GLA claimant rates 2011 Business All in One (LBRuT) ONS Claimant Count data DWP Benefits Claimants
Improve the resilience of businesses and the economy	<p>Insufficient diversity of economic sectors represented in the area</p> <p>Number of empty non-domestic properties.</p>	Encourage the retention and provision of a range of small business units to meet the needs of local business.	IDBR/APS LBRuT Town Centre Land Use Surveys Council Tax & Revenues
High car use, transport infrastructure at capacity during peak times, congestion on road network	<p>High levels of traffic, including through traffic, which leads to significant road congestion particularly in the morning and evening peaks.</p> <p>High levels of car ownership and dependency</p>	<p>Locate major trip generating activities in town centres and areas of high public transport accessibility (in order to increase opportunities for alternative means of travel). Reduction of congestion and encouragement of travel choice and car clubs.</p> <p>Promote walking, cycling and public transport as alternatives to car travel for short journeys</p>	<p>Employment floorspace in main centres</p> <p>LBRuT monitoring</p> <p>Public Transport use from TfL</p>
Need for education, training and local employment opportunities	The borough has generally a highly skilled, high earning, articulate population but this conceals the fact that there are those less fortunate: without work; with health problems; in fuel and housing poverty and those living in the pockets of relative deprivation across the borough.	Ensure policies and initiatives are in place that focus on providing training and local employment opportunities, particularly for those in the areas of relative deprivation.	Unemployment rate for the borough from GLA claimant rates English Indices of Deprivation 2015

Sustainability Issues	Description	Possible policy option	Data Source
Protect and enhance the vitality and viability of town centre	Overall, the number of vacancies throughout the borough's five main centres is between around 5% and 11%, whereby Teddington has the lowest and Whitton the highest rate. Rates are generally below the national average (c.15%).	Ensure that main town centre uses are protected and that any new town centre uses are located in the high streets.	LBRuT Town Centre & Retail Research LBRuT monitoring
Adequate supply of hotels to support sustainable tourism	Tourism could be a greater economic force in the area given the number and quality of historic sites, houses, and gardens etc. Potential to capitalise on the 2015 Rugby World Cup.	Support tourist and overnight visitor accommodation development in appropriate locations.	LBRuT monitoring LBRuT Hotel Study

Table 35: Sustainability Issues in the London Borough of Richmond upon Thames

5 FORMULATING SUSTAINABILITY APPRAISAL OBJECTIVES

Task A4 Develop the sustainability framework consisting of sustainability objectives, indicators and targets.

5.1 Introduction

- 5.1.1 In order to measure the operation of the Local Plan and help assess the sustainability of its policies, and to monitor its achievement in sustainability terms, sustainability objectives and indicators are developed. The objectives are, where possible expressed in terms of targets, the achievement of which should be measurable using the indicators selected.
- 5.1.2 The Sustainability Appraisal (SA) objectives are based on the issues which are affecting the borough, as identified in the previous chapter.

5.2 SA Objectives

- 5.2.1 The Community Plan⁶⁰ objectives are specific to the development of the London Borough of Richmond upon Thames and are detailed below:
- The vision is for a borough where local people are engaged and involved in their communities and where there is a vibrant and sustainable community and voluntary sector to support residents and help them play a full role in community life.
 - Where people lead happy and healthy lives and are able to enjoy life, with opportunities to learn, develop and fulfil their potential.
 - Where people can live as independently as possible in the local community and feel empowered to take responsibility for their health and wellbeing and plan for their future.
 - Where people feel safe, are respected and valued and able to contribute to their communities and where diversity is celebrated.
 - Where the local character of the environment is protected and new development is high quality and compatible with local character, meets people's needs and provides opportunities for all.
 - Where the towns and local centres are attractive, viable for businesses and contribute positively to the quality of life of residents and visitors.
- 5.2.2 The Council has identified three themes which describe how it will work in partnership with the local community and inform everything they do to put people first. The themes are:
- 1) Involving and engaging local people and businesses

⁶⁰ [Community Plan 2013 to 2018](#)

- 2) Delivering for local people
 - Tackling Inequality and Creating Opportunity for Children and Young People
 - A Healthy Borough
 - A Safe Borough
 - Supporting Business, Voluntary and Community Sector and the Arts
 - A Green Borough
- 3) Being accountable to local people

5.2.3 While the Community Plan objectives set the aims and aspirations of the borough, the Local Plan SA objectives are more specific goals for land use in Richmond upon Thames. The SA objectives purely provide the framework for assessment. They are designed to provide a balance between the three objectives of sustainable development: the environment, the economy and society. The objectives reflect the key sustainability issues in the borough, as identified in the previous step (Stage A3). Many of the objectives are cross-cutting and not purely social, environmental and economic objectives.

5.2.4 For the purpose of the Local Plan the starting point for identifying the SA objectives were those objectives in the Core Strategy and DMP. These SA objectives have been reviewed over time, compared to other national, regional and local documents, including the Community Plan, and the final list of draft objectives for the SA can be viewed below. The objectives may be refined further based on consultations with statutory bodies.

SA objectives for the London Borough of Richmond upon Thames Local Plan			
	Env	Econ	Soc
1) To prevent and reduce the amount of waste that is produced and increase the proportion that is reused, recycled and composted, recovered (including energy recovery) before lastly disposal.	✓		
2) To reduce pollution (such as air, noise, light, water and soil) from any source and ensure air and water quality improves and safeguard soil quality and quantity.	✓		
3) To reduce the need for travel, encourage alternatives to the car, make best use of existing transport infrastructure and improve public transport integration.	✓		✓
4) To mitigate climate change by reducing greenhouse gas emissions and promoting sustainable energy use through maximising energy efficiency, use of zero- and low carbon technologies and renewable energy, and provide satisfactory water and sewerage infrastructure.	✓		✓
5) To ensure resilience to the effects of climate change through effective adaptation, in particular avoiding or reducing flood risk from all sources and conserving water.	✓	✓	✓
6) To conserve and enhance biodiversity, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).	✓		
7) To promote high quality places, spaces and buildings and conserve and enhance the borough's landscape and townscape character and its heritage assets and their settings..	✓	✓	✓
8) To protect and enhance the quality and range of parks and open spaces and plan positively for the creation, protection and enhancement of the green infrastructure network.	✓		✓
9) To make best and efficient use of previously developed land and existing buildings, implement sustainable design and construction practices and remediate and reuse contaminated land.	✓	✓	✓
10) To provide new housing opportunities and sufficient affordable housing that meets local needs.		✓	✓
11) To facilitate and improve the health and well-being of the population, reduce health inequalities and deliver safer and more secure communities.			✓
12) To promote the independence of people and communities by improving the quality, range and accessibility of services and facilities, such as health, transport, education, training, employment, environment, leisure, sport and recreation opportunities.		✓	✓
13) To increase the vitality and viability of existing town centres, local centres and parades.		✓	✓
14) To promote and strengthen a buoyant, diverse and resilient local economy and facilitate inward investment that will secure sustainable economic growth.		✓	✓
15) To increase the amount and quality of commercial development opportunities to meet the needs of the local and sub-regional economy.		✓	✓

Table 36: SA objectives for the Richmond upon Thames Local Plan

5.3 SA Assessment Framework and Decision Making Criteria

Sustainability Appraisal objective	Decision making criteria	Assessing of Local Plan Policies
1) To prevent and reduce the amount of waste that is produced and increase the proportion that is reused, recycled and composted, recovered (including energy recovery) before lastly disposal.	<ul style="list-style-type: none"> • Will it prevent waste wherever it occurs? • Will it promote sustainable waste management, following the waste hierarchy, and reduce consumption of materials and resources? • Will it increase waste recycling? 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Location • Vacant sites • Derelict sites • Potential options for future land uses
2) To reduce pollution (such as air, noise, light, water and soil) from any source and ensure air and water quality improves and safeguard soil quality and quantity.	<ul style="list-style-type: none"> • Will it impact on natural resources, soil, air and water quality? • Will it reduce emissions of pollutants? • Will it impact on locations that are sensitive to air pollution? • Will it impact on noise levels? • Will it lead to more light pollution? • Does it improve water quality? • Will it safeguard soil quality and quantity? 	<ul style="list-style-type: none"> • The whole borough is an Air Quality Management Area • Analysis of potentially contaminated land and past industrial land uses • River Thames Policy Area • River Crane Opportunity Area
3) To reduce the need for travel, encourage alternatives to the car, make best use of existing transport infrastructure and improve public transport integration.	<ul style="list-style-type: none"> • Will it impact on traffic congestion? • Will it encourage the use of public transport? • Is the proposal/land use in a location with appropriate PTAL level? • Will it make use of existing transport infrastructure? 	<ul style="list-style-type: none"> • PTAL level • Town centre boundary • Area of Mixed Use • 1 km distance to primary school • 3 km distance to secondary school • 1 km distance to GP surgery • 400m distance to Area of Mixed Use • 400m distance to main town centre • Public Right of Way
4) To mitigate climate change by reducing greenhouse gas emissions and promoting sustainable	<ul style="list-style-type: none"> • Will it reduce greenhouse gas and particularly carbon dioxide emissions by reducing energy consumption? • Does it involve the incorporation of zero- and low 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Potential options for future land uses

Sustainability Appraisal objective	Decision making criteria	Assessing of Local Plan Policies
energy use through maximising energy efficiency, use of zero- and low carbon technologies and renewable energy, and provide satisfactory water and sewerage infrastructure.	carbon technologies? <ul style="list-style-type: none"> • Does it incorporate renewable energy technologies? • Is it in keeping with the principles of the Council's Sustainable Construction Checklist SPD? • Will there be satisfactory water supply and sewerage infrastructure provision? 	
5) To ensure resilience to the effects of climate change through effective adaptation, in particular avoiding or reducing flood risk from all sources and conserving water.	<ul style="list-style-type: none"> • Will the proposal be affected by flooding, i.e. is it within zone 2, 3a or 3b? • Will it lead to increased surface water flooding? • Will it lead to sewer flooding? • Will it impact or increase the risk of flooding to other people and property? • Will it promote and include climate change adaptation measures? • Will it include measures to reduce water consumption? 	Analysis of: <ul style="list-style-type: none"> • Location within flood zone • Surface water maps • Localised flooding maps, where available
6) To conserve and enhance biodiversity, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).	<ul style="list-style-type: none"> • Will it impact on national, regional or local BAP habitats and/or species? • Does it affect a site designated for nature conservation purposes? • Will it impact on access to nature? • Does it support ecosystems and lead to any enhancements in biodiversity, particularly in non-designated sites? • Will it impact on existing networks of open spaces and create new green spaces? • Will it lead to a degradation or fragmentation of the green spaces? 	Analysis of: <ul style="list-style-type: none"> • Tree Preservation Orders • Sites designated for nature conservation purposes, including SSSI and OSNI • Existing on-site habitats and biodiversity features (NB: If development is proposed on protected or BAP species sites, local authorities should consult the Natural England Standing Advice)
7) To promote high quality places, spaces and buildings and conserve and enhance the borough's landscape	<ul style="list-style-type: none"> • Will it affect the settings or features of heritage assets? • Will the design enhance the local character? • Have opportunities that make a positive 	Analysis of: <ul style="list-style-type: none"> • Conservation Area(s) • Listed Building(s) • Building(s) of Townscape Merit

Sustainability Appraisal objective	Decision making criteria	Assessing of Local Plan Policies
and townscape character and its heritage assets and their settings.	contribution to the local character and area been identified? <ul style="list-style-type: none"> • Will it impact on any potential archaeological remains? 	<ul style="list-style-type: none"> •Archaeological Priority Area •River Thames •River Crane •Historic Parks & Gardens
8) To protect and enhance the quality and range of parks and open spaces and plan positively for the creation, protection and enhancement of the green infrastructure network.	<ul style="list-style-type: none"> • Will it increase or decrease public open space deficiency? • Will it lead to loss or degradation of designated spaces such as MOL or OOLTI? • Will it improve connectivity between existing open spaces? 	Analysis of: <ul style="list-style-type: none"> •Existing use and buildings •Metropolitan Open Land •Green Belt / Major Developed Site in GB •Historic Parks & Gardens
9) To make best and efficient use of previously developed land and existing buildings, implement sustainable design and construction practices and remediate and reuse contaminated land.	<ul style="list-style-type: none"> • Will it optimise on the use of previously developed land, buildings and existing infrastructure? • Will it lead to a loss of greenfield sites or backgarden land? • Does it incorporate sustainable design and construction practices? • Is there remediation of contaminated land? 	Analysis of: <ul style="list-style-type: none"> •Existing use and buildings •Vacant site •Derelict site •Potential options for future land uses •Potential contaminated land
10) To provide new housing opportunities and sufficient affordable housing that meets local needs.	<ul style="list-style-type: none"> • Will it increase the number of homes? • Will it increase the number of affordable homes? • Will it reduce the number of unsuitable/unfit homes? • Does it achieve Lifetime Homes standard and increase accessibility for wheelchair users? 	Analysis of: <ul style="list-style-type: none"> •Existing use and buildings •Potential options for future land uses •Conservation Areas
11) To facilitate and improve the health and well-being of the population, reduce health inequalities and deliver safer and more secure communities.	<ul style="list-style-type: none"> • Will it impact on access and/or provision of health facilities? • Will it encourage healthy life styles? • Does it follow Security by Design principles? • Will it contribute to a reduction in the actual crime level? • Will it contribute to a reduction in the fear of crime? 	Analysis of: <ul style="list-style-type: none"> •Existing use and buildings •Area of relative disadvantage •Potential options for future land uses

Sustainability Appraisal objective	Decision making criteria	Assessing of Local Plan Policies
12) To promote the independence of people and communities by improving the quality, range and accessibility of services and facilities, such as health, transport, education, training, employment, environment, leisure, sport and recreation opportunities.	<ul style="list-style-type: none"> • Will it improve accessibility to key local services? • Will it impact or lead to a loss of essential services and community facilities? • Will it enable people to stay independent? • Does it improve access for all, such as for those with limited mobility, wheelchairs? • Does it provide any facilities or services that can be accessed by all? 	Analysis of: <ul style="list-style-type: none"> •Area of relative disadvantage •1 km distance to primary school •3 km distance to secondary school •1 km distance to GP surgery •400m distance to Area of Mixed Use •400m distance to main town centre •Public open space deficiency •Town Centre Boundary •Area of Mixed Use •Public Right of Way
13) To increase the vitality and viability of existing town centres, local centres and parades.	<ul style="list-style-type: none"> • Will it promote and add to the vitality and viability of town centres? • If the site is located in a town centre, will it include retail or town centre uses? • Does it reinforce a centres' retail role? 	Analysis of: <ul style="list-style-type: none"> •Employment use •Town Centre Boundary •Area of Mixed Use •Key shopping frontage •Secondary shopping frontage •Frontage/area subject to specific restrictions
14) To promote and strengthen a buoyant, diverse and resilient local economy and facilitate inward investment that will secure sustainable economic growth.	<ul style="list-style-type: none"> • Will it improve business development? • Will it impact on the local economy? • Will it lead to local economic growth? • Does it provide jobs? • Will it meet local business needs? 	Analysis of: <ul style="list-style-type: none"> •Employment use •Town Centre Boundary •Area of Mixed Use
15) To increase the amount and quality of commercial development opportunities to meet the needs of the local and sub-regional economy.	<ul style="list-style-type: none"> • Will the site/land use include commercial development? • Is it flexible space, of suitable size and in an appropriate location? • Will it increase employment opportunities? • Will it increase training and skilled employment? 	Analysis of: <ul style="list-style-type: none"> •Employment use •Town Centre Boundary •Area of Mixed Use

Table 37: SA Framework and Decision Making Criteria

5.4 Compatibility of Sustainability Appraisal Objectives

- 5.4.1 As part of the process of developing SA objectives the internal compatibility has been tested to identify any particular tensions or inconsistencies. There may be possible conflicts between SA objectives. A number of SA objectives have been identified as having a potential impact on each other, and these are set out in a compatibility matrix in Appendix 2. The impact of these SA objectives on each other can only be determined and made clear when considering options against the SA objectives. In these cases where any negative impacts are identified, they could be addressed through mitigation. The majority of negative impacts are between environmental and economic SA objectives. Some tensions will always exist between these types of SA objectives; however both are required to ensure sustainable development.
- 5.4.2 Even though incompatibilities exist, it is not necessary to re-write the SA objectives on these grounds. As stated in the DCLG guidance “There may be tensions between objectives that cannot be resolved; the compatibility assessment should clarify these so that subsequent decisions are well based, and mitigation can be considered”.

5.5 SA Monitoring Framework

- 5.5.1 In general, information monitored by the Council in relation to the implementation and effectiveness of the adopted Plans and policies is published in the Authority’s Monitoring Report (AMR) as required by current planning regulations. Any policies and proposals developed as part of a DPD will be reviewed in the light of the results of monitoring and any other significant changes in circumstances.
- 5.5.2 The success and effectiveness of the SA/SEA process will also be monitored using the indicators and baseline data, through the Authority’s Monitoring Report. We would use existing indicators as a basis to establish a new framework to support the emerging Local Plan.

Consultation questions:

- 8) Are the objectives and assessment framework suitable for the borough?**
- 9) Are there any other objectives that should be included (bearing in mind the need to keep the number of objectives manageable)?**
- 10) Should any objectives be re-worded or removed?**
- 11) Are there any particular indicators that we should be including for measurement and monitoring?**

6 CONSULTING ON THE SCOPE AND NEXT STAGES

Task A6 Consult on the scope of the SA with the relevant statutory bodies, key stakeholders and the public

- 6.1.1 It is required by the Strategic Environmental Assessment (SEA) Directive that the Scoping Report should be referred to the three statutory Consultation Bodies with environmental responsibilities:
- Historic England
 - Natural England
 - Environment Agency
- 6.1.2 However, anyone is invited to comment on the draft Scoping Report, especially other bodies and local groups with environmental responsibilities and interests. As such, the Scoping Report will be made available for comment as part of the Local Plan Review consultation from 4 January until 1 February 2016. To guide the consultees through the Scoping Report, specific questions are set out at the end of each section of this report, and information on previous Sustainability Appraisals are available for download on the Council's website:
http://www.richmond.gov.uk/sustainability_appraisal_ldf.htm
- 6.1.3 A Scoping Report forms part of the evidence base for the Local Plan, in that it sets out the scope and level of detail of the SA. Following the consultation on this draft Scoping Report, the comments and responses will be fully considered and updates and amendments made to the Scoping Report. The final revised Scoping Report for the Local Plan, which documents the findings from Stage A of the SA / SEA process as well as what happens next in the process, will be published.
- 6.1.5 The next stages in the SA process are completed alongside the preparation of the Local Plan. The emerging policies and options for specific sites to be included in the Plan will be tested against the SA framework before the next stage of consultation on the Plan options proceeds.
- 6.1.6 Following consideration of the options, the draft Local Plan will be subject to a further sustainability appraisal, the findings of which will be set out in the final SA Report for the Local Plan, incorporating an Environmental Report as required by the SEA Regulations.
- 6.1.7 The third stage will be the SA / SEA Statement, following adoption of the Plan, setting out the difference the process has made.

Consultation questions:

12) Does your organisation collect any data /information that would be useful to the monitoring of the Local Plan documents, which you would be happy to supply?

13) Do you have any other comments on the draft SA Scoping Report?

7 GLOSSARY

Affordable Housing

Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision. See the NPPF for definitions of “social rented”, “affordable rented” and “intermediate housing”.

Air Quality Management Areas

Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines.

Archaeological interest

There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

Authority’s Monitoring Report (AMR)

Provides an annual evidence base upon which the implementation of the policies in the Local Plan (also previously referred to as Local Development Framework) and Unitary Development Plan can be assessed.

Baseline

A description of the present and future state of an area, in the absence of any plan, taking into account changes resulting from natural events and from other human activities.

Biodiversity

Literally the 'variety of life' - the number and mix of species of animals and plants in a given area, and the range of urban and rural habitats making up the ecosystem, including the links and interactions between all of these.

Biodiversity Action Plan

A plan that sets objectives and actions for the conservation of biodiversity in the UK, London and Richmond respectively, with measurable targets. The action plan also identifies priority species and habitats for conservation.

Birds and Habitats Directives

European Directives to conserve natural habitats and wild fauna and flora.

BREEAM

BREEAM (Building Research Establishment Environmental Assessment Method) is the leading and most widely used environmental assessment method for buildings within the UK. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance. It assesses the performance of buildings in the following areas: management, energy use, health and well-being, pollution, transport, land use and ecology, waste, materials and water.

Brownfield Site – see Previously Developed Land**Climate change adaptation**

Adjustments to natural or human systems in response to actual or expected climatic factors or their effects, including from changes in rainfall and rising temperatures, which moderate harm or exploit beneficial opportunities.

Climate change mitigation

Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Combined Heat and Power (also see Decentralised Energy)

Combined Heat and Power (CHP) is the use of a single piece of plant to generate both heat and electricity. In conventional power generation large quantities of energy in the form of heat are wasted. The waste heat from the CHP plant's engine is utilised for a heating application such as making hot water or space heating.

Community Infrastructure Levy

A levy allowing local authorities to raise funds from owners or developers of land undertaking new building projects in their area.

Conservation (heritage)

The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.

Consultation Body

In the context of SA and SEA, a Consultation Body is an authority, which, because of its environmental responsibilities, is likely to be concerned by the effects of implementing plans and programmes and must be consulted under the SEA Directive. The Consultation Bodies in England are Historic England, Natural England and the Environment Agency.

Core Strategy

The Core Strategy sets out the key elements of the planning framework for the area. It is comprised of a spatial vision and strategic objectives for the area; a spatial strategy; core policies; and a monitoring and implementation framework with clear objectives for achieving delivery. All other Development Plan Documents must be in conformity with the adopted Core Strategy.

Decentralised Energy (also see Combined Heat and Power)

A Decentralised Energy (DE) scheme provides heat and/or power from a central source at or near the point of consumption to more than one building, dwelling or customer. It includes high efficiency co-generation or Combined Heat and Power (CHP), on-site renewable energy systems and/or energy recycling systems. It is an alternative to providing individual national grid-connected systems to each dwelling. Schemes can vary in size from a few dwellings to city-wide networks, and reduce costs for tenants and cut carbon dioxide emissions.

Development

Defined and qualified by the Town and Country Planning Act 1990 (s.22) as the carrying out of building, engineering, mining or other operations in, on, over, or under land, or the making of any material change in the use of any building or other land.

Development Plan Documents (DPDs)

The adopted Local Plan (previously referred to as Local Development Framework) is partly comprised of Development Plan Documents, which in turn comprise the Core Strategy, Site Allocations, Proposals Map, Development Management DPD and sometimes Area Action Plans. Local Plans are defined in section 38 of the Planning and Compulsory Purchase Act 2004.

Economic development

Development, including those within the B Use Classes, public and community uses and main town centre uses (but excluding housing development).

Ecological networks

These link sites of biodiversity importance.

Environmental Assessment

Generically, a method or procedure for predicting the effects on the environment of a proposal, either for an individual project or a higher-level “strategy” (a policy, plan or programme), with the aim of taking account of these effects in decision-making. The term “Environmental Impact Assessment” (EIA) is used, as in European Directive 337/85/EEC, for assessments of projects. In the Strategic Environmental Assessment (SEA) Directive, an environmental assessment means “the preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision”, in accordance with the Directive’s requirements.

Environmental Report

A document required by the SEA Directive as part of an environmental assessment, which identifies, describes and appraises the likely significant effects on the environment of implementing a plan or programme (see SA Report).

European site

This includes candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas, and is defined in regulation 8 of the Conservation of Habitats and Species Regulations 2010.

Green infrastructure

A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.

Heritage asset

A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).

Historic environment

All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Indicator

A measure of variables over time, often used to measure achievement of objectives.

- **Output Indicator:** An indicator that measures the direct output of the plan or programme. These indicators measure progress in achieving plan or programme objectives, targets and policies.
- **Significant Effects Indicator:** An indicator that measures the significant effects of the plan or programme.
- **Contextual indicator:** An indicator used in monitoring that measures changes in the context within which a plan or programme is being implemented.

International, national and locally designated sites of importance for biodiversity

All international sites (Special Areas of Conservation, Special Protection Areas, and Ramsar sites), national sites (Sites of Special Scientific Interest) and locally designated sites including Local Wildlife Sites.

Local Development Document (LDD)

There are two types of Local Development Document: Development Plan Documents and Supplementary Planning Documents.

Local Development Framework (LDF) – see Local Plan**Local Development Scheme (LDS)**

The LDS sets out the local authority's programme for preparing the Local Plan.

Local planning authority

The public authority whose duty it is to carry out specific planning functions for a particular area. This includes all London boroughs, district councils, county councils and also the Greater London Authority.

Local Plan

The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. Current core strategies or other planning policies, which under the regulations would be considered to be development plan documents, form part of the Local Plan. The term includes old policies, which have been saved under the 2004 Act. Since the Localism Act 2011, the LDF is now referred to as Local Plan.

Main town centre uses

Retail development (including warehouse clubs and factory outlet centres); leisure, entertainment facilities the more intensive sport and recreation uses (including cinemas, restaurants, drive-through restaurants, bars and pubs, night-clubs, casinos, health and fitness centres, indoor bowling centres, and bingo halls); offices; and arts, culture and tourism development (including theatres, museums, galleries and concert halls, hotels and conference facilities).

National Planning Policy Framework (NPPF)

The National Planning Policy Framework was published by the UK's Department of Communities and Local Government in March 2012 and forms the basis of the planning system in England. It has replaced national planning policy and guidance, which was previously delivered in the form of Planning Policy Statements (PPSs) and Planning Policy Guidance

(PPGs). Its central theme is the 'presumption in favour of sustainable development', set out in twelve core land-use planning principles, which underpin both plan-making and decision-taking.

Objective

An objective is a statement of what is intended, specifying the desired direction of change in trends.

Open Space

Any open land that is used by the public or local community for outdoor recreation, whether publicly or privately owned and whether use is by permission, as of right, or de facto. All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Planning Practice Guidance (PPG)

On 6 March 2014 the Department for Communities and Local Government (DCLG) launched this planning practice guidance web-based resource. For the first time, planning practice guidance is now available entirely online.

Pollution

Anything that affects the quality of land, air, water or soils, which might lead to an adverse impact on human health, the natural environment or general amenity. Pollution can arise from a range of emissions, including smoke, fumes, gases, dust, steam, odour, noise and light.

Previously developed land

Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or has been occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures; land in built-up areas such as private residential gardens, parks, recreation grounds and allotments; and land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time.

Primary shopping area

Defined area where retail development is concentrated (generally comprising the primary and those secondary frontages which are adjoining and closely related to the primary shopping frontage).

Primary and secondary frontages

Primary frontages are likely to include a high proportion of retail uses which may include food, drinks, clothing and household goods. Secondary frontages provide greater opportunities for a diversity of uses such as restaurants, cinemas and businesses.

Ramsar sites

Wetlands of international importance, designated under the 1971 Ramsar Convention.

Renewable and low carbon energy

Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the

wind, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Responsible Authority

In the SEA Regulations, a Responsible Authority means an organisation, which prepares a plan or programme subject to the SEA Directive and is responsible for the SEA.

Scoping

The process of deciding the scope and level of detail of an SA, including the sustainability effects and options which need to be considered, the assessment methods to be used, and the structure and contents of the SA Report.

Setting of a heritage asset

The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

Site of Special Scientific Interest

Sites designated by Natural England under the Wildlife and Countryside Act 1981.

Special Areas of Conservation

Areas given special protection under the European Union's Habitats Directive, which is transposed into UK law by the Habitats and Conservation of Species Regulations 2010.

Special Protection Areas

Areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the Birds Directive.

Strategic Environmental Assessment (SEA)

Required by European (European Directive 2001/42/EC) and UK law, SEA is a way of systematically identifying and evaluating the impacts that a plan is likely to have on the environment. The aim is to provide information in the form of an Environmental Report that can be used to enable decision makers to take account of the environment and minimise the risk of the plan causing significant environmental damage. Government guidance advises that where a plan requires both strategic environmental assessment and sustainability appraisal, that the former process should be integrated into the latter one.

Strategic Environmental Assessment (SEA) Directive

European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment.

Strategic Environmental Assessment (SEA) Regulations

The Environmental Assessment of Plans and Programmes Regulations, 2004.

Strategic Flood Risk Assessment

The NPPF requires Local Planning Authorities to appraise the risk of flooding in their areas by undertaking a Strategic Flood Risk Assessment (SFRA), the aim of which is to avoid inappropriate development in areas at risk of flooding, and to direct development away from

areas at highest risk. The SFRA is a report which includes a series of maps that define areas of flooding in the borough according to various levels of risk and from the River Thames, its tributaries and other sources. The Council's SFRA was published in June 2008 and it has been used as important evidence base document for the Council's Core Strategy. In August 2010, the London Borough of Richmond upon Thames has completed the update to the 2008 SFRA. The SFRA Update supersedes the previous June 2008 SFRA. This SFRA will be used to inform land allocations, to facilitate the application of the Sequential Test and in particular, advise Development Management and developers on flood risk matters.

Statement of Community Involvement (SCI)

The SCI is a document explaining to stakeholders and the community how and when they will be involved in the preparation of the Local Plan, previously referred to as Local Development Framework, and the steps that will be taken to facilitate this involvement.

Supplementary planning documents

Documents which add further detail to the policies in the Local Plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.

Sustainability Appraisal

The Planning and Compulsory Purchase Act 2004 requires Local Development Documents to be prepared with a view to contributing to the achievement of sustainable development. Sustainability Appraisal is a systematic appraisal process. The purpose of Sustainability Appraisal is to appraise the social, environmental and economic effects of the strategies and policies in a Local Development Document from the outset of the preparation process. This will ensure that decisions are made that accord with sustainable development.

Sustainable transport modes

Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra low emission vehicles, car sharing and public transport. It is also used to describe all forms of transport which minimise emissions of carbon dioxide and pollutants.

Town centre

Area defined on the local authority's proposal map, including the primary shopping area and areas predominantly occupied by main town centre uses within or adjacent to the primary shopping area. References to town centres or centres apply to city centres, town centres, district centres and local centres but exclude small parades of shops of purely neighbourhood significance. Unless they are identified as centres in Local Plans, existing out-of-centre developments, comprising or including main town centre uses, do not constitute town centres.

Transport assessment

A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport and what measures will need to be taken to deal with the anticipated transport impacts of the development.

Transport statement

A simplified version of a transport assessment where it is agreed the transport issues arising out of development proposals are limited and a full transport assessment is not required.

Travel plan

A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that is regularly reviewed.

Wildlife corridor

Areas of habitat connecting wildlife populations.

Unitary Development Plan (UDP)

UDPs were previously produced by each London Borough, which integrated strategic and local planning responsibilities, through policies and proposals for the development and use of land in their areas.

APPENDIX 1 – Detailed review and key messages from Policies, Plans and Programmes

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
Level: International / European Context		
<p>Title: EC Directive on the Conservation of Natural Habitats of Wild Fauna and Flora 92/43/EEC of 21 May 1992 Author: European Commission Status: Statutory Date: 1992</p>	<ul style="list-style-type: none"> • Member States are required to take legislative and administrative measures to maintain and restore natural habitats and wild species at a favourable conservation status in the Community. • An assessment of the impact and implications of any plan or project that is likely to have a significant impact on a designated site. 	<ul style="list-style-type: none"> • The SA will take into account the conservation status of areas in Richmond upon Thames and will seek to identify measures to further maintain and restore natural habitats. • Local Plan policies should protect and enhance habitats and conservation in the borough.
<p>http://europa.eu/legislation_summaries/environment/nature_and_biodiversity/l28076_en.htm</p>		
<p>Title: The Wild Birds Directive 2009/147/EC/ Author: European Commission Status: Statutory Date: 2009</p>	<ul style="list-style-type: none"> • Member States have a duty to sustain populations of naturally occurring wild birds by sustaining areas of habitats in order to maintain populations at ecologically and scientifically sound levels. This applies to birds, their eggs, nests and habitats. • Introduced Special Protection Areas into NATURA 2000 	<ul style="list-style-type: none"> • The SA will consider the impacts of Local Plan policies on wild bird populations. • The requirements of the Directive should be reflected in the Sustainability Appraisal Framework. • Local Plan policies should protect wild bird populations.
<p>http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm</p>		
<p>Title: The Convention on Biological Diversity 93/626/EEC Author: European Commission Status: Statutory Date: 1993</p>	<ul style="list-style-type: none"> • The Convention on Biological Diversity was signed by the EC and all Member States at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992; this Decision approves the Convention on behalf of the European Community. • Article 6A requires each Contracting Party to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity. 	<ul style="list-style-type: none"> • The SA will consider biodiversity in accordance with guidance on this issue. • The Local Plan policies should consider the potential impacts on the biodiversity of the borough.
<p>http://europa.eu/legislation_summaries/development/sectoral_development_policies/l28102_en.htm</p>		
<p>Title: Directive 2000/60/EC establishing a framework for the Community action in</p>	<ul style="list-style-type: none"> • A framework Directive that provides for the protection, improvement and sustainable use of water across Europe. 	<ul style="list-style-type: none"> • The SA will include objectives for water quality and ecological status of

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
<p>the field of water policy (The EU Water Framework Directive - FWD) Author: European Commission Status: Statutory Date: 2000</p>	<ul style="list-style-type: none"> • Requires all Member States to achieve good ecological status of inland water bodies by 2015. • Objectives to promote sustainable use of water, reduce pollution of water, lessen the effects of floods and droughts and rationalise and update existing legislation and introduce a coordinated approach to water management. 	<p>inland water bodies and supply issues.</p> <ul style="list-style-type: none"> • The Local Plan policies should protect water resources, water quality and reduce pollution; they should contribute to achieving the good ecological status.
<p>http://ec.europa.eu/environment/water/water-framework/index_en.html</p>		
<p>Title: Directive 1996/62/EC on ambient air quality assessment and management Author: European Commission Status: Statutory Date: 1996</p>	<ul style="list-style-type: none"> • Establishes mandatory standards for air quality. • Make information on air quality available to the public. 	<ul style="list-style-type: none"> • The SA will include objectives for air quality and the requirements of the Directive will be reflected in the SA Framework. • Local Plan policies and proposals should consider impacts on air quality.
<p>http://europa.eu/legislation_summaries/other/l28031a_en.htm</p>		
<p>Title: Directive 1999/30/EC Limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air Author: European Commission Status: Statutory Date: 1999</p>	<ul style="list-style-type: none"> • Establishes limit values for sulphur and nitrogen dioxide, suspended particulates and lead in air. • Up-to-date air ambient concentrations of each are to be made available to the public. • Sets limits and deadline for SO₂ for 2005 and health limit values for NO₂ and Pb to be met by 2010. 	<ul style="list-style-type: none"> • The SA will include objectives for air quality. • The Local Plan should consider the potential that development may contribute to air pollution.
<p>http://europa.eu/legislation_summaries/other/l28098_en.htm</p>		
<p>Title: Directive 2008/50/EC on ambient air quality and cleaner air for Europe (Air Quality Directive) Author: European Commission Status: Statutory Date: 2008</p>	<ul style="list-style-type: none"> • This new Directive has merged most of existing legislation into a single directive with no change to previous air quality objectives, except for the Framework Directive 96/62/EC, 1-3 daughter Directives 1999/30/EC, 2000/69/EC, 2002/3/EC and Decision on Exchange of Information 97/101/EC • New air quality objectives for PM_{2.5} (fine particles) including the limit value and exposure related objectives – exposure concentration obligation and exposure reduction target. • The possibility to discount natural sources of pollution when assessing compliance against limit values. • The possibility for time extensions of three years (PM₁₀) or up to five years (NO₂, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. 	<ul style="list-style-type: none"> • The SA will include objectives for air quality. • The requirements of the Directive will be reflected in the SA Framework. • Local Plan policies and proposals should consider the impact on air quality.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
<p>http://ec.europa.eu/environment/air/quality/legislation/existing_leg.htm</p> <p>Title: Directive 2002/49/EC Assessment and management of environmental noise (Environmental Noise Directive – END) Author: European Commission Status: Statutory Date: 2002</p>	<ul style="list-style-type: none"> • Requires competent authorities in member states to use Strategic Noise mapping on the basis of harmonised indicators to create action plans to address noise issues. • The objective is to monitor the impact of noise on health and the environment with the use of strategic Noise Maps for major sources such as roads, railways, aircraft and agglomerations. • Informing the public on noise exposure and the action plans that have been draw up to address the issues 	<ul style="list-style-type: none"> • The SA objectives will address noise pollution. • Any plans and policies produced for the Local Plan will have to comply with the Noise Action Plans.
<p>http://ec.europa.eu/environment/noise/directive.htm</p> <p>Title: Decision 2002/358/EC concerning the approval of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder Author: European Commission Status: Statutory Date: 2002</p>	<ul style="list-style-type: none"> • The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialised countries and the European community for reducing greenhouse gas (GHG) emissions. These amount to an average of five per cent against 1990 levels over the five-year period 2008-2012. • The Kyoto Protocol tackles emissions of six greenhouse gases: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); sulphur hexafluoride (SF₆). • It represents an important step forward in the effort to tackle global warming as it includes binding, quantified objectives for limiting and reducing greenhouse gases. 	<ul style="list-style-type: none"> • The SA will include objectives in relation to carbon dioxide and greenhouse gas emissions reductions. • Local Plan policies and proposals should include commitments and requirements for reducing carbon dioxide emissions.
<p>http://europa.eu/legislation_summaries/environment/tackling_climate_change/l28060_en.htm</p> <p>Title: Decision 2010/778/EU determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC Author: European Commission Status: Statutory Date: 2010</p>	<ul style="list-style-type: none"> • This decision has allocated to the Union and Member States the respective emission levels in terms of tonnes of carbon dioxide, equivalent for the first quantified emission limitation and reduction commitment period under the Kyoto Protocol 	<ul style="list-style-type: none"> • The SA will include objectives in relation to carbon dioxide and greenhouse gas emissions reductions. • Local Plan policies and proposals should include commitments and requirements for reducing carbon dioxide emissions.
<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32010D0778:EN:NOT</p> <p>Title: Directive 1999/31/EC on the landfill of waste (Landfill Directive) Author: European Commission Status: Statutory</p>	<ul style="list-style-type: none"> • The objective of the Directive is to prevent or reduce as far as possible negative effects on surface water, groundwater, soil, air and human health caused by the land filling of waste. 	<ul style="list-style-type: none"> • The impact of waste generation & disposal will be addressed in the objectives of the SA • The policies and proposals of the

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
Date: 1999	<ul style="list-style-type: none"> The Directive introduces stringent technical requirements for waste and landfill sites and a standard waste acceptance procedure and a system of operating permits for landfill sites. If a site does not comply with operational requirements, they would no longer continue to operate. Sets targets for reduction of biodegradable municipal solid waste going to landfill. 	<p>Local Plan will need to reflect these objectives.</p> <ul style="list-style-type: none"> The Local Plan should contribute to national commitment to cut biodegradable municipal waste going to landfill to 50% of 1995 level by 2013. Directive requires further reduction to 35% of 1995 level by 2020.
http://ec.europa.eu/environment/waste/landfill_index.htm		
<p>Title: Directive 2001/77/EC to promote electricity produced from renewable energy sources in the internal electricity market Author: European Commission Status: Statutory Date: 2001</p>	<ul style="list-style-type: none"> Directive aims to promote an increase in the contribution of renewable energy sources to electricity production in the internal market for electricity and to create a basis for a future Community Framework thereof. Member States are obliged to take steps to increase the consumption of electricity produced from renewable energy sources, by setting national indicative targets, in terms of a percentage of electricity consumption by 2010. UK target is for renewables to account for 10% of UK consumption by 2010. 	<ul style="list-style-type: none"> The SA Framework should include objectives to cover the action areas and encourage energy efficiency. Local Plan policies and proposals need to recognise the importance of renewable energy and the need to increase the consumption of electricity produced from renewable energy sources.
http://europa.eu/legislation_summaries/energy/renewable_energy/l27035_en.htm		
<p>Title: Directive 2012/27/EU on Energy Efficiency Author: European Commission Status: Statutory Date: 2012</p>	<ul style="list-style-type: none"> This Directive establishes a common framework of measures for the promotion of energy efficiency within the European Union in order to ensure the achievement of the EU's 2020 20% headline target on energy efficiency and to pave the way for further energy efficiency improvements beyond that date. It lays down rules designed to remove barriers in the energy market and overcome market failures that impede efficiency in the supply and use of energy, and provides for the establishment of indicative national energy efficiency targets for 2020. 	<ul style="list-style-type: none"> The SA will include objectives on cutting greenhouse gas and carbon dioxide emissions and promoting sustainable energy use, including energy efficiency. Local Plan documents and policies should aim to achieve high quality and energy efficient homes and buildings as well as support and encourage zero-/low-carbon technologies.
http://ec.europa.eu/energy/efficiency/eed/eed_en.htm		
<p>Title: Directive 2007/60/EC on the Assessment and Management of Flood Risks (EU Floods Directive) Author: European Commission Status: Statutory</p>	<ul style="list-style-type: none"> The Directive aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. It requires Member States to assess whether all water courses and coast lines are at risk from flooding, to map the 	<ul style="list-style-type: none"> The SA Framework should include objectives that promote the reduction and management of flood risk. The Local Plan, in particular policies and proposals for sites, should

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
Date: 2007	<p>flood extent and assets and humans at risk in these areas, and to take adequate and coordinated measures to reduce this flood risk.</p> <ul style="list-style-type: none"> • The Directive shall be carried out in co-ordination with the Water Framework Directive, most notably through flood risk management plans and river basin management plans, and also through co-ordination of the public participation procedures in the preparation of these plans. 	<p>consider and take account of potential flood risk. The Local Plan should generally prevent development within floodplains.</p>
<p>http://ec.europa.eu/environment/water/flood_risk/index.htm</p>		
<p>Title: Pan-European Biological and Landscape Diversity Strategy Author: Council of Europe, UNEP Status: Non-Statutory Date: July 2003</p>	<ul style="list-style-type: none"> • An innovative and proactive approach to stop and reverse the degradation of biological and landscape diversity values in Europe. • Strategy to introduce a coordinating and unifying framework for strengthening and building on existing initiatives. The strategy assesses the strengths and weaknesses of existing initiatives, and promotes practical action where there is a lack of suitable instruments or where existing mechanisms are not implemented to their full potential. 	<ul style="list-style-type: none"> • The SA will consider biodiversity in accordance with guidance on this issue. • Local Plan policies should aim to conserve and enhance biodiversity.
<p>http://www.peblids.org</p>		
<p>Title: Mainstreaming sustainable development into EU policies: 2009 Review of the European Union Strategy for Sustainable Development Author: European Commission Status: Non-Statutory Date: 2009</p>	<ul style="list-style-type: none"> • This review underlines that in recent years the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in many areas and the efforts need to be intensified. The review takes stock of EU policy measures in the areas covered by the EU SDS and launches a reflection on the future of the EU SDS and its relation to the Lisbon strategy. • Long-term vision and overarching policy framework for all Union policies and strategies. • A number of unsustainable trends require urgent action. Significant additional efforts are needed to curb and adapt to climate change, to decrease high energy consumption in the transport sector and to reverse the current loss of biodiversity and natural resources. • The shift to a safe and sustainable low-carbon and low-input economy will require a stronger focus in the future. • Priority actions should be more clearly specified in future 	<ul style="list-style-type: none"> • The SA will consider long-term sustainable development in accordance with guidance on this issue. • Local Plan documents should be based upon the principle of sustainable development, should provide a sustainable spatial vision, promote a low-carbon economy and tackle climate change.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	<p>reviews.</p> <ul style="list-style-type: none"> • Governance, including implementation, monitoring and follow-up mechanisms should be reinforced for example through clearer links to the future EU 2020 strategy and other cross-cutting strategies. 	
<p>http://ec.europa.eu/environment/eusdd/ Title: European Spatial Development Perspective Author: EU Ministers for Spatial Planning, published by the European Commission Status: Non-Statutory Date: May 1999</p>	<ul style="list-style-type: none"> • Define at Union level policy objectives and general principles of spatial development to ensure the sustainable balanced development of the European territory, which respects its diversity. • Aim of balanced and sustainable development of the Territory of the European Union. • Emphasis is on achieving the three fundamental goals of European Policy equally in all regions: <ol style="list-style-type: none"> 1. Economic and social cohesion 2. Conservation and management of natural resources, and the cultural heritage. 3. More balanced competitiveness of the European Territory. 	<ul style="list-style-type: none"> • The SA will consider the aims of the European Spatial Development Perspective and ensure the objectives reflect these. • Local Plan policies should be based upon a sustainable spatial vision and take account of the European dimension of spatial planning.
<p>http://europa.eu/legislation_summaries/regional_policy/management/q24401_en.htm Title: Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system Author: European Commission Status: White Paper Date: 2011</p>	<p>The European Commission adopted a roadmap of 40 concrete initiatives for the next decade to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment. At the same time, the proposals will dramatically reduce Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050.</p> <p>By 2050, key goals will include:</p> <ul style="list-style-type: none"> • No more conventionally-fuelled cars in cities. • 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions. • A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport. • All of which will contribute to a 60% cut in transport emissions by the middle of the century. 	<ul style="list-style-type: none"> • The SA objectives will consider the wide-ranging aims in relation to transport, in particular dealing with direct and indirect impact of road traffic, providing travel choice and cutting transport related emissions • Local Plan documents, its policies and proposals should promote sustainable travel, contribute to a reduced dependence on imported oil and cut carbon dioxide emissions.
<p>http://ec.europa.eu/transport/themes/strategies/2011_white_paper_en.htm Title: European Landscape Convention (ELC)</p>	<ul style="list-style-type: none"> • The aims of this Convention are to promote landscape protection, management and planning, and to organise 	<ul style="list-style-type: none"> • The SA will include an objective on protecting and conserving landscape

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
Author: Council of Europe Status: Statutory Date: 2000	European co-operation on landscape issues. It also aims to encourage public authorities to adopt policies and measures at local, regional, national and international level for protecting, managing and planning landscapes throughout Europe. <ul style="list-style-type: none"> • Signed by the UK Government in February 2006, the ELC became binding from March 2007. It applies to all landscapes, towns and villages, as well as open countryside; the coast and inland areas; and ordinary or even degraded landscapes, as well as those that are afforded protection. 	and townscape character. <ul style="list-style-type: none"> • Policies and proposals as set out in the Local Plan should protect, manage and plan for landscapes and townscapes.
http://www.coe.int/t/dg4/cultureheritage/heritage/landscape/default_en.asp		
Title: Proposal for a Decision on a General Union Environment Action Programme to 2020 – “Living well, within the limits of our planet” Author: European Commission Status: Non-Statutory Date: 2012	Environment Action Programmes have guided the development of EU environment policy since the early 1970s; the 6th EAP expired in July 2012. The proposed programme provides an overarching framework for environment policy to 2020, identifying nine priority objectives for the EU and its Member States to attain. The context of this proposal is fourfold. <ul style="list-style-type: none"> • Despite progress in some areas, major environmental challenges remain, as well as opportunities to make the environment more resilient to systemic risks and change. • The EU has adopted the Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth, which guides policy development for the period up to 2020. • While many Member States are struggling to cope with the economic crisis, the need for structural reforms offers new opportunities for the EU to move towards an inclusive green economy. • Rio+20 highlighted the importance of the global dimension. This EAP aims to step up the contribution of environment policy to the transition towards a resource-efficient, low-carbon economy in which natural capital is protected and enhanced, and the health and well-being of citizens is safeguarded. 	<ul style="list-style-type: none"> • The SA will include objectives aimed at achieving the objectives set out in this Programme (climate change, nature & biodiversity, environment/health/quality of life, natural resources and waste). • The Local Plan policies should aim to provide an approach to meet the target and objectives relating to these key priorities.
http://ec.europa.eu/environment/newprg/index.htm		
Title: The Johannesburg Declaration on Sustainable Development (Earth Summit 2002) Author: United Nations	<ul style="list-style-type: none"> • States a commitment to building a humane, equitable and caring global society. • Key commitments include sustainable production and consumption; renewable energy & energy efficiency; 	<ul style="list-style-type: none"> • The SA will reflect the commitments of this Declaration, particularly with regard to using resources efficiently. • Plans and policies within the Local

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
Status: Non-Statutory Date: 2002	production of chemicals in ways that do not lead to significant adverse effects on human health and the environment; develop integrated water resources management and water efficiency plans by 2005.	Plan should also reflect the commitments and aims of the Declaration.
http://www.un-documents.net/jburgdec.htm		
Title: Living Planet Report 2012 – Biodiversity, biocapacity and better choices Author: World Wildlife Fund in collaboration with Global Footprint Network, Zoological Society of London and the European Space Agency (ESA) Status: Non-Statutory Date: 2012	<ul style="list-style-type: none"> • Reviews and surveys the ecological state and health of the planet; it reports an alarming rate of biodiversity loss – in total 28% global reduction between 1970 and 2008. • Determines the human impact on Earth's resources; the 2012 report shows that we are using 50% more resources than the Earth can provide. 	<ul style="list-style-type: none"> • The SA will includes objectives relating to sustainable development, protecting and enhancing biodiversity and ecology and to reduce carbon dioxide emissions. • Local Plan policies should aim to conserve and enhance biodiversity.
http://wwf.panda.org/about_our_earth/all_publications/living_planet_report/		
Level: National Context		
Title: National Planning Policy Framework Author: UK Government Status: Government Policy Date: 2012	The new simplified National Planning Policy Framework (NPPF) has replaced Planning Policy Statements and Planning Policy Guidance except PPS10 regarding Waste. The Framework sets out planning policies for England and how they are expected to be applied. It provides guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications. It includes a general presumption in favour of sustainable development, and requires to:	<ul style="list-style-type: none"> • The SA framework and objectives will be in line with the overarching objectives and policies of the NPPF. • All documents produced under the Local Plan will need to be in general conformity with the NPPF and thus adhere to its policies.
	<ul style="list-style-type: none"> • Support a genuinely plan-led system and plan positively for growth • Secure high quality design standards • Take account of the roles and character of different areas • Support transition to a low carbon future • Contribute to conserving and enhancing the natural environment and reducing pollution • Prioritise the use of previously developed land • Promote mixed use development • Conserve heritage assets 	

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	<ul style="list-style-type: none"> • Manage patterns of growth to make full use of public transport, walking and cycling • Take account of and support local strategies to improve health, social and cultural wellbeing and deliver facilities and services to meet local needs. <p>The Framework does not contain specific waste policies, since national waste planning policy will be published as part of the National Waste Management Plan for England.</p>	
https://www.gov.uk/government/publications/national-planning-policy-framework--2		
<p>Title: Planning Practice Guidance Author: UK Government Status: Government Policy Date: 2014</p>	<p>This web-based resource provides guidance to any user of the planning system. The guidance is set out under separate headings.</p>	<ul style="list-style-type: none"> • The SA framework and objectives will take account of the guidance in relation to flood risk. • Local Plan policies and proposals in relation to flood risk should be in general conformity with this Guidance.
http://planningguidance.communities.gov.uk/blog/guidance/		
<p>Title: National Planning Policy for Waste Author: UK Government Status: Government Policy Date: 2014</p>	<p>Provides a clear framework to enable waste planning authorities to work collaboratively and to identify what sort of waste facilities are needed and where they should go, while also protecting the local environment and local amenity by preventing waste facilities being placed in inappropriate locations. The new policy reiterates the need to drive waste management up the waste hierarchy.</p>	<ul style="list-style-type: none"> •
https://www.gov.uk/government/publications/national-planning-policy-for-waste		
<p>Title: Planning policy for traveller sites Author: UK Government Status: Government Policy Date: 2012</p>	<p>The government has published its new planning policy for traveller sites at the same time as the NPPF. This planning policy for traveller sites should be read in conjunction with the NPPF.</p>	<ul style="list-style-type: none"> • The SA framework and Local Plan should take account of this planning policy for traveller sites.
https://www.gov.uk/government/publications/planning-policy-for-traveller-sites		
<p>Title: Localism Act Author: UK Government Status: Statutory Date: 2011</p>	<p>The Localism Act has wide-ranging measures aimed at taking power away from Central Government so that local communities, through their directly elected local representatives, have more say in the provision of local services. The Act has the following key planning implications:</p> <ul style="list-style-type: none"> • Abolition of Regional Spatial Strategies (with the exception of London); • Nationally Significant Infrastructure Projects: Abolition of the 	<ul style="list-style-type: none"> • The SA and Local Plan need to take account of the changes to the planning system as a result of the Localism Act.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	<p>Infrastructure Planning Commission;</p> <ul style="list-style-type: none"> • National Planning Policy Statements: the streamlining of national planning policy guidance into a single document – the National Planning Policy Framework; • Community Infrastructure Levy: some CIL funds now have to be passed to neighbourhoods where the development has taken place; • Inspectors Reports not binding upon the Authority; • Neighbourhood Planning: This is a key component of the Act as it introduces a new tier of spatial planning concept - namely neighbourhood planning. The Act introduces the right for communities to shape their local areas by creating "Neighbourhood Planning Authority" (NPA). The NPA could be based on existing parishes - or a group of parishes or by an organisation designated by the LPA as a "Neighbourhood Forum. " Neighbourhoods can also establish general policies that will steer decisions on traditional planning applications. NPA's can therefore prepare their own "Neighbourhood Development Plan", which will form part of the statutory development plan once adopted. • Requirement for pre-application consultation for prospective developers; <p>Changes specifically for London Planning:</p> <ul style="list-style-type: none"> • Devolution of powers over housing investment from the Homes and Communities Agency to the GLA; • Abolition of the London Development Agency; • New powers for the Mayor of London to create Mayoral Development Corporations for regeneration. 	
<p>http://www.legislation.gov.uk/ukpga/2011/20/contents/enacted</p> <p>Title: Public Services (Social Value) Act 2012 Author: UK Government Status: Statutory Date: 2012</p>	<p>In accordance with the Public Services (Social Value) Act, an authority must consider:</p> <ul style="list-style-type: none"> • how what is proposed to be procured might improve the economic, social and environmental well-being of the relevant area, and • how, in conducting the process of procurement, it might act with a view to securing that improvement. <p>This Act therefore places a duty on public bodies to consider social value ahead of a procurement. The Act applies to the</p>	<ul style="list-style-type: none"> • The SA, Local Plan and associated work carried out, should take account of the Council's duty to consider social value ahead of procurement.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	provision of services, or the provision of services together with the purchase or hire of goods or the carrying out of works.	
http://www.legislation.gov.uk/ukpga/2012/3/enacted		
<p>Title: Reuniting health with planning: healthier homes, healthier communities' Author: UK Government Status: Guidance Date: 2012</p>	<p>This guide is the first of its kind since the Government set out a radical reform agenda across the planning and health sectors in England, including a requirement on planners to work with public health organisations, and a new public health responsibility for local authorities. It explains the relevance of these reforms for health and planning, and gives planners and public health practitioners ideas for how they can work together. Using case studies from around England, it explores how places are using this time of change to push forward their intention to integrate their work across both sectors.</p>	<ul style="list-style-type: none"> • The SA framework will include an objective on facilitating the improved health and well being of the population, including access to health, education, sport, leisure and recreation facilities. • The Local Plan should consider the potential impacts and benefits that plan-making decisions can have on the health of communities.
http://www.tcpa.org.uk/pages/reuniting-health-with-planning-healthier-homes-healthier-communities.html		
<p>Title: UK Sustainable Development Strategy "Securing the Future" Author: UK Government Status: Non-Statutory Date: 2005</p>	<p>The Strategy incorporates a framework to enhance the achievement of the following aims: social progress, effective protection of the environment, prudent use of natural resources and maintenance of high and stable levels of economic growth and employment. The framework has a set of overarching principles, which form the basis for policy in the UK:</p> <ul style="list-style-type: none"> • Living within environmental limits • Ensuring a strong, healthy and just society • Achieving a sustainable economy • Promoting good governance • Using sound science responsibly 	<ul style="list-style-type: none"> • The Sustainable Development Strategy will provide guidance and inform the entire SA process. • The aims and principles of this Strategy will be incorporated in the SA objectives. • Local Plan documents and their policies should support the principles and objectives of the strategy.
http://www.defra.gov.uk/publications/2011/03/25/securing-the-future-pb10589/		
<p>Title: Conservation of Habitats and Species Regulations 2010 (Habitats Regulation) Author: UK Government Status: Statutory Date: 2010</p>	<ul style="list-style-type: none"> • The regulations affect any proposed works within or adjacent to a Special Protected Area (SPA) or a proposed/ candidate SPA or a Special Area of Conservation (SAC) or a proposed/ candidate SAC. • The consenting authority needs to test whether the proposed works would have an adverse impact on the site. In so doing, it will have regard to the advice of the appropriate nature conservation body. Unless the conclusion is that there will be no adverse impact, the applicant will have to consider measures to mitigate these effects. If appropriate and adequate mitigation measures are not possible, the project 	<ul style="list-style-type: none"> • The SA framework will reflect the requirements of the Habitats Regulations. • Local Plan documents should ensure that areas designated for nature conservation purposes are protected.

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	<p>may only be consented if the Secretary of State decides there is no alternative approach, that there are reasons of overriding public interest for it to proceed, and after a suitable compensation package has been agreed.</p>	
<p>http://www.legislation.gov.uk/ukxi/2010/490/contents/made</p>		
<p>Title: Biodiversity 2020: A strategy for England's wildlife and ecosystem services Author: UK Government, DEFRA Status: Non-Statutory Date: 2011</p>	<ul style="list-style-type: none"> • This biodiversity strategy for England provides a comprehensive picture of how the UK is implementing the international and EU commitments. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. • The mission for this strategy, for the next decade, is to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people. 	<ul style="list-style-type: none"> • The SA will include objectives in relation to protecting and enhancing the biodiversity. • Local Plan policies should ensure that development does not have a detrimental impact on threatened species and habitats.
<p>http://www.defra.gov.uk/publications/2011/08/19/pb13583-biodiversity-strategy-2020/</p>		
<p>Title: UK Biodiversity Action Plan (UK BAP) 1992–2012 Author: UK Government Status: Statutory Date: 1994</p>	<ul style="list-style-type: none"> • The UK BAP was the UK Government's response to the Convention on Biological Diversity (CBD), which the UK signed up to in 1992 in Rio de Janeiro. The UK BAP described the biological resources of the UK and provided detailed plans for conservation of these resources. Action plans for the most threatened species and habitats were set out to aid recovery, and national reports, produced every three- to five-years, showed how the UK BAP was contributing to the UK's progress towards the significant reduction of biodiversity loss called for by the CBD. 	<ul style="list-style-type: none"> • The SA will include objectives in relation to protecting and enhancing the biodiversity. • Local Plan policies should ensure that development does not have a detrimental impact on threatened species and habitats.
<p>http://jncc.defra.gov.uk/page-5155</p>		
<p>Title: UK Post-2010 Biodiversity Framework Author: UK Government Status: Statutory Date: 2012</p>	<ul style="list-style-type: none"> • Environment Departments and Ministers of all four governments in the UK have signed a framework of priorities for UK-level work for the Convention on Biological Diversity. The 'UK Post-2010 Biodiversity Framework' covers the period from 2011 to 2020. • Most work which was previously carried out under the UK Biodiversity Action Plan (UK BAP) is now focussed in the countries. The UK BAP partnership no longer operates. • Many of the tools developed under UK BAP remain of use, for example, background information about the lists of priority habitats and species. The lists of priority species and habitats 	<ul style="list-style-type: none"> • The SA will include objectives in relation to protecting and enhancing the biodiversity. • Local Plan policies should ensure that development does not have a detrimental impact on threatened species and habitats.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	agreed under UK BAP still form the basis of much biodiversity work in the countries.	
http://jncc.defra.gov.uk/page-6189		
<p>Title: Transport White Paper "Creating Growth, Cutting Carbon: making sustainable local transport happen" Author: UK Government Status: Statutory Date: 2011</p>	<ul style="list-style-type: none"> • The local transport white paper sets out the government's vision for a sustainable local transport system that supports the economy and reduces carbon emissions. • It explains how the government is placing localism at the heart of the transport agenda, taking measures to empower local authorities when it comes to tackling these issues in their areas. • The white paper also underlines central government's direct support to local authorities, including through the Local Sustainable Transport Fund. 	<ul style="list-style-type: none"> • The SA framework will include objectives relating to transport, including sustainable travel, accessibility as well as issues such as health and air pollution. • The Local Plan should incorporate policies to address transport issues, through initiatives and new developments, within the borough as well as the connectivity with surrounding areas.
https://www.gov.uk/government/publications/creating-growth-cutting-carbon-making-sustainable-local-transport-happen		
<p>Title: Draft Aviation Policy Framework Author: UK Government Status: Draft for consultation Date: 2012</p>	<ul style="list-style-type: none"> • The government's primary objective is to achieve long-term economic growth. The aviation sector is a major contributor to the economy, and the government supports its growth within a framework that maintains a balance between the benefits of aviation and its costs, particularly climate change and noise. • The framework seeks to strengthen the arrangements for involving communities near airports in decisions, which affect them. • The aviation industry also needs to have confidence that the framework is sufficiently stable to underpin long-term planning and investment in aircraft and infrastructure. 	<ul style="list-style-type: none"> • The issue of air capacity and associated development is one that this Borough cannot influence through SA and Local Plan documents. • It is however important to the Council as a whole due to the close proximity of the borough to Heathrow airport.
https://www.gov.uk/government/consultations/draft-aviation-policy-framework		
<p>Title: The Wildlife and Countryside Act (as amended) 1981 Author: UK Government Status: Statutory Date: 1981 (as amended)</p>	<p>The Wildlife and Countryside Act 1981 is an Act of Parliament in the UK implemented to comply with Directive 2009/147/EC. In short, the act gives protection to native species (especially those at threat), controls the release of non-native species, enhances the protection of Sites of Special Scientific Interests (SSSIs) and builds upon the rights of way rules in the National Parks and Access to the Countryside Act 1949.</p>	<ul style="list-style-type: none"> • The SA will include objectives to protect habitats and wildlife. • Policies in the Local Plan should consider the potential impact of new development on wildlife species and habitats, particularly on the borough's SSSIs.
http://jncc.defra.gov.uk/page-1377		
<p>Title: Sustainable Communities Act 2007: decisions on local councils' proposals to improve local areas (amended in 2010)</p>	<p>This Act provides a statutory framework for councils in England – working with local people and community groups – to put forward proposals on sustainable improvements to economic,</p>	<ul style="list-style-type: none"> • The SA will include objectives for sustainable development and communities.

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Author: UK Government Status: Statutory Date: 2007, 2010	environmental and social wellbeing	<ul style="list-style-type: none"> Local Plan documents should provide a sustainable spatial vision, contributing towards the achievement of sustainable communities as well as incorporate people into the decision-making process.
http://www.legislation.gov.uk/ukpga/2007/23/contents		
Title: The Energy Efficiency Strategy: The Energy Efficiency Opportunity in the UK Author: UK Government Status: Statutory Date: 2012	<ul style="list-style-type: none"> The Energy Efficiency Strategy sets the direction for energy efficiency policy for the coming decades. It makes clear the government's ambition, the barriers that need to be addressed and the additional steps to be taken to stimulate the energy efficiency market. The Government's plans are aimed at changing the way energy is used in housing, transport and manufacturing. It shows that there is a clear role for ambitious Government leadership and spells out how the government will act to connect finance with demand, encourage innovation, and make energy efficiency information more accessible to the consumer. The EU Energy Efficiency Directive, which must be transposed into national laws and fully implemented by spring 2014, imposes various measures on EU member states to reduce their primary energy consumption by 20% of their 2007 business as usual projections by 2020. 	<ul style="list-style-type: none"> The SA will include objectives on cutting greenhouse gas and carbon dioxide emissions and promoting sustainable energy use, including energy efficiency. Local Plan documents and policies should aim to achieve high quality and energy efficient homes and buildings as well as support and encourage zero-/low-carbon technologies.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/65602/6927-energy-efficiency-strategy--the-energy-efficiency.pdf		
Title: Climate Change Act Author: UK Government Status: Statutory Date: 2008	The Climate Change Act creates a new approach to managing and responding to climate change in the UK, by: <ul style="list-style-type: none"> setting ambitious, legally binding targets taking powers to help meet those targets strengthening the institutional framework enhancing the UK's ability to adapt to the impact of climate change establishing clear and regular accountability to the UK Parliament and to the devolved legislatures. Legally binding targets: Green house gas emission reductions through action in the UK and abroad of at least 80% by 2050, and reductions in CO2 emissions of at least 26% by 2020, against a 1990 baseline.	<ul style="list-style-type: none"> The SA will include objectives on cutting greenhouse gas emissions and promoting sustainable energy use. Local Plan documents and policies should aim to achieve high sustainable homes, energy efficient buildings and support and encourage zero-/low-carbon technologies.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
http://www.legislation.gov.uk/ukpga/2008/27/contents		
<p>Title: UK Climate Projections 2009 Author: UK Government Status: Non-Statutory Date: 2009</p>	<ul style="list-style-type: none"> • The 2009 UK Climate Projections (UKCP09) describe the methodology and some key projections of future climate change for the UK over the 21st century. • The UKCP09 Projections provide a basis for studies of impacts and vulnerability and decisions on adaptation to climate change in the UK over the 21st century. • Projections are given of changes to climate, and of changes in the marine and coastal environment; recent trends in observed climate are also discussed. 	<ul style="list-style-type: none"> • The SA will include objectives for reducing emissions including that of CO₂, and will take into account guidance on climate change. • The Local Plan policies should address climate change and ensure that all new developments reduce carbon emissions and encourage existing developments to increase their energy efficiency.
http://ukclimateprojections.defra.gov.uk/		
<p>Title: The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volume 2) Author: UK Government Status: Statutory Date: 2007</p>	<p>The strategy:</p> <ul style="list-style-type: none"> • sets out a way forward for work and planning on air quality issues; • sets out the air quality standards and objectives to be achieved; • introduces a new policy framework for tackling fine particles; • identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. 	<ul style="list-style-type: none"> • The SA will include air quality and emissions objectives. • The Local Plan should consider air quality and climate change throughout its documents.
http://www.defra.gov.uk/publications/files/pb12670-air-quality-strategy-vol2-070712.pdf		
<p>Title: Air Pollution: Action in a Changing Climate Author: UK Government Status: Non-Statutory Date: 2010</p>	<ul style="list-style-type: none"> • Details the UK's plan to tackle air pollution from 2010 to 2020 • Sets out to maximise the benefits of the similar goals of reducing CO₂ emissions and reducing air pollution 	<ul style="list-style-type: none"> • The SA will include air quality and emissions objectives. • The Local Plan should consider air quality and climate change throughout its documents.
http://www.defra.gov.uk/publications/2011/04/13/pb13378-air-pollution/		
<p>Title: National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England – Understanding the risks, empowering communities, building resilience Author: Environment Agency, Defra Status: Non-Statutory Date: 2011</p>	<ul style="list-style-type: none"> • The Flood and Water Management Act 2010 requires the Environment Agency (EA) to 'develop, maintain, apply and monitor a strategy for flood and coastal erosion risk management in England'. • This strategy describes what needs to be done by all organisations involved in flood and coastal erosion risk management. These include local authorities, internal drainage boards, water and sewerage companies, highways authorities and the EA. • The strategy sets out a statutory framework that will help 	<ul style="list-style-type: none"> • The SA will include objectives to reduce vulnerability to climate change and to minimise the susceptibility of land use to flooding. • Local Plan documents should include policies to avoid high flood risk locations and protect developments from flooding.

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	<p>communities, the public sector and other organisations to work together to manage flood and coastal erosion risk. It will support local decision-making and engagement in FCERM, making sure that risks are managed in a coordinated way across catchments and along each stretch of coast. This includes the development of local flood risk management strategies by lead local flood authorities, as well as the EA's strategic overview of all sources of flooding and coastal erosion.</p>	
<p>http://www.environment-agency.gov.uk/research/policy/130073.aspx</p>		
<p>Title: Natural England Corporate Plan 2012-2015 Author: Natural England Status: Non-Statutory Date: 2012</p>	<p>This Plan sets out Natural England's (NE) priorities for the next three years against a set of four strategic outcomes, developed in the context of the new local delivery landscape:</p> <ul style="list-style-type: none"> • A healthy, well-functioning natural environment • People are inspired to value and conserve the natural environment • Sustainable use of the natural environment • A secure environmental future <p>These outcomes have been established to enable NE to fulfill their statutory role. The plan describes how NE will deploy their resources across their strategic outcomes and the key performance indicators they will use to measure how successfully they have delivered them.</p>	<ul style="list-style-type: none"> • The SA will include objectives to protect and where possible enhance overall biodiversity value, in particular of designated sites. • The Local Plan should include policies on protecting the natural environment.
<p>http://naturalengland.etraderstores.com/NaturalEnglandShop/ne188</p>		
<p>Title: Historic England Corporate Plan 2015 - 2018 Author: Historic England Status: Non-Statutory Date: 2015</p>	<p>Corporate Plan 2015 - 2018 The Corporate Plan sets out Historic England's aims and objectives for the next three years: Aim 1: Champion England's heritage Aim 2: Identify and protect England's most important heritage Aim 3: Support change through constructive conservation Aim 4: Support owners and local authorities to have the Aim 5: Achieve excellence, openness and efficiency in all we do</p>	<ul style="list-style-type: none"> • The SA framework as well as the Local Plan should take note of Historic England's Corporate Plan and protect the historic environment.
<p>https://historicengland.org.uk/about/what-we-do/corporate-strategy/</p>		
<p>Title: Tall Buildings: Historic England Advice Author: Historic England Status: Non-Statutory Date: 2015</p>	<p>Historic England has published updated advice on Tall Buildings which sets out good practice in deciding whether to grant planning permission for this kind of application.</p>	<ul style="list-style-type: none"> • The SA framework will take account of the need to protect the historic environment and townscape. • The Guidance should be used and referred to in the Local Plan

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		documents and informed for policy making; where appropriate policies are not yet in place, it should be used to evaluate planning applications for tall buildings.
http://historicengland.org.uk/images-books/publications/tall-buildings-advice-note-4/		
Title: Water Resources Act Author: UK Government Status: Statutory Date: 1991	<ul style="list-style-type: none"> • This Act aims to prevent and minimise pollution of water. The policing of this Act is the responsibility of the Environment Agency. Under the Act, it is an offence to cause or knowingly permit any poisonous, noxious or polluting material, or any solid waste to enter any controlled water. • Silt and soil from eroded areas are included in the definition of polluting material. If eroded soil is found to be polluting a water body or watercourse, the Environment Agency may prevent or clear up the pollution, and recover the damages from the landowner or responsible person. 	<ul style="list-style-type: none"> • The SA framework will include objectives to prevent and minimise the pollution of water. • Local Plan documents should set out policies and be aware of impacts that developments can have in order to protect the water quality and water resources.
http://www.legislation.gov.uk/ukpga/1991/57/contents		
Title: Water Act Author: UK Government Status: Statutory Date: 2003	The four broad aims of the Act are <ul style="list-style-type: none"> • the sustainable use of water resources; • strengthening the voice of consumers; • a measured increase in competition; and • the promotion of water conservation. 	<ul style="list-style-type: none"> • The SA framework will include objectives to maintain and where possible improve water quality. • Local Plan documents should set out policies on protecting water quality and water resources.
http://www.legislation.gov.uk/ukpga/2003/37/contents		
Title: Flood Risk Regulations 2009 Author: UK Government Status: Statutory Date: 2009	Lead Local Flood Authorities gain duties of: <ul style="list-style-type: none"> • Assembling Preliminary Flood Risk Assessments • Identifying Flood Risk Areas • Creating Flood Risk Maps • Making Flood Risk Management plans 	<ul style="list-style-type: none"> • Reducing the risk to and from flooding will be included in the SA objectives. • Local Plan documents should set out aims and policies to reduce flood risk and ensure new development addresses flood risk.
http://www.legislation.gov.uk/uksi/2009/3042/contents/made		

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<p>Title: Flood and Water Management Act 2010 Author: UK Government Status: Statutory Date: 2010</p>	<p>Introduces Lead Local Flood Authorities, who gain new powers and responsibilities such as:</p> <ul style="list-style-type: none"> • Developing Flood Risk Management Strategies • Designation and registration of assets • Creation of SUDS approval bodies • Investigation of flooding 	<ul style="list-style-type: none"> • Reducing the risk to and from flooding will be included in the SA objectives. • Local Plan documents should set out aims and policies to reduce flood risk and ensure new development addresses flood risk.
http://www.legislation.gov.uk/ukpga/2010/29/contents		
<p>Title: White Paper: Healthy Lives, Healthy People: Our Strategy for Public Health in England Author: Department of Health Status: Statutory Date: 2010</p>	<p>A radical new approach that will empower local communities, enable professional freedoms and unleash new ideas based on the evidence of what works, while ensuring that the country remains resilient to and mitigates current and future health threats. This approach will reach across and reach out – addressing the root causes of poor health and wellbeing, reaching out to the individuals and families who need the most support – and be:</p> <ul style="list-style-type: none"> • Responsive – owned by communities and shaped by their needs; • Resourced – with ring-fenced funding and incentives to improve; • Rigorous – professionally-led and focused on evidence; efficient and effective; and • Resilient – strengthening protection against current and future threats to health. 	<ul style="list-style-type: none"> • The SA framework will include an objective on facilitating the improved health and well being of the population, including access to health, education, sport, leisure and recreation facilities. • The Local Plan should consider the potential impacts and benefits that plan-making decisions can have on the health of communities.
http://www.dh.gov.uk/health/2011/07/healthy-lives-healthy-people/		

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<p>Title: Definition of Waste: Development Industry Code of Practice Author: Contaminated Land: Applications in Real Environments (CL:AIRE) Status: Non-Statutory Date: 2011</p>	<ul style="list-style-type: none"> • This Definition of Waste Code of Practice (DoWCoP) is an initiative to improve the sustainable and cost effective development of land. • It provides a clear, consistent and streamlined process which enables the legitimate reuse of excavated materials on-site or their movement between sites with a significantly reduced regulatory burden. • In many instances the DoWCoP can provide an alternative to Environmental Permits or Waste Exemptions when seeking to reuse excavated materials. It enables the direct transfer and reuse of clean naturally occurring soil materials between sites. • It creates the conditions to support the establishment and operation of fixed soil treatment facilities, which have a key role to play in the future of sustainable materials management. • It allows the reuse of both contaminated and uncontaminated materials on the site of production and between sites within defined Cluster projects. 	<ul style="list-style-type: none"> • The impact of waste generation and disposal will be addressed in the objectives of the SA. • The policies and proposals of the Local Plan will need to reflect these objectives and ensure that waste is minimised where possible.
http://www.claire.co.uk/index.php?option=com_content&view=article&id=210&Itemid=82		
<p>Title: The Plan for Growth Author: UKI Government, HM Treasury, Department for Business, Innovation and Skills Status: Government statement Date: March 2011</p>	<p>The ambitions are:</p> <ol style="list-style-type: none"> 1. to create the most competitive tax system in the G20; 2. to make the UK one of the best places in Europe to start, finance and grow a business; 3. to encourage investment and exports as a route to a more balanced economy; and 4. to create a more educated workforce that is the most flexible in Europe. 	<ul style="list-style-type: none"> • The SA framework will promote and encourages a diverse economy that will provide sustainable economic growth. • Local Plan plans and policies should promote and encourage sustainable economic growth.
http://cdn.hm-treasury.gov.uk/2011budget_growth.pdf		
<p>Title: A Practical Guide to the Strategic Environmental Assessment Directive Author: ODPM (UK Government) Status: Government Policy Date: 2006</p>	<p>Practical guidance on applying European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”.</p>	<ul style="list-style-type: none"> • This Practical Guide will be taken into account and followed during the entire Sustainability Appraisal process, including this Scoping Report.
<p>Level: Regional Context</p>		

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
<p>Title: Further Alterations to The London Plan: Spatial Development Strategy for Greater London Author: The Mayor of London Status: Statutory Date: 2015 And Minor Alterations to The London Plan</p>	<ul style="list-style-type: none"> The London Plan is the overall strategic plan for London. It sets out a fully integrated economic, environmental, transport and social framework for the development of the capital to 2031. The London Plan forms part of the development plan for Greater London. London boroughs' local plans need to be in general conformity with the London Plan, and its policies guide decisions on planning applications by councils and the Mayor. 	<ul style="list-style-type: none"> The Borough will have to ensure that the policies in the Local Plan and the objectives of the SA are in general conformity with policies and objectives in The London Plan.
<p>http://www.london.gov.uk/priorities/planning/londonplan</p>		
<p>Title: The Mayor's Housing Strategy (draft) Author: The Mayor of London Status: Draft Date: 2012</p>	<ul style="list-style-type: none"> Since the Mayor published the first statutory London Housing Strategy in February 2010, a new investment period has begun. There have been major changes to the allocation of government funding for housing, including significant new housing and regeneration powers for the Mayor. The 2010 strategy has now been reviewed and a number of areas have been identified where change is needed, and a revised housing strategy is being produced. 	<ul style="list-style-type: none"> The SA will include objectives to create sustainable, well-designed as well as affordable housing, particularly for families. The Local Plan should maximise the provision of affordable housing in line with government targets; promote redevelopment of sites, provide a housing mix and good design that benefit the community as a whole while minimising environmental impact.
<p>http://www.london.gov.uk/publication/revised-london-housing-strategy-public-consultation</p>		
<p>Title: The Mayor's Transport Strategy (draft) Author: The Mayor of London Status: Draft Date: 2010</p>	<p>The Mayor's transport vision: 'London's transport system should excel among those of world cities, providing access to opportunities for all its people and enterprises, achieving the highest environmental standards and leading the world in its approach to tackling urban transport challenges of the 21st century.'</p> <p>Six goals set out how this overarching vision should be implemented. The transport strategy should:</p> <ul style="list-style-type: none"> Support economic development and population growth Enhance the quality of life for all Londoners Improve the safety and security of all Londoners Improve transport opportunities for all Londoners Reduce transport's contribution to climate change and improve its resilience 	<ul style="list-style-type: none"> The SA will include objectives that address sustainable travel, reduction of CO2 emissions and accessibility of transport, as well as associated issues such as health and air pollution. The Local Plan will have to look at ways to incorporate policies to address transport issues through initiatives and new developments within the borough, as well as consider the connectivity with surrounding areas.

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	<ul style="list-style-type: none"> Support delivery of the London 2012 Olympic and Paralympic Games and its legacy 	
http://www.london.gov.uk/publication/mayors-transport-strategy		
<p>Title: The Mayor's Ambient Noise Strategy: Souder City Author: The Mayor of London Status: Non-Statutory Date: 2004</p>	<ul style="list-style-type: none"> The aim of the strategy is: 'to minimise the adverse impacts of noise on people living and working in, and visiting London using the best available practices and technology within a sustainable development framework'. It recognises the importance of London's 'Soundscape'. <p>Three key issues have been identified:</p> <ul style="list-style-type: none"> Securing good, noise reducing surfaces on Transport for London's roads. Securing night aircraft ban across London. Reducing noise through better planning and design of new housing 	<ul style="list-style-type: none"> The SA will include objectives and indicators for noise reduction to minimise its impact within the borough. The location, design and layout of development will have to be considered by Local Plan policies with regard to noise implications.
http://static.london.gov.uk/mayor/strategies/noise/		
<p>Title: The Mayor's Air Quality Strategy: Clearing the Air Author: The Mayor of London Status: Non-Statutory Date: 2010</p>	<p>The Strategy focuses on reducing PM10 and NO2 pollution levels</p> <ul style="list-style-type: none"> The Mayor's aim is to improve London's air quality to the point where pollution no longer poses a significant risk to human health. As road traffic is one of the biggest contributors to air pollution the strategy focuses on reducing this. <p>The measures to be implemented:</p> <ul style="list-style-type: none"> Reduce the amount of traffic Reduce emissions from individual vehicles Reducing emissions from air travel Adoption of more energy efficient buildings Improving the energy efficiency of existing buildings Improving fuel efficiency Using renewable energy technologies Reducing pollution from industry and construction 	<ul style="list-style-type: none"> The SA will include objectives for air quality. The Local Plan should consider the potential of developments, the design of buildings and transport contributing to air pollution.
http://www.london.gov.uk/publication/mayors-air-quality-strategy		
<p>Title: The Mayor's Biodiversity Strategy: Connecting with London's Nature Author: The Mayor of London Status: Non-Statutory Date: 2002</p>	<p>The strategy and its implementation aim to meet the biodiversity objectives within the context of the Mayor's overall vision for London. The objectives for biodiversity are:</p> <ul style="list-style-type: none"> Biodiversity for people – ensure access for all to wildlife and natural green space. 	<ul style="list-style-type: none"> The SA will include objectives and indicators for biodiversity reflecting the aims and objectives of the Mayor's Strategy. The Local Plan policies should be

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	<ul style="list-style-type: none"> • Nature for its own sake – conserve plants, animals and their habitats. Biodiversity has an intrinsic right to be conserved for its own sake. • Economic Benefits – open space attracts tourists, green space provides jobs, ensure the economic benefits of natural greenspace are fully realised. • Functional Benefits – vegetation can reduce flood risk, local climate benefits, and absorption of some pollutants. • Sustainable Development – recognise that biodiversity conservation as an essential element of sustainable development. 	<p>considered against the potential to impact on the biodiversity of the borough, looking at the protection of green spaces, access to these for the community, and other areas of biodiversity should be considered in the policies, e.g. back gardens.</p>
<p>http://legacy.london.gov.uk/mayor/strategies/biodiversity/index.jsp</p>		
<p>Title: The Mayor's Cultural Strategy: Cultural Metropolis Author: The Mayor of London Status: Non-Statutory Date: 2010</p>	<p>The Strategy seeks to</p> <ul style="list-style-type: none"> • Maintain London position as a world city of culture • Widen the reach to excellence • Improve education, skills and careers • Improve infrastructure, the environment and public realm • Incorporate cultural enhancements into the 2012 Olympics plans and legacy 	<ul style="list-style-type: none"> • The SA objectives should reflect the cultural aims of this Strategy. • The Local Plan will need to consider policies that encourage developments that enhance creativity and culture within the borough. It will also have to ensure that facilities are accessible to all members of the community and are accessible by sustainable transport.
<p>http://www.london.gov.uk/who-runs-london/mayor/publications/culture/cultural-strategy</p>		
<p>Title: The Mayor's Economic Development Strategy for London Author: The Mayor of London Status: Non-Statutory Date: 2010</p>	<p>The Mayors economic development objectives:</p> <ul style="list-style-type: none"> • To promote London as the world capital of business, the world's top international visitor destination, and the world's leading international centre of learning and creativity. • To ensure that London has the most competitive business environment in the world. • To make London one of the world's leading low carbon capitals by 2025 and a global leader in carbon finance. • To give all Londoners the opportunity to take part in London's economic success, access sustainable employment and progress in their careers. • To attract the investment in infrastructure and regeneration which London needs, to maximise the benefits from this investment and in particular from the opportunity created by the 2012 Olympic and Paralympic Games and their legacy. 	<ul style="list-style-type: none"> • The SA objectives will include sustainable buildings in infrastructure, economic efficiency; knowledge and skills base; and social inclusion. • Local Plan policies should encourage new development that is sustainable and promotes economic growth and social inclusion.

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<p>http://www.london.gov.uk/who-runs-london/mayor/publications/business-and-economy/eds</p> <p>Title: Delivering London's Energy Future: The Mayor's Climate Change Mitigation and Energy Strategy Author: The Mayor of London Status: Non-Statutory Date: 2011</p>	<p>This strategy sets out a strategic approach to limiting further climate change and securing a low carbon energy supply for London. The Mayor has set a target to reduce London's CO2 emissions by 60% of 1990 levels by 2025. Delivering London's Energy Future details the programmes and activities that are ongoing across London to achieve this. These include:</p> <ul style="list-style-type: none"> • RE:NEW – retrofitting London's homes with energy efficiency measures, and helping Londoners save money off their energy bills. • RE:FIT – retrofitting London's public sector buildings, saving millions of pounds every year. • RE:CONNECT – ten low carbon zones in London aiming to reduce CO2 emissions by 20% by 2012 across the community. • Decentralised energy programme – aiming to supply 25 per cent of London's energy from secure, low carbon local sources. 	<ul style="list-style-type: none"> • The SA will include objectives relating to energy and climate change mitigation/cutting greenhouse gas emissions. • Local Plan policies should duly consider the need for climate change mitigation, and ensure that the borough contributes to the London-wide target of 60% reduction of carbon emissions.
<p>http://www.london.gov.uk/who-runs-london/mayor/publication/climate-change-mitigation-energy-strategy</p> <p>Title: The Mayor's Climate Change Adaptation Strategy (Draft) Author: The Mayor of London Status: Draft Date: 2010</p>	<p>The Mayor's Climate Change Adaptation Strategy does three things:</p> <ul style="list-style-type: none"> • identifies who and what is most at risk today • analyses how climate change will change the risk of flood, drought and heatwave through the century • describes what action is needed to manage this and who is responsible for it. <p>The key actions proposed in the strategy are:</p> <ul style="list-style-type: none"> • To improve our understanding and management of surface water flood risk • An urban greening programme to increase the quality and quantity of greenspace and vegetation in London – this will buffer us from floods and hot weather • To retro-fit up to 1.2m homes by 2015 to improve the water and energy efficiency efficiency of London homes 	<ul style="list-style-type: none"> • The SA will include objectives that reflect the objectives of the Climate Adaptation Strategy, particularly in relation to flood risk and sustainable design and construction. • Local Plan policies should take account of climate change and the need to create adaptable buildings. Policies should be included to address flood risk, risk of overheating and need for cooling and to ensure that buildings are resilient to climate change.
<p>http://www.london.gov.uk/climatechange/strategy</p> <p>Title: London Biodiversity Action Plan Author: London Biodiversity Partnership Status: Non-Statutory</p>	<ul style="list-style-type: none"> • London Biodiversity Action Plan is an audit of London's key habitats and species. The audit is an important foundation for the implementation of action to conserve London's 	<ul style="list-style-type: none"> • The SA will include objectives to protect, conserve and enhance habitats, rare species and the

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Date: 2001	biodiversity. <ul style="list-style-type: none"> Also includes action plans for individual species, habitat action plans and generic action plans. 	environment. <ul style="list-style-type: none"> The Local Plan should ensure that policies protect key habitats and species, which will also need to be monitored.
http://www.lbp.org.uk/		
Title: Sub Regional Development Framework for the South Author: South development partnership, The Mayor of London Status: Non-Statutory Date: 2006	The London Borough of Richmond upon Thames is within the South London Sub Region, which have the following strategic priorities: <ul style="list-style-type: none"> Promote opportunities to increase employment and housing. Identify capacity to accommodate new job and housing opportunities and appropriate mixed-use development. Maximise the number of additional homes including affordable housing Promote and intensify retailing, services, employment, leisure and housing in town centres Plan for and secure the necessary financial resources to deliver planned transport infrastructure for the sub-region Improve the variety, quality and access to available employment sites. Ensure that social and community infrastructure is retained, enhanced and expanded where needed. Ensure that new development is sustainable, safe and secure and well designed, improves the environment and takes account of the sub-region's heritage. Identify areas suitable for tall buildings. Plan for waste facilities in line with the principle of self-sufficiency. 	<ul style="list-style-type: none"> The policies in the Local Plan and the objectives of the SA should have regard to the wider strategic priorities of the south London sub regional framework.
http://legacy.london.gov.uk/mayor/planning/srdf/south.jsp		
Title: Thames Waterway Plan 2006-2011 Author: River Thames Alliance Status: Non-Statutory Date: 2006	The plan aims to achieve coordinated planning between councils on the following matters: <ul style="list-style-type: none"> river front development and protecting and promoting access, transport and open spaces protection of habitats and environment more and better riverside leisure facilities such as moorings, toilets and tourism information plans to regenerate old industrial and working sites 	<ul style="list-style-type: none"> The SA will include objectives on protecting the natural environment of the river, its habitats and its river related/dependent industries and associated facilities. The Local Plan should include policies on the protection of the River Thames, and ensure that access to the river is promoted, its habitats and

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	<ul style="list-style-type: none"> more cost effective promotion of the river, boating and leisure to encourage more visitors and support local businesses 	species as well as river-related/-dependent industries and facilities protected.
http://www.environment-agency.gov.uk/homeandleisure/recreation/133175.aspx		
<p>Title: Thames Corridor Catchment Abstraction Management Strategy (CAMS) Author: Environment Agency Status: Statutory Date: 2004</p>	<p>The Catchment Abstraction Management Strategy is the document that sets out the licensing strategy for the catchment. This Strategy for example shows that groundwater in areas of Richmond is 'over-licensed' and water resources (surface water) are only 'available' from the Beverly Brook and River Crane.</p>	<ul style="list-style-type: none"> The SA will include objectives on protecting water quality and resources. The Local Plan should include policies on the protection of water quality and water resources, and to ensure that developments meet challenging water consumption targets.
http://cdn.environment-agency.gov.uk/geth0604bhze-e-e.pdf		
<p>Title: Thames River Basin Management Plan Author: Environment Agency Status: Statutory Date: 2009</p>	<p>The Core objectives of the plan are:</p> <ul style="list-style-type: none"> improve and promote access and information for all users (on water and land) improve and maintain the river infrastructure, facilities and services for all users contribute to enhanced biodiversity, heritage, and landscape value in the waterway corridor increase use of the river and its corridor 	<ul style="list-style-type: none"> The SA will include objectives in relation to reducing risk to and from flooding, promoting access and enhancing biodiversity. Local Plan policies should take account of this Management Plan and protect the river's biodiversity, heritage (including river services and facilities) and landscape value, as well as increase the usage of the river.
http://www.environment-agency.gov.uk/research/planning/125035.aspx		
<p>Title: Thames Catchment Flood Management Plan (CFMP) Author: Environment Agency Status: Statutory Date: 2009</p>	<p>Aids understanding of the scale and extent of flooding now and in the future, and set policies for managing flood risk within the catchment.</p>	<ul style="list-style-type: none"> The SA will include objectives in relation to reducing risk to and from flooding. Local Plan should duly consider flood risk, and its policies will be informed by this Strategy.
http://www.environment-agency.gov.uk/research/planning/127387.aspx		
<p>Title: Thames Estuary 2100: Managing flood risk through London and the Thames estuary (TE2100 Plan) Author: Environment Agency Status: Statutory</p>	<ul style="list-style-type: none"> The TE2100 Plan sets out the strategic direction for managing flood risk in the Thames estuary to the end of the century and beyond. It sets out how we will continue to protect 1.25 million people and £200 billion worth of property from tidal flood risk. 	<ul style="list-style-type: none"> The SA will include objectives in relation to reducing risk to and from flooding. Local Plan policies should consider and address flood risk, and in

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Date: 2012	<ul style="list-style-type: none"> Communities in London and along the Thames estuary already benefit from world-class defences, but flood risk is increasing. The TE2100 Plan recommends what actions the Environment Agency and others will need to take – in the short term (next 25 years), medium term (the following 15 years) and long term (to the end of the century). The plan is based on current guidance on climate change, but is adaptable to changes in predictions for sea-level rise and climate change over the century. 	particular take account of the findings of this Plan.
http://www.environment-agency.gov.uk/homeandleisure/floods/125045.aspx		
<p>Title: Lower Thames Flood Risk Management Strategy (draft) Author: Environment Agency Status: Draft Date: 2010</p>	<p>The Lower Thames Strategy is a long-term plan to manage flood risk in the Lower Thames area. The strategy aims to reduce the risk of river flooding to 15,000 properties with a 1% annual (1 in 100 year) chance of flooding, from Datchet to Teddington. The Strategy will be carried out in two phases. Phase 1 includes:</p> <ul style="list-style-type: none"> ecological surveys of the River Thames; individual property protection measures; capacity increases to Sunbury, Molesey and Teddington weirs; widening and deepening the Desborough Cut; developing outline planning proposals for the engineering channel. <p>Phase 2 includes:</p> <ul style="list-style-type: none"> the detailed engineering design; securing detailed planning permission; building three flood diversion channels. 	<ul style="list-style-type: none"> The SA will include objectives in relation to reducing risk to and from flooding. Local Plan policies will have to duly consider flood risk, and its policies will be informed by this Strategy.
https://consult.environment-agency.gov.uk/portal/re/flood/thames/lts?pointId=909489		
<p>Title: London Strategic Parks Project Author: Mayor of London Status: Non-Statutory Date: 2006</p>	<p>This project report provides guidance on how to implement a new strategic park by developing a generic methodology which is tested through four case studies. The case studies consider the constraints, opportunities, spatial context, demography, management and funding options for two regional park areas of search and two metropolitan park opportunities.</p>	<ul style="list-style-type: none"> The SA framework and documents developed under the Local Plan should take account of the outcomes of this project.
http://legacy.london.gov.uk/mayor/planning/parks/index.jsp		
<p>Title: Transport Assessment Best Practice Guidance Author: Transport for London (TfL)</p>	<ul style="list-style-type: none"> The purpose of the document is to provide high-level guidance to improve the process for TfL and its Land Use Planning Team 	<ul style="list-style-type: none"> The SA will consider issues relating to accessibility and sustainable development.

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Status: Non-Statutory Date: 2010	<ul style="list-style-type: none"> The guidance is relevant to developments that are deemed to be strategically important and which are referred to the Mayor. This document offers advice and guidance to those producing transport assessments for referred applications. 	<ul style="list-style-type: none"> The Local Plan should consider policies in relation to reduced car dependence by facilitating more walking and cycling, by improving linkages by public transport between housing, jobs, local services and local amenity.
http://www.tfl.gov.uk/assets/downloads/businessandpartners/transport-assessment-best-practice-guidance.pdf		
Title: New Way to Plan – Travel planning for new development in London Author: Transport for London (TfL) Status: Non-Statutory Date: 2010	This guidance provides advice on workplace, residential and other developments. It details the process, responsibilities and timescales for preparing a travel plan; content of the plan; implementation and monitoring requirements.	<ul style="list-style-type: none"> The SA will consider transport related issues. The Local Plan policies should contain guidance in relation to travel planning for new development in London.
http://www.lscp.org.uk/newwaytoplan/travelplan_guidance.html#sh1		
Title: Delivery and Servicing Plans: Making freight work for you Author: Transport for London Status: Non-Statutory Date: 2010	A Delivery and Servicing Plan (DSP) will help organisation to better manage deliveries and could save you money. A DSP provides a framework to make sure that freight vehicle activity to and from a building is working effectively. It will help to: <ul style="list-style-type: none"> Manage deliveries to reduce the number of trips, particularly during peak hours; Identify where safe and legal loading can take place; Commission delivery companies who can demonstrate their commitment to best practice; Help to reduce CO2 emissions, congestion and collisions. 	<ul style="list-style-type: none"> The SA and Local Plan should consider transport related issues.
http://www.tfl.gov.uk/microsites/freight/delivery_servicing_plans.aspx		
Title: The Mayor's Equality Framework: Equal Life Chances for All Author: Mayor of London Status: Non-Statutory Date: 2009	<ul style="list-style-type: none"> Ensure the capital's diverse communities, particularly the most vulnerable and disadvantaged people, benefit from London's success and are protected in the economic downturn. Support the development across the London economy of diverse markets, workforces and suppliers, in particular through the GLA Diversity Works for London and Responsible Procurement programmes Embed equality into the heart of business and corporate planning exemplifying the gold standard for best practice which brings real change to people's quality of life Require working with GLA group and more widely with London councils, and the public, private, voluntary and 	<ul style="list-style-type: none"> The SA will consider tackling disadvantage and inequalities, which is in line with the Council's Community Plan.

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	<p>community sectors to provide practical solutions to effectively tackle inequality</p> <ul style="list-style-type: none"> • Ensure services delivered by the Functional Bodies are accessible and appropriate to all Londoners • Ensure delivery of an accessible and inclusive London 2012 Olympic and Paralympic Games with a legacy to benefit all Londoners 	
http://www.london.gov.uk/who-runs-london/mayor/publications/society/mayors-equality-framework-equal-life-chances-all		
Level: Local Context (London Borough of Richmond upon Thames)		
<p>Title: Core Strategy Author: London Borough of Richmond upon Thames Status: Statutory Date: April 2009</p>	<p>The Core Strategy is a Development Plan Document (DPD), which is part of the Local Plan. It is the strategic policy document, which will determine the future planning policy for the Borough. It outlines the Vision, Spatial Strategy and 20 Core Planning Policies on topics such as climate change, housing, employment and retailing. The main objectives of the Core Strategy are:</p> <ul style="list-style-type: none"> • For a sustainable future • Protecting local character • To meet people's needs 	<ul style="list-style-type: none"> • The Core Strategy has been informed by a comprehensive Sustainability Appraisal. • The objectives of the Core Strategy are therefore reflected in this SA framework. • Any future Local Plan documents need to be in general conformity with the Core Strategy.
http://www.richmond.gov.uk/local_development_framework_core_strategy.htm		
<p>Title: Development Management Plan DPD (DMP) Author: London Borough of Richmond upon Thames Status: Statutory Date: 2011</p>	<p>The Development Management DPD includes the detailed policies that are used when new developments are considered. The Development Management DPD takes forward the objectives set out in the Core Strategy.</p>	<ul style="list-style-type: none"> • The DMP has been informed by a comprehensive Sustainability Appraisal. • The objectives of the Core Strategy/ DMP are reflected in this SA framework. • Any future Local Plan documents need to be in line with the Core Strategy/ DMP objectives.
http://www.richmond.gov.uk/development_management_dpd.htm		
<p>Title: Village Plans Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2012-2015</p>	<p>The borough has been divided into 14 areas, whereby each area has its own Village Plan. The Village Plans:</p> <ul style="list-style-type: none"> • Describe the local area and have a vision for how the area will develop in the future. • Look at key issues, priorities and opportunities in the area. 	<ul style="list-style-type: none"> • The SA will include objectives that take account of the Village Plan visions and priorities. • The policies within the Local Plan will need to take account of the Council's

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	<ul style="list-style-type: none"> Describe how communities can be involved in improving an area. Give useful information about how to get things done with the Council. 	<p>vision and objectives for the various areas and communities as set out in the Village Plans.</p>
<p>http://www.richmond.gov.uk/village_plans</p>		
<p>Title: Community Plan 2013-2018 Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2013</p>	<p>The overall vision is for a Richmond upon Thames that is...</p> <ul style="list-style-type: none"> Where local people are engaged and involved in their communities. Where a vibrant and sustainable community and voluntary sector helps residents play a full role in community life. Where the local character of the environment is protected and development is high quality and compatible with local character. Where our towns and local centres are attractive, viable for businesses and contribute positively to the quality of life of residents and visitors. Where people can live as independently as possible in the local community with good health and wellbeing <p>There are three themes which describe how the Council will work in partnership with the local community and inform everything they do to put people first:</p> <ol style="list-style-type: none"> Involving and engaging local people and businesses. Delivering for local people <ul style="list-style-type: none"> Tackling Inequality and Creating Opportunity for Children and Young People A Healthy Borough A Safe Borough Supporting Business, Voluntary and Community Sector and the Arts A Green Borough Being accountable to local people. 	<ul style="list-style-type: none"> The SA will include objectives designed to maintain and enhance landscape and townscape character and opportunities for their enjoyment by the communities. The policies within the Local Plan will need to take account of the Council's vision and objectives for the community within the borough, encouraging development that will help to achieve community plan objectives and priorities.
<p>http://www.richmond.gov.uk/community_plan</p>		
<p>Cultural Partnership Strategy 2015-2019 2015</p>	<p>Key goals include: PARTICIPATION The Council want to increase and widen opportunities for participation,</p>	<ul style="list-style-type: none"> Policies in the Local plan should allow delivery of the goals to encourage participation and

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	<p>enjoyment and achievement, and develop pathways for new talent</p> <p>INSPIRATION The Council want to promote Richmond upon Thames and develop a vibrant and inspirational public realm</p> <p>ENTERPRISE The Council want to encourage innovation and enterprise, and provide effective support to cultural entrepreneurs and to the leisure, creative and tourism industries</p> <p>EXCELLENCE The Council want to maintain cultural excellence by building capacity to continually drive improvement in services</p>	<p>opportunities for delivery of the plan for culture in Richmond upon Thames</p>
<p>http://www.richmond.gov.uk/cultural_partnership</p>		
<p>Title: Air Quality Action Plan Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2012/13</p>	<p>This Local Air Quality Action Plan (AQAP) is required under Part IV of the Environment Act 1995, following the decision of the Council to declare the Borough an Air Quality Management Area. The purpose of the AQAP is to ensure that the Council takes suitable action to improve air quality within the Borough. It is not a legal requirement to actually achieve the national air quality objectives, however the action must be in pursuit of achieving the objectives.</p>	<ul style="list-style-type: none"> • The SA will include objectives for air quality. • The Local Plan should consider the potential of developments, the design of buildings and transport contributing to air pollution.
<p>http://www.richmond.gov.uk/air_quality_action_plan.htm</p>		
<p>Title: Local Biodiversity Action Plan Author: Richmond Biodiversity Partnership Status: Non-Statutory Date: 2005</p>	<ul style="list-style-type: none"> • A local action plan to protect vital wildlife species and their habitats. • The plan aims to protect, conserve and enhance species that are rare and in decline, such as the stag beetle, the water vole and the song thrush. 	<ul style="list-style-type: none"> • The SA will include objectives to protect, conserve and enhance habitats, rare species and the environment. • The Local Plan needs to ensure that polices protect key habitats and species, which will also need to be monitored.
<p>http://www.richmond.gov.uk/richmonds_biodiversity_action_plan.htm</p>		
<p>Title: Children and Young People's Plan 2009-2013 Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2009</p>	<p>The Children and Young People's Plan (CYPP) - Tackling inequality, creating opportunity - is the primary document which sets out how the vision for children and young people in the borough will be delivered.</p> <p>The plan is a partnership document, owned by all of the organisations in the Children and Young People's Trust.</p>	<ul style="list-style-type: none"> • The SA objectives will reflect the needs of young people and ensure all facilities are accessible. • The Local Plan documents and its policies should reflect the Council's goals for children and young people.

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<p>http://www.richmond.gov.uk/children_and_young_peoples_plan</p> <p>Title: (Second) Local Implementation Plan for Transport 2011-2014 Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2011</p>	<p>The Second Local Implementation Plan (LIP2) for transport outlines how the Borough will implement the Mayor of London's Transport Strategy. The LIP2 objectives are:</p> <ul style="list-style-type: none"> • To set out the Council's long term goals in regards to transport priorities, policies and programmes. • To demonstrate how Richmond upon Thames will help support the London Mayor achieve the objectives set out in the Mayor's Transport Strategy. • To outline the Borough's own transport objectives and a broad programme of investment covering the period 2011 to 2014 and beyond, including major schemes to improve Richmond, Twickenham and Whitton Town Centres. 	<ul style="list-style-type: none"> • The SA will include objectives that address sustainable travel and accessibility of transport, as well as issues such as health and air pollution. • The Local Plan should look at ways to incorporate policies to address transport issues, through initiatives and new developments within the borough, as well as consider the connectivity with surrounding areas.
<p>http://www.richmond.gov.uk/local_implementation_plan_for_transport.htm</p> <p>Title: Housing Strategy 2008-2012 Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2008 incl 2012 update</p>	<p>The housing strategy sets out the Borough's housing plans and the key challenges facing Richmond upon Thames up to 2012. The strategy focuses on seven priorities identified through the work of a multi agency steering group:</p> <ul style="list-style-type: none"> • More affordable homes; • Better quality and greener homes; • Preventing homelessness; • Supporting independent living; • Understanding and influencing the housing market; • Promoting housing choice; and • Creating thriving communities. <p>2012 update: The Council will during 2013 be developing a new housing strategy that reflects both national changes in housing policy, new and emerging housing issues as well as reflecting the views of the current administration. Until this is published the Housing Strategy 2008-2012 provides a useful source of information on housing issues in the borough.</p>	<ul style="list-style-type: none"> • The SA will include objectives to create sustainable housing, including issues such as design, mixtures of housing type and tenure, open amenity space as well as proximity to shops, public facilities and public transport. • The Local Plan should maximise the provision of affordable housing in line with government targets; promote redevelopment of sites, provide a housing mix and good design that benefit the community as a whole while minimising environmental impact.
<p>http://www.richmond.gov.uk/housing_strategy.htm</p> <p>Title: Homelessness Strategy 2012-2016 Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2012</p>	<p>The Homelessness Act 2002 requires all local authorities to undertake a Homelessness Review and publish a Homelessness Strategy, at least every five years. The Strategy has five areas of focus. These are:</p> <ul style="list-style-type: none"> • Homelessness prevention and advising on the range of 	<ul style="list-style-type: none"> • The SA will include objectives in relation to the creation of sustainable, well-designed housing, including affordable housing.

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	<p>housing opportunities;</p> <ul style="list-style-type: none"> • Homelessness and the housing market; • Homelessness and vulnerable groups; • Preventing rough sleeping and addressing the needs of rough sleepers; • Providing appropriate accommodation for homeless households. 	<ul style="list-style-type: none"> • The Local Plan should maximise the provision of affordable housing.
http://www.richmond.gov.uk/homelessness_strategy_2012_16		
<p>Title: Tenancy Strategy Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2012</p>	<p>As set out in the Localism Act, the Government requires that each Local Authority develops a Tenancy Strategy. This Strategy will give guidance to local providers of social housing regarding the various changes that have been passed in law.</p>	<ul style="list-style-type: none"> • The SA and Local Plan should have regard to the Council's Tenancy Strategy.
http://moderngov.richmond.gov.uk/documents/s37898/Main%20Cabinet%20report%20template%20-%20updated%2011%20October%202012.pdf		
<p>Title: Climate Change Strategy Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2009</p>	<p>The Climate Change Strategy focuses on the following areas:</p> <ul style="list-style-type: none"> • Energy efficiency: Improve the fabric of the existing housing and building stock and uptake of energy efficient boilers, controls and appliances to reduce energy demand and fuel poverty. • Energy supply: Accelerate the installation of low-carbon micro-generation technologies and reduce the distance between sources of energy production and consumption. • Transport: Promote car free mobility, choice of travel modes and new models of car ownership, and explore use of greener fuels to reduce the CO2 emissions from transport. • Risks and opportunities: Adapt to climate change and reduce the impact of extreme weather events by identifying risks, developing appropriate management plans and realising opportunities. 	<ul style="list-style-type: none"> • The SA objectives will reflect the need for climate change mitigation and adaptation. • Local Plan policies should be included on climate change mitigation and adaptation.
http://www.richmond.gov.uk/gg_energy_and_climate_change		
<p>Title: Director of Public Health's Annual Report 2014-2015 Author: NHS South West London, Richmond Borough Team Status: Non-Statutory Date: 2015</p>	<p>This is the Annual Report of the Director of Public Health for NHS South West London Richmond Borough Team and the London Borough of Richmond upon Thames (LBRuT) for 2014-2015.</p> <p>Annual Public Health Reports used to be the main reference document giving an overview of the health of a local population, adding specific more in-depth assessments of locally relevant</p>	<ul style="list-style-type: none"> • The SA framework will include an objective on facilitating the improved health and well being of the population, including access health, education, sport, leisure and recreation facilities. • The Local Plan should consider the potential impacts and benefits that

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	needs and recommending actions for health improvement across a wide range of partners. This role is now superseded by the Joint Strategic Needs Assessment (JSNA), since 2008 a statutory requirement for the NHS and Local Authorities to work together to better understand the health and wellbeing needs of their local population as a basis for joint up service planning.	plan-making decisions can have on the health of communities.
Annual Public Health Report - London Borough of Richmond upon Thames		
<p>Title: Joint Strategic Needs Assessment 2015-2016 Author: NHS South West London, Richmond Borough Team Status: Non-Statutory Date: 2015</p>	The JSNA is an assessment of the health and well-being needs of the population of Richmond upon Thames.	<ul style="list-style-type: none"> • The SA framework will include an objective on facilitating the improved health and well being of the population, including access health, education, sport, leisure and recreation facilities. • The Local Plan should consider the needs assessment and ensure sufficient land is allocated to meet the needs for healthy communities.
http://www.richmond.gov.uk/jsna.htm		
<p>Title: Strategic Flood Risk Assessment Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2010</p>	The aim of the Strategic Flood Risk Assessment (SFRA) is to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk. The SFRA includes a series of maps that define areas of flooding in the borough according to various levels of risk and from the River Thames, its tributaries and other sources. This SFRA will be used to inform land allocations, to facilitate the application of the Sequential Test and in particular, advise Development Management, Emergency Planners and developers on flood risk matters.	<ul style="list-style-type: none"> • The SA will include objectives to reduce vulnerability to climate change and to minimise the susceptibility of land use to flooding. • Local Plan documents should include policies to avoid high flood risk locations and protect developments from flooding. The SFRA should be used to inform the site allocations and Sequential Test.
<ul style="list-style-type: none"> • http://www.richmond.gov.uk/flood_risk_assessment.htm 		
<p>Title: Preliminary Flood Risk Assessment Author: URS/Scott Wilson Status: Non-Statutory Date: 2011</p>	The PFRA is a stock take of risk from flooding for the London Borough of Richmond upon Thames and is a coarse assessment for identifying potential local sources of flood risk. By looking back at past events simple models are created and used to identify sites that are at potential flood risk. It evaluates flood risk from surface water (local rain), rivers and ground water. The PFRA has been compiled using readily available information from a number of sources. These include the	<ul style="list-style-type: none"> • The SA will include objectives to take account of all sources of flooding. • Local Plan documents should include policies to avoid high flood risk locations and protect developments from flooding. The PFRA should be used to inform the allocation of sites and uses.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	Environment Agency's national datasets and existing local products, such as the Strategic Flood Risk Assessment.	
<p>• http://www.richmond.gov.uk/preliminary_flood_risk_assessment.htm</p> <p>Title: Surface Water Management Plan Author: URS/Scott Wilson Status: Non-Statutory Date: 2011</p>	<p>This Surface Water Management Plan (SWMP) assesses the surface water flood risk across the borough, using both historical information and undertaking pluvial modelling to determine the future flood risk for a range of rainfall events. These identify the areas of significant surface water and groundwater risk and options to address the risk of flooding.</p>	<ul style="list-style-type: none"> • The SA will include objectives to take account of all sources of flooding. • Local Plan documents should include policies to avoid high flood risk locations and protect developments from flooding. The SWMP should be used to inform the allocation of sites and uses as it can assist in identifying the susceptibility to surface water flooding.
<p>http://www.richmond.gov.uk/surface_water_management_plan.htm</p> <p>Title: Contaminated Land Strategy Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2001</p>	<p>The Council's priorities in dealing with contaminated land are to:</p> <ul style="list-style-type: none"> • Protect human health • Protect controlled waters • Protect designated eco-systems • Prevent damage to property • Prevent any further contamination of land • To encourage voluntary remediation <p>Local Authorities are required to inspect all land within their boundaries for contamination. The London Borough of Richmond upon Thames contaminated land strategy details how the authority takes a rational, ordered and efficient approach to the inspection.</p>	<ul style="list-style-type: none"> • The SA objectives will reflect the Council's priorities for contaminated land and particularly to reduce contamination. • Policies in the Local Plan should consider any contamination effects on development, encourage the re-use of contaminated land and protect the environment.
<p>http://www.richmond.gov.uk/contaminated_land_strategy.htm</p> <p>Title: Employment Land Study Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2009</p>	<p>A review of employment land provided advice on policy direction; it included an audit of existing employment land and premises, and future supply, provided an analysis of the local economy and likely growth/contraction and identified potential gaps in provision. The findings confirm that there is a very limited amount of employment land in the borough. There is a strong case for the Local Plan to protect all existing employment sites unless they are inherently unsuitable. Note that this Study is currently being reviewed and a new Study prepared (as of February 2013).</p>	<ul style="list-style-type: none"> • The SA framework and in particular the evidence base contained within this Study will be taken into account. • The Local Plan should take account of the evidence base presented in this Study and develop appropriate policies dealing with employment land.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
<p>http://www.richmond.gov.uk/employment_land_study_november_2009.htm</p> <p>Title: Local Economic Assessment Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2010</p>	<p>The Local Economic Assessment takes a holistic view of how the borough's economy works and connects to other places and issues. It does this by examining issues from the perspectives of residents, businesses and visitors, taking account of the vast range of data and knowledge that is currently available, alongside appropriate projections. It covers issues including types of business sectors, business growth, employment, workforce data, qualifications and commuting.</p> <p>This Assessment is not a policy or a strategy: it does not put forward a view of the Council's priorities. However, it will form an important part of the Council's evidence base that will be used to inform policies and plans. It is also a useful document for business people that need local information for their business planning.</p>	<ul style="list-style-type: none"> • The SA framework and in particular the evidence base will take account of this assessment. • The Local Plan should take account of economic issues and evidence base set out in this assessment in the development of policies and strategies.
<p>http://www.richmond.gov.uk/local_economic_assessment</p> <p>Title: Retail Study 2006 and 2009 update Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2009</p>	<p>GVA Grimley produced a retail capacity study on behalf of the Council, which assessed the borough's capacity for retail growth for both food and non-food shopping. It concluded that there was limited capacity for food shopping, which was located to the east of the borough. There is more capacity for non-food goods, the demand for which is also mainly in the east of the borough. The main town centres were looked at individually and a number of possible sites were assessed.</p>	<ul style="list-style-type: none"> • The SA framework and in particular the evidence base will take account of this retail needs assessment. • The Local Plan should take account of economic and retail related issues and the evidence base set out in this assessment in the development of policies and strategies.
<p>http://www.richmond.gov.uk/retail_study_march_2006.htm</p> <p>Title: Infrastructure Delivery Plan (IDP) Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2012</p>	<p>The Infrastructure Delivery Plan (IDP) analyses and assesses the existing infrastructure provision, the current shortfall and identifies the existing and future needs and demands for the borough to support new development and a growing population. It provides a snap-shot in time and best available information has been used at the time of its production.</p> <p>The IDP covers:</p> <ul style="list-style-type: none"> • social and community infrastructure (including schools and other education needs, health and adult social care, sports and leisure facilities as well as other community facilities); • emergency services (police, fire service and ambulance); • green infrastructure (including parks, open spaces, rivers, allotments and play facilities) 	<ul style="list-style-type: none"> • The SA framework and objectives will take account of the findings of the IDP, particularly in relation to the shortfall and future demands and needs of certain infrastructure categories. • The Local Plan should take account of the evidence base set out in this IDP in terms of planning and providing for the infrastructure needed in this borough.

Policy / plan / programme / strategy / initiative	Objectives, key targets or requirements of the plan or programme	Implications for SA / Local Plan
	<ul style="list-style-type: none"> • utilities and physical infrastructure (including, electricity, gas, water, sewage, waste, telecommunications and flood risk/defence infrastructure) • transport infrastructure (including roads, rail network, buses, cycling and pedestrian facilities) • heritage assets and civic spaces (including historic buildings) 	
<p>http://www.richmond.gov.uk/infrastructure_delivery_plan.htm</p> <p>Title: Borough's sport, open space and recreation needs assessment Author: London Borough of Richmond upon Thames Status: Non-Statutory Date: 2008</p>	<p>This assessment has been carried out both to form a basis for the Local Plan and covers the most popular forms of indoor and outdoor sport and physical activity. This assessment aims to assist the delivery of:</p> <ul style="list-style-type: none"> • Networks of accessible, high quality open spaces and sport and recreation facilities, which meet the needs of residents and visitors, are fit for purpose and economically and environmentally sustainable; • An appropriate balance between new provision and the enhancement of existing provision; • Clarity and reasonable certainty for developers and land owners in relation to the requirements and expectations of Councils in respect of open space and sport and recreation provision. 	<ul style="list-style-type: none"> • The SA objectives will take account of the findings of this needs assessment and set out the importance of protecting and enhancing the borough's sport, recreation and open space provision. • The Local Plan should take account of the evidence base set out in this needs assessment in terms of planning, providing for and protecting open space, sport and recreational facilities.
<p>http://www.richmond.gov.uk/needs_assessmentfinalupdatemar08.pdf</p> <p>Title: Thames Landscape Strategy (Review) – Hampton to Kew Author: Thames Landscape Strategy Status: Non-Statutory Date: 2012</p>	<p>The Thames Landscape Strategy (TLS) is an analysis of the character of the river landscape providing a vision for the natural and man-made elements of the landscape – an evidence base which draws together the history, topography, culture, politics and wildlife of the river corridor to form the basis for and shape future policy, management, projects and design. The TLS Review document has been extended upstream to Weybridge – embracing four new and distinct character reaches.</p>	<ul style="list-style-type: none"> • The SA will include objectives in relation to the protection and enhancement of the river environment, habitats, cultural heritage and open space. • The Local Plan policies should include the preservation and enhancement of the river, and reflect the aims and objectives within the strategy.
<p>http://thames-landscape-strategy.org.uk/tlsreview</p>		

Table 38: Detailed review and key messages from Policies, Plans and Programmes

APPENDIX 2 – Compatibility Matrix of SA Objectives

SUSTAINABILITY APPRAISAL OBJECTIVES	1															
	2	?														
	3															
	4	+	+	+												
	5				+											
	6	?	+	+	+	+										
	7			+	?	+										
	8			+		+	+	+								
	9	+	+		+	X		+								
	10				X	X	X	?	?	?						
	11	?	+	+	+	+		+	+		+					
	12							+				+				
	13							+			+		+			
	14							+			?		+	+		
	15		?	?	X	X	X		?	?	X					+
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
SUSTAINABILITY APPRAISAL OBJECTIVES																

KEY	+	Positively compatible
	X	Possible conflict
	?	Uncertain
		Neutral

Table 39: Compatibility matrix of SA Objectives

SA objectives for the London Borough of Richmond upon Thames Local Plan			
	Env	Econ	Soc
1) To prevent and reduce the amount of waste that is produced and increase the proportion that is reused, recycled and composted, recovered (including energy recovery) before lastly disposal.	✓		
2) To reduce pollution (such as air, noise, lights, water and soil) from any source and ensure air and water quality improves and safeguard soil quality and quantity.	✓		
3) To reduce the need for travel, encourage alternatives to the car, make best use of existing transport infrastructure and improve public transport integration.	✓		✓
4) To mitigate climate change by reducing greenhouse gas emissions and promoting sustainable energy use through maximising energy efficiency, use of zero- and low carbon technologies and renewable energy, and provide satisfactory water and sewerage infrastructure.	✓		✓
5) To ensure resilience to the effects of climate change through effective adaptation, in particular avoiding or reducing flood risk from all sources and conserving water.	✓	✓	✓
6) To conserve and enhance biodiversity, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).	✓		
7) To promote high quality places, spaces and buildings and conserve and enhance the borough's landscape and townscape character and its heritage assets and their settings.	✓	✓	✓
8) To protect and enhance the quality and range of parks and open spaces and plan positively for the creation, protection and enhancement of the green infrastructure network.	✓		✓
9) To make best and efficient use of previously developed land and existing buildings, implement sustainable design and construction practices and remediate and reuse contaminated land.	✓	✓	✓
10) To provide new housing opportunities and sufficient affordable housing that meets local needs.		✓	✓
11) To facilitate and improve the health and well-being of the population, reduce health inequalities and deliver safer and more secure communities.			✓
12) To promote the independence of people and communities by improving the quality, range and accessibility of services and facilities, such as health, transport, education, training, employment, environment, leisure, sport and recreation opportunities.		✓	✓
13) To increase the vitality and viability of existing town centres, local centres and parades.		✓	✓
14) To promote and strengthen a buoyant, diverse and resilient local economy and facilitate inward investment that will secure sustainable economic growth.		✓	✓
15) To increase the amount and quality of commercial development opportunities to meet the needs of the local and sub-regional economy.		✓	✓

Table 40: SA Objectives

Explanation of Results from Internal Compatibility Testing		
Objectives	Relation-ship	Concerns highlighted
1 and 2 1 and 7 1 and 12	? ? ?	Effects of waste management upon air quality, biodiversity and the health and well-being of the population are uncertain.
2 and 15 3 and 15	? ?	Large amount of additional development for commercial or other purposes may conflict with objectives to reduce pollution and congestion. These conflicts could be addressed through appropriate mitigation measures such as sustainable construction practices and appropriate travel plans.
3 and 10	X	Additional housing potentially could increase traffic and congestion. Although the location of housing, will be subject to the NPPF and Local Plan policies, which promote sustainable patterns of development, including concentrating most additional housing development in urban areas and using urban brownfield sites first.
4 and 10 4 and 15	X X	Reducing green house gas emissions and incorporating zero-/low carbon technologies may potentially lead to fewer (affordable) housing due to higher costs associated with very energy efficient buildings. It could also have an impact on delivering commercial developments.
5 and 10 5 and 15	X	There could be a potential conflict between demand for housing land and the need to avoid development in locations considered to be at risk, such as floodplain development. Housing developments as well as commercial developments can impact negatively on water quantity and quality, including impacts on the sewerage systems.
6 and 10 6 and 15	X	Potential impacts of increased housing and commercial development on biodiversity in general and designated sites (i.e. SSSIs, OSNIs). Whilst it is not anticipated that any buildings would be constructed on designated sites, many other sites, including brownfield land, can be of high biodiversity value.
7 and 9	?	Conserving the landscape and townscape including heritage assets may limit efforts on making best use of previously developed land and existing buildings as intensifying land uses may not be appropriate.
8 and 10 8 and 15	X X	Conserving landscape, townscape including heritage assets, may limit the potential for new housing and commercial development opportunities.
9 and 10	?	The redevelopment of existing sites and buildings could potentially lead to more housing opportunities as part of mixed use schemes, but the possible need for remediation and sustainable design/construction practices may limit the opportunities.
9 and 15	?	The redevelopment of existing sites and buildings could potentially lead to a loss of commercial uses due to land use pressures for residential uses; in addition, the possible need for remediation and sustainable design / construction practices may limit opportunities due to increases in costs.
10 and 14 10 and 15	? x	The priority for building new homes can lead to pressures for re-using vacant and even existing employment sites or town centre uses even when they are in active use. This premature loss can be harmful to the local economy, lead to a loss of local employment and create pressure for development in unsuitable locations that may also increase the need to travel.

Table 41: Explanation of Results from Internal Compatibility Testing