

Guildford Borough Local Plan: Development Management Policies

Sustainability Appraisal Scoping Report

January 2020

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CHAPTER 1: Introduction

1.1 Background

Under the Planning and Compulsory Purchase Act 2004¹ and Localism Act 2011², the Council is required to prepare a Local Plan. Following completion of the first phase of a Local Plan preparation process resulting in the adoption of the Guildford borough Local Plan: Strategy and Sites (LPSS) on 25th April 2019, Guildford Borough Council (GBC) is now moving into its second phase of the Local Plan development and is in the process of preparing its second part – 'Guildford borough Local Plan: Development Management (DM) Policies' hereafter referred as "the Plan". The Plan will set out the vision, objectives and a number of detailed DM policies that will be formulated in conformity with the recently adopted strategic policies contained in the first part of the Local Plan. Once adopted, these DM policies will form the basis to guide future planning applications and ultimately provide a planning framework for the Borough up to 2034 alongside the Local Plan: Strategy and Sites document.

Section 19 of the Planning and Compulsory Purchase Act 2004 requires a local planning authority to carry out a Sustainability Appraisal (SA) of each of the proposals in a Plan during its preparation and where relevant, to meet the requirements of the Strategic Environmental Assessment (SEA) Directive 2001/42/EC³. To this end, Guildford Borough Council is conducting a SA in support of the Plan preparation. The SEA requirement will be met as part of this SA work.

This report sets out the scope for the SA of the Plan for consultation with the relevant environmental authorities and other interested stakeholders. It also takes account of the National Planning Policy Framework (NPPF)⁴ and the emphasis it places on achieving sustainable development. This SA Scoping Report forms the first stage in the SA process for the Plan. It sets the context for producing the document by:

- Identifying other plans, policies and programmes that may influence the content of the Plan.
- Gathering relevant baseline information to inform the Plan.
- Identifying social, environmental and economic issues and problems that need to be addressed.
- Developing a framework for appraising the Plan to identify the key sustainability effects.

As part of the plan-making process, the Council will appraise the Plan against defined economic, social and environmental criteria to demonstrate that the Plan is sustainable. The Council will use an established set of 22 sustainability objectives developed in consultation with key stakeholders and other planning authorities to appraise the Plan.

Sustainable development

There are many definitions of **sustainable development**. The most common and widely accepted is that adopted by the World Commission on Environment and Development in 1987:

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." 5

At its core is an approach to development that looks to balance different, and often competing, needs against an awareness of the environmental, social and economic limitations that society faces today. Living within environmental limits is one of the central principles of sustainable development. The focus of sustainable development is also about ensuring a strong, healthy and just society. Eradicating poverty in all its forms and dimensions is an indispensable requirement for sustainable

¹ Planning and Compulsory Purchase Act 2004, Section 19, available from: https://www.legislation.gov.uk/ukpga/2004/5/section/19

² Localism Act 2011, available at: http://www.legislation.gov.uk/ukpga/2011/20/contents/enacted

³ Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0042

⁴ The revised National Planning Policy Framework sets out government's planning policies for England and how these are expected to be applied, available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2

⁵ This resulted is an international commitment to achieving sustainable development - Resolution 24/187 of the United Nations General Assembly.

development. This means meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity.

Facilitating sustainable development will help address climate change by reducing greenhouse gas emissions and building climate resilience. Conversely, action on climate change will drive sustainable development. Tackling climate change and fostering sustainable development are two mutually reinforcing sides of the same coin; sustainable development cannot be achieved without climate action. In 2015, countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs)⁶. Many of the SDGs are addressing the core drivers of climate change.

National Planning Policy Framework (NPPF)⁷ states that plans should secure net gains within economic, social and environmental objectives in order to achieve sustainable development.⁸ Environmental objectives include the requirement to:

- contribute to protecting and enhancing natural, built and historic environment;
- help to improve biodiversity;
- use natural resources prudently
- · minimise waste and pollution; and
- mitigate and adapt to climate change, including moving to a low carbon economy.

Sustainability Appraisal explained

Sustainability Appraisal (SA) is required as part of the preparation of a plan, programme or policy. SA is a mechanism to promote sustainable development by assessing the extent to which the emerging plan, when judged against reasonable alternatives, will help to achieve relevant environmental, economic and social objectives by avoiding and mitigating adverse impacts and maximising positive significant effects of the Plan. The purpose of SA is to promote sustainable development through better integration of social, environmental and economic considerations into the preparation of planning documents.

SA helps to identify and assess different strategic options and help advise on the most sustainable solutions. To be effective, an SA must be fully integrated into the plan making process. SA is an integral part of good plan-making and should not be seen as a separate activity. It is an iterative and systematic

process that identifies and reports on the likely significant effects of a plan or strategy and the extent to which implementation of the plan or strategy will contribute towards sustainable development. SA also aims to minimise negative impacts, optimise positive ones, and compensate for the loss of valuable features and benefits.

The SA will be applied at each stage of document production and audit key decisions. SA will be used to monitor the effectiveness of the Plan during its implementation in order to inform revisions of the Plan that will be more conducive to achieving sustainable development.

The fundamental tasks to be carried out to ensure a comprehensive and robust SA include:

- Collecting and presenting baseline information:
- Predicting the significant effects of the plan and addressing them during its preparation;
- Identifying reasonable Plan options and their effects;
- Involving the public and authorities with social, environmental and economic responsibilities as part of the assessment process;

⁶ United Nations. Transforming our world: the 2030 Agenda for Sustainable Development, 25 September 2015, Sustainable Development Goals, Knowledge Platform [online] available at: https://sustainabledevelopment.un.org/sdgs

⁷Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework (NPPF), February 2019 [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_

<u>nttps://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</u>

⁸ Promoting healthy and safe communities, paragraph 8, NPPF, February 2019. pp.27-29 [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810507/NPPF_Feb_2019_print_revised.pdf.

Monitoring the actual effects of the Plan during its implementation

The SA is shown alongside the Plan preparation process as set out in **Figure 1.1** below:

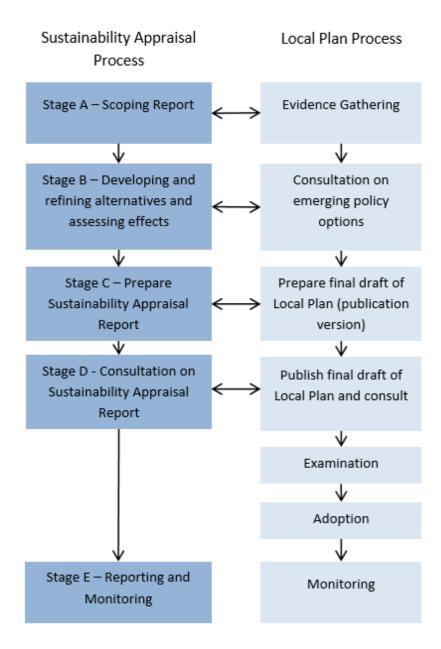


Figure 1.1: Local Plan and Sustainability Appraisal Process

This SA Scoping report constitutes the first **Stage A** of the SA process.

Strategic Environmental Assessment

An SEA is a systemic process for evaluating the environmental consequences of plans and programmes to ensure that environmental issues are integrated and assessed at the earliest opportunity in the decision-making process.

Undertaking an SEA for new or revised plans became a statutory requirement following the adoption of European Directive 2001/42/EC (the SEA Directive) which was transposed into UK legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 ("the SEA Regulations"

SI2004/1633)9. The objective of SEA as set out in the Directive is:

"to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development".

The SEA Regulations require a report to be prepared, and made available to the public, which identifies, describes and evaluates the likely significant effects on the environment of implementing the strategy and the reasonable alternatives taking into account the objectives and the geographical scope of the Plan.

As per the SEA Regulations, an assessment of the likely significant effects on the environment should be undertaken through assessing issues such as: biodiversity; population; human health; fauna; flora; soil; water; air; climatic factors; material assets; cultural heritage, including architectural and archaeological heritage; landscape; and the inter-relationship between the issues.

Sustainability Appraisal relationship to the Strategic Environmental Assessment Directive

Under the Planning and Compulsory Purchase Act 2004, SA is mandatory for Development Plan Documents. For these documents it is also necessary to conduct an environmental assessment in accordance with the requirements of the SEA Directive, as transposed into law in England by the SEA Regulations. Therefore, it is a legal requirement for the Plan to be subject to SA and SEA throughout its preparation. The differences between these processes lie in the fact that SEA focuses primarily on environmental effects whereas SA is concerned with the full range of environmental, social and economic considerations.

The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both using a single appraisal process (as advocated in the National Planning Practice Guidance), whereby users can comply with the requirements of the SEA Regulations through a single integrated SA process – this is the process that is being adopted for the emerging Plan. Whilst there are formalised approaches for both SA and SEA, only SEA has a legal obligation to perform certain activities. These legal obligations have been and will continue to be adhered to throughout the combined SA and SEA for the Local Plan. From here on, the term 'SA' should therefore be taken to mean 'SA incorporating the requirements of the SEA Regulations'.

SA therefore is an assessment tool which uses an integrated appraisal approach across a number of topics to measure the potential impacts of the Plan. It delivers SEA requirements as well as looking in more depth into social and economic impacts. By adopting this approach, the SA provides for a thorough assessment of the respective aspects of sustainability.

Health Impact Assessment

SA is a major opportunity to prevent ill health and tackle health inequalities. Health Impact Assessment (HIA) is not a statutory requirement for SA; however, health considerations should be integrated within the SA process and other forms of assessment where relevant. HIA is a process which ensures that the effect of development on both health and health inequalities is considered and responded to during the planning process. Planning Practice Guidance maintains that a HIA may be a useful tool to use where there are expected to be significant impacts. There is a case to proactively consider promotion of health and wellbeing as part of the SA requirement. This would ensure that health and wellbeing is adequately built into the final adopted plans, strategies and programmes, especially where they relate to development/ regeneration of specific neighbourhoods or areas.

⁹ The Environmental Assessment of Plans and Programmes Regulations (2004). , No. 1633, UK Statutory Instruments [online] available at: http://www.legislation.gov.uk/uksi/2004/1633/contents/made

¹⁰ Town & Country Planning Association (TCPA) (2019) Research on the links between Local Plans and health [Online]. Available at: https://www.tcpa.org.uk/blog/research-on-the-links-between-local-plans-and-health

Rapid HIA¹¹ is recommended to be carried out for local authorities when developing a new Plan by the Town and Country Planning Association (2015) Public Health in Planning Good Practice Guide. ¹²The Royal Town Planning Institute ¹³ recognises that planners have an important role in tackling public health issues, "from making streets safer and more attractive to walk in and locating housing where there are services, to reducing car dependency and creating green spaces. Health services should be located sustainably, close to existing local amenities and accessible via active travel."

The Health Urban Design Unit (HUDU) Rapid Health Impact Assessment tool will be used to carry out assessment of the Plan's likely significant effects on health as part of the SA process and will form an integral part of the assessment.

Different health effects will arise among different groups of people and individuals exposed to the same risk or hazard. This is because of differences in their exposure to the hazard, their sensitivity and their capacity to respond to events (i.e. their resilience) or to adapt in the long term. Significance of effects in relation to human health attributed according to the characteristics of the population which will be affected i.e. age, employment status, disability, etc. Data and priorities from Health and Wellbeing Strategy or other health strategies will be taken into account when identifying relevant environmental and socio-economic health determinants as well as evidence from the take into account local health needs by referring to the Joint Strategic Needs Assessment (JSNA) to inform the SA framework.¹⁴

The following environmental and socio-economic health determinants, where relevant, will form the basis for assessing potential significant effects of the proposed Plan on human health:

- The health topics or broad determinants:

 1. Housing quality and design
 - 2. Access to healthcare services and other social infrastructure
 - 3. Access to open space and nature
 - 4. Air quality, noise and neighbourhood amenity
 - 5. Accessibility and active travel
 - 6. Crime reduction and community safety
 - 7. Access to healthy food
 - 8. Social cohesion and lifetime neighbourhoods
 - 9. Minimising the use of resources
 - 10. Climate change and health

The Scoping report will attempt to establish links between the identified environmental and socio-economic risk and their effects public health in the context of the Plan, where possible. The council will also strive through the SA process to understand how health is affected by the proposed Plan so that, in assessing it, major relevant health issues are covered, maximising positive effects and preventing, offsetting or minimising negative ones, and promoting healthier planning. Health organisations will be effectively engaged in the process, with the health needs of the population being addressed in the SA process.

Equality Impact Assessment

The *Equality Act 2010* (Equality Act) requires public authorities to work to eliminate discrimination and promote equality in all their activities. Under Section 149 of the Equality Act a public authority has a duty to ensure that all decisions are made in such a way as to minimise unfairness, and do not have disproportionately negative impacts on people because of their protected characteristics or background.

The duty requires the Council to have due regard to the need to eliminate unlawful discrimination, harassment and victimisation as well as to advance equality of opportunity and foster good relations

¹¹ A 'rapid' assessment, involves a more focused investigation of health impacts and recommending mitigation and enhancement measures

¹²TCPA (2015) Public Health in Planning Good Practice Guide. Available at: https://www.housinglin.org.uk/ assets/Resources/Housing/OtherOrganisation/TCPA Public Health in Planning Good Practice Guide.pdf

¹³ RTPI quoted in TCPA (2015) Public Health in Planning Good Practice Guide

¹⁴ Town & Country Planning Association (TCPA) (2019) Research on the links between Local Plans and health [Online]. Available at: https://www.tcpa.org.uk/blog/research-on-the-links-between-local-plans-and-health

between people who share a protected characteristic and those who do not under section 149 of the Equality Act 2010. This may involve, in particular, removing or minimising any disadvantage suffered by those who share a relevant protected characteristic, taking steps to meet the needs of such people; and encouraging them to participate in public life or in any other activity where their participation is disproportionately low, including tackling prejudice and promoting understanding. (The protected characteristics and groups are: age, disability, gender reassignment, pregnancy and maternity, race, gender, religion or belief, sexual orientation and marriage/ civil partnership status – see **Table 3.1** below.)

An Equality Impact Assessment (EqIA) forms an integral part of a SA and likely disproportionate or differential effects on equality groups listed in **Table 1.1** will be identified through assessing issues such as: open space provision and accessibility; air quality; climate change; crime and security; employment; education and skills; energy use; housing; and social inclusion.

Table 1.1: Groups with protected characteristics

Protected characteristics as per Equality Act 2010	Definition of group as per Equality Act 2010	People within group referred to within this report
Age	A person of a particular age or persons of the same age group	Children (0-4); Younger people (aged 18-24); older people (aged 60 and over)
Disability	A person with physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities	Disabled people, people with physical and mental impairment
Gender reassignment	A person in the process of transitioning from one gender to another	Not applicable to Plan SA
Marriage and civil partnership	A person in a civil partnership or marriage between same sex or opposite sex	Not applicable to Plan SA
Pregnancy and maternity	A person who is pregnant or expecting a baby and a person who has recently given birth	Mothers or expectant mothers, lone parents
Race	A person defined by their race, colour and nationality (including citizenship) ethnic or national origins	Not applicable to Plan SA
Religion and belief	A person with religious and philosophical beliefs including lack of belief	Not applicable to Plan SA
Sex	A man or a woman	Women
Sexual orientation	A person's sexual orientation towards persons of the same sex, persons of the opposite sex or persons of either sex	Not applicable to Plan SA

Habitats Regulations Assessment

The requirement to undertake Habitats Regulations Assessment (HRA) of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010 and again in 2012 and 2017. The regulations translate Directive 92/43/EEC

on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) and 79/409/EEC (Birds Directive) into UK law. The purpose of HRA is to assess the impacts of a land-use plan against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity of that site. The HRA will be undertaken separately but the findings will be taken into account in the SA where relevant (for example to inform judgements about the likely effects of potential development locations on biodiversity).

Compliance with the SEA Directive/Regulations

A table has been prepared and presented in **Appendix 1** signposting the relevant sections of the SA Scoping Report that are considered to meet the SEA Regulations requirements (the remainder will be met during subsequent stages of the SA of the Plan). This table will be included in the full SA Report at each stage of the SA to show how the requirements of the SEA Regulations have been met through the SA process.

1.2 Purpose of this SA Scoping Report

The first part of a sustainability appraisal is the preparation of a Scoping Report. The SA Scoping Report sets out, for the purposes of consultation, the proposed scope of issues to be addressed in the SA and the approach to be undertaken in assessing them. The document aims to outline the baseline information and evidence which is needed to inform the SA of the Plan objectives and policies. This is based on the identification of plans and programmes which are relevant to the study area; environmental, economic, and social baseline information; and environmental issues and problems.

The Scoping Report also identifies significant issues the borough is facing and provides an SA framework for assessing the likely impacts of the Plan in terms of how it will contribute to resolving such issues and ultimately how it will contribute to sustainability. The SA framework consists of a number of SA objectives, guide questions and potential monitoring indicators which will examine whether the policies set out in the Plan are sustainable.

Government guidance subdivides the SA process into a series of stages (see Figure 1). Whilst each stage consists of specific tasks, the intention should be that the process is iterative. This report is the result of work carried out for Stage A of the process and identifies the scope of the SA of the Plan.

The Scoping Report contains five steps which constitute the process for producing a Scoping Report, as explained below:

Task A1: Identifying other relevant plans, programmes and sustainability objectives

Task A2: Collecting baseline information

Task A3: Identifying significant sustainability issues and problems

Task A4: Developing the SA framework which will be used to test policy and allocation options in the plan

The SA objectives provide the opportunity to compare the potential effects of all reasonable options considered. Stage A5 – Consultation on every element of the SA is fundamental and required by national regulations. The Scoping Report will be informed through consultation with statutory bodies and other relevant stakeholders across the district and the wider plan area.

This SA Scoping Report follows key legislation, policy and guidance including:

- Directive 2001/42/EC 'on the assessment of the effects of certain plans, and programmes on the environment' (European Commission, 2001) i.e. the SEA Directive.
- Environmental Assessment of plans and programmes Regulations 2004 (SI 2004 No 1633)
- A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, 2005);
- Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment (4th April 2013 European Commission);

- Historic England guidance (2013) on Strategic Environmental Assessment (SEA)/ Sustainability Appraisal (SA) and the Historic Environment;
- Planning Advisory Service (PAS) Good Plan Making Guide. Plan Making Principles for Practitioners (2014);
- RTPI (2018) Strategic Environmental Assessment, Improving the effectiveness and efficiency of SEA/SA for land use plans. Levett-Therivel.
- Department of Health (2007) Draft Guidance on Health in Strategic Environmental Assessment:
- Town and Country Planning Association (2015) Public Health in Planning Good Practice Guide:
- Town and Country Planning Association (2019) The State of the Union: Reuniting Health with Planning in Promoting Healthy Communities.
- National Planning Policy Guidance (online).

1.3 Structure of this scoping report

- Chapter 1 describes the background to the production of the Guildford borough Plan: Development Management Policies and the requirement to undertake SA and other assessment processes.
- Chapter 2 describes the other plans, policies and programmes of relevance to the SA of the Plan.
- **Chapter 3** presents the baseline information which will inform the assessment of the policies and spatial options in the Plan.
- Chapter 4 identifies future challenges likely to be faced by Guildford borough over the plan period, and the key environmental, social and economic issues in Guildford of relevance to the Plan and considers the likely evolution of those issues without its implementation.
- **Chapter 5** presents the SA Framework that will be used for the appraisal of the emerging Plan and the proposed method for carrying out the SA.
- Chapter 6 describes the next steps to be undertaken in the SA of the Plan.

1.4 Plan objectives and outline of contents

The Plan aim is to formulate DM policies to guide future planning applications and ultimately provide a planning framework for the Borough up to 2034. The Plan will be in general conformity with the National Planning Policy Framework (NPPF), and in-line with planning legislation and regulations including the Localism Act 2011.

Plan objectives:

- 1. To deliver sufficient sustainable development that meets all identified needs.
- 2. To improve opportunities for all residents in the borough to access suitable housing, employment, training, education, open space, leisure, community and health facilities.
- 3. To ensure that all development is of high-quality design and enables people to live safe, healthy and active lifestyles.
- 4. To retain the distinct character and separate identities of our settlements.

- 5. To protect and enhance our heritage assets and improve the quality of our built and natural environment.
- 6. To protect those areas designated as Thames Basin Heaths Special Protection Area, Special Areas of Conservation, Sites of Special Scientific Interest and Areas of Outstanding Natural Beauty for their biodiversity and landscape characteristics.
- 7. To ensure that new development is designed and located to minimise its impact on the environment and that it mitigates, and is adapted for, climate change.
- 8. To maintain and enhance our role as one of the County's key employment locations in both a strategic and local context by providing and protecting a range of employment sites in appropriate locations.
- Reinforce our role as a world leader in innovation and research, with a particular focus on biotechnology, space and electronic gaming industries, and the sustainable growth of Surrey Research Park and the borough's other business hubs.
- 10. Support and expand the economic vitality of our rural areas whilst protecting existing heritage, landscape and character.
- 11. Reinforce Guildford's role as Surrey County's premier town centre destination whilst protecting and enhancing its cultural facilities and heritage assets.
- 12. To facilitate the timely provision of necessary infrastructure to support sustainable development.
- 13. To deliver an integrated, accessible and safe transport system, balanced in favour of sustainable transport modes, to facilitate sustainable development.

1.5 Uncertainties and Assumptions

SA is a strategic level assessment by nature and is based on broad assumptions and judgements, therefore some uncertainty over the assessment may exist. Qualitative rather than quantitative assessments will need to be made and there will be some degree of subjectivity which is typical of the SA process. The assessment will be undertaken by independent consultants with specialist knowledge across a range of sustainability topics. The monitoring plan will assist in providing more clarity for the duration of the Plan and will enable to address the uncertainties identified in the SA Scoping report.

Where the Plan makes reference to a collective set of actions rather than specific details of individual schemes an assumption about the predicted effects will be made based on the nature of the collective actions. The assessment will assume that all actions listed in the Plan under each DM policy narrative and objective will be implemented.

We do not yet know how our departure from the EU will have an impact; however, there is widespread concern that housing and social care could be affected as a direct consequence from our departure. Risks could include; reduced access to low cost finance affecting the building of new homes, an economic downturn leading to a rise in unemployment, interest rate increases making home ownership less affordable, difficulties in recruitment and retention of staff working in the health and social care sectors and further reductions to public sector budgets. It should be stressed that the precise impact of Brexit on both migration and economic growth is clearly unknown and will be influenced by future Government policy (including immigration controls, trade deals/ relationships, tariff barriers etc.).

1.6 Difficulties encountered

The success of the borough's economy is tied to that of the UK economy as a whole. For this reason, predictions are difficult to make.

There is a limited capacity of food bank evidence and no local measurement of food insecurity in the borough to provide better clarity on the extend of this issue at the borough level.

CHAPTER 2: Identifying other plans, programmes and sustainability objectives (Task A1)

Compliance with the SEA Directive

"The relationship with other relevant plans and programmes" (Annex 1 (a))

"The environmental protection objectives established at international, [European] Community or [national] level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation" (Annex 1 (e))

2.1 Overview of the policy context

Task A1 requires that all relevant policies, plans, programmes and environmental objectives are analysed. The relationship between various policies, plans, programmes and environmental protection objectives may influence the Plan. The relationships are analysed to:

- Identify any external social, environmental or economic objectives that should be reflected in the SA process;
- Identify external factors that may have influenced the preparation of the Plan; and
- Determine whether the policies in other plans and programmes might lead to cumulative or synergistic effects when combined with policies in the Plan.

A plan or programme may be influenced in various ways by other plans or programmes, or by external environmental protection objectives such as those laid down in policies or legislation. The SA process takes advantage of potential synergies and addresses any inconsistencies and constraints. This SA Scoping Report presents an analysis of the objectives of the key policies, plans and programmes (including legislation) that are relevant to the Plan and the SA assessment process. The key documents and their objectives have been taken into account when drafting the SA framework in Chapter 5.

The policy context aims to show how the plan is affected by, and affects, other policies, plans, programmes and initiatives. In line with recommendations provided in the RTPI practice guidance¹⁵ "SEA Improving the effectiveness and efficiency of SEA/SA for land use plans" (2018)¹⁶, this SA Scoping report does not aim to just to list all policies or provide a large appendix of policy analyses but rather it attempts to provide a focused discussion for their implications for the Plan which is from the planners perspective considered to be a more meaningful and tailored approach. Therefore, this report has focused only on a limited number of key policy documents. They are presented below.

2.2 Climate change mitigation and adaptation

International

United Nations Paris Climate Change Agreement (2015) is an international agreement to keep

¹⁵ Royal Town Planning Institute (RTPA) (2018) Strategic Environmental Assessment, Improving the effectiveness and efficiency of SEA/SA for land use plans. Commissioned by RTPI South East Written by Levett-Therivel. Available at: https://www.rtpi.org.uk/media/2668152/sea-sapracticeadvicefull2018c.pdf

¹⁶ Planners should use the 'so what' test to focus on a limited number (say a dozen) of key policy documents. For instance, in England this should include the NPPF and Defra's 25 year environment plan.

global temperature rise this century well below 2 degrees Celsius above pre-industrial levels.

European Energy Performance of Buildings Directive (2018) aims to promote the energy performance of buildings and building units. Requires the adoption of a standard methodology for calculating energy performance and minimum requirements for energy performance. Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amends Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency.

European Floods Directive (2007) provides a framework for the assessment and management of flood risk, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity.

National

The Climate Change Act (2008) sets targets for UK greenhouse gas emission reductions of at least 80% by 2050 and CO2 emission reductions of at least 26% by 2015, against a 1990 baseline. Through the Climate Change Act, the government has committed to: (i) reduce emissions by at least 100% of 1990 levels (net zero) by 2050 contribute to global emission reductions; and (ii) to limit global temperature rise to as little as possible above 2°C. UK emissions were 44% below 1990 levels in 2018. The first carbon budget (2008 to 2012) was met, as was the second (2013 to 2017) and the UK is on track to outperform the third (2018 to 2022). However, it is not on track to meet the fourth (2023 to 2027). To meet future carbon budgets and the 100% target for 2050 it will require the government to apply more challenging measures. The 100% target was based on advice from the CCC's 2019 report, 'Net Zero – The UK's contribution to stopping global warming'.

The Planning and Compulsory Purchase Act 2004 requires that "Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change."

The NPPF (2019) contains as part of its environmental objective a requirement to mitigate and adapt to climate change, "including moving to a low carbon economy". It states that "he planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience...and support renewable and low carbon energy and associated infrastructure...Plans should take a proactive approach to mitigating and adapting to climate change...FN: In line with the objectives and provisions of the Climate Change Act 2008."

The document also states that the "planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change." To achieve these aims new development should be planned to ensure appropriate adaptation measures are included (including green infrastructure) and should be designed, located and orientated as to help to reduce greenhouse gas emissions.

The revised framework also requires that development is directed away from areas which are at highest existing or future risk of flooding. Where development is required in such areas, the "development should be made safe for its lifetime without increasing flood risk elsewhere." In relation to coastal change in England planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Furthermore plans should "reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast".

The UK Renewable Energy Strategy (2009) describes out the ways in which we will tackle climate change by reducing our CO2 emissions through the generation of a renewable electricity, heat and transport technologies.

The Energy Efficiency Strategy (2012) aims to realise the wider energy efficiency potential that is available in the UK economy by maximising the potential of existing dwellings by implementing 21st century energy management initiatives on 19th century homes.

The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting (2018) sets out visions for the following sectors:

- People and the Built Environment "to promote the development of a healthy, equitable and resilient population, well placed to reduce the harmful health impacts of climate change...buildings and places (including built heritage) and the people who live and work in them are resilient and organisations in the built environment sector have an increased capacity to address the risks and make the most of the opportunities of a changing climate."
- Business and Industry "UK businesses are resilient to extreme weather and prepared for future risks and opportunities from climate change."
- Local Government "Local government plays a central in leading and supporting local places to become more resilient to a range of future risks and to be prepared for the opportunities from a changing climate."

The Flood and Water Management Act (2010) sets out measures to ensure that risk from all sources of flooding is managed more effectively. This includes: incorporating greater resilience measures into the design of new buildings; utilising the environment in order to reduce flooding; identifying areas suitable for inundation and water storage to reduce the risk of flooding elsewhere; rolling back development in coastal areas to avoid damage from flooding or coastal erosion; and creating sustainable drainage systems (SuDS).

The 25 Year Environment Plan (2019) sets out policy priorities with respect to: responding to climate change are using and managing land sustainably; and protecting and improving our global environment. Actions that will be taken as part of these two key areas are as follows:

- Take action to reduce the risk of harm from flooding and coastal erosion including greater use of natural flood management solutions.
- Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.

Climate change mitigation and adaptation

Implications of the policies and programmes review

The review of relevant plans, programmes and policies has identified a number of key messages that need to be taken into consideration when developing the Plan and SA objectives:

There is a need to encourage the use of renewable energy sources and low carbon technology in the Plan. Legislation and national planning policy require the Plan to drive reductions in greenhouse gas emissions and promote sustainable development that is adapted to the expected range of climate impacts. New development should be designed to adapt to climate change for the increased likelihood of extreme weather events, overheating as a result of temperature rise, as well as current infrastructure improved to be resilient to climate change. The Plan policies should contribute to meeting the objectives set out within the Climate Change Act 2008. The Plan needs to include policies "designed to secure" that the development and use of land contributes to the mitigation of, and adaptation to, climate change in conformity with the Planning and Compulsory Purchase Act of 2004. The Plan need a strong and precise policy narrative to show how such reductions will be achieved.

Plan should encourage reductions in CO_2 emissions and promote sustainable growth. The Plan policies should promote energy efficient design for business premises and private houses, encourage the development of renewable energy facilities, both as standalone facilities and as part of wider developments.

The Plan needs to seek new renewable energy generation capacity to deliver an appropriate contribution towards the UK Government's binding renewable energy targets. There is a need for the Plan to include policies to assist in directing development to locations at least risk of flooding and help to reduce overall flood risk.

2.3 Natural environment and biodiversity

International

International Convention on Wetlands (Ramsar Convention) (1976) is an international agreement with the aim of conserving and managing the use of wetlands and their resources.

European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979) aims to ensure conservation and protection of wild plant and animal species and their natural habitats, to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species).

International Convention on Biological Diversity (1992) is an international commitment to biodiversity conservation through national strategies and action plans.

European Habitats Directive (1992) sets the standard for nature conservation across the EU and enables all 27 Member States to work together within the same strong legislative framework in order to protect the most vulnerable species and habitat types across their entire natural range within the EU. It also established the Natura 2000 network.

European Birds Directive (2009) requires the maintenance of all species of naturally occurring birds in the wild state in the European territory at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements.

United Nations Declaration on Forests (New York Declaration) (2014) sets out international commitment to cut natural forest loss by 2020 and end loss by 2030.

National

A requirement of the NPPF's environmental objective is that the planning system should contribute to protecting and enhancing the natural environment including helping to improve biodiversity and using natural resources prudently. In support of this aim the framework states that Local Plans should "identify and map safeguard components of local wildlife-rich habitats and wider ecological networks" and should also "promote the conservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity." The framework requires that plans should take a strategic approach in terms of "maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries".

The Natural Environment and Rural Communities Act (2006) places a duty on public bodies to conserve biodiversity.

Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011) guides conservation efforts in England up to 2020 by requiring a national halt to biodiversity loss, supporting healthy ecosystems and establishing ecological networks. The Strategy includes 22 priorities which include actions for the following sectors: Agriculture, Forestry, Planning & Development, Water Management, Marine Management, Fisheries, Air Pollution and Invasive Non-Native Species.

Biodiversity Offsetting in England Green Paper (2013) sets out a framework for offsetting. Biodiversity offsets are conservation activities designed to compensate for residual losses.

The key areas of **the 25 Year Environment Plan**¹⁷ **(2018)** of relevance in terms of the protection and promotion of biodiversity are recovering nature and enhancing the beauty of landscapes; securing

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¹⁷ HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

clean, productive and biologically diverse seas and oceans; and protecting and improving our global environment. Actions that will be taken as part of these three key areas are as follows:

- Develop a Nature Recovery Network to protect and restore wildlife and provide opportunities to re-introduce species that have been lost from the countryside.
- Achieve a good environmental status of the UK's seas while allowing marine industries to thrive and complete our economically coherent network of well-managed marine protected areas.
- Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.
- Support and protect international forests and sustainable agriculture.

Local

The following documents prepared by the Surrey Nature Partnership have been reviewed:

The Natural Capital Investment Plan (NCIP) (2018) sets out the broad actions required to achieve and maintain healthy natural assets in Surrey over the next 25 years.

Biodiversity and Planning in Surrey (2019) guidance's central purpose is to help those involved in planning in Surrey to ensure that development within the county protects and enhances our valuable local biodiversity, which underpins our Natural Capital. Through this it aims to also help local planning authorities to meet their statutory Biodiversity 'Duty' under Section 40 of the Natural Environment & Rural Communities Act, 2006.

Biodiversity Opportunity Areas (BOA): the basis for realising Surrey's ecological network (2015) emerges through a growing number of Local Plans to avoid, on principle, development that would compromise achieving the overarching purpose and specific objectives of a BOA. This clearly involves protecting the designated and Priority habitats and species in the BOA, but consideration should also be given to whether development will affect existing or potentially improved habitat connectivity, both across and beyond it.

Natural environment and biodiversity

Implications of the policies and programmes review

The review of relevant plans, programmes and policies has identified a number of key messages that need to be taken into consideration when developing the Plan and SA objectives.

The objectives of policies and plans at all levels focus on the conservation of biological diversity (including a reduction in the current rate of biodiversity loss), and the protection and monitoring of endangered and vulnerable species and habitats. They also emphasise the ecological importance of geodiversity. The integration of biodiversity considerations into all environmental and socio-economic planning is strongly advocated. Biodiversity needs to become part of development policy on sustainable communities, urban green space and the built environment, and this should be reflected in policies to promote biodiversity conservation and enhancement, opportunities for local planning, design and operation to integrate biodiversity and the network of green spaces and green infrastructure to provide a range of sustainability benefits, i.e. healthy living, improving air and water quality, cooling the urban environment, service resilience, enhancing biodiversity and ecological resilience. This could include both enhancing existing habitats and providing new areas for biodiversity as opportunities arise. The Plan needs to take a landscape scale approach to conservation.

The Plan needs to take the four critical themes into account: conservation; creation; connection; and celebration. The Plan policies will need to be written in accordance with the objectives and requirements set out in the 25 Year Plan. In particular, new policies should embed the principle of environmental net gain and tackling invasive species.

2.4 Heritage

International

International United Nations (UNESCO) World Heritage Convention (1972) promotes cooperation among nations to protect heritage around the world that is of such outstanding universal value that its conservation is important for current and future generations.

European Convention for the Protection of the Architectural Heritage of Europe (1985): defines 'architectural heritage' and requires that the signatories maintain an inventory of it and take statutory measures to ensure its protection. Conservation policies are also required to be integrated into planning systems and other spheres of government influence as per the text of the convention.

National

Relevant legislation is set out in the overarching **Town and Country Planning Act 1990**, with specific protection for buildings and areas of special architectural or historic interest within the Planning (Listed Buildings and Conservation Areas) Act 1990. **The Ancient Monuments and Archaeological Areas Act 1979** provides specific protection for scheduled monuments.

Any decisions relating to listed buildings and their settings and conservation areas must address the statutory considerations of the **Planning (Listed Buildings and Conservation Areas) Act 1990** (see in particular sections 16, 66 and 72) as well as satisfying the relevant policies within the NPPF and the Local Plan.

Of relevance to the approach of the planning system to the historic environment the NPPF contains an environmental objective to contribute to the protection and enhancement of the built and historic environment. The document also sets out a strategy to seek "the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay and other threats." Such a strategy is required to take into consideration the desirability of sustaining and enhancing the significance of heritage assets and bringing them into viable use. It should also be considerate of the wider benefits of conserving the historic environment, the contribution new development can make in terms of character and distinctiveness and the opportunity for the historic environment to contribute to this character and distinctiveness. Local authorities should also maintain or have access to a historic environment record which is to be supported by up to date evidence.

The Government's Statement on the Historic Environment for England (2010) sets out the Government's vision for the historic environment. It calls for those who have the power to shape the historic environment to recognise its value and to manage it in an intelligent manner in light of the contribution that it can make to social, economic and cultural life. It includes reference to promoting the role of the historic environment within the Government's response to climate change and the wider sustainable development agenda.

The Heritage Statement (2017) describes out how the Government will support the heritage sector and help it to protect and care for our heritage and historic environment, in order to maximise the economic and social impact of heritage and to ensure that everyone can enjoy and benefit from it.

Local

Guildford Landscape Character Assessment (LCA) 2007 provides a strategy on how change through built development and land management can be guided to protect, conserve and enhance our landscape character. It includes information on historic land use and settlement patterns and refers to information available in the Surrey County Council document the Historic Landscape Character Assessment of Surrey.

Historic environment

Implications of the policies and programmes review

Historic environment priorities from international to local level include protecting designated resources and their settings (such as listed buildings, conservation areas, scheduled monuments, and registered parks and gardens); recognising the cultural aspects of landscape and establishing mechanisms for their protection against inappropriate development; recognising the potential value of unknown and undesignated resources; and preserving/enhancing sites and landscapes of archaeological and historic interest so that they may be enjoyed by both present and future generations.

The Plan must ensure that historic environment policies enable the sustainable use of historic buildings, which do not harm or remove their significance. The Local Plan must ensure the conservation and protection and enhancement of heritage assets including Listed Buildings, Conservation Areas and Scheduled Ancient Monuments, and their settings.

2.5 Landscape

International

The European Landscape Convention (2002) promotes landscape protection, management and planning. The Convention is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape.

National

The NPPF includes as part of its approach to protecting the natural environment, recognition for the intrinsic character and beauty of the countryside, and the wider benefits to be secured from natural capital. Importantly, great weight is to be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty. As part of the approach to achieving well-designed places the NPPF states that planning policies and decisions should ensure that developments "are sympathetic to local character and history, including the surrounding built environment and landscape setting."

The key area in the **25 Year Environment Plan** of relevance in terms of the conservation and enhancement of landscape character is recovering nature and enhancing the beauty of landscapes. Actions that will be taken as part of this key area are as follows:

- Working with AONB authorities to deliver environmental enhancements.
- Identifying opportunities for environmental enhancement of all England's Natural Character Areas, and monitoring indicators of landscape character and quality.

Surrey Hills AONB Management Plan (2014-2019) sets out the policy framework for the Surrey Hills. Local Authorities have a statutory duty to adopt the plan and public bodies must have a duty of regard to the purposes of AONB designation and the Management Plan policies.

Landscape

Implications of the policy review

The review of relevant plans, programmes and policies has identified a number of key messages that need to be taken into consideration when developing the Plan and SA objectives.

At the EU, national, regional and local level, emphasis is placed on the protection of landscape as an essential component of people's surroundings and sense of place. The plans and policies seek to increase recognition of the linkages and interplay between the different aspects and roles of

landscape, including: local distinctiveness; the historic environment; natural resources; farming, forestry and food; educational, leisure and recreation opportunities; transport and infrastructure; settlements and nature conservation. Changes to the character of the wider landscape, not just designated areas, can compromise the quality of the environment. Development should respond positively to local landscape and townscape character and the effects of change should be measured through the effects on the key characteristics. The link between landscapes and multifunctionality is provided with a close focus by the plans and programmes' concentration on green infrastructure provision. In this respect policies advocate the provision of open space, green networks and woodland as opportunities for sport and recreation, creating healthier communities, supporting and enhancing biodiversity, reducing temperatures in built up areas during summer, reducing the impact of noise and air pollution, and limiting the risk of flooding.

The Local Plan should aim to: protect and enhance the quality and distinctiveness of natural landscapes and townscapes; promote high quality design that respects and enhances local character; ensure tourism is compatible with protection of biodiversity, landscapes and townscapes.

2.6 Water quality

International

EU Water Framework Directive (2000/60/EC) requires member states to prevent deterioration of all water bodies (groundwater and surface waters) and to improve them with the aim to meet 'good status' or 'good ecological potential' by 2027. The Water Framework Directive establishes a statutory framework for the protection of groundwater and inland surface water, estuaries, and coastal waters.

European Nitrates Directive (1991) identifies nitrate vulnerability zones and puts in place measures to reduce water pollution caused by the introduction of nitrates.

European Urban Waste Water Directive (1991) aims to protect the environment from the adverse effects of urban waste water collection, treatment and discharge, and discharge from certain industrial sectors.

European Drinking Water Directive (1998) seeks to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.

National

Water Industry Act (and Water Industry Act 1991) (Envirowise, 2005) covers the control of the supply of water and provision of sewerage services by the water and sewerage undertakers and defines the criteria for disposal of trade effluent.

Water Framework Regulations 2017

NPPF requires us to prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of water pollution. This is set out in the National Planning Policy Framework, paragraphs 170 (e).

The Water White Paper (2012) provides out the Government's vision for the water sector including proposals on protecting water resources and reforming the water supply industry. It outlines the measures that will be taken to tackle issues such as poorly performing ecosystems, and the combined impacts of climate change and population growth on stressed water resources.

Local

The South East River Basin Management Plan 2016, prepared by the Environment Agency,

provides a framework for protecting and enhancing the benefits provided by the water environment. The Plan highlights the areas of land and bodies of water that have specific uses that need special protection. These include waters used for drinking water, bathing, commercial shellfish harvesting and those that sustain the most precious wildlife species and habitats.

The Thames Basin River Management Plan (2015) sets out the current state of the water environment; pressures affecting the water environment; environmental objectives for protecting and improving the waters; programme of measures, actions needed to achieve the objectives. It also informs decisions on land-use planning because water and land resources are closely linked.

The Wey Catchment Implementation Plan (2018) promotes the Catchment Based Approach (CaBA) embedding collaborative working at a river catchment scale to deliver cross cutting improvements to our water environment. It sets out the vision for the river Wey: "Our vision is for a healthy and diverse catchment where all interested sectors, groups or individuals may contribute effectively towards restoring the natural environment for the sustainable use of its essential resources, whilst preserving other valued heritage assets; to benefit both people and wildlife today and in the future".

Water quality

Implications of the policies and plans review

The review of relevant plans, programmes and policies has identified a number of key messages that need to be taken into consideration when developing the Plan and SA objectives.

National water policies are primarily driven by the aims of the EC Water Framework Directive, as translated into national law by the Water Framework Regulations 2017. Key objectives include improving the quality of rivers and other water bodies to 'good ecological status' by 2021; considering flood risk at all stages of the plan and development process in order to reduce future damage to property and loss of life; and incorporating water efficiency measures into new developments. In terms of planning policy, NPPF requires the planning system to contribute to and enhance the natural and local environment by: preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability. National and regional strategies also have a focus on maintaining and protecting the availability of water. The River Basin Management Plan (South East River Basin District) highlights the current state of watercourses in the area, and the opportunities and actions for improvements in order to meet Water Framework objectives.

The Plan must include measures to protect, manage and conserve water resources and water (river and groundwater) quality.

2.7 Air quality

International

European Air Quality Framework Directive (1996) and Air Quality Directive (2008) put in place measures for the avoidance, prevention, and reduction in harmful effects to human health and the environment associated with ambient air pollution and establish legally binding limits for the most common and harmful sources of air pollution.

European Industrial Emission Directive (2010) lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.

National

Clean Air Strategy (2019) sets out actions to tackle all sources of air pollution, making air healthier to breathe, protecting nature and boosting the economy. It adopts legally binding international targets to reduce emissions of five of the most damaging air pollutants (fine particulate matter, ammonia, nitrogen oxides, sulphur dioxide, non-methane volatile organic compounds) by 2020 and 2030. It is now also proposing tough new goals to cut public exposure to particulate matter pollution, as recommended by the World Health Organization.

The Road to Zero (2018) sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how cleaner air, a better environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

The UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations (2017) provides the Government's ambition and actions for delivering a better environment and cleaner air, including £1 billion investment in ultra-low emission vehicles (ULESvs), a £290 million National Productivity Investment Fund, a £11 million Air Quality Grant Fund and £255 million Implementation Fund to help local authorities to prepare Air Quality Action Plans and improve air quality, an £89 million Green Bus Fund, £1.2 billion Cycling and Walking Investment Strategy and £100 million to help improve air quality on the National road network.

Of the key areas in the **25 Year Environment Plan** around which action will be focused, of relevance to the Plan in terms of the protection of air quality is: "reduce pollution by tackling air pollution in our Clean Air Strategy and reduce the impact of chemicals."

Local

Guildford Borough Council Air Quality Action Plan (AQAP) (2019), sets out the options for working towards improving the air quality and outlines the actions that Guildford Borough Council will deliver between 2019 - 2020 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors within the Compton AQMA. It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

Surrey Transport Plan: Low Emissions Transport Strategy (2018) aims to reduce polluting emissions from transport by improving transport networks and infrastructure for sustainable travel (walking, cycling, passenger transport and public EV charge point network) and advising on transport impacts of new developments.

Surrey Air Quality Alliance (SAA) (2016) was formed by the eleven Surrey district/borough councils and Surrey County Council to address air quality issues through collective action on priority issues including addressing air quality through planning policy. The SAA updates Surrey Health and Wellbeing Board on progress to improve air quality.

Air Quality

Implications of the policy review

A number of objectives have been established in relation to air quality at both the European and the UK level (emanating from the 1996 EC Directive). This includes the setting of targets for reducing emissions of specific pollutants to minimise negative impacts on health and the environment. At the sub-regional and local level emphasis is placed on reducing emissions of nitrogen dioxide (NO2) from the transport sector.

The Plan must acknowledge the importance of air quality to the lives of people who live, work and play in the district, as well as the environment. It must also demonstrate possible measures to be put in place to reduce the harmful effects of air pollution on human health and the environment.

2.8 Soils

National

The NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued soil and the economic and other benefits of the best and most versatile agricultural land. Policies should also prevent new and existing development from "contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution." The document also requires that strategic policies should seek to make the most effective use of land in meeting local requirements making as much use as possible of previously-developed or 'brownfield' land. Furthermore policies should "support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land".

Safeguarding our Soils – A Strategy for England (2009) sets out how England's soils will be managed sustainably. It highlights those areas which Defra will prioritise and focus attention in tackling degradation threats, including: better protection for agricultural soils; protecting and enhancing stores of soil carbon; building the resilience of soils to a changing climate; preventing soil pollution; effective soil protection during construction and; dealing with contaminated land.

Soils

The Implications of the policies and programmes review

National and regional policies and strategies on soil seek to: prevent soil pollution; reduce soil erosion from wind and water; maintain soil diversity; improve the quality of soil, including through the remediation of contaminated land and through promoting an increase in organic matter in soil; protect and enhance stores of soil carbon and water; recognise soils' role for natural systems; and increase the resilience of soils to a changing climate. The plans and programmes also have a focus on protecting the quality and availability of agricultural land, through reducing soil degradation, maintaining soil productivity, limiting compaction and a range of other approaches.

The Plan needs to focus on prevention and remediation of environmental damage, including land contamination. There is a need to increase efforts to reduce soil degradation and remediate contaminated sites.

2.9 Health and health inequalities

National

Public Health England is an active partner in the Reuniting Health with Planning project (2012) which makes many explicit connections and recommendations for uniting planning and health. Public Health England's Healthy Places, Healthy People programme was launched in November 2013. It recognises that the built and natural environment is a major determinant of health, and that the design of the built and natural environment has an influence on health and wellbeing.

National Planning Policy Framework (2019): A core planning principle is "to take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs." It calls for planning policies to assess the needs of open space, sports and recreation facilities and opportunities for new provision and requires local planning authorities to take a proactive approach to ensure a sufficient choice of school places is available.

The Health and Social Care Act (2012)

The increasing role that local authorities are expected to play in producing health outcomes is well demonstrated by recent Government legislation. The Health and Social Care Act 2012 transfers responsibility for public health from the NHS to local government (upper tier authorities in the first instance), giving them a duty to improve the health of the people who live in their areas. This will require a more holistic approach to health across all local government functions.

The Marmot Review: Implications for Spatial Planning (2011)

'Fair Society, Healthy Lives' ('The Marmot Review') investigated health inequalities in England and the actions needed in order to tackle them. Subsequently, a supplementary report was prepared providing additional evidence relating to spatial planning and health. It does so on the basis that that there is: 'overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities.

It highlights three main policy actions to ensure that the built environment promotes health and reduces inequalities for all local populations (which should be applied on a universal basis, but with a scale and intensity that is proportionate to the level of disadvantage):

- 'Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality'
- 'Prioritise policies and interventions that both reduce health inequalities and mitigate climate change by: Improving active travel; Improving good quality open and green spaces; Improving the quality of food in local areas; Improving the energy efficiency of housing'
- 'Support locally developed and evidence-based community regeneration programmes that: Remove barriers to community participation and action; and Reduce social isolation'.

The PHE publications "Spatial Planning for Health: An evidence resource for planning and designing healthier places" (2017), and "Health High Streets: Good place-making in an urban setting" (2018) aim to inform action and policy on the health impacts of the built and natural environment.

Local

Surrey Health and Wellbeing Strategy¹⁸ **(2019)** has five local priorities: improving children's health and wellbeing; developing a preventative approach; promoting emotional wellbeing and mental health; improving adult's health and wellbeing; and safeguarding the population.

Surrey Physical Activity Strategy¹⁹ **(2015-2020)** builds on the recommendations of Surrey's Joint Strategic Needs Assessment, this physical activity strategy provides guidance to strategic leads, policymakers, commissioners and providers on the key approaches and priority groups we need to focus on to improve activity levels in Surrey.

Guildford Health and Wellbeing Board 2017-2022 sets a number of priorities, including:

- Improving children's health and wellbeing
- Developing a preventative approach
- Promoting emotional wellbeing and mental health
- Improving older adults' health and wellbeing
- Safeguarding the population

Due to resources constraints, the board made a decision to focus on preventing premature deaths and reducing inequalities in health with a focus on wards with poorest health outcomes including Stoke, Westborough and Ash Wharf.

The local priorities were derived taking into consideration the Surrey Joint Strategic Needs Assessment, the local health profile and the priorities identified by Surrey's Joint Health and Wellbeing

¹⁸ Tim Oliver Surrey health and wellbeing strategy, 'Community Vision for Surrey in 2030'. Available at: https://www.healthysurrey.org.uk/__data/assets/pdf_file/0007/197530/Surrey-Health-and-Wellbeing-Strategy-FINALV2.pdf

¹⁹ Active Surrey (2019) Surrey Physical Activity Strategy. Available at: http://www.activesurrey.com/physical-activity-strategy

Strategy.

Surrey Health Weight Strategy (2017-2022) sets out the aims and rationale for taking a multiagency approach to support children, young people and families in Surrey to maintain and achieve a healthy weight.

Health and health inequalities

Implications of the policies and plans review

National and regional health related plans and programmes focus on improving rates of infant mortality and life expectancy; reducing work related illness and accidents; significantly improving levels of sport and physical activity, particularly among disadvantaged groups; promoting healthier modes of travel; supporting the public to make healthier and more informed choices in regards to their health; improving accessibility to healthcare and leisure/recreational facilities; and reducing health inequalities, particularly for children and older people.

There is a need to improve the overall health of Guildford's population and make Guildford a socially integrated borough with strong and resilient communities by encouraging modal shift for car owners and for older people, as well as increasing physical activity. Where possible the Local Plan needs to assist in the delivery of the vision of the Surrey's Physical Activity Strategy (2015-2020).

The Plan needs to contribute towards reduction of inequalities in health outcomes and strive to improve the overall physical and mental health and wellbeing of the borough. It must take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs, with particular focus on a focus on wards with poorest health outcomes including Stoke, Westborough and Ash Wharf.

2.10 Material assets

National

National Planning Policy for Waste (2014) sets out the government's ambition to work towards a more sustainable approach for resource management and use. Waste management facilities should aim to make a positive contribution to communities and to balance the need for waste management facilities with the interests of the community. Broadly, the NPPW requires waste planning authorities to:

- Prepare local plans which identify sufficient opportunities to meet the identified needs of their area for the management of waste streams.
- Identify in their local plans sites and / or areas for new or enhanced waste management facilities in appropriate locations.
- Assess the suitability of sites and/or areas for new or enhanced waste management facilities against certain criteria.
- First look for suitable sites and areas outside the Green Belt for waste management facilities
- Monitor and report on the uptake of allocated sites in the local plan and the amount of waste recycled, recovered and sent for disposal.

Local

Surrey Minerals Plan (2008) Sets out the vision, objectives and spatial strategy for mineral development to 2026 incorporating specific policies on silica sand, brick clay and oil and gas, together with generic policies to determine planning applications for mineral development. Primary Aggregates: sets out a policy framework to address the need for and provision of sharp sand, gravel and soft sand in Surrey. The document identifies preferred areas to meet need for aggregates and contains policies for controlling primary aggregate extraction.

Draft Surrey Waste Plan (2019), which has been submitted to the Secretary of State at the time of writing, sets out the authority's vision, objectives and waste development spatial strategy for Surrey and provides the policy framework for development management Waste Development: Policy framework addresses the need for waste facilities and identification of sites for such facilities. Development Control Policies provides a policy framework for the consideration of planning applications for waste development in Surrey.

Material assets

Implications of the policies and plans review

The material assets sustainability theme covers a range of policy areas, including waste management, minerals, energy production and previously developed land. National level plans and programems seek to protect minerals resources and promote appropriate after uses for minerals workings. Plans and programmes at all levels seek to promote the 'waste hierarchy'. This seeks to prioritise waste management in the following order: reduction; reuse; recycling and composting; energy recovery; and disposal.

At the county level, **the** Surrey Minerals (2011) and Waste Plan (2008) sets out the strategic approach to minerals and waste issues. An expansion of renewable energy production is strongly promoted by European and national plans and programmes. The UK's recent Renewable Energy Strategy which seeks to produce 15% of electricity from renewable sources by 2020.

The Plan should apply principles of circular economy when aiming for waste reduction, reuse, remanufacturing and recycling in all construction and operational practices. Surrey County Council is the planning authority for minerals and waste matters and is therefore responsible for preparing minerals and waste planning policies. Guildford Borough Council should seek to promote sustainable waste management within the Plan.

2.11 Transport and accessibility

International

The Trans-European Networks (TEN) was created by the European Union by Articles 154-156 of the Treaty of Rome (1957), with the stated goals of the creation of an internal market and the reinforcement of economic and social cohesion. These include the Trans-European Transport Networks (TEN-T), which includes High Speed 1, and the Trans-European Telecommunications Networks (eTEN).

National

The NPPF requires that "transport issues should be considered from the earliest stages of planmaking". The scale, location and density of development should reflect "opportunities from existing or proposed transport infrastructure". To help reduce congestion and emissions, and improve air quality and public health the planning system should focus significant development "on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes." The draft revised framework also requires that planning policies support an appropriate mix of uses across an area to further help reduce the need to travel as well as the provision of high quality walking and cycling network. While the framework promotes the use and development of sustainable transport networks it also requires that "where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development" should be identified and protected.

The Road to Zero (2018) sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how

cleaner air, a better environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

Local

Surrey Cycling Strategy (2014) aims to get "more people cycling, more safely". The strategy set out twelve objectives to achieve the aim. One of the objectives is to produce local cycling plans, to be developed by the Local Committee and its partners, which reflect local priorities.

Guildford Borough Transport Strategy (2017) sets out a programme of schemes covering all modes of surface transport in the borough and beyond. The schemes will, in combination, tackle the historic infrastructure deficit, facilitate a modest modal shift and mitigate the principal transport impacts of future proposed planned growth in the borough.

Surrey Transport Plan (LTP3, 2011 and subsequent updates) is the third Local Transport Plan (LTP) for the county. It is a statutory plan (required by the Local Transport Act 2008 and Transport Act 2000), which replaced the second LTP on 1 April 2011. The aim of the Transport Plan is, "To help people to meet their transport and travel needs effectively, reliably, safely and sustainably within Surrey; in order to promote economic vibrancy, protect and enhance the environment and improve the quality of life." There are four objectives of the plan:

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

Guildford Borough Transport Strategy (2017) sets out a programme of schemes covering all modes of surface transport in the borough and beyond. The schemes will, in combination, tackle the historic infrastructure deficit, facilitate a modes modal shift and mitigate the principal transport impacts of future proposed planned growth in the borough.

Guildford borough Infrastructure Delivery Plan (2017) including an Infrastructure Schedule, provides detail on key infrastructure needed to support the development included in the Submission Local Plan 2017.

Transport and accessibility

Implications of the policies and plans review

European and UK transport policies and plans place emphasis on the modernisation and sustainability of the transport network. Specific objectives include reducing pollution and road congestion through improvements to public transport, walking and cycling networks and reducing the need to travel. National policy also focuses on the need for the transport network to support sustainable economic growth. The plans and programms highlight that congestion and poor air quality resulting from transport are key issues for a number of locations in the wider region. Regional and local plans therefore focus on appropriate design, location and layout of development, increasing investment in infrastructure, improving the quality and accessibility of public transport, supporting walking and cycling, and enhancing road safety. The Surrey Local Transport Plan 2011 sets out the transport plan for the county. There is a need for transport systems to be accessible and well connected. The transport system should be easier for older and disabled people to use. The transport system should facilitate access to jobs, housing developments, education, healthcare and amenities for all in Guildford.

The Plan policies should promote sustainable transport modes, walking and cycling and reduce the need to travel; reduce traffic and congestion; Improve public transport provision including better integration of modes; and enhance accessibility to key community facilities, services and jobs for all,

giving regard for older and disabled people (urban and rural).

2.12 Economic competitiveness and employment

National

The NPPF contains an economic objective to "help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity." It also requires that planning seeks to "create the conditions in which businesses can invest, expand and adapt" with policies required to "set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth". Policies addressing the economy should also seek "to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment." Of particular relevance to Guildford is the requirement for planning policies to "recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations."

Planning policies are also required specifically to address support for the rural economy. Sustainable growth and expansion of all types of business and enterprise in rural areas should be supported, both through conversion of existing buildings and well-designed new buildings, while the diversification of the rural economy and promotion of sustainable rural tourism and leisure developments is also supported.

The NPPF also supports the role of town centres as functioning at the heart of local communities. This support is required to provide for a "positive approach to [town centres'] growth, management and adaptation." Included within this support is a requirement to "allocate a range of suitable sites in town centres to meet the scale and type of development needed, looking at least ten years ahead."

The Local Growth White Paper (2010) highlights the importance of economic policy that focusses on the delivery of strong, sustainable and balanced growth of income and employment over the long-term, growth which is broad-based industrially and geographically to provide equality of access and opportunity and build businesses that are competitive internationally.

Innovation Policy – the Government's Industrial Strategy (2017) states that as a key factor for business and economic growth and productivity, broadband provision is a high priority issue and features in the refresh of the Enterprise M3Local Enterprise Partnership's (LEP's) local industrial strategy. The Industrial Strategy identified five foundations of productivity focused on Ideas, People, Infrastructure, Business Environment and Places – under Infrastructure the Government has pledged a major upgrade to the UK's infrastructure. The Strategy also identified four Grand Challenges to put the UK at the forefront of the industries of the future: Artificial Intelligence and the Data Economy; Clean Growth; Future of Mobility and the Ageing Society. Technological innovations are already transforming how we live and work but there is an urgent need for greater investment in the skills, industries and infrastructure of the future.

Clean Growth Strategy²⁰ (2018) emphasizes the need to provide growth at a national scale which is clean. "Protecting our built and natural environment is of paramount importance for the future of the country. Protecting our environment is beneficial for our economy and should be seen as an opportunity rather than a constraint. Successfully protecting and enhancing our natural environment will:

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²⁰ HM Government (2017) The Clean Growth Strategy Leading the way to a low carbon future. Presented to Parliament pursuant to Sections 12 and 14 of the Climate Change Act 2008 Amended April 2018 from the version laid before Parliament in October 2017 October 2017. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf

- Improve our quality of life.
- Increase our economic prosperity.
- Result in cleaner air.
- Lower energy bills.
- Provide greater economic security."

The report defines Clean Growth as growing natural income while cutting greenhouse gases.

Local

Guildford Economic Strategy (2013-2031) aims to ensure that Guildford will be the leading economy in Surrey in the years up to 2031 and beyond. It also concentrates on improvements to support economic growth, including road infrastructure, housing, skills and employment opportunities, in our urban and rural allocations.

Guildford Innovation Strategy (2019-2020) establishes a Vision for Guildford that embraces a digital future and promotes our town as being at the leading edge of innovation. It aims to enable technological change and innovation to support local economic competitiveness, quality of life and public service delivery with a view to creating a vibrant, prosperous, resilient and sustainable borough for the digital age. The strategy promotes Guildford as the welcoming location of choice for companies, researchers and developers, who lead the digital revolution, with the Council providing active support for innovation and technological change in order to develop a connected community.

Guildford Borough Rural Economic Strategy (2017-2022) aims at protecting natural and built heritage, sustaining rural communities, and enabling enterprise and diversification in the borough's changing countryside. Its five priority areas include:

- Affordable Housing and Sustainable Communities
 - Infrastructure for Enterprise
 - Landscape Management and Countryside Vision
 - Green Space, Health and Wellbeing for Better Quality of Life
 - Energy Policy, Generation and Supply

Economic competitiveness and employment

Implications of the polices and plans review

The improvement and maintenance of high and stable levels of economic growth and employment are key aims of the strategies at UK and European levels. Other objectives include improvements to the education system to increase the skill levels of both children and adults; and improved productivity and innovation, particularly with regards to technology. At a regional and local level, emphasis is placed on improvements to the cultural and visitor economy; inward investment; and the use of Information and Communications Technology (ICT) to improve efficiency and skills.

The Plan policies will need to encourage economic growth across the whole plan area and take account of changing economic conditions and requirements to support local businesses and enterprises.

2.13 Housing

National

The NPPF includes as part of its social objective the promotion of "strong, vibrant and healthy communities" by:

- "ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and
- by fostering a well-designed and safe built environment, with accessible services and open

spaces that reflect current and future needs and support communities' health, social and cultural well-being."

Ultimately planning policies and planning decision making should "aim to achieve healthy, inclusive and safe places". The document states that strategic policies should set out the pattern, scale and quality of development and make sufficient provision for "housing (including affordable housing) ... [as well as] community facilities (such as health, education and cultural infrastructure)."

Policies should reflect "the size, type and tenure of housing needed". This policy approach is to include but should not be limited to housing requirements relating to affordable homes, families with children older people, students, people with disabilities, service families, travellers, those who rent their homes and people wishing to commission the construction of their own homes.

At major developments providing new housing planning policies and decisions should expected at least 10% of new provision to be delivered for affordable home ownership subject to conditions and exemptions. To help to diversify opportunities for builders, promote a better mix of site sizes and increase the number of schemes that can be built-out quickly to meet housing need, the NPPF states that at least 10% of the sites allocated for housing through a local authority's plan should be half a hectare or smaller. Where there is an identified need, development of sites not already allocated for housing to provide entry-level homes suitable for first-time buyers is to be supported by local planning authorities unless such need is already to be met at other locations within the authority area. These sites should comprise of entry-level homes that offer one or more types of affordable housing.

The NPPF also sets out that the standard method provided in national planning guidance should be used to undertake a local housing need assessment identifying the minimum number of homes needed. The Housing Delivery Test Measurement Rule Book (2018) provides this standard method allowing for calculation of objectively assessed housing need using government household forecasts adjusted for local house prices and local earnings. Unmet need from neighbouring areas will also need to be taken into account as part of the calculation.

Planning Policy for Traveller Sites (2015) sets out the Government's planning policy for traveller sites. The Government's overarching aim is to ensure fair and equal treatment for travellers, in a way that facilitates the traditional and nomadic way of life of travellers while respecting the interests of the settled community.

Local

Guildford Housing Strategy (2015-2020) concentrates on affordable housing and the use and quality of existing homes, with a focus on what can be achieved in the next five years.

Homelessness Strategy (2013 – 2018) aims to prevent homelessness and support our vision that 'everyone should have a home that meets their needs'. It identified three core areas as its focus for the next five years:

- Managing the impact of welfare reforms.
- Sustaining and creating access to accommodation.
- Tackling rough sleeping and single homelessness. Single people account for over half
 the households on our housing register but are generally considered a lower priority
 than families or other households. We are witnessing an increase in homelessness
 amongst single people, and in particular rough sleeping, reflecting the national trend.

Housing

Implications of the policies and plans review

National and sub-regional objectives for housing include improvements in longer term housing affordability; high quality housing design and streetscapes; a more stable housing market; improved choice; location of housing supply which supports accessibility and patterns of economic development; and an adequate supply of publicly-funded housing for those who need it. Local plans and strategies focus on the affordability of housing, rural housing, the quality of housing, access to

services, and meeting the housing needs of vulnerable people. The housing needs of elderly people, disabled people, gypsies, homeless people and travellers are also addressed by national, regional and local policies. The key local plan for this sustainability theme is the Guildford Housing Strategy 2015-2020.

The Plan may need to include a policy that enables the provision of self-build and custom built housing, having regard for the register the authority has already established. The Plan should allocate sufficient pitches and plots to meet need and include criteria for assessing planning applications for Traveller sites and allocations. Evidence base should provide an assessment of need and identify a rolling five-year supply of deliverable sites.

2.14 Population and social inclusion

Section 17 of the Crime and Disorder Act 1998 requires all local authorities to exercise their functions with due regard to their likely effect on crime and disorder, and to do all they reasonably can to prevent crime and disorder. The prevention of crime and the enhancement of community safety are matters that a local authority should consider when exercising its planning functions.

National

The NPPF promotes a theme of enhancing healthy and safe communities which is to be achieved by creating places which "promote social interaction (and) enable and support healthy lifestyles." As part of this approach social, recreational and cultural facilities and services that the community needs should be provided guided by planning policies which:

- "plan positively provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services;
- support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;
- help prevent unnecessary loss of valued facilities and services."

Para 95 of the NPPF states that "Planning policies and decisions should promote public safety and take into account wider security and defence requirements by:

a) anticipating and addressing possible malicious threats and natural hazards, especially in locations where large numbers of people are expected to congregate. Policies for relevant areas (such as town centre and regeneration frameworks), and the layout and design of developments, should be informed by the most up-to-date information available from the police and other agencies about the nature of potential threats and their implications. This includes appropriate and proportionate steps that can be taken to reduce vulnerability, increase resilience and ensure public safety and security; and b) recognising and supporting development required for operational defence and security purposes, and ensuring that operational sites are not affected adversely by the impact of other development proposed in the area."

With regards to road safety, the NPPF states that "plans should create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones."

The 25 Year Environment Plan sets out goals for improving the environment over the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. The document identifies six key areas upon which action will be focused. Those of relevance to the topics of population growth, health and wellbeing are using and managing land sustainably; and connecting people with the environment to improve health and wellbeing. These two key areas are of relevance to the Plan as follows:

- Embed an 'environmental net gain' principle for development, including housing and infrastructure
- Help people improve their health and wellbeing by using green spaces including through mental health services. Encourage children to be close to nature, in and out of school, with

- particular focus on disadvantaged areas. 'Green' our towns and cities by creating green infrastructure and planting one million urban trees.
- Make 2019 a year of action for the environment, working with Step Up To Serve and other
 partners to help children and young people from all backgrounds to engage with nature and
 improve the environment.

The Equality Act 2010 requires public authorities to work to eliminate discrimination and promote equality in all their activities. Under Section 149 of the Equality Act a public authority has a duty to ensure that all decisions are made in such a way as to minimise unfairness, and do not have disproportionately negative impacts on people because of their protected characteristics or background. It protects everyone against unfair treatment, on the basis of protected characteristics: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.

The public sector Equality Duty came into force across Great Britain on 5 April 2011. It means that public bodies have to consider all individuals when carrying out their day-to-day work – in shaping policy, in delivering services and in relation to their own employees. It also requires that public bodies have due regard to the need to:

- eliminate discrimination
- advance equality of opportunity
- foster good relations between different people when carrying out their activities

Local

Community vision for Surrey in 2030²¹ and Vision for Surrey 2030 - evidence base²² sets out a vision for the county: "By 2030 we want Surrey to be a uniquely special place where everyone has a great start to life, people live healthy and fulfilling lives, are enabled to achieve their full potential and contribute to their community, and no one is left behind.

Our ambitions for people are:

- Children and young people are safe and feel safe and confident.
- Everyone benefits from education, skills and employment opportunities that help them succeed in life.
- Everyone lives healthy, active and fulfilling lives, and makes good choices about their wellbeing.
- Everyone gets the health and social care support and information they need at the right time and place.
- Communities are welcoming and supportive, especially of those most in need, and people feel able to contribute to community life."

Safer Guildford Partnership (SGP) Partnership Plan 2017 – 2020 works to ensure residents feel safe and are safe in Guildford by targeting priority areas of crime and anti-social behavior. It sets out priorities:

- To focus on threat, harm, risk and vulnerability, including
 - serious and organised crime
 - child sexual exploitation
 - modern day slavery
 - domestic abuse
 - threat of radicalisation
 - cyber related crime
 - supporting vulnerable victims
- To identify and tackle anti-social behaviour hotspot locations and perpetrators

²¹ Surrey County Council (SCC) (2019) Community vision for Surrey in 2030. Available at: https://www.surreycc.gov.uk/council-and-democracy/finance-and-performance/our-performance/our-organisation-strategy/community-vision-for-surrey-in-2030

²² Vision for Surrey 2030 – Evidence base (2018). Available at: https://www.surreycc.gov.uk/ data/assets/pdf_file/0009/193905/ltem-11-Annex-A-Vision-2030-Evidence-base.pdf

- To reduce re-offending
- To promote reassurance to our public to help make our communities stronger

Population and social inclusion

Implications of the policies and plans review

Plans and programmes on population include a range of different objectives, including tackling social exclusion, improving human rights and public participation, improving health, and ensuring every child has the chance to fulfil their potential by reducing levels of education failure, ill health, substance misuse, crime and anti-social behaviour. At the regional and local levels, support for cultural diversity and young people are key aims. The Equality Act 2010 is the law intended to achieve equal opportunities in the workplace and in wider society.

The Plan should seek to ensure provision of goods, services, facilities, public functions, the disposal and management of premises, education and associations, meet the act's requirements. The Plan needs to acknowledge the importance of creating and maintaining a safe and attractive public realm which encourages people to walk and cycle, promoting a sense of place and reducing the need to travel). The Plan needs to have policies promoting opportunities for education, skills and employment that help all to succeed in life and advance equality of opportunity.

2.15 Relevant environmental protection objectives

In order to establish a clear scope for the SA, and to fulfil the requirements of the SEA Regulations, it is necessary to review and develop an understanding of the environmental, social and economic objectives contained within international, national and local plans and strategies that are of relevance to Guildford Local Plan.

Many of the relevant plans, policies and programmes that have been subject for a review address some aspects of the sustainable development agenda but this may not be their main impetus. Some of the key sustainable development messages (including environmental protection objectives) coming out of the review of relevant plans, policies and programmes are presented below.

Population, social inclusion, health and health inequalities

- Meet housing need.
- Provide affordable housing to meet identified needs.
- Provide for a range of types and tenures of housing.
- Take into account the needs of an ageing population.
- Take into account the needs of less able people.
- Achieve well-designed places.
- Promote sustainable construction.
- Improve peoples' health and reduce health inequalities.
- Improve active lifestyles to address obesity.
- Protect and provide access to appropriate levels of open space and community facilities.
- Create mixed, safe communities and promote social inclusion.
- Reduce fuel and food poverty.

Economic competitiveness and employment

- Facilitate building competitive economy.
- Make provision for clusters or networks of knowledge and data-driven, creative or high technology industries.
- Provide for storage and distribution operations at a variety of scales and in suitably accessible locations.

- Ensure the vitality of town centres.
- Improve access to employment and training opportunities.
- Promote high quality and sustainable tourism.
- Ensure a resilient and economically sustainable food system.

Transport

- Reduce the need to travel.
- Promote a sustainable way of travelling.
- Encourage walking and cycling and public transport.

Air quality

- Improve air quality particularly by addressing traffic-related emissions.
- Place particular focus for air quality improvements on those locations where air quality standards are not being met, e.g. (AQMA).

Land use and soils

- Make the best use of previously developed land.
- Promote higher densities of development in accessible locations.
- Protect soil resources including high quality agricultural land.
- Promote local food production.

Water resources and quality

- Promote water efficiency and ensure sufficient water resources are available to support development.
- Ensure sufficient water treatment facilities are available to support development.
- To prevent deterioration of the status of surface waters and groundwater.
- To achieve objectives and standards for protected areas.
- To aim to achieve good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status.

Climate change mitigation and adaptation

- Support low carbon economies.
- Promote energy efficiency in buildings.
- Promote and provide for renewable energy.
- Avoid increasing flood risk to people and property, taking into account future increased risks as a result of climate change.
- Reduce the risk of overheating from rising temperatures.

Heritage

- Protect and enhance the historic environment.
- Where possible, safeguard historic assets including their setting.
- Promote good design and sustainable construction sympathetic to the historic character of the areas in which they are located.

Natural environment and biodiversity

- Protect and enhance designated biodiversity assets.
- Reduce fragmentation and improve connectivity and resilience of ecological networks.
- Achieve at least 10% net gains in biodiversity.

Landscape

- Protect and enhance landscape character.
- Give great weight to conserving and enhancing nationally designated landscapes in particular, including their settings.
- Protect and provide access to appropriate levels of open space.

CHAPTER 3: Baseline Information and key sustainability issues in London (Tasks A2 & A3)

In addition to the requirements of the SEA Directive, the statutory SA process requires the collection

Compliance with the SEA Directive

"Relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme" and "the environmental characteristics of areas likely to be significantly affected" (Annex 1 (b), (c))

of additional information on social and economic characteristics of the plan area.

3.1 Overview

Baseline information provides the basis for predicting and monitoring environmental effects and helps to identify environmental problems and alternative ways of dealing with them. Both qualitative and quantitative information can be used for this purpose. The SA Report can focus on those where significant effects are likely, provided it is made clear why other matters do not need to be addressed. The baseline and environmental effects can also include matters such as geological conditions, mineral resources, flood risk, energy consumption, noise and light pollution.

The baseline data for the SA includes existing relevant environmental and sustainability information from a range of sources which is both quantitative and qualitative. This information provides the basis for assessing the potential impact of the Plan policies and will aid development of appropriate mitigation measures, together with future monitoring data. The baseline refers to the conditions prevailing in the absence of the Plan (i.e. business as usual) and has been developed with regard to the current situation and predicted trends as detailed in existing literature and data. Information about the environmental/sustainability baseline helps to identify existing problems that the proposed Plan DM policies should try to resolve. The baseline sets a context for the impact prediction and evaluation stage and provides a basis against which the proposed Plan DM policies' impacts can later be monitored.

This SA Scoping Report is built upon the large amount of data collected from engagement with local and national government bodies to ensure that the Plan policies are based on up-to-date information about the state of natural environment and other characteristics of the study area. Not all the baseline data needs be available for an SA to proceed. This SA Scoping Report can be seen as a way of identifying what data need to be collected and monitored in the future.

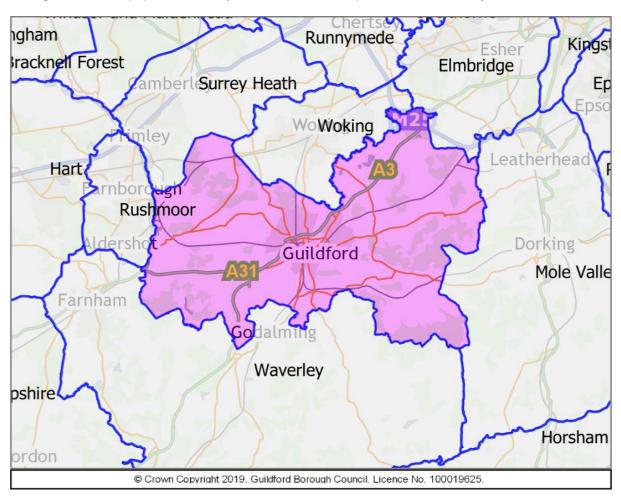
For each topic key significant issues have been identified. These have been used to inform the development of SA objectives against which the emerging Plan will be assessed. The baseline data collected to date are summarised below. This data has allowed the identification of key issues for the borough.

Inter – relationships identified

Each of the SA topics and issues listed in the Scoping Report, whilst presented individually, have clear inter-relationships. For example, an increase in population can result in increased pressure on community facilities and infrastructure or traffic generation, and thus air quality. Where relevant, those have been identified and presented in the baseline data review.

3.2 Geographical context

Guildford Borough is located in south west Surrey, and borders Hampshire in the west, and Surrey boroughs of Mole Valley, Surrey Heath, Waverley and Woking. The Borough is the second largest district in the county in terms of area, covering approximately 104 square miles (269 square kilometres). The two principal urban areas are the town of Guildford and the urban area of Ash and Tongham in the west of the borough. Guildford's population density was 5.6 in 2018 compared to 7.08 in Surrey.



3.3 Population and social inclusion

Population

Approximately half of Guildford borough's population lives in the main urban area of Guildford town²³. Guildford borough is the most highly populated borough in Surrey, with an estimated population reaching 150,400 in 2019²⁴. Over recent decades, the population has shown a general upward trend (see **Figure 3.1**), rising steadily since 2005 and growing by a total of 24,400 in the last 28 years. This increase has been driven by both positive natural change (more births than deaths) and net migration (more people moving in than out). Evidence points to net positive international in-migration, alongside a modest net movement out of the Borough to other locations within the UK. It should be borne in mind that if someone moves to the Borough from abroad but then moves to somewhere else within the UK, the latter move is

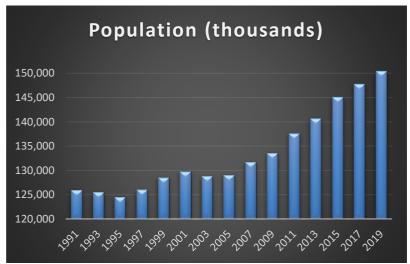
 ²³ Surrey County Council. Local Area Profiles: Community Wellbeing – context (2019). [Online]. Available at: https://www.surreyi.gov.uk/dataset/local-area-profiles--community-wellbeing---context
 ²⁴ Labour Market Profile – Guildford (19/11/2019), Nomis, official labour market statistics, Office for National Statistics [online].

Available at: https://www.nomisweb.co.uk/reports/lmp/la/1946157330/report.aspx#tabrespop

counted as internal migration²⁵.

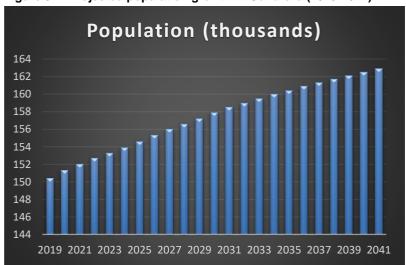
Additionally, more elderly people are likely to be living in the south east of England in the next 20 years due to longer life expectancy and net in-migration. Population projections for Guildford show an increase of just over 8.4% between 2019 and 2041 (see **Figure 3.2**). By 2041 the population of Guildford is estimated to reach over 162,900. The population projections are an indication of future trends in population.

Figure 3.1: Population in Guildford 1991-2019



Source: www.nomisweb.co.uk

Figure 3.2: Projected population growth in Guildford (2019-2041)



Source: ONS, 2016-based subnational population projections for local authorities and higher administrative areas in England

As illustrated in Figure 3.3, the population age structure in Guildford identifies that the borough currently has a higher proportion of people aged 19-29 than both Surrey and England on average. This is in part due to the presence of Surrey University. Should this age group remain resident in the borough and reach retirement age in 20-30 years' time, there is likely to be an increased demand on

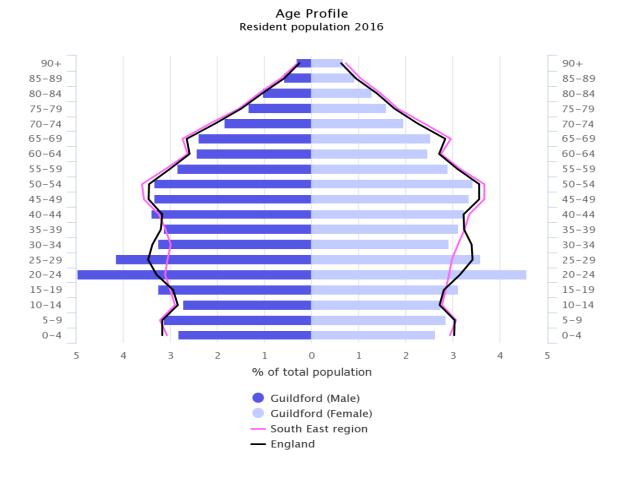
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²⁵ Guildford Borough Council (2017) Ireland N., Gardner J. West Surrey Strategic Housing Market Assessment: Guildford Addendum Report, Guildford Borough Council, Final Report – March 2017. Available at: https://www.guildford.gov.uk/newlocalplan/media/23816/West-Surrey-SHMA-Guildford-Addendum-Report-2017/pdf

health and social support services.

Figure 3.3: Population age structure, 2016



Source: www.nomisweb.co.uk

Social inclusion

Guildford Borough is generally seen as an affluent area in a generally wealthy county. However, significant inequalities and levels of poverty within the Borough and the county are identifiable. For example, in Surrey twenty-five neighbourhoods are within the third most deprived areas in England, with four of these deprived neighbourhoods in Guildford Borough (Westborough, Stoke, Worplesdon, and Ash Wharf)²⁶. In 2018, the percentage of children in the borough that live in poverty after housing costs (AHC) is 14.59 per cent. In three local neighbourhoods in the borough, over a quarter of the children live in poverty AHC²⁷.

Multiple Deprivation Levels

A number of indicators are used to look at the overall community wellbeing of a place and whether local residents are deprived against measures such as earnings, employment levels, health and disability, skill levels, living environment and other such measures. This is known as the 'Index of Multiple Deprivation Score'. The Index of Multiple Deprivation is an overall measure of multiple deprivation experienced by

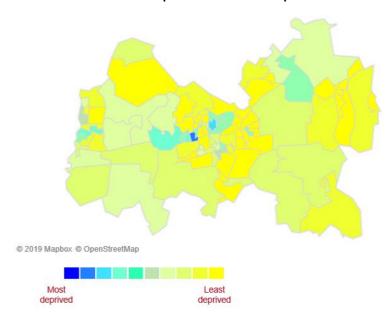
²⁶ For comprehensive data and examples see: Surrey County Council, The Welfare Picture in Surrey: An update report from the Surrey Welfare Coordination Group, October 2018; Community Foundation for Surrey, Surrey

²⁷ The Before Housing Costs figure for the Borough is 8.96 per cent. Poverty levels are generally higher when household incomes are measured after housing costs, as poorer households tend to spend a larger proportion of their income on housing than high-income households. Feargal McGuinness, 'Poverty in the UK: Statistics', House of Commons Library, briefing paper 7096, August 2018. http://researchbriefings.files.parliament.uk/documents/SN07096/SN07096.pdf. Local data, including ward level figures, are available at http://www.endchildpoverty.org.uk/poverty-in-your-area-2018/

people living in an area and is calculated for every Lower Layer Super Output Area (LSOA)²⁸, or neighbourhood in England. It provides a measure of deprivation based on factors such as income, employment, health, education, housing and crime.

The Index of Multiple Deprivation (2015)²⁹ ranks Guildford 304 out of 326 (with 326 being the least deprived authority). This represents a slight increase from 300 in 2010. There are, however, isolated pockets of relative deprivation in the borough as previously noted. The most deprived (LSOA in Guildford are in the ward of Westborough and Stoke which fall within the most deprived 20% of all LSOAs in England (see **Figure 3.4**).

Figure 3.4: Indices of Multiple Deprivation by LSOA (2015) for Guildford – Dark blue shading indicates that a LSOA is in a lower quintile in terms of deprivation³⁰





Part of Westborough ward is now the most deprived area in Surrey (a decline from fourth in 2010), whilst Stoke is the fourth most deprived area in Surrey (a decline from fifth in 2010). Disparities in

²⁸ LSOAs are a unit in the geographic hierarchy that is used to report statistics in England and Wales typically. They typically cover an area that includes 1,000 to 1,500 people.

²⁹ National Statistics. English indices of deprivation 2015, National Statistics [online] Available at: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015

³⁰ Index of Multiple Deprivation Guildford and Waverley CCG, IMD dashboard (2019). [Online]. Available at: https://public.tableau.com/profile/anu.shaikh#!/vizhome/IndexofMultipleDeprivationGuildfordandWaverleyCCG/IMDdashboard

deprivation levels are significant in the borough. For example, 28% of older people are affected by income deprivation in part of Westborough, compared to just 0.3% in Christchurch. Disparities also exist with regards to income deprivation affecting children across Guildford – 41% of children are affected by income deprivation in parts of Westborough, placing the area in the top 10% most deprived LSOA. In contrast, the income deprivation affecting children is 3.5% in Christchurch, and 10% across Surrey.

Establishing links between deprivation and public health

Family income makes a significant difference to children's cognitive, behavioural and health outcomes. In 2016, around 9.2% of children in Guildford lived in low-income households compared to 8.9% in Surrey³¹ (see **Table 3.1** below). Children living in poverty are almost twice as likely to live in bad housing. This has significant effects on both their physical and mental health, as well as educational achievement.³² Two LSOA in Westborough have the highest levels of lone-parent families (15%) and families with children under 5 (41.3%).

Table 3.1	Percentage of	children in	low-income	families, 2016
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Area	% of Children in low-income families ³³
England	17.0%
South East	12.7%
Surrey	8.9%
Elmbridge	8.1%
Epsom and Ewell	7.5%
Guildford	9.2%
Mole Valley	7.2%
Reigate and Banstead	9.3%
Runnymede	11.3%
Spelthorne	12.4%
Surrey Heath	7.5%
Tandridge	9.2%
Waverley	7.0%
Woking	9.6%

Source: https://www.surreyi.gov.uk/dataset/children-in-low-income-households

Westborough

The ward has an above average rate of lone-parent families, and households with one adult aged 65+. The frequency of people living in social and private rented property is above average, as is overcrowding, and the number of households with no car is twice the average. 41% of children and 28% of older people are affected by income deprivation. 44% have no qualifications and over 12% of the population are claiming working age benefits. Over 14% have a limiting long-term illness or disability. Only 37% achieve 5 GCSEs at grade C or above (including english and maths) or equivalent. The incidence of anti-social behaviour and domestic violence are substantially higher than the average.³⁴

³¹ Surrey-i. Children in low income households (2015), HM Revenue and Customs (HMRC) [Online]. Available at: https://www.surreyi.gov.uk/dataset/children-in-low-income-households

³² Child Poverty and Housing (2006), End Child Poverty. [Online]. Available at: http://england.shelter.org.uk/ data/assets/pdf file/0004/114853/Child Poverty and Housing.pdf

³³ Number of children living in families in receipt of CTC whose reported income is less than 60 per cent of the median income or in receipt of IS or (Income-Based)

³⁴ Sangarde-Brown S. Surrey Uncovered, Why local giving is needed to strengthen our communities, Community Foundation for Surrey, Available at: https://www.cfsurrey.org.uk/wp-content/uploads/2016/04/2279_Surrey_uncovered_final_LR.pdf

Food poverty

The real impact of food poverty and insecurity across the borough has been revealed following a wide-ranging analysis by the Council's Overview and Scrutiny Committee. Working with local experts, the study³⁵ found that food poverty exists in both urban and rural settings and is influenced by a number of factors including changes to the benefits system and the rising cost of housing. It also found that more and more working families are being affected by food poverty, often facing a stark choice between paying bills and buying food for their children.

Food poverty and insecurity are issues that require priority action and they stem from a number of factors, including; income stagnation, in-work poverty, and the impact of welfare reform and austerity. They highlight a failing social security safety net and the consequence of breaking the link between benefits and price rises. This points to a need for a structural framing of the drivers and solutions to food poverty and insecurity, rather than an approach focusing on the behaviour of those in food insecure households. There is a need for a greater understanding of the wider context, the continuing circumstances and conditions within which some vulnerable households and families live, and an upstream action on the structural drivers of food poverty and insecurity.

Figure 3.5 illustrates the household profile-derived risk of food insecurity (indicated by colour) and the high number of benefit claimants (indicated by hatching). The colour shading indicates the percentage of people aged < 65 years who live in a household on a low income with dependent children (identified as a higher demographic risk of food poverty). The areas with hatching are the areas where the percentage of people of working age claiming benefits is in the top 20 per cent for Surrey.

Percentage of age 0-64 in each MSOA at higher demographic risk - low income with dependent children. Hatched areas show MSOAs in the top 20% of areas within Surrey for JSA, ESA, UC oliamants. Data from 2011 Census and 2016 CNS mid-year population estimates.

0 1.5 3 6 Killometers

10.3 - 20.5

Figure 3.5: The relative risk of household food insecurity for those < 65 years within Guildford³⁶

Source: Dr Dianna Smith, University of Southampton

³⁵ Food Poverty Overview and Scrutiny Task and Finish Group, 2019. Available from: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=14427

³⁶ Abbreviations used in the map key: MSOA (Middle Layer Super Output Area), JSA (Jobseeker's Allowance), ESA (Employment and Support Allowance), and UC (Universal Credit).

Food bank usage

There is a limited volume of food bank evidence and no local measurement of food insecurity in the borough. Food bank usage can provide an accurate indication of the existence of food insecurity (though the rate of food insecurity among people who do not use food banks is unknown). There are currently two food banks based within Guildford borough, providing food parcels in four areas: the Salvation Army at Woodbridge Road and the North Guildford Food Bank with locations at St. Clare's Church in Park Barn, the New Hope Centre in Bellfields, and Bushy Hill Community Centre in Merrow. None of these food banks are Trussell Trust affiliated.

The following key drivers of the need for emergency food aid were reported by the North Guildford Food Bank in 2017: approximately one third (31 per cent) of users had benefit problems, one third (31 per cent) were homeless, had delayed wages, had debt issues, were sick, suffered from domestic abuse or were unemployed, and one third (34 per cent) had a low income³⁷.

The number of three-day emergency food supplies distributed by Trussell Trust foodbanks in Surrey has more than doubled. The increase well exceeds Surrey's South East neighbours. Latest figures also show that 2 in 5 emergency food supplies are for children³⁸.

Establishing links between access to healthy food and public health

An inability to afford or have access to food to make up a healthy diet can lead to diet-related ill health. Conditions such as diabetes, cardiovascular disease, obesity, malnutrition, and a range of cancers are common diet-related diseases.

Education

The Surrey School Organisation Plan 2018³⁹ reports that there are 38 primary phase schools in the borough of Guildford, four of which have nursery provision. There are seven secondary schools, six with post-16 provision. Guildford College also provides sixth form provision to the local and surrounding area. There are two short stay Pupil Referral Units (PRUs) in Guildford, one of which operates over two sites. Four primary schools and one secondary school host specialist centres that support students with a range of special educational needs within a mainstream environment. There are three special schools one catering for children with severe learning and development difficulties, one for pupils with learning and additional needs and the last for students with social, emotional and mental health needs.

The number of school places across Guildford as a whole is tight and, following the peak of births seen in 2012, a number of school expansions have taken place. The vacant places that exist tend to be concentrated in schools in some of the rural areas, with a shortage of primary places in the Guildford Town area. Pressure on places will be increased by new housing.

On the basis of the known increase in birth rate and projected housing completions, the number of children entering primary is set to dip in 2019 and then steadily increase again over forthcoming years. The number of children entering secondary education is likely to see a period of fluctuation, reflecting the trends that have been seen in the primary sector over the last 10 years.

Higher qualification levels in Guildford borough surpass those for the South East and Great Britain (see **Table 3.2**). This can be explained in part by the relatively high number of independent schools in the area and the presence of several further and higher education establishments.

Table 3.2: Qualification levels in Guildford borough resident population aged 16-64, January 2018 – December 2018⁴⁰

Qualifications	Guildford (level)	Guildford (%)	South East (%)	Great Britain (%)
NVQ4 and above	40,400	42.2	42.2	39.3
NVQ3 and above	61,600	64.3	61.8	57.8

³⁷ North Guildford Food Bank, year-end data for 2017 shared with the task group

³⁸ Food Poverty Overview and Scrutiny Task and Finish Group (2019). Available at: http://www2.guildford.gov.uk/councilmeetings/documents/s14303/ltem%2012%20-%20Food%20Poverty%20OS%20Task%20and%20Finish%20Group%20report.pdf

³⁹ Mills, L. School Organisation Plan (SOP) (2018) Available at:

https://www.surreycc.gov.uk/ data/assets/pdf_file/0006/26169/School-Organisation-Plan-2018-2027.pdf

⁴⁰ Numbers and % are for those of aged 16-64. % is a proportion of resident population of area aged 16-64

Qualifications	Guildford (level)	Guildford (%)	South East (%)	Great Britain (%)
NVQ2 and above	76,700	80.1	78.9	74.9
NVQ1 and above	87,600	91.5	89.2	85.4

Source: ONS annual population survey

There are many independent schools in the borough, including the Royal Grammar School, St. Catherine's School, Guildford High School, Tormead School and Rydes Hill Preparatory School. In relation to further and higher education, the borough is home to the Guildford College of Further and Higher Education, the Academy of Contemporary Music and the Italia Conti Arts Centre. The campus of the University of Surrey is located in Guildford, as is the inaugural campus of The College of Law and the Guildford School of Acting.

The 2017 study Closing the Gap: Trends in Educational Attainment and Disadvantage⁴¹ finds that, while there has been some progress in closing the attainment gap it is still the case that persistently disadvantaged pupils end primary school over a year behind their non-disadvantaged peers and are over two years behind by the end of secondary school. In 2016, the gap between disadvantaged pupils in Surrey and all other pupils was: -3.9 for early years; -8.1 primary for schools; and -20.6 for secondary schools⁴².

The Education, Skills and Training Deprivation Domain measures the lack of attainment and skills in the local population. The worst performing wards within Guildford in this domain are Westborough, Worplesdon and Ash Wharf which are each in the top 10 worst performing wards in attaining skills and qualifications in Surrey.

Establishing links between access to housing, housing quality and public health

Homelessless

There is an unmet need for housing for many vulnerable groups of people in Guildford borough, including frail older people and those suffering with dementia or poor mental health⁴³. Other groups particularly needing support with housing include people with learning, physical or sensory disabilities, people with HIV/AIDS, people who misuse drugs or alcohol, women escaping domestic abuse, travellers, teenage parents, young people leaving care, offenders and those at risk of offending, and homeless families with support needs.

Homelessness⁴⁴ is an important public health problem; people in unsettled accommodation have higher health needs than their peers. In 2018, the number of rough sleepers in Guildford has increased to about 40, registered every month. On top of this, 2,600 are waiting on the social housing register, some of whom have been waiting for years.

The new legislation for Houses in Multiple Occupation (HMOs) and the modernisation of services makes it harder for the council to reach out to the people who need it the most and the council is facing significant ongoing financial pressures, which compounds the issue. In April 2018, the Housing Related Support budget for socially excluded groups was reduced, resulting in a 10% funding reduction to

⁴¹ Andrews, J., Robinson D., Hutchinson J. Closing the Gap? Trends in Educational Attainment and Disadvantage, August 2017, PP.54, Education Policy Institute. Available at: https://epi.org.uk/wp-content/uploads/2017/08/Closing-the-Gap_EPI_pdf
⁴² Ibid.

 ⁴³ Surrey Uncovered (2013) Why local giving is needed to strengthen our communities. Available at: https://www.cfsurrey.org.uk/wp-content/uploads/2016/04/2279 Surrey uncovered final LR.pdf

The definition of statutory homelessness consists of two elements:

Homelessness acceptances – Number of households who are eligible, unintentionally homeless and in priority need, for which the local authority accepts responsibility for securing accommodation under part VII of the Housing Act 1996 or part III of the Housing Act 1985.

[•] Households in temporary accommodation – Number of households in "temporary accommodation" as arranged by local housing authorities. It is not possible to calculate this rate currently.

supported housing and a 50% reduction to floating support⁴⁵.

Guildford is an area of high-cost housing in both the owner-occupied and private-rented sectors. There is a high demand for all types of properties, resulting in a competitive market, increased house prices (see Figure 3.6) and rent levels that are out of reach for most people on low incomes and those dependent on benefits. Rent levels also prevent people in better-paid employment from accessing suitable accommodation.

Local Housing Allowance (LHA)⁴⁶ has not kept pace with local rent increases. For example, the monthly median rent for a 3-bed property increased by 18.5% between 2013-2017. Over the same period, the LHA 3 bed rate increased by 2.1%. The difference between median rent and LHA for a 3-bed property in October 2017 was £340⁴⁷. These differences place the majority of properties out of reach for people who are faced with a choice of moving into a smaller property or moving away from Guildford to a more affordable area.

A significant number of households in the Borough – 517 per annum –require financial support to meet their housing needs. To meet the affordable housing need in full, based on 40% affordable housing delivery, would require notionally almost 1,300 homes per annum⁴⁸.

The latest data points to c. 1,500 benefit claimants living in the Private Rented Sector (PRS), although national planning policy does not specifically seek to meet the needs identified through the Needs Assessment Model in the Private Rented Sector. The Government's benefit caps may reduce the contribution that this sector plays in providing a housing supply which meets the needs of households identified in the affordable housing needs model. In particular, future growth in households living within the PRS and claiming LHA cannot be guaranteed.

The Homes 4U Scheme remains one of the main sources of help for households facing homelessness and is normally only available to households the Council would otherwise have a statutory duty to secure a home for. In 2009/10 a peak of 168 households were assisted via Homes4U. But by 2014/15 this had fallen to 85, and in 2015/16 to a low of 69, reflecting high costs, rising demand and major issues around the rates of Local Housing Allowance available (see Figure 3.6).⁴⁹

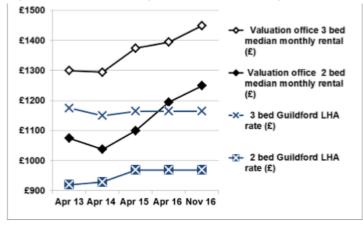


Figure 3.6: Local Housing Allowance and average rents, 2013-2016

Figure 3.7 indicates that private rents in Guildford are around twice the England average, well above

⁴⁵ Guildford Borough Council (2018) Homelessness Strategy 2018-2020. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=10920

⁴⁶ How Local Housing Allowance rates are set and used to work out Housing Benefit. The Valuation Office Agency Rent Officers determines Local Housing Allowance (LHA) rates used to calculate housing benefit for tenants renting from private landlords.

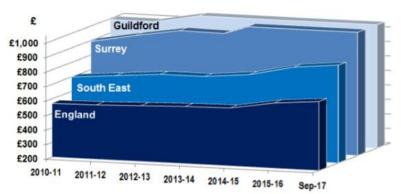
⁴⁷ Guildford Borough Council (2018) Homelessness Strategy 2018-2020. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=10920

⁴⁸Guildford Borough Council (2017) West Surrey Strategic Housing Market Assessment: Guildford Addendum Report 2017. Available at: https://www.guildford.gov.uk/newlocalplan/CHttpHandler.ashx?id=23816&p=0

⁴⁹ Guildford Borough Council (2015) 2015-2020 Guildford Housing Strategy - Statistical Update full year 2016-17.

rates in the South East and higher than the average across Surrey.

Figure 3.7: Median private property rents, monthly (all property types)



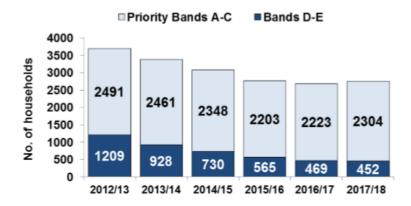
Source: Valuation Office Agency: private rental market statistics

Housing Register

There were 2,752 households on the housing register in Guildford on 1 April 2018, of which 83.6% were in Bands A-C and considered to be in unsuitable accommodation and would meet the 'reasonable preference' criteria if they became homeless. In Bands A-C, households have a substantive local connection with the Borough through residence, employment or family connections⁵¹.

The overall number of households on the housing register has reduced gradually following the Housing Allocations review in 2014 (Figure 3.8), which strengthened local connection criteria and restricted eligibility, excluding some households from the register. Therefore, the reduction in numbers was expected. In addition, reminders to renew applications for those in Band E were discontinued.

Figure 3.8: Households on combined housing registers



Establishing links between fuel poverty and cold homes

According to the recent State of the Energy Market Report 2019⁵², fuel poverty is particularly concentrated in households that rent privately and can have severe impacts. In England and Wales, around one in five privately rented households live in fuel poverty, compared to around a tenth of other households. The impact of fuel poverty can be severe; the best available estimates suggest that fuel poverty may have

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⁵⁰ Guildford Borough Council (2015) 2015-2020 Guildford Housing Strategy - Statistical Update full year 2016-17 waiting list. You must be given some priority or 'reasonable preference' if you: are homeless or fleeing violence; live in overcrowded or very bad housing conditions; need to move because of a health problem or disability.

⁵¹ Guildford Borough Council (2018) Homelessness Strategy 2018-2020. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=10920

⁵² OFGEM. State of the Energy Market 2019. Available at: https://www.ofgem.gov.uk/system/files/docs/2019/10/2019 state of the energy market 0.pdf

contributed to 5,500 excess winter deaths and that 16,500 excess winter deaths may have been linked to people living in cold homes in winter 2017-18.

Low income households are at a greater risk of fuel poverty, contributing to social and health inequalities. Cold homes can affect or exacerbate respiratory, circulatory and mental health problems. Cold homes can also affect wider determinants of health, such as educational performance among children and absence from work. Vulnerable groups such as young children, older people and those with pre-existing health problems are particularly susceptible to cold-related illnesses. Among older people, cold temperatures can increase the likelihood of strokes, circulatory problems, respiratory problems, hospital admissions, and lower strength and dexterity leading to falls and accidental injuries⁵³. In addition to the general risks associated with deprivation, older people are at more risk of being admitted to hospital or dying if they suffer from "fuel poverty" in the winter months.

Table 3.3 below shows the 2016 fuel poverty data by Local Authority and indicates that the proportion of households in Guildford in fuel poverty is 9.1 per cent, compared to 7.7 per cent in 2015, and is now the highest in the South East. These statistics are particularly important for people living in social housing accommodation, pointing to people's struggle in the Borough to keep up with the costs of fuel to keep their houses warm.

Table 3.3: Fuel Poverty by Local Authority, 2016

Local Authority	Estimated number of households	Estimated number of fuel poor households	Proportion of households in fuel pooverty (%)
Guildford	57,115	5,192	9.1
Elmbridge	55,855	4,350	7.8
Mole Valley	37,813	3,069	8.1
Epsom	31,441	2,681	8.5
Reigate and Banstead	58,578	4,618	7.9
Runnymede	34,597	2,813	8.1
Spelthorne	41,759	3,145	7.5
Surrey Heath	35,459	2,723	7.7
Tandridge	35,272	2,780	7.9
Waverley	52,076	4,315	8.3
Woking	41,692	3,336	8.0
Surrey	481,657	39,022	8.1
South East	3,755,000	336,585	9.0

Source: https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2018

Tackling fuel poverty is often the main impetus for improving energy efficiency. Unaffordable heating is a particular problem for social housing tenants, who are now more likely to have lower relative incomes than in the past, especially in comparison to owner-occupiers and private renters. Inefficient housing can also have impacts on households that go beyond the financial issues, as cold and damp homes can affect residents' health and wellbeing, especially vulnerable individuals such as the elderly or disabled. And benefits go both ways. Lower energy bills for tenants can help to reduce the risk of rent arrears,

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⁵³ Public Health England (2014) Local action on health inequalities: Fuel poverty and cold home related health problems, Public Health England, 2014. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/355790/Briefing7_Fuel_p
overty_health_inequalities.pdf

helping to bolster cashflow for social landlords.

Crime and safety

Guildford is one of the safest places to live, work and visit in the country, as Surrey has low levels of recorded crime in England. However, there is a disproportionate fear of crime and concerns about antisocial behaviour in certain parts of Guildford town centre. In addition, despite overall low crime rates, there are a small number of hotspots with crime levels amongst the highest in the county.

Much of the violent crime in the borough, particularly in Guildford town centre, is alcohol related. Data from the Office for National Statistics, which estimates the borough's population at 147,889, shows that 86.8 crimes were committed per every 1,000 of the population in 2018. According to SureyLive, this ranks Guildford as the fifth most dangerous in terms of crime rate across Surrey in 2018. The 12,838 reported crimes in 2018 was nearly 800 more than anywhere else in the county and more than four crimes per 1,000 people ahead of the county-wide average. In 2018, there were more reported antisocial behaviour offences (3,330), drugs offences (418), other thefts (1,263), possession of weapons offences (86), public order offences (1,038) and shoplifting offences (869).

Crime in Guildford is set to increase by more than 5% in 2019 compared to 2018, according to police data. Statistics recorded on the Police.uk website show 6,757 crimes were recorded by police in Guildford borough from January 1 to June 30, 2019. If current crime rates continue then 13,514 crimes will be committed in the borough, an increase on the 12,838 recorded in 2018 and on the 12,893 offences reported in 2017. From January 1 to June 30, 2019, 2,259 crimes were reported in Guildford Town Centre, which is more than three times the number of crimes reported in any other Guildford policing neighbourhood. There were 4,177 offences committed in Guildford Town in the whole of 2018 meaning if the current trend continues crime rates will have increased by more than 8%. Of the 14 types of crime recorded, the area recorded the highest number in all but vehicle crime (34). When compared to figures for the whole of 2018, rates of violent or sexual offences (476) and shoplifting (406) are set to increase. However, rates of antisocial behaviour (528) are set for a slight decrease.

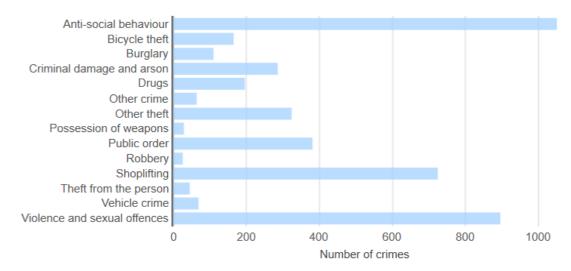


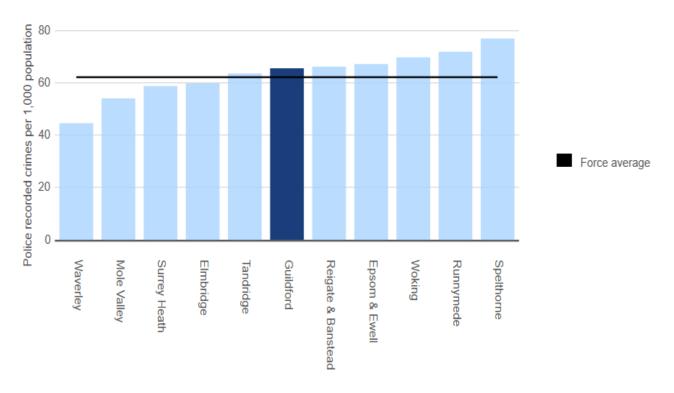
Figure 3.9: Comparison of crime types in Guildford Town Centre between August 2018 and July 2019

Source: https://www.police.uk/surrey/GDGT/crime/stats/

In 2018-2019, anti-social behavior related crimes presented 24% out of total crimes committed for this period, while violence and sexual offences were the second highest – 20.5%, followed by shoplifting – 16.5% (see **Figure 3.9**).

In the year ending December 2018, the crime rate in Guildford was higher than average for the Surrey force area (see **Figure 3.10**).

Figure 3.10: Crime in Guildford compared with crime in the Surrey force area



Source: https://www.police.uk/surrey/GDGT/performance/compare-your-area/

In the quarter ending December 2018, crime rates were up in Guildford, and in the Surrey force area compared with the corresponding quarter in 2017 (see **Figure 3.11**).

Police recorded crimes per 1,000 population 18 16 Guildford Most Similar Group average Surrey 12 Guildford December 2015 March 2016 September 2016 September 2018 June 2016 March 2017 March 2018 June 2018 December 2018 December 2016 September 2017 December 2017 June 2017

Figure 3.11: Crime changes over time in Guildford and in the Surrey force area

Source: https://www.police.uk/surrey/GDGT/performance/compare-your-area/

Onslow and University reported the second most crimes in Guildford borough in the first six months of 2019, with 683 offences. There were 1,216 offences recorded in the neighbourhood in 2018 meaning that, if current crime rates continue, it would mean more than a 12% increase in the number of crimes. Rates of violent or sexual offences (194) have increased compared to 2018, however rates of antisocial

behaviour (99) and criminal damage and arson (51) are set to fall. With 643 offences the policing neighbourhood of Send, Ripley, Wisley, Ockham, The Horsleys, The Clandons and Effingham ranks as the third most dangerous in Guildford, while the villages of Ash and Ash Wharf rank fourth in terms of the number of crimes committed.

The Borough Council tackles issues of fear of crime and anti-social behaviour locally in partnership with other organisations. The Safer Guildford Partnership aims to help residents feel safe and be safe in Guildford, by focusing on reducing priority issues of crime and anti-social behaviour in hotspot locations. The Partnership's priorities are based on both key policy areas and the Surrey County Council strategic assessment, which draws together key data sets and combines these with the knowledge and experience of local partners:

Priority 1: Serious organised crime (including): child sexual exploitation, modern day slavery

Priority 2: Domestic abuse

Priority 3: Prevent - threat of radicalisation

Priority 4: To identify and tackle anti-social behaviour hotspot locations and perpetrators

Priority 5: To promote reassurance to our public to help make our communities stronger

Population and social inclusion trends

Guildford's population continues to grow and is predicted to age as time goes on. Overall, educational attainment is positive, however there are significant disparities for deprived children and those with additional needs. There are increasing demands on services for vulnerable adults and children, and children with additional needs. Pockets of deprivation exist across the borough, and foodbank usage has risen. The data indicates that, since publication of the previous SA Scoping Report in 2013, the level of deprivation has exacerbated in some areas of the borough, while disparities between areas have also increased pointing to a widening inequality.

The number of people over 65 is expected to rise by nearly a third in the next 20 years, and there are increasing numbers of people suffering from dementia, increasing problems of fuel poverty and greater isolation and loneliness amongst older people. The proportion of people in Guildford living in overcrowded homes is set to rise by 5% over the next 10 years, specifically for the population living in more deprived wards.

Crime rates are up in Guildford, with Guildford town centre having the highest proportion of reported crimes. Crime in Guildford overall is set to increase by more than 5% this year compared to 2018.

Although Guildford is perceived as an affluent borough and overall ranks well in the Index of Multiple Deprivation, the general wealth of communities in the borough cannot overshadow that fact that many communities and groups experience inequality of opportunities and poorer outcomes, which have shown a negative trend since 2013.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues

- Catering for population growth in the short-term with its associated social, economic and environmental consequences. Population increases and are likely to place additional pressure on house prices and availability.
- The age structure of the borough will require continued monitoring as age shifts will have long term implications for health care needs, housing mix and other social services.
- Guildford has a higher proportion of people aged between 19 and 29 compared to the national average. This has implications for a series of factors that affect the economy and social well- being of the borough. It is recognised that this proportion is made up of a significant proportion of university and college students this creates uncertainty when considering long- term population trends.

- Some pockets of deprivation persist; there is a negative trend of increased disparities across the wards pointing to a widening inequality.
- Food and fuel poverty and insecurity are issues that need priority action.
- Crime rates are up in Guildford, with Guildford town centre having the highest proportion of reported crimes.

Opportunities

- Opportunity to plan positively to reduce deprivation and improve social inclusion
- Opportunities to address ageing population and meet the needs of a changing population.
- Opportunities for the streetscape and pedestrian realm design to take account of the needs of protected groups, to maximise the benefits.
 Particular consideration to be given to safety and security (e.g. lighting, sight lines etc.), and wheelchair accessibility.
- Opportunities to strengthen new-build standards to ensure they are designed for a changing climate, are future-proofed for low-carbon heating and deliver high levels of energy efficiency to provide environmental improvements and reduce fuel poverty.
- Opportunity for growing food through provision of plazas, allotment areas, courtyards for the establishment of community gardens for community food growing, e.g. orchards.
- Support the provision of educational facilities and community facilities such
 as community store or social supermarket. In areas of deprivation and health
 issues, it will be important to ensure that no open space is lost, and ideally
 new open spaces provided. There is an opportunity to prioritize developer
 contributions for the provision of new park areas to improve environmental
 justice.
- Public transport services must be designed (and/or retrofitted where possible) to ensure they are fully accessible to people with impaired mobility or vision.
- Opportunities to reference to 'Secured by Design' within development management policies to facilitate prevention of crime and the enhancement of community safety, particularly Guildford Town Centre.

Evolution without the Plan

- The population in Guildford is predicted to increase to just over 162,900 in 2041 and with more elderly people living in the area due to longer life expectancy and in-migration there will be an increased demand on health and social support services.
- Disparities in deprivation are going to increase. Food poverty has economic, social, and health impacts and there is a need to tackle the root cause of food poverty and insecurity in the borough.
- Without initiatives to develop more vocational courses and job specific qualifications the disparity between those with qualifications and those without will remain.
- In the absence of the Plan, there will be less opportunity to plan positively to reduce deprivation and improve social inclusion. Disparities in deprivation are going to increase. Food poverty has economic, social, and health impacts and there is a need to tackle the root cause of food poverty and insecurity in the borough.
- The population in Guildford is predicted to increase to just over 162,900 in 2041 and with more elderly people living in the area due to longer life expectancy and in-migration there will be an increased demand on health and social support services.

	 Without initiatives to develop more vocational courses and job specific qualifications the disparity between those with qualifications and those without will remain. Without the Plan, it is likely that the gap between the most and least deprived areas in Guildford will continue to widen.
Implications of the Policy Review	The Plan should seek to ensure provision of goods, services, facilities, public functions, the disposal and management of premises, education and associations, all meets the Equality Act 2010 requirements. The Plan needs to have policies promoting opportunities for education, skills and employment that help to succeed in life for all, particularly focusing on the most deprived areas of the borough, i.e. Westborough, Ash Vale and Worplesdon.



- 3. To create and maintain safer and more secure communities and improve the quality of where people live and work
- 4. To reduce poverty and social exclusion for all sections of the community
- 5. To create and sustain vibrant communities
- 6. To improve levels of education and skills in the population overall

3.4 Health and health inequalities

As part of the health reforms brought in by the Health and Social Care Act 2012, local authorities have a duty to take such steps as they consider appropriate for improving the health of the people in their area. The transfer of public health from the NHS to local government is one of the most significant extensions of local government powers and duties in a generation. It represents a unique opportunity to change the focus from treating sickness to actively promoting health and wellbeing.

Local authorities' public health role also includes ensuring that there are plans in place to protect the local population from health threats, including plans for emergencies, preventative measures such as immunisations and screening and monitoring the plans individual providers have in place.⁵⁴ They are also required to provide Clinical Commissioning Groups (CCGs) with population health advice, for example supporting the development of joint strategic needs assessments.⁵⁵ The management of these functions is led by the local authority's Director of Public Health in consultation with its Health and Wellbeing Board comprised of Directors of Children and Adults Services, health commissioners, elected members of the local authority and other agencies.⁵⁶

Guildford Health and Wellbeing Board is a partnership with representation from Guildford Borough Council, Guildford and Waverley and Surrey Health Clinical Commissioning Groups, Surrey County Council, and local voluntary groups. Other partners support the work of the Board through participation

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⁵⁴ National Children's Bureau (NCB) (2016) Local authorities' role in public health. Briefing for the children and young people's voluntary sector. Available at: https://www.ncb.org.uk/sites/default/files/field/attachment/Local%20Authorities%20Role%20In%20Public%20Health.pdf

⁵⁵ As required by regulations made under Section 6C the National Health Service Act 2006

⁵⁶ See Sections 194-199 of the Health and Social Care Act 2012, Sections 116-116A of the Local Government and Public Involvement in Health Act 2007 and Department of Health (2013) Statutory Guidance on Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies

in delivering the Health and Wellbeing Strategy.

Life expectancy

The current population of Guildford is largely healthy and active and comprised of a highly skilled workforce that is supported by good performing schools. Life expectancy (LE) is a measure of how healthy a population is. Differences in life expectancy can show the extent of health inequalities between groups of people.

Life expectancy in the borough compares favourably with the national average. In Guildford life expectancy is 81.9 years for males and 84.9 years for females, compared to 79.6 years for males and 83.1 years for females at the national level. For However, there are considerable differences between wards in life expectancy for both men and women, although with such localised areas there is uncertainty about the precision of the estimates. Despite this encouraging overall picture, the pattern is not uniform. Male life expectancy in parts of Stoke, Westborough, Onslow, Ash Wharf and Ash South and Tongham is 5.8 years shorter than that in the least deprived areas.

Obesity

Child obesity is a major public health issue. Excess weight in children increases the risk of them becoming obese as adults and they are more likely to develop long term conditions such as type 2 diabetes, coronary heart disease and cancer. In 2017, 5.9 per cent of reception and 13.9 per cent of year 6 children in Guildford were obese compared to Surrey's 6.2 and 13.4 per cent respectively. Obesity and excess weight rates are 13.5 per cent higher in deprived wards than the average Surrey ward. There is a relationship between child poverty and obesity prevalence. Where poverty exists, it is also frequently accompanied by higher incidence of poorer average health, obesity, isolation and difficulty accessing local support services.

The percentage of adults estimated as having excess weight in Guildford is 57%, similar to the Surrey proportion but less than for England 65 % (2012-14).

Parts of Friary and St Nicolas, Holy Trinity, Ash South and Tongham, Ash Wharf, Stoke and Ash Vale are within the top national quartile in terms of mental health problems. One in four adults drinks alcohol above sensible levels; this places Guildford in the top ten council areas nationally for hazardous drinking.

The proportion of adults estimated to be doing 150+ minutes of physical activity per week in Guildford is 65.4%. While this is significantly higher than that of England (57%) and Surrey (62%), it does mean that close to one third of the population do not meet the recommended levels of physical activity to maintain their health and independence. Estimates of the proportion of the population which is inactive (i.e. less than 30 minutes of physical activity per week) are 19.6% for Guildford. The percentage of physically active adults has increased at a faster rate than we see nationally so this is a positive change. 20

⁵⁷ Local Government (LG) Inform. Life expectancy at birth - female in Guildford (2017), Office for National Statistics, Local Government Association [online]. Available at: https://lginform.local.gov.uk/reports/lgastandard?mod-metric=96&mod-period=1&mod-area=E07000209&mod-group=E92000001&mod-type=area

⁵⁸ Surrey-i. Developing Healthy Lifestyles [online]. Available at: https://www.surreyi.gov.uk/jsna/developing-healthy-lifestyles/

⁵⁹ Tableau Public. Surrey-i Local Area Profiles: Community wellbeing (2018) [online]. Available at: https://public.tableau.com/profile/kathy.trott#!/vizhome/SurreyiLocalAreaProfilesCommunitywellbeing/Introduction?publish=yes

⁶⁰ Surrey County Council (SCC) (2019) Health and Wellbeing Strategy by 2030. Available at: https://www.healthysurrey.org.uk/ data/assets/pdf file/0007/197530/Surrey-Health-and-Wellbeing-Strategy-FINALV2.pdf

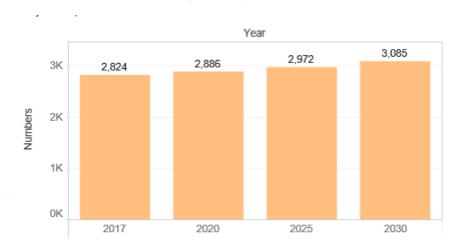
⁶¹ Shaikh, A. Guildford and Waverley Place-Based Profile, Surrey County Council on 11/10/2017, Surrey-i [online]. Available at: https://www.surreyi.gov.uk/health-profiles/guildford-and-waverley/

⁶² Guildford Borough Council (2018) Guildford Health and Wellbeing Strategy 2017-2022. Available at: http://www2.guildford.gov.uk/councilmeetings/documents/s10630/ltem%207%20-%20Health%20and%20Wellbeing%20Strategy.pdf

Disability and ill health

Figure 3.12. shows an estimate of the number of adults with a learning disability in Guildford in 2017 and projected up to 2030, broken down by age groups. The number of adults with a learning disability in Guildford was 2,824 in 2017 and was the highest among the neighboring local authorities.

Figure 3.12: Estimated Number with Learning Disability (Baseline) 18 plus population, Guildford



Source:

https://public.tableau.com/profile/surrey.county.council.joint.strategic.needs.assessment#!/vizhome/PeoplewithLearningDisabilitiesandorwithAutismJSNA/JSNA-PLD

The estimated number of autistic adults and adults with learning disabilities is expected to increase steadily over time in line with population growth. Population growth is expected to be greatest among the over 65 age group and this, coupled with increases in life expectancy, will result in more autistic adults and adults with learning disabilities requiring additional care and support associated with older age. This is projected to increase to 3,085 people with a learning disability and 1,307 people with autism by 2030. Of these, an estimated 597 adults have a moderate or severe learning disability (143 of whom have a severe learning disability) and this is estimated to increase to 152 by 2030.

Some adults with learning disabilities or autism will have additional health needs compared with other people. In addition, they are also known to experience worse outcomes across a number of areas of health and wellbeing and often require reasonable adjustments to enable them to access services, compared with those without a learning disability or autism.

Menthal health

The GP prevalence of mental health disorders in children is lower in Guildford than in England. The estimated prevalence of any mental health disorders for the GP registered population aged 5 to 16 is 7.4 per cent, compared to the national average of 9.2 per cent.

The estimated prevalence of common mental health disorders is 12.8 per cent. This is lower than the England estimate of 15.6 per cent but is higher than estimates of most other long-term conditions such as diabetes and coronary heart disease in G&W. The incidence of depression (first time cases presenting to their GPs) has increased since 2013/14. The proportion of newly diagnosed GP registered patients has nearly doubled from 0.8 per cent to 1.3 per cent.⁶³

The demand for mental health advice through NHS 111 made by those aged 65 years and over was greater in G&W (27.8 per cent) than the national average (23.5 per cent). In general, there has been a downward trend in suicides in the UK and in Surrey since 2000. Surrey has historically had a lower rate of suicide compared to England. The latest three-year average data for Guildford and Waverley CCG (7.6 age standardised rate per 100 000) shows that mortality rate from suicide and injury undetermined is similar to the Surrey (9.1) and England average (10.1).

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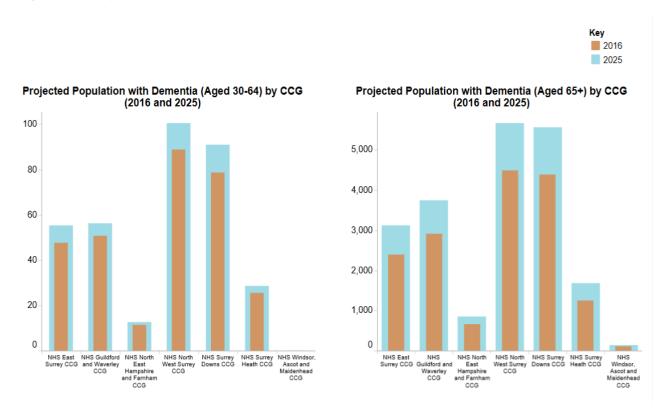
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⁶³ Tableau Public. Surrey County Council Joint Strategic Needs Assessment (2017), SCC JSNA Dementia [online]. Available at: https://www.surreyi.gov.uk/health-profiles/guildford-and-waverley/#header-dementia

Dementia

Dementia can affect people of any age but is most common in older people. In Surrey, based on UK demential prevalence rates and ONS population projections, it is estimated that in 2016 there were 16,472 people in Surrey with dementia. Of those, 16,169 are estimated to be aged over 65 and 303 people are estimated to have early onset dementia. ⁶⁴ **Figure 3.13** below demonstrates projected population with dementia by Clinical Commissioning Groups (CCG). The number of people with dementia in Surrey is projected to rise to 21,075 by 2025.

Figure 3.13: Projected Population with Dementia (2016 and 2025)



Source: 2011 Census and population projections (ONS) and dementia prevalence rates

Air pollution

This chapter focuses on air pollution and its potential effects on public health. The effects of air pollution on the environment and cultural heritage are discussed later in the document in **Section 3.9**: **Air quality**.

Public Health England modelling of 2010 data in estimating local mortality burdens associated with particulate air pollution⁶⁵, estimate that the proportion of local deaths (attributable fraction) of those aged 25 years and over in Guildford borough, attributable to long term exposure to anthropogenic particulate air pollution (PM2.5) was 5.7 per cent (same as Surrey at 5.7 per cent). From this, using the 2010 data on the number of attributable deaths equates to 55. Using the number of attributable deaths and the age of death, PHE also estimated that in 2010, 577 years of life lost to the population of Guildford borough. Despite being the highest populated borough in Surrey, Guildford is sixth out of the eleven Surrey district/borough areas for attributable traction and third highest in terms of life-years

⁶⁴ Surreyi (2019) Surrey County Council Joint Strategic Needs Assessment. [Online]. Available at: <a href="https://public.tableau.com/profile/surrey.county.council.joint.strategic.needs.assessment#!/vizhome/SCCJSNADementia/JSNADementia
SNADementia/JSNADementia

⁶⁵https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/332854/ PHE CRCE 010.pdf

lost.

Mortality attributable to particulate air pollution varies widely across Surrey. In 2015, the proportion of all deaths in people aged over 30 years of age which are due to man-made air pollution is higher in Guildford (4.4 per cent) compared to Waverley (4.0 per cent), but less than for England (4.6 per cent). Partners across the Surrey Air Quality Alliance including Guildford borough, could continue to work to lower air pollution and its effects through development of sustainability strategies evidence base projects such as air alerts and school projects, and travel initiatives such as increasing active travel and car-pooling.

Establishing links between air quality and public health

Air pollution is associated with a number of adverse health impacts. It is recognized as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas.

Air pollution is the second-biggest public health threat, after smoking. In Guildford, where levels of pollution from industrial sources are relatively modest, the key pollutants are normally nitrogen dioxide gas (NO2) and fine particles of solid matter (particulates). These typically come from traffic emissions, including diesel exhausts, brake and tyre wear, and other dust sources. Particulates of 10 micrometers or less (PM10) pose a hazard to health as they can enter the human body. Fine particulates of 2.5 micrometers or less (PM2.5) are of concern as they penetrate deeper into to the lungs and pass through to the blood stream.

The PM2.5 indicator in the Public Health Outcomes Framework (England) provide further impetus to join up action between the various local authority departments which impact on the delivery of air quality improvements. To help facilitate this, the LGA/Defra/PHE toolkit Air Quality: A briefing for Directors of Public Health, provides a suite of tools to help local authorities to take action to improve air quality. The toolkit provides a one-stop guide to the latest evidence on air pollution, guiding local authorities to use existing tools to appraise the scale of the air pollution issue in its area. It also advises local authorities how to appropriately prioritise air quality alongside other public health priorities to ensure it is on the local agenda.

Substance abuse and smoking

The rate of hospital admission episodes for alcohol-related conditions (broad) in Guildford and Waverley CCG is 1,757.1 per 100,000 population. While this is less than the rate for England at 2,138.7 per 100,000 population (2014/15), alcohol-related admission episodes have been increasing steadily since at least 2008/9. Admission episodes specifically related to alcohol, i.e. all causally attributable to alcohol consumption, have been increasing in G&W at an apparent faster rate than Surrey, the South East or England, particularly in women. Currently, alcohol-related mortality is 32.2 per 100,000 population in G&W, with men experiencing a higher rate of alcohol-related mortality compared to women (2014).

Smoking is a leading cause of preventable ill-health and death in the UK. In 2014, almost 80,000 deaths were attributable to smoking in England (ONS, 2017), as well as adding significantly to the burden on the NHS treating smoking-related illness. The government has set an ambitious smoking prevalence target for England of 12 per cent by 2022.

While the overall estimated smoking prevalence in Guildford and Waverley CCG is 16 per cent, there are some wards which are already below the national target for 2022 (e.g. 9.2 per cent in Blackheath and Wonersh). However, smoking rates are much higher among more deprived communities in

67 http://www.local.gov.uk/air-quality-briefing-directors-public-health

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⁶⁶ Department of Environment Food & Rural Affairs Local Air Quality Management Technical Guidance (TG16), Part IV of the Environment Act 1995 Environment (Northern Ireland) Order 2002 Part III, February 2018. Available at: https://laqm.defra.gov.uk/documents/LAQM-TG16-February-18-v1.pdf

Guildford and Waverley, which has a significant impact on increasing health inequalities by reducing life expectancy in these groups. The smoking prevalence is highest in Westborough (25 per cent), one of the most deprived wards in Guildford and Waverley. The smoking rate amongst Surrey residents in routine and manual occupations is 24 per cent (England, 27 per cent). Efforts to reduce smoking across G&W should focus on those areas or groups where prevalence is highest.⁶⁸

Provision of open space

The National Planning Policy Framework (NPPF) recognises that access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities. It requires local planning authorities to set out policies to help enable communities to access high quality open spaces and opportunities for sport and recreation. These policies must be based on a thorough understanding of the local needs for such facilities and opportunities available for new provision.

Guildford Open Space, Sport & Recreation Assessment (2017) found that at the Borough level there is an under supply of the majority of open space typologies, with the exception of amenity green space and outdoor sport (private). Provision varies across wards and typologies, with some meeting the standards and some falling below. There is an under supply of the majority of typologies across the majority of the wards, most notably youth provision. Particularly, greater deficiencies exist for:

<u>Play space children and youth – Ash South and Tongham ward, Merrow, Holy Trinity, Friary and St Nicolas, Onslow, Stoughton, Westborough and Worplesdon.</u>

<u>Outdoor sport</u> – Ash South and Tongham Ward, Ash Vale, Stoke, Stoughton, Westborugh and Worplesdon.

<u>Park and recreation ground</u> - Ash South and Tongham ward, Merrow, Friary and St Nicolas, Stoke, Stoughton, Westborough and Worplesdon.

Amenity and green space – Ash Wharf, Firary and St Nicolas, Stoughton, Merrow and Westborough.

Given that two areas in Westborough have the highest levels of Lone Parent Families & Families with Children under 5, the existence of deficiencies in play space for children and youth in these areas will cause a disproportional effect on these groups and should form a priority action for the council.

Ash and Stoke and Westborough are the Council's public health target areas having higher rates of smoking, biggest difference in life expectancy, high percentage of people living with risk of food poverty and insecurity, income deprivation, low educational attainment, mental health issues, etc. These are areas where increased physical activity would have most impact, and hence the ones that the council would need to focus on.

Encouraging regular walking, cycling etc. in parks and green spaces, using rights of way, and outdoor play for children removes this barrier as this is free for all sectors of the community. Maintaining accessible green spaces and facilities of this kind can therefore be of great benefit to improving health and wellbeing. ⁶⁹

Given that many of these wards have pre-existing constraints for the provision of new open space, particular focus needs to be given for creating opportunities for physical activity by developing and maintaining appropriate facilities such as parks, play areas and open spaces in relation to promoting better public health and reducing health inequalities when determining the need for on-site open space in allocated housing sites. This can be achieved through redevelopment of existing sites to create high density sustainable development and release of land for new open space.

For wards with higher density urban environment, the sustainable approach to the green space layout to encourage its social and economic sustainable development is required, e.g. creation of the park connector network. This will serve as a multifunctional greenway, requiring planners "to seek a

⁶⁸ PHE (2019) Fingertips, Annual Population Survey. [Online]. Available at: https://fingertips.phe.org.uk/profile/tobacco-control

⁶⁹ Guildford Borough Council (2017) Guildford Open Space, Sport and Recreation Assessment, 2017. Available at: https://www.guildford.gov.uk/newlocalplan/media/24648/1---Open-Space-Sport-and-Recreation-Assessment-2017/pdf/1 - Open Space Sport and Recreation Assessment 2017.pdf

balance between the ecological, cultural, social and aesthetic goals" in their planning.70

Future developments may consider food insecurity and hunger. To this end, "edible green infrastructure" is a novel approach to have the potential to improve resilience and quality of life in cities as well as prevent food insecurity.⁷¹

Establishing links between provision of green space, deprivation and public health

Green spaces provide vital health services as well as environmental services; they are equigenic, reducing socioeconomic health inequalities, facilitating activity and promoting better mental health and well-being. To Greenspace in the living environment is also associated with lower income-related health inequality, and in the short-term individuals who report high negative mood are more likely also to select a natural area, rather than other types of area, as their favorite place. Together, these research findings suggest that individuals' desire for contact with nature is not just the result of a romanticized view of nature, but is an important adaptive process, which appears to aid optimum functioning. Greenspaces are often used in a targeted way to deliver structured therapeutic interventions for vulnerable groups such as youth at risk, individuals living with dementia or mental ill-health, probationers and stressed employees.

For example, for adolescents with behavioural or self-esteem issues, wilderness greenspaces are used as vehicles for reflection over week-long expeditions, with relevant psychological and behavioural improvements frequently reported, such as enhanced self-esteem, self-efficacy, self-image, self-control, self-confidence, self-empowerment and decision making. For individuals living with dementia, engaging with greenspaces can positively influence eating and sleeping patterns, fitness and mobility, sense of well-being, self-esteem and control associated with improved social interaction and a sense of belonging. Emotional states are also improved via reductions in stress, agitation, anger, apathy and depression.

Public Health England have provided a health equity briefing: "Local action on health inequalities: Improving access to green spaces."

Summary of key points

- There is significant and growing evidence on the health benefits of access to good quality green spaces. The benefits include better self-rated health; lower body mass index, overweight and obesity levels; improved mental health and wellbeing; increased longevity.
- There is unequal access to green space across England. People living in the most deprived areas are less likely to live near green spaces and will therefore have fewer opportunities to experience the health benefits of green space compared with people living in less deprived areas.
- Increasing the use of good quality green space for all social groups is likely to improve health outcomes and reduce health inequalities. It can also bring other benefits such as greater community cohesion and reduced social isolation.
- Local authorities play a vital role in protecting, maintaining and improving local green spaces and can create new areas of green space to improve access for all communities. Such efforts require joint work across different parts of the local authority and beyond, particularly public health, planning, transport, and parks and leisure.

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Russo, A., Cirella Giuseppe, T. Modern Compact Cities: How Much Greenery Do We Need? Int J Environ Res Public Health. 2018 Oct; 15(10): 2180; Published online 2018 Oct 5. doi: 10.3390/ijerph15102180; US National Library of Medicine National Institutes of Health; Articles from International Journal of Environmental Research and Public Health are provided here courtesy of Multidisciplinary Digital Publishing Institute (MDPI). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6209905/

⁷¹ Edible green infrastructure is a sustainable planned network of edible food components and structures within the urban ecosystem which are managed and designed to provide primarily provisioning ecosystem services.

⁷² Barton, J., Rogerson, M. The importance of greenspace for mental health. BJPsych Int. 2017 Nov; 14(4): 79–81; Published online 2017 Nov 1; Articles from BJPsych International are provided here courtesy of Royal College of Psychiatrists. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5663018/

⁷³ Van den Berg A. E., Hartig T. & Staats H. (2007) Preference for nature in urbanized societies: stress, restoration, and the pursuit of sustainability. Journal of Social Issues, 63, 79–96.

Health and health inequalities trends

Demands on healthcare in the borough are set to increase due to a growing population and an increasing elderly population. The estimated number of autistic adults and adults with learning disability is expected to increase steadily over time in line with population growth. Population growth is expected to be greatest among the over 65 age group and this, coupled with increases in life expectancy, will result in more autistic adults and adults with learning disabilities requiring additional care and support associated with older age. The number of people with dementia in Surrey is also projected to rise to 21,075 by 2025.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues Considerable differences between wards in life expectancy for both men and women, although with such small areas there is uncertainty about the precise estimate. Adult and child obesity. One in four adults drinks alcohol above sensible levels; this places Guildford in the top ten council areas nationally for hazardous drinking. In Guildford Borough, based on 2010 data, PHE estimates that the proportion of local deaths (attributable fraction) of those aged 25 years and over, attributable to long term exposure to anthropogenic air pollution (PM2.5) was 5.7 per cent. The number of adults with a learning disability in Guildford was 2,824 in 2017 and was the highest among the neighboring local authorities. There is an under supply of the majority of typologies across the majority of the wards, most notably youth provision. Deficiencies in open space provision have a disproportionate effect on certain groups, i.e. lone parents, families with children under 5. **Opportunities** Opportunity to provide analysis of the correlation of the open space provision and health/deprivation (a study on the correlation of a lack of provision and access to open space, and a level or deprivation and mental health issues by wards in Guildford). Opportunity to use CIL to provide for new accessibility links (park connector network) from wards with limited opportunities for creation of new or redesign of existing open space to natural green spaces (e.g. new developments to the North-West of the borough), giving particular focus on wards with high level of deprivation and health issues. The Plan should take into account priorities set out in the Health and Wellbeing Strategy or other health strategies and findings of a Joint Strategic Needs Assessment to support its policies. Ensure provision of adequate open space to provide health related interventions, i.e. wilderness therapy, social and therapeutic horticulture, facilitated environmental conservation, care farming, ecotherapy, nature-based arts and crafts, and animal-assisted interventions, particularly within the wards which are the public health

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focus.

- To give support to improvements in community infrastructure that are intending to improve access to or enable delivery of positive improvements against locally evidenced health and well-being needs.
- To focus on supporting strategies that address current health priorities as identified in the borough health and well-being strategy in particular those that tackle obesity.
- To support investment in health infrastructure that will address health requirements identified within the strategic transformation plan or future equivalent document. Development proposals will understand the impact they will have on existing health infrastructure and work with those partners responsible for the delivery and maintenance of such infrastructure (Guildford and Waverley CCG) to ensure that any impact is addressed.
- The Council is not the lead agency for many services and initiatives
 that support health and well-being in Guildford borough, but can adopt
 a <u>health in all policies approach</u> supported by giving due consideration
 to potential health impacts in the SA framework, the council can insure
 the DM policies can provide a foundation for delivery of activities and
 services that maintain and improve the health and well-being of our
 communities.

Evolution without the Plan

- In the absence of the Plan, it is assumed that relevant policies in the current Local Plan and National Planning Policy would apply.
- Demands on healthcare in the borough will increase due to a growing population and an increasing elderly population.
- The issue of rising obesity, fuel and food poverty may not be adequately addressed through current policies in existing Plan.
- The existing lack of open space provision in most deprived areas will likely to further exacerbate deprivation and health inequalities. Lack of opportunities to address deficiencies in open space provision in wards with high level of deprivation, i.e. Westborough, Ash Vale and Worplesdon.
- An opportunity to provide for new accessibility links (park connector network) from wards with limited opportunities for creation of new or redesign of existing open space to natural green spaces (e.g. new developments to the North-West of the borough), giving particular focus on wards with high level of deprivation and health issues could be missed.
- An opportunity to specify that the provision of adequate open space to provide health related Interventions, particularly within the wards which are the public health focus may not be explored.
- In the absence of the Plan, an opportunity for the Council to adopt a
 <u>health in all policies approach</u> may be missed. There opportunity to
 provide a foundation for delivery of activities and services that
 maintain and improve the health and well-being of our communities
 may not be fully explored.

Implications of the Policy Review

There is a need to improve the overall health of Guildford's population and make Guildford a socially integrated borough with strong and resilient communities by encouraging modal shift for car owners and for older people, where possible, as well as increasing physical inactivity.

The Plan needs to contribute towards reduction of inequalities in health outcomes and strive to improve the overall physical and mental health and wellbeing of the borough. It must take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs, with a particular focus on wards with poorest health outcomes including Stoke, Westborough and Ash Wharf in line with Guildford Borough Health and Wellbeing Strategy.



Suggested SA Objectives⁷⁴

2.To facilitate improved health and well-being of the population, enabling people to stay independent and reducing inequalities in health

3.5 Economy and employment

Economy

Guildford's economy is closely tied to that of London and the proximity of Heathrow and Gatwick Airports. However, Guildford's current economic success comes at the price of congested roads, pressure on infrastructure and high house prices.

According to Guildford Economic Report (2018)⁷⁵, Guildford's economy continues to grow at a steady rate and for the latest figures available in 2016 had a total Gross Value Added (GVA)⁷⁶ of over £5.5bn making it the largest economy in the Enterprise M3 area, where night-time economy makes a significant contribution. The total GVA per head⁷⁷ was £37,193⁷⁸ (see **Table 3.4**) which is slightly higher than the Surrey average. However, overall there are signs of a slowing in economic growth in Surrey, particularly in the East of the county.

Table 3.4: Guildford Gross Value Added (GVA) 2012-2016

GVA	2012	2013	2014	2015	2016
GVA Total £m	4,798	4,964	5,303	5,243	5,505
GVA £ per head	34,340	35,206	37,098	35,890	37,193

⁷⁴ An objective aiming at reducing human exposure to air pollution is presented in **Section 3.10: Air quality** of this report due to a cross-cutting nature of the air quality topic.

⁷⁵ Guildford Borough Council (2018) Guildford Economic Report. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=14789

⁷⁶ Gross Value Added is a measure of the value of goods and services produced in the economy. It is primarily used to monitor the performance of the national economy and is now the measure preferred by the Office for National Statistics (ONS) to measure the overall economic wellbeing of an area.

OVA per head (income approach) relates the value added by production activity in a region to the resident population of that region, and it can therefore be subject to distortion due to the effects of commuting and variations in the age distribution of the population. Small areas, such as local authorities, can be subject to very large distortions and this should be borne in mind when interpreting the statistics as an indicator of relative economic prosperity.

⁷⁸ Guildford Borough Council (2018) Guildford Economic Report. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=14789

Source: Regional Gross Value Added (Balanced) by Local Authority in the UK, Regional Accounts, Office for National Statistics

Guildford was number 9 (having been No 6) in the UK in the influential Lambert Smith Hampton Economic Vitality Index that examines 20 datasets based on six key themes:

- Most educated
- Most entrepreneurial
- · Growing Affluence
- Most Productive
- Fastest growing
- Greenest (Measures are CO2 emissions per capita, recycling rates and energy per capita consumption)

Guildford is widely recognised as an international centre of excellence for firms in sectors such as knowledge, health, biotechnology and ICT. Main industry clusters in Guildford are Finance, IT and professional services, gaming, advanced manufacturing, healthcare, tourism and learning. This is primarily related to the University of Surrey and Surrey Research Park (which includes the Surrey Technology Centre), located in the Onslow Ward, these sectors are important for generating a supply of well qualified personnel as well as for establishing and facilitating the formation of a number of new businesses in the Guildford Urban Area.

Construction and Transport jobs are primarily concentrated in the urban wards of Friary and St Nicolas, Stoke and Merrow although there is a presence in all wards including the rural wards. As might be expected, retail and related sectors are fairly widespread. Although employment in retail is concentrated in the town centre wards of Friary and St Nicolas and Holy Trinity, even rural wards such as Effingham and Normandy have more than 100 jobs in this sector. Business and other services are mainly concentrated in Friary and St Nicolas, Holy Trinity and Onslow wards with a significant cluster in Tillingbourne.

Guildford continues to produce a steady flow of new start-up companies, and the businesses tend to be higher growth than the peer group. One trend of concern is a worsening survival rate than in previous years. This might be a reflection of the entrepreneurial environment in the Borough where businesses may be more prone to failure, but the causes of this trend need to be investigated. They could be Brexit related.⁷⁹ Data on UK business counts in Guildford is presented in **Table 3.5.**

Table 3.5: UK Business Counts, 201880

Businesses	Guildford (numbers)	Guildford (%)	South East (numbers)	South East (%)
	Enterp	rises		
Micro (0 to 9)	6,680	89.8	363,890	89.9
Small (10 to 49)	605	8.1	33,090	8.2
Medium (50 to 249)	120	1.6	6,035	1.5
Large (250+)	30	0.4	1,535	0.4
Total	7,435	-	404,555	-
	Local	Units		
Micro (0 to 9)	7,435	85.0	398,835	85.4
Small (10 to 49)	1,080	12.3	55,365	11.9
Medium (50 to 249)	205	2.3	11,340	2.4
Large (250+)	30	0.3	1,620	0.3
Total	8,745	-	467,160	-

⁷⁹ Guildford Borough Council (2018) Guildford Economic Report. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=14789

^{80 %} is as a proportion of total (enterprises or local units)

Source: Inter Departmental Business Register (ONS)

Tourism

Tourism and the visitor economy are made up of diverse number of small and medium enterprises and the tourism sector has been identified as a priority for growth by the Enterprise M3 LEP. Guildford's attractive countryside, leisure opportunities, heritage and retail offer are crucial to attracting visitors to the borough. A number of tourist attractions are located in, or within close proximity to, the town whilst the University of Surrey also draws visitors to the area. Guildford has a wide range of facilities including G Live, and the Yvonne Arnaud Theatre both of which attract national touring shows. It also has a number of smaller arts facilities such as the Guildford House Gallery. The Tourist Information Centre is very successful and is one of the few in the Enterprise M3 area. The borough offers a great variety of tourist attractions such as the Scheduled Ancient Monument of the Castle, the Royal Horticultural Gardens at Wisley and Chilworth Powder Mills. The rural part of the borough makes a valuable contribution to tourism and the visitor economy through the numerous National Trust properties and attractive landscaped gardens such as Loseley House and Clandon Park.

Developing a better tourist offer and exploring opportunities on business tourism with the Enterprise M3 LEP are priorities for many businesses and other stakeholders⁸¹, and Guildford Borough Council is ideally placed to offer support and take a lead in any initiatives coming forward.

Volume and value of trips to Guildford Borough

Tourism is an important, and growing, sector of the borough's economy. Guildford performs well, attracting tourists from UK, Europe and the rest of the world to visit friends and relatives, do business and attend conferences (MICE Meetings, Incentives, Conferences and Events), to work on short term contracts and be educated. The total value of tourism activity in 2017, including visits to second homes and friends and family, was worth around £307.5 million - down by 9% compared to 2016. The SE as a whole by comparison saw a drop of 13%. It is estimated tourism generates around 4,158 direct full-time jobs (5,679 jobs in total, including part-time, seasonal and indirect jobs) for the borough, spread across a wide range of service sectors from catering and retail to public service⁹².

In the past 7 years, Guildford has shown a small increase each year in both footfall and annual spend – often against declines in the rest of the South East of England, or England as a whole. Around £232.5 million was spent on trips to the borough in 2017 by overnight and day visitors.⁸³ A total 106,500 overnight trips were made to the borough by people from outside the UK.

In total, it is estimated that around £93.2 million was spent by all overnight visitors on their trip to Guildford in 2017, a fall of 2%. Domestic visitor expenditure decreased by 12% and overseas visitor expenditure increased by 7%. It is estimated that around 4.8 million tourism day trips were made to Guildford in 2017 – this shows a slight decrease of 2% but the previous year it increased by 22%. Day visits were down 3% nationally. 84

According to the Economic Impact of Tourism on Guildford Borough (2017)⁸⁵, around 0.35 million overnight tourism trips were made to Guildford in 2017 (equivalent to that of 2016). Of these trips,

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⁸¹ Guildford Borough Council (2013) Guildford Borough Economic Strategy 2013 – 2031. Available at: (http://www.guildford.gov.uk/media/15129/Guildford-Borough-Economic-Strategy-2013-2031/pdf/Economic Strategy_Final.pdf

⁸² Guildford Borough Council (2017) The Economic Impact of Tourism on Guildford Borough. Available at: http://www2.guildford.gov.uk/councilmeetings/documents/s13841/Item%205%202%20-%20Guildford%20Tourism%20Data%202.pdf

⁸³ Surrey Live. Guildford Borough Council, Tourism figures show rise in overseas tourists to Guildford but drop in UK visitors. [Online]. Available at: https://www.getsurrey.co.uk/news/surrey-news/tourism-guildford-rise-overseas-visitors-16272980

⁸⁵ Tourism South East (2017) The Economic Impact of Tourism on Guildford Borough. Available at: http://www2.guildford.gov.uk/councilmeetings/documents/s13841/ltem%205%202%20-%20Guildford%20Tourism%20Data%202.pdf

domestic visitors made 70% of trips (245,000) and overseas visitors made up 30% of trips (106,500). Compared to 2016, the volume of domestic overnight trips decreased by 1% and the volume of inbound overnight trips rose by 3%. The total number of nights spent in Guildford by domestic visitors in 2017 fell from 0.71 million bednights to 0.69 million bednights (a decrease of 4% compared to 2016). However, there was an increase in the trip length of overseas visitors where the number of nights spent in Guildford rise by11%. This gave an overall increase in the number of nights spent in Guildford of 3% (1.42 million bednights compared with 1.38 million bednights in 2016).

The Surrey Hotel Futures Study (2015)⁸⁶ suggests that there is an undersupply of visitor and business accommodation in Guildford. Whilst there is market potential and hotel company interest in luxury country, 4*, boutique and budget hotels and serviced apartments in the Guildford area, there are not thought to be any live development proposals other than the redevelopment of a small hotel located at a shooting range in the west of the borough. A failure to provide additional accommodation could limit the borough's ability to host future events and reduce its appeal as a business and visitor destination, thus stemming the growth of the visitor economy.⁸⁷ Conversely, the recent trend in conversions of guesthouses and hotels to residential and other uses may worsen the existing undersupply of bed spaces in the borough.

Leisure uses are important to enhancing the vitality and viability of town centres and improving the social wellbeing of residents. The Council's Retail and Leisure Study⁸⁸ (2014) indicates that the borough has a relatively good choice of leisure uses and that participation rates for particular leisure activities, namely restaurants, cinemas, concerts and theatres, is high. Subject to continued demand, the high participation rate offers potential to enhance the borough's overall leisure offer. The study also confirms that there remains potential to strengthen and improve the leisure offer in the borough's main centres. Such development can stimulate the evening economies of our urban centres, and by increasing dwell times during the day, provide benefits to other shops and businesses.

Learning cluster

Guildford is very fortunate to have a number of learning institutions within the borough, including the University of Surrey, College of Law and Guildford College, which demonstrate a high intellectual property base and make Guildford an ideal centre for an education and learning cluster.

In the academic year 2016-17 the University of Surrey and its Research Park generated almost £1.75bn Gross Value Added (GVA) for the UK. The University's 2016-17 study (*Measuring Up: Impact and Contribution*) also found that the University and Research Park generate £6.41 GVA impact across the UK for every £1 received in income and that for every direct job at the University 6.5 jobs are supported throughout the UK economy. Companies on Surrey Research Park employed around 4,400 people in 2016-17, a significant proportion of which were in highly technical jobs. In total, the University and Surrey Research Park directly or indirectly supported 17,800 jobs, including 13,800 in the county of Surrey and 11,200 in the borough of Guildford in the year 2016-17.89

Retail

Cambridge and Guildford top the list of the UK's most resilient retail locations, according to recent research published by Cushman & Wakefield, which ranks the viability and performance of 250 High Streets outside Central London.⁹⁰

⁸⁶ Surrey Hotel Futures Report. Available at: http://www.surreycc.gov.uk/__data/assets/pdf_file/0011/68384/SURREY-HOTEL-FUTURES-STUDYFINAL-REPORT-AUGUST-2015.pdf

⁸⁷ Guildford Borough Council (2017) Topic Paper: Leisure and Tourism (December 2017). Available at: https://www.guildford.gov.uk/media/26581/Topic-paper-2017-Leisure-and-Tourism/pdf/Leisure and Tourism topic paper 2017.pdf?m=636482396278970000

⁸⁸ Guildford Borough Council (2014) Retail and Leisure Study 2014. Available at:

https://www.guildford.gov.uk/newlocalplan/media/19959/Guildford-Retail-and-Leisure-Study-Update-2014Final-Report/pdf/GRLSU Final Report and Appendices 25-09-15.pdf

⁸⁹ University of Surrey (2016) Measuring up impact and contribution (2016-17) [online]. Available at: https://www.surrey.ac.uk/sites/default/files/2018-06/measuring-up-social-impact-report-2016-17.pdf

⁹⁰ Europe Real Estate (2018) Cambridge and Guildford top the list of the UK's most resilient retail locations, Tuesday, 24 April 2018. Available at: http://europe-re.com/cambridge-and-guildford-top-the-list-of-the-uk-s-most-resilient-retail-locations/65068

Although under pressure, the retail sector in Guildford is still performing relatively well compared to other centres in the South East. ⁹¹ The last detailed survey of the retail sector was conducted in April/May 2019. In the last four years the percentage of vacant units in the PSA (6.7% in May 2019 ⁹²) has remained consistently below the national average vacancy rate for town centres, which was 10.2% in April 2019 ⁹³. Guildford also enjoys a better than average independents vacancy rate at 26.6% versus a South East average of 35.9%. Footfall in the early part of 2019 increased by 6% with a year on year overall increase. ⁹⁴

Guildford is the principal shopping and service centre in Surrey and provides a highly successful focus for retail activity in the area. Guildford Town Centre is a sub-regional centre, and the primary retail centre in Surrey (based on Experian's Goad floorspace reports). As of May 2019, there were 420 units⁹⁵ within a designated shopping frontage.

Guildford's Primary Shopping Area (PSA) is centred on the pedestrianised lower (western) High Street, which is part of the retail core (primary shopping frontage) of the Town Centre. This area is characterised by the highest proportion of A1 (shop) uses, the highest Zone A rental values and predominantly the highest pedestrian flow levels.

The designated shopping frontages consists predominantly (approximately 80%) of secondary shopping frontages. The secondary frontages are also part of the PSA and contain a high proportion of retail use, with a limited proportion of uses complementary to the retail offer, which support and vitalise the town centre (including during the evening). The secondary frontage is concentrated around North Street, parts of upper (eastern) High Street, and the streets and lanes between High Street and North Street, Friary Centre, and the Tunsgate Centre.

The largest concentration of retail use in the borough outside of any designated shopping area is Ladymead retail park, which was built in the mid-1990s, with planning permission as a non-food retail park.

This out-of-centre retail park has experienced close to full occupancy and great stability of its occupants. The retail park is clearly successful, with many of the retailers having continuously occupied the same stores for over 18 years, and high rental values continuing. Most of the retailers sell large, bulky goods to car-borne customers, and do not appear to compete with the Town Centre or nearby Local Centres.

There are two district centres in the borough: Wharf Road, Ash and Station Parade, East Horsley. Both district centres appear to be sustaining their viability and attracting a good number of users. Of the two district centres, East Horsley gives the impression of greater vitality due to the larger number of convenience shops, library and post office, its mix of everyday service requirements and its proximity to the railway station.

Rural economy

The Guildford Borough Rural Economic Strategy 2017 – 2022 - shaped by events and policies since the 2016 EU Brexit vote - follows analysis and review of available statistics, research and sample surveys of companies to identify the main business sectors represented in the rural west Surrey Wards of Guildford, Waverley and Woking Boroughs. Together these Boroughs cover most of the River Wey catchment, a geographical area that is mainly rural, but with a number of commuter belt towns and villages that have grown because of their proximity to London.⁹⁶

The Rural Economic Strategy 2017 – 2022 identified:

⁹¹ Guildford Borough Council (2018) Guildford Economic Report. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=14789

⁹² This percentage fell slightly (by 0.1%) between May 2017 and May 2019 as there was a larger total number of units in the PSA (due to a smaller number of non-surveyed units) than in May 2017

⁹³ BRC-Springboard data. Available at: https://www.spring-board.info/

⁹⁴ Ibid.

⁹⁵ Not including Tunsgate Shopping Centre/Tunsgate Quarter or North Street regeneration area

⁹⁶ Guildford Borough Council (2017) Guildford Borough Rural Economic Strategy 2017 – 2022. Available at: https://www.guildford.gov.uk/ruraleconomy

- Rapid changes in technology in particular around 5G mobile communications pioneered in Guildford at the University of Surrey – will continue to transform daily life and the way we work, learn, travel or spend time online for recreation, shopping or healthcare.
- Approximately 25% of local jobs are located in Guildford's rural wards.
- The rural mapping exercise that was conducted across the three boroughs of Guildford, Waverley and Woking (summarised at Appendix D) identified:
 - 4,330 micro-businesses in rural areas, some 88.5% of all rural businesses in these boroughs.
 - More than 96% of premises in Surrey can now access fast broadband of 15mbps or above.
 - The rural areas of Guildford and Waverley account for about 27.5% of the increase in business growth since 2010 – at 2.0% per annum only marginally lower than in urban areas.
 - Close to one in four of all manufacturing businesses are now found in rural areas.
 - The majority of respondents to the survey would plan to stay in the Borough with 16% of those having grown sufficiently to consider moving to larger premises locally.
- The rural mapping exercise included an online survey of business needs (summarised at Appendix E) which highlighted the following:
 - Almost half (48%) of businesses in the Guildford, Woking and Waverley Boroughs who
 were surveyed have access to Superfast broadband with a further 45% using Standard
 Speed ADSL, Fibre or Cable broadband (93% of businesses overall) indicating some
 level of broadband access. However, only 57% of businesses are satisfied with their
 current internet provision with a further 27% stated being dissatisfied to some level,
 some very dissatisfied.
 - Only a quarter of businesses reported awareness of the Surrey County Council/BT Superfast Surrey programme, with 75% not having seen the programme. The local road network is pivotal to many local businesses for goods and services, staff commuting and travel to meetings or site visits.
 - The local trunk road network followed as the second most important factor across all business operations.
 - Looking forward 12 months, 25% of businesses plan to maintain their current position; 60% plan to expand the scale of their activity. However, beyond 24 months 45% of business wish to reduce the scale of their activities or are uncertain about their future plans.
 - Quality of the local environment was a key advantage for businesses in their current locations. There were mixed views on the quality of the local transport infrastructure, access to markets, quality of premises and communications infrastructure.
 - On Brexit, businesses regarded a Tariff-free EU Customs Union and access to the single market for free movement of goods, services, capital and workers as important to future growth.
- In 2012 Guildford's visitor economy generated about 4.5 million day trips annually, with staying visitors spending in total £84.6 million on their trip.

To address the above-mentioned issues, the Rural Economic Strategy 2017-2022 plans to:

- Support measures to meet the demand for affordable housing for young people, people on low incomes or key workers such as teachers and nurses – as the most important driver of the local economy. The proximity to London and access to international destinations through south-east ports and airports places major demands and challenges on the local transport infrastructure.
- Support opportunities to pilot innovative projects in rural communities to facilitate 5G technology deployment.
- > Support effective woodland management and stimulate the recruitment of well skilled and qualified entrants to the industry, either as adults with career experience or as newly-qualified young people (e.g. Apprentices graduating from land-based college courses).
- Invest and improve broadband infrastructure, particularly in the rural areas.

Employment

Guildford borough has a very different employment profile from that of its comparator economies (Bracknell Forest, Reigate & Banstead, Runnymede, Waverley, Windsor & Maidenhead, Woking). Guildford has seen a rise in the number of self-employed, but overall the number of jobs declined in the Borough by -3.4% or 2,750 jobs in 2018 compared to 2017. Research by Surrey County Council identified the loss of 18,000 (often highly skilled jobs) between 2016-2017. However, Guildford has recorded a total of 19 new company arrivals in the same period which is one of the best in Surrey. 98

In 2017, the Inter Departmental Business Register (IDBR) recorded 78,000 jobs in total in Guildford borough across different industry sectors. Wholesale and retail trade; repair of motor vehicles and motorcycles sectors employed the largest amount of people (13,000) people in 2017, whilst Human health and social work activities and Professional, scientific, educational and technical activities sectors employed 10,000 and 9,000 people, respectively. Only 10 people were employed in the Mining and quarrying sector in 2017. Manufacturing accounts for 4.5 per cent of employment and construction, a further 4.5 per cent (see **Figure 3.14**). It illustrates that the proportion of jobs in the Education, Scientific, Trade and other business activities is slightly higher than that for the South East and Great Britain.

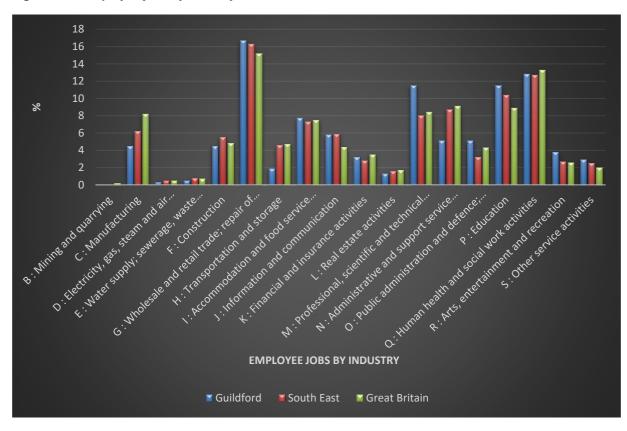


Figure 3.14: Employee jobs by industry, 2017

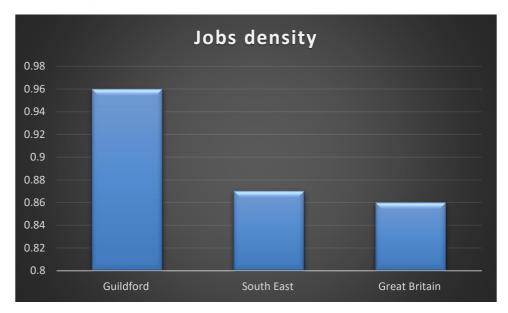
Source: ONS employee jobs by industry

Job density is the number of jobs per resident aged 16-64. A job density of one would mean there is a job for every resident aged 16-64. Job density within the Borough is 0.96 and is higher than that of the South East (0.87) and Great Britain (0.86) (see **Figure 3.15**).

98 Ibid

⁹⁷ Guildford Borough Council (2018) Guildford Economic Report. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=14789

Figure 3.15: Jobs density99, 2017



Source: ONS jobs density

Table 3.6 illustrates that 44.8 per cent of Guildford's residents are employed within management, professional and technical occupations. Conversely, the proportion of residents employed in the more elementary occupations (major group 8-9) is just over 13.7 per cent.

Table 3.6: Employment by occupation (April 2018 - March 2019)100

All people	Guildford (numbers)	Guildford (%)	South East (%)	Great Britain (%)
Soc 2010 major group 1-	34,100	44.8	51.2	46.8
1 Managers, directors and senior officials	7,400	9.7	12.3	10.9
2 Professional occupations	16,400	21.6	22.6	20.9
3 Associate professional & technical	10,300	13.6	16.2	14.8
Soc 2010 major group 4- 5	16,700	21.9	19.7	20.1
4 Administrative & secretarial	7,800	10.2	10.3	9.9
5 Skilled trades occupations	8,900	11.7	9.4	10.1
Soc 2010 major group 6-	14,900	19.6	15.7	16.5
6 Caring, leisure and Other Service occupations	10,300	13.5	8.8	9.0
7 Sales and customer service occs	#	#	6.9	7.4
Soc 2010 major group 8- 9	10,400	13.7	13.4	16.6

⁹⁹ The density figures represent the ratio of total jobs to population aged 16-64. Total jobs include employees, self-employed, government-supported trainees and HM Forces

Notes: Numbers and % are for those of 16+

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^{100 #} Sample size too small for reliable estimate (see definitions)

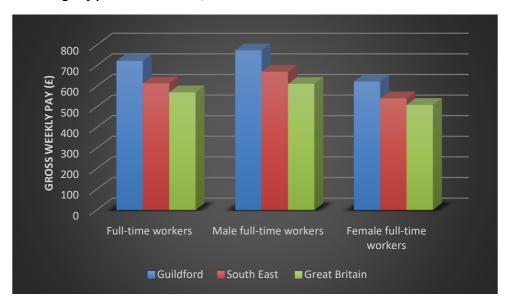
[%] is a proportion of all persons in employment, arnings by place of residence (2018)

8 Process plant & machine operatives	#	#	4.7	6.3
9 Elementary occupations	#	#	8.7	10.3

Source: ONS annual population survey

Average (median) salary levels within Guildford are higher than those for the South East and the rest of Great Britain for both males and females (**Figure 3.16**). This reflects the data in **Section 3.3**: **Population and social inclusion**, relating to high levels of educational attainment in the borough and the data above which shows that the vast majority of jobs within the borough are at the highest levels.

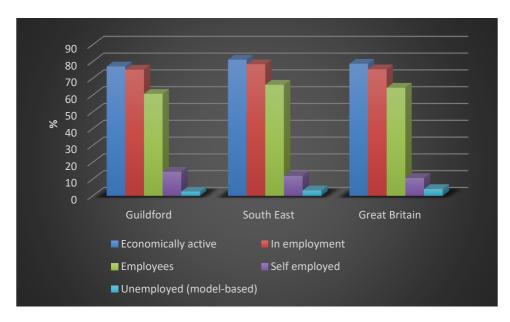
Figure 3.16: Earnings by place of residence, 2018



Source: ONS annual survey of hours and earnings - resident analysis

Figure 3.17 below shows that the proportion of residents in employment in 2019 (77.1%) fell below that of the South East (81.1%) and slightly below the proportion for Great Britain (78.7%). This points to a decreased employment rates performance compared to the data published in the Scoping Report 2013. However, fewer people are unemployed in Guildford (2.6 per cent) compared to 3.3 per cent in South East and 4.1 per cent in Great Britain. Higher levels of unemployment are a particular concern for rural Surrey and the borough's more deprived areas.

Figure 3.17: Employment and unemployment (Apr 2018-Mar 2019)



Source: ONS employment and unemployment

Universal Credit is designed so that a broader span of claimants is required to look for work than under Jobseeker's Allowance. This means that as Universal Credit is fully rolled out in particular areas, the Claimant Count in those areas is likely to be higher than it would otherwise be under Jobseeker's Allowance.

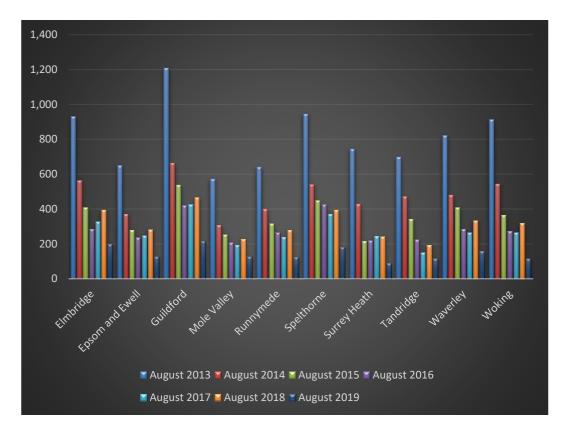
Table 3.7: Claimant count by sex – not seasonally adjusted (August 2019)

	Guildford (numbers)	Guildford (%)	South East (%)	Great Britain (%)
All people	860	0.9	1.9	2.8
Males	505	1.0	2.2	3.3
Females	355	0.7	1.6	2.4

Source: ONS Claimant count by sex and age

From 2013 to 2014, Job Seeker's Allowance (JSA) claimants have reduced almost by half from 1,209 to 663 in Guildford (see **Figure 3.18**). Similar trend is observed for the neighboring authorities. There is uncertainty with regards to why such a dramatic decrease has taken place. It could be explained by the change of methodology used by ONS or due to the government's introduction of new Claimant Commitment in 2013 which resulted in a large increase in the threat and use of benefits sanctions against unemployed people claiming the Job Seeker's Allowance. The government also introduced a new sanctions regime for JSA claimants, with higher associated financial penalties, in October 2012. Therefore, it is not clear whether the figures demonstrate that the decrease in number of JSA claimants was due to them finding new employment or simply a result of a change in the government policy.

Figure 3.18: Job Seeker's Allowance claimants 2013-2019, numbers



Source: https://www.nomisweb.co.uk

Guildford Borough Economic Strategy 2013 – 2031 identifies availability of employment sites as an issue for the borough. The continued growth of the local population means that there is a need to provide new job opportunities within the borough. In order to achieve this, it is essential that a sufficient supply of economic land and premises of an appropriate quality are available where needed across the borough to attract new firms into the area and retain existing firms by allowing them additional space in which to expand and increase their scale of production. The LPSS 2015-2034 provides sufficient land to meet employment needs as well as meeting forecast retail needs.

Housing market imbalances between supply and demand are another potential barrier to economic prosperity as the cost and availability of housing influences where people live, where they work and the availability of local labour. This is already adversely affecting some of the businesses in the borough and increasing congestion as more people are travelling longer distances to work in the borough.

While the economic profile of the borough is higher than average incomes there are also higher than the national average housing costs. The gap between local wages and house prices in the borough is an issue for many local residents (more information in **Section 3.7**).

The cost and availability of housing is an important part of the local business environment. Affordability of housing is directly linked to recruitment and retention issues, particularly for key workers, young people, and other lower paid workers. It also influences commuting patterns. A lack of affordable homes may be a major factor in determining the willingness and ability of people to live and work in Guildford. The cost of private housing in the borough is high and there is a shortage of affordable homes, therefore some people working in the area cannot afford to live here and are forced to commute in from neighbouring areas where more suitable and affordable housing may be available.

¹⁰¹ Guildford Borough Council (2013) Guildford Borough Economic Strategy 2013 – 2031. Available at: http://www.guildford.gov.uk/media/15129/Guildford-Borough-Economic-Strategy-2013-2031/pdf/Economic_Strategy_Final.pdf

Economy and employment trends

Guildford's economy continues to grow at a steady rate and for the latest figures available in 2016 had a total Gross Value Added (GVA) of over £5.5bn, however, overall there are signs of a slowing in economic growth in Surrey, particularly in the East of the county. Guildford continues to produce a steady flow of new start-up companies, and the businesses tend to be higher growth than the peer group. One trend of concern is a worsening survival rate than in previous years. In 2017, the total value of the tourism sector is £307.5 million, which was a 9% drop compared to 2016. There was a loss of 18,000 (often highly skilled jobs) between 2016-2017.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	 The cost and availability of housing influences where people live, where they work and the availability of local labor. This is already adversely affecting some of the businesses in the borough and increasing congestion as more people are travelling longer distances to work in the borough. Broadband and the need for higher internet speeds has been raised as a key priority for businesses across the borough, from rural to town centre businesses where access to increased speeds is necessary to perform at the cutting edge of the business innovation. There are pockets of disadvantage and concentrations of people on low incomes, in receipt of benefits and with no or low qualifications, with some areas being amongst the most deprived in Surrey The borough experiences high levels of traffic congestion in the town centre and on major routes during peak hours. This is a concern for local businesses and residents. The high cost of living housing prevents key and low-level workers from living in the borough. This will affect the ability of local businesses to employ these workers.
Opportunities	 Opportunity for the Plan to encourage economic growth across the whole plan area and take account of changing economic conditions and requirements to support local businesses and enterprises. The LPSS 2015-2034 includes DM policies for employment. There remains potential to strengthen and improve the leisure offer in the borough's main centres. Such development can stimulate the evening economies of our urban centres, and by increasing dwell times during the day, provide benefits to other shops and businesses. LPSS 2015- 2034 includes a policy of visitor and tourism attractions which is likely to improve the borough's leisure offer.
Evolution without the Plan	 The aforementioned challenges will potentially cap the growth of business across the borough, as they limit their ability to attract and retain talent. Policy E3 of the Local Plan: Strategy and Sites (LPSS) 2015 – 2034 addresses the availability of employment sites by designating several Strategic and Locally Significant Employment Sites, which are priority locations for the development of further Use Class B1-B8 employment uses in line with their designation (as per LPSS policy E2). Employment uses on these sites are also protected against change of use to other non-employment uses. The LPSS also allocates mixed-

use sites that include a requirement for employment floorspace and one site specifically for employment uses; these sites will also increase the amount of land available for new businesses or business relocation and expansion.

 Policy E5 of the LPSS provides a positive framework to promote economic growth in rural areas and avoid stifling opportunities, however some additional detailed enabling policy wording may still be beneficial to stimulate and develop the rural economy, encourage innovative projects and capitalise on opportunities to diversify the economic activities of existing businesses in these areas.

Implications of the Policy Review

Emphasis needs to be placed on improvements to the cultural and visitor economy; inward investment; and the use of Information and Communications Technology (ICT) to improve efficiency and skills. The Plan policies will need to encourage economic growth across the whole plan area and take account of changing economic conditions and requirements to support local businesses and enterprises. This focus should include development in rural areas, subject to policy constraints on the countryside and Green Belt.



Suggested SA Objectives

- 7. To maintain Guildford borough and Guildford town's competitive economic role
- 8. To facilitate appropriate development opportunities to meet the changing needs of the economy
- 9. To enhance the borough's rural economy
- 10. To ensure that the digital infrastructure available meets the needs of current and future generations

3.5 Transport & accessibility

A number of public bodies and also private companies have roles and responsibilities for provision and future planning of transport infrastructure and passenger transport services:

- Surrey County Council as Local Highway Authority is responsible for maintenance and
 improvement of adopted local roads, including footways, which collectively comprise the
 Local Road Network (LRN), the management and improvement of the Rights of Way
 network, as Local Transport Authority is responsible for transport policy and initiatives
 through the Surrey Transport Plan, which is the county's third Local Transport Plan
 (LTP3), and is a statutory consultee on planning matters and negotiates improvements to
 the LRN to mitigate the impacts of development.
- Highways England as Strategic Highways Company is the Highway Authority responsible for the A3 trunk road and M25 motorway within the borough as part of the nationwide Strategic Road Network (SRN).
- Network Rail as the owner and operator of the railway infrastructure in the borough and beyond.

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- The train operating companies (the franchise operators), presently South Western Railway and Great Western Railway responsible for operating the principal rail services and managing the rail stations in the borough.
- Bus and community transport operators, principally Stagecoach, Arriva and Safeguard –
 provide bus services across the borough and beyond.

The active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils is required by the NPPF 2019, so that strategies and investments for supporting sustainable transport and development patterns are aligned (NPPF 2019 para 104). This requirement for close working mirrors that set out in previous national policy.

Guildford Borough Council prepared a Guildford Borough Transport Strategy (2017), which was submitted as an evidence base document supporting the LPSS. This provided an up-to-date and forward-looking transport strategy including a programme of schemes covering all modes of surface transport in Guildford borough. It includes all of the transport infrastructure schemes set out in the Infrastructure Schedule to the LPSS. It is understood that Surrey County Council, as the Local Transport Authority, proposes to bring forward a Guildford borough Local Transport Strategy and Forward Programme. This is proposed to be subject to a public consultation exercise in 2020. Surrey County Council would then propose to adopt this as part of the statutory LTP3.

Existing provision

There are two Strategic Road Network (SRN) routes which pass through Guildford borough:

- the M25 motorway, which enters the borough at the Wisley interchange (M25 junction 10 with the A3), and
- the A3 trunk road that connects London to Portsmouth, which runs through the borough from north-east to south-west, with a number of junctions which allow traffic to join or leave the A3.

The M3 motorway, which is also an SRN road to the north of our borough, is accessed via the A331 Blackwater Valley road from Ash. The direct connections to the SRN provide links to Greater London, Heathrow and Gatwick airports, ports and other key destinations. Heathrow and Gatwick airports and areas of south and west London are accessible by road within an hour. The remainder of this section considers the A3, being the key SRN in the borough.

From the south-west of the borough to its junction with the A31 Hog's Back, the A3 trunk road is a dual carriageway with two lanes on each carriageway. The speed limit is 70 miles per hour (mph). A dual carriageway is a class of highway with two carriageways for traffic travelling in each direction, separated by a central reservation.

For four kilometres between its junctions with the A31 Hog's Back and the A320 Stoke interchange, the A3 bisects the urban area of Guildford. The road here continues as a dual carriageway with two lanes in each direction. The road is of a lower standard in this section, with a gradient of as much as 4.5 per cent and tight bends with limited forward visibility, and so has a lower 50mph speed limit.

Pressures

Significant, recurrent traffic congestion is experienced during peak hours on the A3 trunk road through the urban area of Guildford, with queuing extending back onto the dual carriageway section of the eastbound A31, and to the east between the A247 Burnt Common interchange (the junction for Ripley) and the A3/M25 (Junction 10) Wisley interchange. Sections (between the interchanges) of the four kilometre stretch of the A3 between the A3/A31 Hog's Back and the A320 Stoke interchange, operate significantly in excess of their theoretical capacity during the morning and evening peak periods.

Together with the sequence of closely spaced, limited access interchanges, there is a strong relationship between traffic conditions on the A3 and those on the LRN in Guildford. This results in traffic having to travel through Guildford town centre when it does not need to. The result is that traffic

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¹⁰² Guildford Borough Council (2017) Guildford borough Infrastructure Delivery Plan: December 2017. Available at: https://www.guildford.gov.uk/newlocalplan/media/26648/Guildford-borough-Infrastructure-Delivery-Plan-December-2017/pdf/Guildford_borough_IDP_Dec_2017.pdf

congestion in Guildford can adversely affect conditions on the A3 and vice versa.

The A3 around Guildford also experiences a high accident rate including many minor accidents associated with peak time traffic merging at junctions, off peak accidents associated with speeding and the junctions, vehicles leaving the carriageway, skidding or overturning, accidents at night and accidents involving parked vehicles. The section of the A3 between the A31 and the A322 interchanges has the highest collision rate per km for all collision severities of any part of Highways England's M25 to Solent (A3 and M3) route (Highways England, April 2015). The area around the M25 junction 10/A3 Wisley interchange has the highest recorded collision rate across the Highways England network (Highways England, December 2016).

There is a lack of technology to guide drivers on the A3 which affects the ability of the route to cope with incidents when accidents occur however minor. The A3 is also not on the core routes patrolled by the Highways England Traffic Officer Service (Highways England, March 2017). Some operational resilience is provided by virtue of the A3 and M3 connecting via the A31/A331 from Guildford to Blackwater Valley, however this can lead to issues occurring on local roads as a result (Highways England, March 2017).

The A31 runs west from the town centre along the top of the Hogs Back and joins with the A331 Blackwater Valley Road at the western end of the borough linking to the M3 motorway. The A25 also runs in an east west direction between Guildford town and Reigate to the east.

The A principal roads in the Guildford urban area are heavily trafficked. The main radial roads to the town centre each carry, on average, 15,630 vehicles a day, with 18 per cent of traffic within the peak hours of 08:00–09:00 and 17:00–18:00¹⁰³. These roads are congested at peak times, most particularly on the one-way gyratory system and its approaches. This affects bus journey times and timekeeping. On the main routes into the town during the morning peak period, the average traffic speed is just 14mph.¹⁰⁴

Recent evidence with respect to traffic trends over the period 2008-2015 suggest that morning peak period traffic flows on the main routes entering and exiting Guildford were flat between 2008 and 2011 and have shown a gradual decrease since 2011¹⁰⁵ whilst journey time data for six routes through Guildford between 2008/09 and 2013/14 found a mixed picture, with an improvement in journey times on key southbound routes and a marginal deterioration in the northbound routes.¹⁰⁶

In the west of the borough, incidents on the A331 Blackwater Valley Route and the A31 Hog's Back can cause rat-running on roads in Ash and Tongham, particularly on Oxenden Road and Manor Road. Both these roads are used to access the A331 and are congested at peak times, particularly the approaches to the A331 roundabout and the Greyhound roundabout respectively. The level crossing on the A323 Ash Church Road by Ash Station also experiences build up of traffic at peak times which results in traffic rat-running on inappropriate roads to avoid the crossing. Although the road carries significant volumes of traffic, this is considered to be limited by the presence of the level crossing, which is closed around eight times each hour, which can amount to up to 25 minutes each hour. The downtimes are predicted by Network Rail to increase significantly within the Local Plan period and is a current safety issue for them.¹⁰⁷

To the east of the borough, the A25 carries a significant volume of through traffic. It passes through a number of villages, and has an adverse effect on the local community in terms of severance and local environmental impacts.¹⁰⁸

The borough is well served by rail with direct lines to London, Portsmouth, Reading and Gatwick. There are twelve rail stations in the borough. These can be classified using Network Rail's six

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¹⁰³ Surrey County Council (2011). Travel SMART in Surrey: Surrey's Large Bid to the Local Sustainable Transport Fund 104 Ibid.

¹⁰⁵ Guildford Borough Council (February 2017). Borough, Economy and Infrastructure EAB Report: Sustainable Movement Corridor – Update.

¹⁰⁶ Surrey County Council (22 June 2016) Surrey County Council Local Committee (Guildford) – Travel SMART programme close overview.

 ¹⁰⁷ Guildford Borough Council (2017) Guildford borough Infrastructure Delivery Plan: December 2017. Available at: https://www.guildford.gov.uk/newlocalplan/media/26648/Guildford-borough-Infrastructure-Delivery-Plan-December-2017/pdf/Guildford_borough_IDP_Dec_2017.pdf
 108 Ibid.

category classification system as follows:

- B Regional Hub: Guildford;
- D Medium Staffed: Ash Vale, Effingham Junction, Horsley, London Road (Guildford);
- E Small Staffed: Ash, Clandon, North Camp; and
- F Small Unstaffed: Chilworth, Gomshall, Shalford, Wanborough.

There were over 11 million estimated entries and exits made at the twelve stations in 2016/17, including 8.2 million at Guildford rail station. 109

Car ownership data suggests that there is an average of 1.49 cars per household in the borough, compared with 1.35 in the South East and 1.16 in England.¹¹⁰

Figure 3.19 below illustrates that the majority of Guildford's residents commute to work by driving a car or a van.

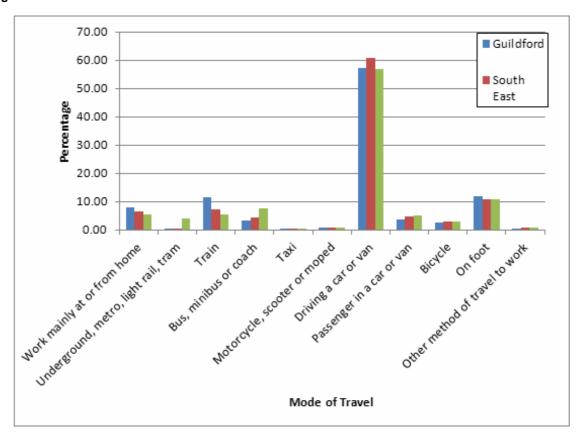


Figure 3.19: Travel to work

Source: Census (2011) Cars or Vans [online] available at: www.neighbourhood.statistics.gov.uk

The average distance travelled to work in Guildford is 15.74km, which is slightly higher than for the South East (14.89km) and England (13.31km).¹¹¹ Given that the majority of people travel to work by car, and of those travelling by public transport the majority travel by train, this suggests that many people are travelling outside the borough to access employment.

The present form and standard of the SRN serving the borough is deficient in quality and capacity, most particularly:

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¹⁰⁹ Estimates of Station Usage 2016-17 (Office of Rail and Road, December 2017)

Census (2011) Cars or Vans [online] available at: www.neighbourhood.statistics.gov.uk/Census (2001) Travel to work statistics [online] available at: www.neighbourhood.statistics.gov.uk/

- The A3 through the urban area of Guildford experiences significant, recurrent congestion, a strong adverse relationship with traffic conditions on the LRN, a high accident rate, significant issues of noise and community severance.
- The M25 Junction 10/A3 Wisley interchange experiences which experiences significant, recurrent congestion and has a poor safety record.

In recognition of these issues, the Government, through the first RIS, has mandated Highways England to transform the A3 trunk road, its junction with the M25 motorway and the M25 motorway northwards from this junction, all within our borough. These schemes are under development. The implementation of all three RIS schemes is required to be able to accommodate future planned growth both within and outside Guildford borough.

The Government has committed funding for two early, targeted improvement schemes for the Guildford section of the A3, primarily to improve road safety but also providing some congestion relief. A further two targeted improvement schemes are also under development.

Three improved junctions with the A3 trunk road are proposed to be delivered by developers in order to achieve appropriate vehicular access to their sites.

Traffic noise

Defra has published strategic noise map data that give a snapshot of the estimated noise from major road and rail sources across England in 2017. The data was developed as part of implementing the Environmental Noise Directive¹¹². This data helps transport authorities to better identify and prioritise relevant local action on noise. It is also be useful for planners, academics and others working to assess noise and its impacts. According to the Defra's noise map data, noise levels on the A3 running through Guildford are excessive on some sections of the road and its vicinity and can potentially have impacts on human health (see **Figure 3.20**).

Figure 3.20: The noise from the A3 in Guildford

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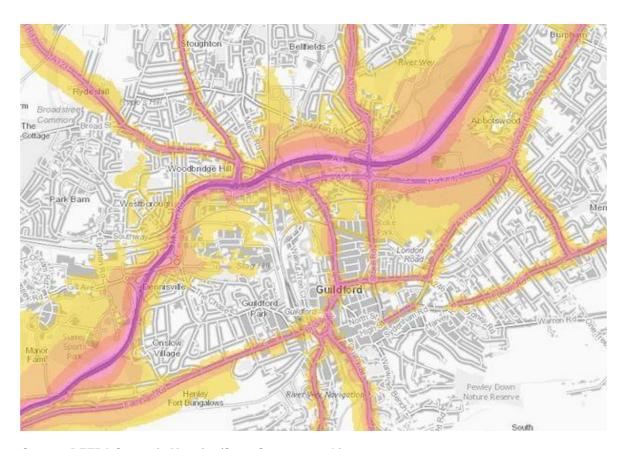
¹¹² Environmental Noise Directive Directive 2002/49/EC relating to the assessment and management of environmental noise (the Environmental Noise Directive – END) is the main EU instrument to identify noise pollution levels and to trigger the necessary action both at Member State and at EU level.

To pursue its stated aims, the Environmental Noise Directive focuses on three action areas:

the determination of exposure to environmental noise

[•] ensuring that information on environmental noise and its effects is made available to the public

[·] preventing and reducing environmental noise where necessary and preserving environmental noise quality where it is good



Source: DEFRA Strategic Mapping/Open Government Licence

Where the darkest purple colour indicates an average noise level of 75.0 dB and over, the lighter shade of purple is between 70.0 and 74.9, the orange between 65.0 and 69.9, the darker yellow between 60.0 and 64.9 and the brighter yellow between 55.0 and 59.9.

Long sections of the A3 in the Guildford urban area and two discrete locations in the wider borough by junctions – the B3000 interchange near Hurtmore and the A247 Burnt Common interchange (the junction for Ripley) – are designated as First Priority Locations for noise action planning through the Noise Action Plan: Roads (including Major Roads – Environmental Noise (England) Regulations 2006, as amended (Department for Environment, Food and Rural Affairs (Defra), 2014). Other sections of the A3 as identified as Important Areas for noise action planning. The M25 to Solent Route Strategy (Highways England, March 2017) identifies that noise is an issue 'notably along the A3 at Guildford'. 113

Sections of the A31 Hog's Back, A322 Worplesdon Road, A320 Woking Road and A25 Ladymead are identified as First Priority Locations for noise action planning (Defra, 2014). The same source designates sections on the A322 Woodbridge Road, A281 Millbrook, A281 Shalford Road, A320 Woking Road, A322 Worplesdon Road in Guildford, the A331 Blackwater Valley Route and A323 Aldershot Road in Ash, as Important Areas for Noise Action Planning.¹¹⁴

Establishing links between the transport noise and public health

Excessive noise can cause stress, interfere with sleep and affect people's health and quality of life. Traffic is also a major contributing factor to effects on habitats. Noise pollution due to road traffic is a potential threat to human health. Population residing along the busy traffic lanes is continuously

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¹¹³ Guildford Borough Council (2017) Guildford borough Infrastructure Delivery Plan: December 2017. Available at: https://www.guildford.gov.uk/newlocalplan/media/26648/Guildford-borough-Infrastructure-Delivery-Plan-December-2017/pdf/Guildford_borough_IDP_Dec_2017.pdf

¹¹⁴ Ibid

exposed to the sound levels which are above the permissible limits. This constant exposure to noise pollution is a cause of concern as it leads to several adverse impacts on human health. Traffic noise causes irritation and annoyance, sleep disturbances, cardiovascular disease, risk of stroke, diabetes, hypertension and loss of hearing. It also results in decreased work performance.¹¹⁵

Trends

Two AQMAs have been declared in 2018 and 2019, with the third AQMA is likely to be declared in the near future.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	The borough experiences high levels of traffic congestion in the town centre and on major routes during peak hours.	
	For those without a car, access to a range of facilities in rural areas is an issue	
	Development in the borough has the potential to exacerbate congestion.	
	There are currently two Air Quality Management Areas in the borough with traffic emissions being the main source of pollution.	
	Adverse economic, social and environmental impacts of high traffic volumes and a culture of dependence on private car use including recurrent traffic congestion on certain parts of the network at certain times of day, road collisions, community severance, obesity, noise pollution, local air pollution, greenhouse gas emissions, high demand for parking, and amenity of local neighbourhoods.	
Opportunities	Cycling networks to be extended in conformity with the Surrey cycling strategy.	
Evolution without the Plan	In the absence of the Plan, the opportunity to maximise the use of the sustainable transport modes of walking, cycling, and the use of public and community transport, and opportunities for people with disabilities to access all modes of transport will be realised through <i>Policy ID3:</i> Sustainable transport for new developments. Although the site allocations and the proposals in the LPSS will provide opportunities to use active modes and may result in a modest modal shift over the period to 2034, there will be still an absolute increase in overall traffic volumes. Accordingly, schemes to increase highway capacity and improve road safety were included in the LSPP in order to mitigate the principal adverse material impacts of this forecast growth in traffic volumes. AECOM SA Report (2017) found that: 'Whilst transport/traffic constraints are widespread across Guildford Borough, it is apparent that the spatial strategy has been developed in order to reflect variations in constraint and opportunity, most notably through focusing growth at locations along a Sustainable Movement Corridor in the urban area of Guildford, and at locations in proximity to a rail station. Policy commitments regarding the phasing of infrastructure are also of critical importance.'	

¹¹⁵ Devi Singh, Neeraj Kumari and Pooja Sharma (2018) A Review of Adverse Effects of Road Traffic Noise on Human. Fluctuation and Noise LettersVol. 17, No. 01, 1830001 (2018) Review PaperHealth. Available at: https://www.worldscientific.com/doi/10.1142/S021947751830001X

Implications of the Policy Review

A policy option to achieve a comprehensive Guildford borough cycle network, with the Policies Map reflecting a defined network for which the Council, working with partners, will undertake or promote measures to encourage cycling, including improvements to the safety and convenience of the routes, the designation of cycle tracks, the designation of cycle lanes, and the signposting and the provision of cycle parking facilities.

A policy option to define standards for the provision of off-street car parking for new developments. Depending on whether the chosen policy option defines standards as maxima, minima or expected levels in the borough or in different areas of the borough this will, all other factors being equal, have impacts with respect to the optimisation of the density of developments, the level of car trip making associated with new developments, and the potential for congested on-street parking in new developments and overspill parking on adjacent local streets.



Suggested SA Objectives

15. To encourage the use of sustainable forms of transport (walking, cycling, bus and rail)

3.6 Housing

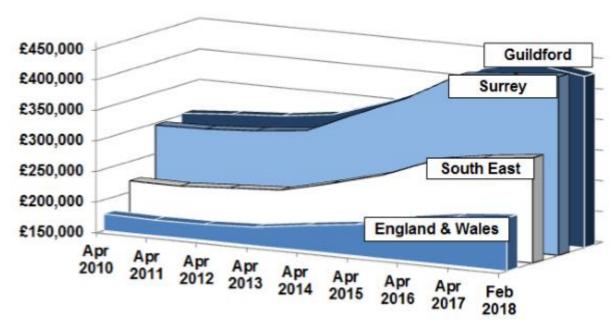
Housing is a key issue of significant importance for the borough, with high house prices, high demand and a shortage of both market and affordable housing. 116 The high cost of housing in Guildford is a major factor affecting supply. The high cost of housing in Guildford is apparent in both the owner-occupied and private rented sectors. In 2018, house prices were almost 70 per cent above the average for England and well above the average for the South East (see **Figure 3.21**). There is an ongoing shortage of affordable housing, particularly for first time buyers. 117

Figure 3.21 Average House Prices (all property types)

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¹¹⁶ Guildford Borough Council (2017) Topic Paper: Housing type, tenure and mix December 2017. To accompany Guildford borough Submission Local Plan: strategy and sites, Guildford Borough [online].
Available at: https://www.guildford.gov.uk/newlocalplan/media/26508/Topic-Paper-2017---Housing-Type-Tenure-and-Mix/pdf/Housing-Type-Tenure-and-Mix-Topic Paper.pdf

¹¹⁷ Guildford Borough Council (2015) 2015-2020 Guildford Housing Strategy - Statistical Update full year 2016-17



Source: Land Registry: House price index

AECOM identified expected employment growth of 17,700 in the Borough between 2013-33, based on their estimate of 89,600 jobs in Guildford at the base date in 2015, based on official data sources, and applying to this the average growth rates for the Borough of three econometric forecasts from Experian, Oxford Economics and Cambridge Econometrics.¹¹⁸

The 2016-based Household Projections¹¹⁹ show household growth of 6,032 in Guildford Borough between 2015-34, an increase of 10.8%. This compares to an increase of 10,353 (18.2%) in the previous 2014-based Household Projections. This difference reflects differences in the population growth (overall and by age) between the projections, and in particular by their migration assumptions.¹²⁰

Increases in Guildford property values have produced huge increases in equity for many Guildford homeowners and Guildford buy to let landlords, yet on the other side of the coin also making housing unaffordable for other people. The best measure of the affordability of housing is the ratio of Guildford property values to Guildford average earnings (i.e. salary/wages). The ratio works on the basis the higher the ratio, the less affordable properties are. The lower quartile house price to lower quartile income ratio (the DCLG's preferred measure of housing "affordability") has been increasing steadily since 1997, as illustrated in **Figure 3.22.** The ratio indicates the multiples of salary required to purchase a home; it has increased from five times the salary in 1997 to over 12.5 times the salary in 2018. The implications of this are that those on lower incomes are unable to afford to buy their own homes.

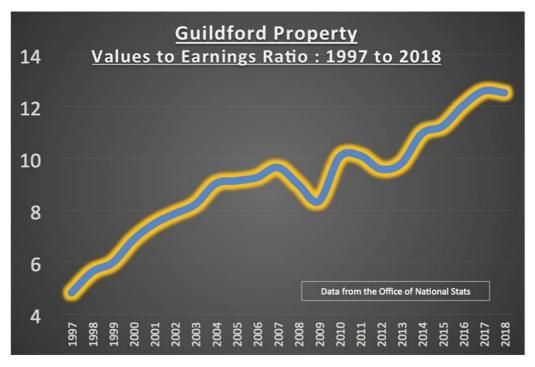
Figure 3.22: Guildford house price to earnings ratio 1997-2018

¹²⁰ Ibid.

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¹¹⁸ West Surrey Strategic Housing Market Assessment: Guildford Addendum Report 2017 Guildford Borough Council Final Report – March 2017 GL Hearn. Available at: <a href="https://www.guildford.gov.uk/newlocalplan/media/23816/West-Surrey-SHMA-Guildford-Addendum-Report-2017/pdf/West-Surrey-SHMA-Guildford-Addendum-Report-2017/pdf/West-Surrey-SHMA-Guildford-Addendum-Report-2017/pdf

https://www.surreyi.gov.uk/dataset/2016-based-household-projections



Source: ONS

In 1997, the average value of a Guildford property was 4.8 times higher than the average annual wage in Guildford, in 2007 it peaked at 9.6, yet two years later it had dropped to 8.3 and since then has slowly risen to 12.5 times higher.

It can be seen that even though property in Guildford became more affordable after the 2007/8 property crash (i.e. the ratio dropped), in subsequent years, with house values rising but earnings/salaries not keeping up, the ratio started to rise. This has meant there has been a decline in affordability of property in Guildford over the last five years - so for those on particularly low incomes or with little capital, it unfortunately means that buying a Guildford home will never become an option. 121 Therefore, the demand for private rented properties in Guildford will continue to grow as many young Guildford people are deciding to rent instead of buy their own house.

The study, by Post Office Money¹²², found that, there were eight towns or cities where no local authorities had average house prices affordable to local first-time buyers, including Warwick (£305,000), Guildford (£450,000), Oxford (£392,500), Brighton (£352,500), Cambridge (£427,500) and York (£237,500), placing Guildford to be one of eight most unaffordable areas for first-time buyers in the UK. Although each of these towns had a lower average house price than London, they also had significantly lower first-time buyer salaries, meaning fewer people could afford to buy a first home.

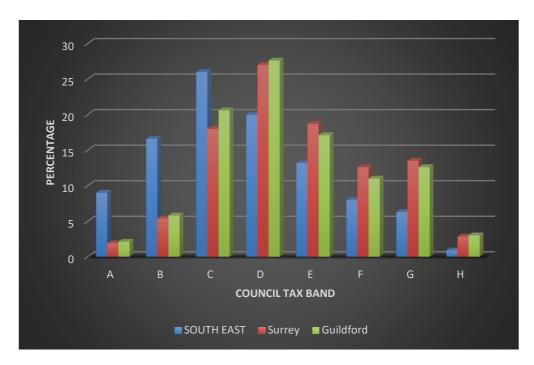
The distribution of properties is biased towards the higher Council Tax bandings compared with the South East and Surrey, as shown in **Figure 3.23.**

Figure 3.23: Dwellings by council tax band (2019)

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¹²¹ Chantries Independent Estate Agents. The Affordability of Buying Property in Guildford. Available at: https://www.chantries.net/blog/the-affordability-of-buying-property-in-quildford/100030

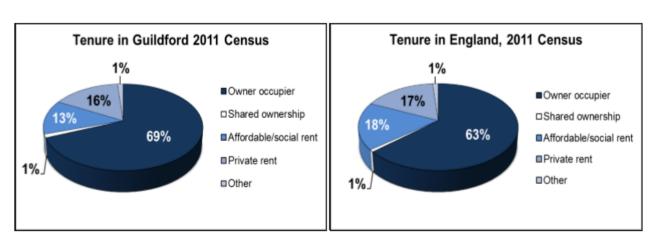
¹²² Victorstone Property Consultants. The Most Affordable Boroughs For First-Time Buyers. Available at: https://www.victorstone.co.uk/news/6693/The-Most-Affordable-Boroughs-For-First-Time-Buyers



Source: Valuation Office Agency, 2019

The charts below compare the housing tenure breakdown for Guildford with that of England, from the 2011 census. This illustrates the higher percentage of owner-occupation and lower level of Affordable/social rental in Guildford. 123

Figure 3.24: Housing tenure (2011)



Source: Census 2011

The West Surrey Strategic Housing Market Assessment (SHMA) commissioned by Waverley, Woking and Guildford Borough Councils estimates that the number of overcrowded households in Guildford is slightly lower at 3.7% (1,980) when compared with the South East at 3.8% and the England average of 4.8% of households. Nevertheless, the number of overcrowded households in Guildford presents a significant increase from 1.9% (1,058) published in the previous SA Scoping Report 2013. Similar negative trend is also evident for the South East and the England average with only 2.0% and 2.7% of households being overcrowded back in 2009, respectively.

Conversely, a relatively high proportion of households are recorded as being under-occupied:

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¹²³ Guildford Borough Council (2015) 2015-2020 Guildford Housing Strategy - Statistical Update full year 2016-17

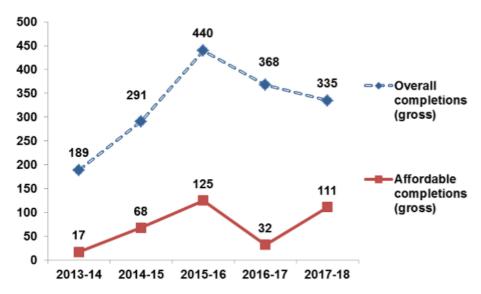
71.5%¹²⁴, which presents an increase from 43.8% in 2009. The SHMA estimates that in the borough, the net annual affordable housing need is 517 homes a year¹²⁵. The evidence suggests that 30% of the identified affordable housing need is for intermediate housing with the remaining 70% for affordable rent.

The population of those aged 75+ is forecast to increase from 11,218 in 2015 to 17,460 in 2034 (and increase if 55.6%). This results in a need for 56 specialist accommodation units per annum and 23 residential care accommodation units per annum. 126 Taking into account the latest household projections, affordable housing need, economic growth and student growth, the objectively assessed housing need (OAN) for Guildford is 562 dwellings per annum¹²⁷. Whilst this is Guilford's OAN it is important to note that this would not provide sufficient affordable homes to meet fully identified need. The greatest need for affordable units is 1 and 2-bedroom whilst for market homes it is 2 and 3bedroom homes.

Affordable housing delivery

Developing new affordable homes in Guildford to boost the social housing stock is an ongoing challenge given high land values and difficulty accessing suitable sites. In Figure 3.25 below, overall completions includes all new homes, both private and affordable (gross figure including replacement housing). New affordable homes' is housing (for rent or partrent/part-buy) provided at below market rates for people who cannot meet their housing needs on the open market. 2017-18 saw a good percentage (33%) of affordable completions, but this followed a low number for the previous year. 128

Figure 3.25: Delivery of new housing in Guildford



of Guildford Borough Source: Overview Homelessness the Council, in Borough, https://www2.guildford.gov.uk/councilmeetings/documents/s10921/ltem%2006%202%20-%20Homelessness%20Strategy%20-%20App%202%20-%20Evidence%20base.pdf

Housing trends

The number of overcrowded households in Guildford is slightly lower at 3.7% (1,980) compared to the national average of 3.8%, however the current figure still presents a significant increase of overcrowded households from 1.9% (1,058) published in the previous SA Scoping report. Conversely,

¹²⁴ West Surrey Strategic Housing Market Assessment (2015). Available at: https://www.guildford.gov.uk/newlocalplan/shma

¹²⁵ West Surrey Strategic Housing Market Assessment: Guildford Addendum 2017. Available at: https://www.guildford.gov.uk/newlocalplan/shma

¹²⁶ Ibid.

¹²⁷ Inspector's Report for the Local Plan: Strategy and Sites 2019. Available at:

https://www.guildford.gov.uk/newlocalplan/examination

¹²⁸ https://www2.guildford.gov.uk/councilmeetings/documents/s10921/ltem%2006%202%20-%20Homelessness%20Strategy%20-%20App%202%20-%20Evidence%20base.pdf

a relatively high proportion of households are recorded as being under-occupied: 71.5%, which presents an increase from 43.8% in 2009. The affordability ratio indicates the multiples of salary required to purchase a home; it has increased from five times the salary in 1997 to over 12.5 times the salary in 2018.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	 High average house prices create affordability problems for local people, first time buyers and essential key workers. The number of overcrowded households in Guildford has significantly increased. There is a deficit in affordable housing supply and the current completion rate is below the annual level required to address the deficit. The need for accommodation for people with care and support needs is likely to increase, given the projected increases in population and the proportion of older people in the borough. Achieving balance between sustainable higher density developments and the impact of density and development on the character of local
	areas.
Opportunities	 Provide housing of a suitable mix and type. Possibility to introduce additional criteria to ensure sustainable and effective use of land.
Evolution without the Plan	 The population of the borough is expected to increase in future years. This is likely to exacerbate current shortages of housing and increase housing need. Furthermore, the need for affordable housing for local people unable to compete in the open market is likely to continue to be unmet. The issue of overcrowding and affordability ratio will worsen. This is a problem shared by the rest of the South East region. Without the Plan, it is likely that house prices will continue to rise across the County. The Plan offers opportunity to facilitate and expedite the delivery of affordable housing across the borough.
Implications of the Policy Review	The Plan may need to include a policy that enables the provision of affordable, self-build and custom-built housing, having regard for the register the authority has already established. The Plan should allocate sufficient pitches and plots to meet need and include criteria for assessing planning applications for Traveller sites and allocations. Many of these considerations have already been addressed in Local Plan: Strategy and Sites (LPSS) 2015-2034 through inclusion of the <i>Policy S2: Planning for the borough – our spatial development strategy.</i>



Suggested SA Objectives	To meet housing requirements of the whole community and provide housing of a suitable mix and type
Objectives	provide flousing of a suitable flux and type

3.7 Historic environment

Within Guildford borough there are many important heritage assets, both designated and non-designated, that contribute to its character, sense of place, attractiveness and quality of life. These include significant buildings, monuments, sites, places, areas and landscapes that have a degree of heritage interest. These assets are invaluable and irreplaceable. They also impact on the economic well-being of the borough. ¹²⁹

The Council maintains a full record of heritage assets in the Borough. Guildford has over 1,000 buildings that are of special architectural or historic interest which are included in the Statutory List. ¹³⁰There are also buildings in the Borough that are classified as Locally Listed Buildings.

Key elements of the historic environment of Guildford borough are 40 Conservation Areas, over 1,000 Listed Buildings and over 200 Locally Listed Buildings. There are also eight Historic Gardens, including the Royal Horticultural Society's Gardens at Wisley (Grade II*), Sutton Place (Grade II*) and Albury Park, and 31 Scheduled Monuments. There are 52 historic parks or gardens within Guildford borough, and a gazetteer listing the details available on the Guildford Borough Council website.

Nationally designated parks and gardens are identified on the Historic England National Heritage List for England. They are as follows:

- ROYAL HORTICULTURAL SOCIETY'S GARDENS, WISLEY, Wisley, Guildford, Grade II*
- LITTLEWORTH CROSS (FORMERLY HETHERSETT) Littleworth Cross, Seale and Sands, Guildford, Surrey, Grade II
- ALBURY PARK, Shere, Guildford, Surrey, Grade I
- CLANDON PARK, West Clandon, Guildford, Surrey, Grade II
- MERROW GRANGE, Merrow Grange, Guildford, Surrey, Grade II
- THE JELLICOE ROOF GARDEN, GUILDFORD, Guildford, Surrey, Grade II
- HATCHLANDS, East Clandon, Guildford, Surrey, Grade II
- COMPTON CEMETERY (ALSO KNOWN AS WATTS CEMETERY), Dow
- Lane, Compton, Guildford, Surrey, Compton, Guildford, Surrey, Grade II*

As of 2019, the number of buildings on the Heritage at Risk register has increased from two to six since 2013:

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¹²⁹ Guildford Borough Council (2016) Guildford borough Historic Environment Information April 2016 [online]. Available at: https://www.guildford.gov.uk/newlocalplan/media/21346/Historic-Environment-Information.pdf
Information/pdf/Historic_Environment_Information.pdf

¹³⁰ Copies of the list for Guildford can be viewed at our Main Reception at Millmead House or listed properties can be individually viewed on our interactive map of planning information online at http://www.guildford.gov.uk/planningmap.

- Abinger Hammer, Shere Guildford Abinger Hammer is identified as a Conservation area at risk. It is assessed as a Conservation Area in poor condition and deteriorating.
- Church of Holy Trinity, High Street, Guildford Guildford Town centre church, mainly built of brick in the mid-C18. There are areas of the church in poor condition including defective parapet gutters, cracked render to
- the inner tower parapets, evidence of leaks internally in the north and south eastern corners to the aisles, slipped slates, open joints to the brick and stonework, and debris in the drainage channels and gullies. A successful application has been made to the Heritage Lottery Fund for grant aid which should allow the repair project to commence.
- Church of St Luke, Burpham Lane, Burpham Guildford Small village church designed by Henry Woodyer in 1859. Built of Bargate stone with tiled roofs. At risk due to defective roof tiling and rainwater disposal. PCC has been encouraged to apply for funding for repairs.
- Church of St Paul, Poyle Road, Tongham Guildford Church of 1865 by Ewan Christian. Apsed church with shingled fleche and decorative banded fishscale roof. Roof and rainwater goods now in need of repairs, along with some isolated stone repairs.
- St Mary's Church, Quarry Street, Guildford Guildford Medieval town centre church. At risk
 due to decaying stonework including the tower and window surrounds. A first phase of grantaided repairs has been completed to the north aisle roof but further phases of repair work are
 required.
- Clandon Park, West Clandon Guildford (This description was written prior to the fire at Clandon Park) Lancelot Brown designed Clandon's landscape park c1776-81. The house and garden are owned by the National Trust but the park is privately owned. Unsympathetic or uncoordinated park use, facilities and access currently affects the overall integrity of the design and the setting of the house. An office development within the park included a legal agreement for a joint conservation management plan but was never signed. Future expansion of Guildford could further affect the park and its setting. A joint working approach and a Conservation Management Plan would reverse the decline.

Guildford Borough Council has published 11 Conservation Area Character Appraisals:

- Charlotteville and Warren Road
- Bridge Street
- St Catherine's
- Town Centre Conservation Area
- Waterden Road
- Abbotswood
- Chilworth
- East Clandon
- Onslow Village
- Pirbright Area
- Shere

Many areas within Guildford borough are identified as areas of high archaeological potential. These sites are identified by Surrey County Council. Recently identified sites are:

- Land at Manor Farm Cottages, Beechcroft Drive, Guildford Medieva
- Land at The Copse, Ripley (archaeological assessment undertaken and planning permission granted)
- St Marthas Priory, Halfpenny Lane, Chilworth -Iron Age
- Land at Lane End Farm, Lawbrook Lane, Gomshall Prehistoric
- Land West of Ockham Road South, East Horsley Medieval
- Manor House, Mill Lane, Byfleet Medieval and Prehistoric
- Guildford, Fire Station, Ladymead, Guildford Palaeolithic and Mesolithic
- 51 Alabanza, Burpham Lane, Guildford Roman

- Land to East Liongate House, Ladymead, Guildford Mesolithic Bronze Age
- Land at Winterfold, Row Lane, Albury (Crosses border of GBC) Bronze Age

The Historic Environment Record (HER) held by SCC holds a comprehensive information on historic environment and is the principal historic environment information source referenced with the NPPF.

Historic environment trends

As of 2019, the number of buildings on the Heritage at Risk register has increased from two to six since 2013.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	 There is a need to conserve the historic and cultural heritage for future generations as it is an essential part of what makes the borough a distinct place. Sites identified through the process of producing a Strategic Housing Land Availability Assessment, Employment Land Assessment and Local Plan sites, are likely to include some locations within settlements that are within or close to heritage assets. Development within the setting of these heritage assets has potential to adversely affect these assets.
Opportunities	To including specific policies on listed and locally listed buildings, conservation areas, scheduled ancient monuments and other sites and monuments of national importance and historic parks and garden
Evolution without the Plan	 The number of Listed Buildings, Conservation Areas, Scheduled Ancient Monuments and Historic Parks and Gardens means that much of the borough's character and distinctive built heritage will continue to be conserved and protected from future development. However, if development of these sites (or in their setting) does occur, dependent on form and design, the cultural heritage interests could potentially be affected. Without the Plan undesignated sites (archaeology, locally listed buildings, heritage landscapes et.) would be at risk of loss as they largely lack protection or consideration through other means. In the absence of the Plan, some designated assets may still be at risk from neglect, decay or inappropriate development.
Implications of the Policy Review	The Plan must ensure that historic environment policies enable the sustainable use of historic buildings, which do not harm or remove their significance. The Plan must ensure the conservation and protection and enhancement of heritage assets including Listed Buildings, Conservation Areas and Scheduled Ancient Monuments, and their settings.



Suggested	SA
Objectives	

17. To protect, enhance, and where appropriate make accessible, the archaeological and historic environments and cultural assets of Guildford, for the benefit of residents and visitors

3.8 Climate change

Introduction

South East England demonstrates the dual challenge of climate change: the need to reduce the environmental impact of prosperity and the provision of infrastructure and housing to accommodate it, and the need to address the particular vulnerability of the region in order to ensure resilience. ¹³¹ The UK Climate Change Risk Assessment (CCRA) (2017)¹³² key findings reveal that without action we could see:

- Increases in the frequency of flooding affecting people's homes and wellbeing, especially for vulnerable groups (e.g. those affected by poverty, older people, people in poor health and those with disabilities), and the operation of businesses and critical infrastructure systems.
 Without action, a range of important infrastructure such as roads and railways may be affected by a significantly increased risk of flooding based on future population growth and if no adaptive action is taken.
- Summer overheating potentially contributing to heat-related health problems. Premature
 deaths due to hotter summers are projected to increase (e.g. by between 580 and 5900 by
 the 2050s). This is likely to place different burdens on National Health Service (NHS), public
 health and social care services. Other health risks that may increase include problems
 caused by ground-level ozone and by marine and freshwater pathogens.
- Reductions in water availability, particularly during the summer, leading to more frequent
 water use restrictions and, in the longer term, water shortages. The gap between demand and
 availability will potentially widen, impacting homes, businesses, schools and hospitals. By the
 2050s, between 27 million and 59 million people in the UK may be living in areas affected by
 water supply-demand deficits (based on existing population levels).
- The South East is the most wooded region of England and has the highest concentration of
 ancient woodlands in the country. It also incurs the greatest risk of forest species losses in the
 country due to climate change. Climate change may alter the impact that agriculture and
 forestry have on the natural environment and the value of the ecosystem services provided.
- Climate change may exacerbate and/or alter the pressures placed on the natural
 environment, especially those caused by human activity. Heightened impacts may in turn
 affect the way humans are able to use the environment for example growing crops or
 obtaining high quality drinking water. The natural environment is crucial to our ability to adapt,
 reducing flood risk, cooling cities and storing water.

Climate change mitigation

Guildford Borough's Carbon Footprint

This section of the report provides carbon dioxide emissions estimates 2017 for Guildford compared

¹³¹ https://www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Synthesis-Report-Committee-on-Climate-Change.pdf

¹³² HM Government (2017) UK Climate Change Risk Assessment 2017, Published 18 January 2017, Presented to Parliament pursuant to Section 56 of the Climate Change Act 2008. Available at: https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-2017

to other Local Authorities.¹³³ The purpose of these estimates is to assist to understand and assess changes in Local Authority emissions. Local Authorities are not mandated to have greenhouse gas emissions reductions targets, but some Local Authorities do have such targets. These statistics allow Local Authorities to track their GHG emissions trends over time, and measure progress against any targets they have.

Emissions per capita allow comparison between areas of different population size. Carbon dioxide emissions total per capita¹³⁴ in Guildford are slightly higher than in Surrey or the rest of the country, as illustrated in **Figure 3.26**. However, in line with the general trend, carbon dioxide emissions per capita in Guildford declined by 2.6 tonnes of CO2 between 2008 and 2017.

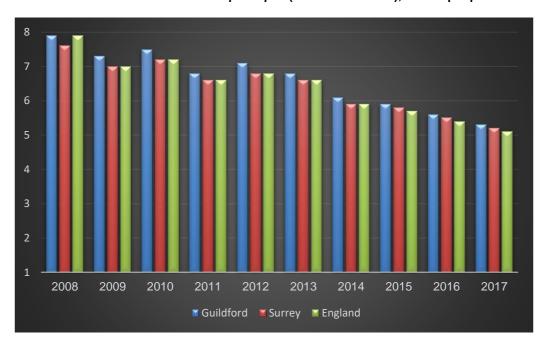


Figure 3.26: CO2 emissions estimates - total per capita (from 2008 to 2017), tonnes per person

Source: Department for Business, Energy & Industrial Strategy

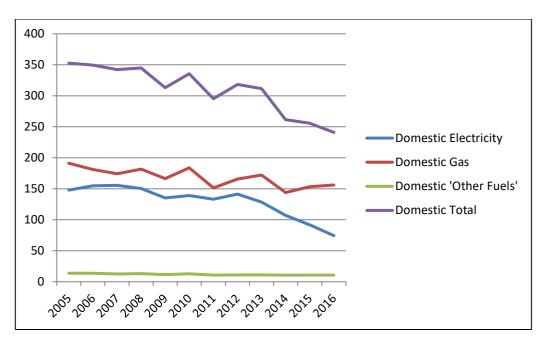
Figure 3.27 shows the change in Guildford Borough's domestic CO₂ emissions for the period from 2005 to 2016, and illustrates that the total domestic CO₂ emissions have been reduced by 32% from 352.7 to 241 kt CO₂.

Figure 3.27: Guildford Borough CO₂ emissions estimates 2005-2016 (kt CO₂)

133 The data show emissions allocated on an "end-user" basis where emissions are distributed according to the point of energy consumption (or point of emission if not energy related). Except for the energy industry, emissions from the production of goods are assigned to where the production takes place. Therefore, emissions from the production of goods which are exported will be included, and emissions from the production of goods which are imported are excluded.

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¹³⁴ Total per capita - This is a measure of estimated carbon dioxide emissions per head of population for all sectors at a local authority level. The purpose of these estimates is to assist those using local emissions accounting as a tool in developing emissions reduction strategies. It should be noted that circumstances vary enormously between authorities, and local authorities have relatively little influence over some types of emissions, and for these reasons these statistics should be interpreted with caution.



Source: Data was produced using the BEIS National Statistics from: https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2016

Guildford's domestic CO₂ emissions per capita¹³⁵ have reduced significantly from 2.8 tonnes per person in 2008 to 1.5 tonnes per person in 2017, and are at the same level as the national average, despite a climate that is warmer and sunnier than other parts of the UK. This can be explained by high domestic energy consumption, which in turn may be a result of affluence and larger homes that tend to be detached. However, homes in our borough are also older and few have taken up the energy efficiency improvements offered through national retrofit schemes, which suggests poor energy efficiency may be both a cause of high domestic emissions, and an opportunity to reduce our emissions.

Carbon dioxide emissions within the scope of influence of Local Authorities

Alongside the full dataset, Department for Business, Energy & Industrial Strategy also published a "subset dataset" which represents carbon dioxide emissions within the scope of influence of Local Authorities. Unlike the full dataset, the dataset of emissions within the scope of Local Authorities excludes emissions that Local Authorities don't have direct influence over. The emissions that are removed from the full dataset are:

- Motorways all emissions from the "Transport (motorways)" sector have been removed.
- EU Emissions Trading System (EU ETS) sites these emissions have been removed from the "Large industrial installations" sector, with the exception of energy suppliers (e.g. power stations), whose emissions are indirectly included via the enduser estimates for electricity use. Note that not all the emissions from the "Large industrial installations" sector are produced by EU ETS installations, hence the fact that there are emissions remaining in this sector in the subset.
- Diesel railways all emissions from the "Diesel Railways" sector have been excluded:
- Land Use, Land Use Change, and Forestry all emissions belonging to the "LULUCF Net emissions" sector have been excluded.

¹³⁵ This is a measure of the carbon dioxide emissions for households per head of population. Domestic emissions represent emissions from energy consumption in and around the home, including emissions attributable to the use of electricity, but not activities by private individuals elsewhere, such as personal travel. This sector can be influenced by the fuel types used, the type and condition of the housing (including its insulation), the average temperature (urban areas can be much warmer and therefore easier to heat than rural areas), average household size, type of household and the income and preferences of the occupiers.

Table 3.8 provides 2017 CO2 emissions estimates by sector by boroughs within the scope of influence of Local Authorities. The Guildford Borough CO2 emissions per capita are 5.3 tonnes, which compares unfavourably with neighbouring authorities, although still being higher than per capita CO2 emissions for Surrey, the South East region and England, with 5.2, 4.8 and 5.1 tonnes respectively.

Table 3.8: CO₂ emissions estimates by sectors by borough, 2017 (tonnes CO₂)

Local Authority	Domestic	Transport	Industry & commerci al	Total CO2 (kilo tonnes)	Per Capita Emissions (t)
Guildford	227.5	442.6	167.4	782	5.3
Mole Valley	162.2	283.2	127.5	524.8	6.0
Epsom	126.5	80.9	44.9	251.2	3.2
Elmbridge	257.8	310.6	133.6	695.3	5.1
Reigate and Banstead	242.7	357.8	164.0	754.7	5.2
Runnymede	132.5	372.5	123.3	624.2	7.2
Spelthorne	147.2	197.4	97.9	440.5	4.4
Surrey Heath	150.9	268.8	126.9	536.1	6.0
Tandridge	157.8	418.3	79.1	632.2	7.2
Waverley	226.4	258.4	108.0	533.0	4.3
Woking	158.8	126.3	144.4	420.1	4.2
Surrey Total	1,990.3	3,116.7	1,317.0	6,194.3	5.2
South East Total	13,409.4	20,185.0	12,156.7	43,907.5	4.8
England Total	80,782.1	107,177.9	102,047.2	284,921.0	5.1

Source: Department for Business, Energy & Industrial Strategy

Energy consumption in Guildford

Table 3.9 below presents results of the total final energy estimates at a borough level in 2016. The total gas consumption figures in Guildford 1,142.1 GWh is the second highest amongst the neighbouring authorities, whilst the total electricity consumption of 592.9 GWh is the third highest level of consumption after Woking and Reigate and Banstead with 603.4 and 600.7 GWh respectively.

Table 3.9: Total final energy consumption by borough, 2016 (GWh)

	Gas		Electricity			
Borough	Industrial & Commerci al	Domesti c	Total	Industrial & Commerci al	Domesti c	Total
Guildford	335.1	807.0	1,142.1	334.8	258.1	592.9
Elmbridge	290.6	951.5	1,242.2	257.5	285.6	543.2
Mole Valley	244.1	571.1	815.1	234.5	176.7	411.2
Epsom Reigate and	99.1	479.9	579.0	94.2	132.6	226.8
Banstead	214.4	889.4	1,103.8	340.4	260.3	600.7
Runnymede	259.2	461.6	720.9	248.3	156.0	404.4
Spelthorne	122.5	530.8	653.4	198.1	171.1	369.2
Surrey Heath	184.2	569.5	753.7	225.3	161.4	386.7
Tandridge	111.2	545.9	657.2	133.1	174.4	307.5
Waverley	198.9	791.9	990.8	176.4	250.7	427.1
Woking	162.3	562.4	724.7	414.6	188.9	603.4
SOUTH EAST	17,923.8	44,040.9	61,964.6	21,408.7	15,865.4	37,274.1

Source: https://www.gov.uk/government/statistical-data-sets/total-final-energy-consumption-at-regionaland-local-authority-level

Renewable energy installations in Guildford

The following are notable renewable energy installations in the borough:

Hydro - In the summer of 2006 a new turbine was installed in the Toll House which generates electricity by utilising the flow of water in the river Wey. This renewable energy microgeneration scheme produces enough electricity to power 34 households every year. The electricity produced by the turbine goes into the local network. As of March 2012, the turbine has generated over 833,721 kilowatt hours. On average the turbine should generate 165,000 kilowatt hours per year; the investment payback period is approximately 13.5 years. 136 The project has proven to be highly successful and the turbine continues to generate sufficient electricity to power approximately fifty homes. In ten years of operation, the plant has generated over 1.5GWh of electricity which is passed directly to the grid.

Guildford conducted a Renewable Mapping Exercise in 2014-15. The results of this exercise confirm the importance of the river as and excellent opportunity to harvest heat and power from renewable sources. In the future, it is hoped that the hydro plant can be replicated at other suitable locations along the river, allowing Guildford to replicate this success and further develop its renewable energy sources.137

¹³⁶ www.guildford.gov.uk/hydro

¹³⁷ Association for Public Service Excellence (APSE) (2017) Ten years at Guildford's Hydro-electric plant (2017) Available at: https://www.apse.org.uk/apse/index.cfm/news/2017/ten-years-at-guildforde28099s-hydro-electric-plant/

• Combined Heat and Power (CHP) – In 2005 a CHP unit was installed at the Spectrum Leisure Centre in Guildford to provide one third of the complex's electricity and half of its heating, saving around 300 tonnes of carbon dioxide. The new CHP went live in February 2018. This unit generates heat and acts as the primary boiler for the venue, and also produces electricity as a by-product. This unit will of cost just under £600k to install. Over the first eight months of this financial year, the unit has saved £145k by comparison to "imported" utilities. In theory, the unit should generate the most savings in winter and we will continue to monitor the performance of the unit carefully. The savings are currently slightly exceeding the projected annual saving, however the level of savings are directly affected by fluctuations in the prices of gas and electricity. The pay back for this unit was originally estimated at less than three years.

An application to install 30,000 solar panels at a farm in Eashing was rejected in 2015 on the grounds of the proposed site being located in a sensitive landscape - the Surrey Hills Area of Outstanding Natural Beauty (AONB) and areas of great landscape value (AGLVs). This points to an issue of renewable energy sources to remain a topic for debate in Surrey. A lack of adequate planning policy and a clear direction from the government with regards to suitability of locations and sites for similar schemes balanced against the constraints to preserve the landscape and visual amenity by such a development. Identifying suitable locations for large scale renewable schemes in the Plan could resolve the above tensions that inhibit the deployment of renewable energy technology in the borough.

Climate change adaptation

Mitigation alone will not be adequate to address the issue of climate change. The weather and climate are already changing and will continue to do so for the foreseeable future. The South East of England is likely to face significant challenges from a changing climate and changing weather patterns, and this trend is expected to continue over the plan period and beyond.

Climate change risks for the South East of England include:

Businesses:

- An increase in the frequency and severity of flooding causing damage and affecting business continuity.
- Overheating of buildings affecting staff productivity.

Health and wellbeing:

- Disruption to health, social care and emergency management services and schools provision, from flooding, heatwaves and storms.
- Wildfire likelihood and severity set to increase due to climate change.
- Excess deaths and illness from overheating.
- Flooding poses multiple risks to people's health, such as heart attacks, trauma, an increase in
 waterborne infectious diseases, and common mental and post-traumatic stress disorders. Damp
 housing and damage to water and sanitation infrastructure can further reinforce the adverse
 effects on health. People living in the countryside face greater risks, owing to deteriorating
 housing and infrastructure and various vulnerabilities.

Buildings and infrastructure:

• Increased disruption, given that even minor incidents test the capacity of our infrastructure today and climate change is likely to exacerbate this.

¹³⁸ Surrey Leave, News, Cleaner energy will save Spectrum £50k (2013). Available at: https://www.getsurrey.co.uk/news/local-news/cleaner-energy-save-spectrum-50k-4846891

¹³⁹ Guildford Borough Council (2019) EAB Discussion Paper – New sport and entertainment venue. Available at: http://www2.guildford.gov.uk/councilmeetings/mgConvert2PDF.aspx?ID=12942

Agriculture and forestry:

- Stresses on woodlands and forest resources, via water stress and pests and diseases.
- Changes in growing conditions such as warmer, longer growing seasons may make new crops more viable, as well as making existing ones less viable.

Natural environment:

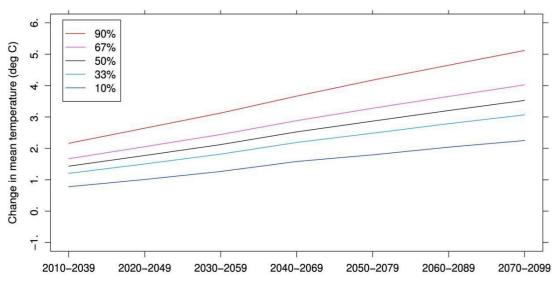
• Impact on biodiversity of habitats and species which are valued for the services they provide such as water and air purification, as well as their intrinsic value.

Water stress

The South East has been identified as an area of serious water stress.¹⁴⁰ The use of measures to reduce demand for clean water is fundamental to sustainable development in Guildford.

Current climate change projections for the UK suggest that by the 2050s, under the medium emissions scenario, summer temperatures may increase and summer rainfall may decrease. Annual mean temperature in the South East is predicted to increase between 1 and 3 degrees between 2010 and 2099 for the medium emissions scenario, with increasingly wetter winters and drier summers. 141 The temperature and winter precipitation and summer precipitation projections are shown in **Figure 3.28** and **Figure 3.29** respectively.

Figure 3.28: Annual change in mean temperature for medium emissions scenario



Source: UKCIP (2012) South East England Graphs [online] available at: http://ukclimateprojections.defra.gov.uk/21767

Short duration droughts (12-18 months) are likely to become more frequent, so that droughts similar to the 1976 could be more common despite the increased resilience of public water supply and more winter storage. Such droughts will have implications for water bodies and will likely result in reduced river flows, which in turn will have implications for biodiversity as well as water supplies.

¹⁴⁰ Environment Agency The case for change – current and future water availability [online]. Available at: http://publications.environment-agency.gov.uk/PDF/GEHO1111BVEP-E-E.pdf

¹⁴¹ UKCIP (2012) South East England Graphs [online]. Available at: http://ukclimateprojections.defra.gov.uk/21767

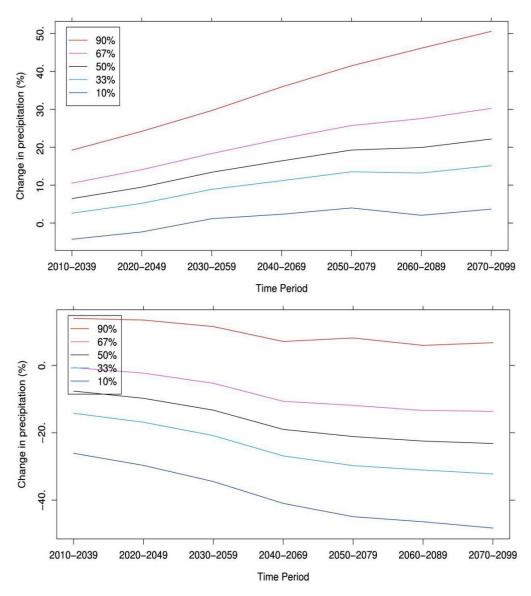
¹⁴² Environment Agency (2011) The case for change – current and future water. Available at: http://publications.environment-agency.gov.uk/PDF/GEHO1111BVEP-E-E.pdf

¹⁴³ Surrey Leave. Neil Shaw, 27 SEP 2019, Warning to gardeners of oncoming UK drought [online]. Available at: https://www.getsurrey.co.uk/news/uk-world-news/warning-gardeners-oncoming-uk-drought-16990721

In 2018, Guildford faced a water shortage as 'high demand' saw taps run dry in thousands of homes and emergency bottles handed out, as wildfires continue to burn across the country during the heatwave. Some properties and schools in Guildford had no water due to a 'technical issue' on the Thames Water pipes network, while there were similar outages 15 miles away in Haslemere due to a reservoir power failure.¹⁴⁴

In September 2019, the Royal Horticultural Society (RHS) warned that despite the recent rain, supplies were not where they needed to be, in the wake of two consecutive years of dry summers and winters. The warning comes as one water company, Affinity Water, which serves 3.6 million people in parts of London and the Home Counties, said drought conditions mean it may need to introduce a hosepipe ban in the spring. Water is a finite resource and despite the recent wet weather the county is nowhere near ensuring supplies are topped up for the year 2020.

Figure 3.29: Annual change in precipitation for winter (top) and summer (bottom) for medium emissions scenario



Source: UKCIP (2012) South East England Graphs [online] available at: http://ukclimateprojections.defra.gov.uk/21767

¹⁴⁴ Mark Duell for Mailonline, 3-4 July 2018, Britain screams for WATER! UK battles double crisis as taps run dry forcing schools to shut while raging fires devastate countryside amid searing heatwave [online]. Available at: https://www.dailymail.co.uk/news/article-5912799/Taps-run-dry-Guildford-UK-battles-water-crisis-amid-85F-heatwave.html

Wildfires

The UK Climate Projections 2018 indicate that weather conducive to wildfire ignition will increase and the wildfire season will extend. 145 Periods of drought in 2010, 2011, and 2012 were associated with increased wildfires and area burnt. 146 Ignitions could increase: if dry lightning strikes become more regular; 147 if accidental or deliberate ignitions become more frequent as people spend more time outside; 148 and if vegetation species distribution changes altering fuel loads and landscape fire resilience. 149

In April 2019, multiple wildfires break out across Surrey with blazes in Worplesdon and Woking, after woodland in Camberley caught fire.¹⁵⁰ Large wildfire incidents within the Thames Basin Heaths (TBH) SPA are regular events.¹⁵¹

Establishing links between climate change and public health

- Disruption to health, social care and emergency management services and schools provision, from flooding, heatwaves and storms.
- Flooding poses multiple risks to people's health, such as heart attacks, trauma, an increase in
 waterborne infectious diseases, and common mental and post-traumatic stress disorders. Damp
 housing and damage to water and sanitation infrastructure can further reinforce the adverse
 effects on health. People living in the countryside face greater risks, owing to deteriorating
 housing and infrastructure and various vulnerabilities.
- Establishing relationship between temperature and health, of both cold and hot weather. Climate change may bring increase in both cold weather excess mortality and heat-related deaths and illness occurring in the summer. Excess heat represents a serious threat for the entire population, but the elderly and small children, and people with pre-existing cardiovascular, respiratory and renal diseases, diabetes and neurological disorders, are more susceptible. Heat and heatwaves affect the incidence of cardiovascular and respiratory diseases. Heat extremes cause heat stress, heat stroke, acute damage to kidneys, exacerbate congestive heart failure and increase the risk of violence and suicide. Prolonged periods (at least three days) of extremely high air temperatures, called heatwaves, directly affect people's health and an increase in the daily mortality rate is the major measurable impact of a heatwave. Urban areas tend to be at greater risk due to the "urban heat island" effect. The number of excess deaths in England resulting from heatwaves in 2018 was 863.¹⁵²
- Cases of food poisoning in the UK that are linked to warm weather have been increasing rapidly.
- Wildfire likelihood and severity set to increase due to climate change.
- The likely increase in occurrence of severe winter gales is a cause for concern. Deaths during
 severe gales are commonplace, as are severe injuries. The likely loss of electrical power supplies
 during severe storms adds very significantly to these problems. Better forecasting of gales and
 better design and more frequent exercising of disaster plans may well help to mitigate the worst
 effects.

¹⁴⁵ Lowe, J. A. et al. (2018). UKCP18 Science Overview report. 73.

¹⁴⁶ Forestry Commission England (2019). Wildfire Statistics for England 2009-10 to 2016-17.

¹⁴⁷ Albertson, K. et al. (2010). Climate change and the future occurrence of moorland wildfires in the Peak District of the UK. Climate Research, Vol 45, 105–118.

¹⁴⁸ McMorrow, J. et al. (2010). Fires Interdisciplinary Research on Ecosystem Services (FIRES) Policy Brief.

¹⁴⁹ IACCCF (2010). Biodiversity and Climate Change - a summary of impacts in the UK. 16. JNCC.

¹⁵⁰ UKNIP 247 – Wildfire well alight near Camberley, 25th April 2019 [online]. Available at: https://www.uknip.co.uk/2019/04/25/breaking/wildfire-well-alight-near-camberley/

¹⁵¹ Nicholas Pearson Associates, Wildfire Mitigation January 14, 2018 Ecology, Environmental Assessment, Landscape Architecture [online] available at: https://npaconsult.co.uk/articles/wildfire-mitigation/

¹⁵² Surrey Comet (2019) Increasing health risks from heatwaves as climate changes, experts warn. [Online]. Available at: https://www.surreycomet.co.uk/uk_national_news/18034916.increasing-health-risks-heatwaves-climate-changes-experts-warn/

Climate change trends

In 2019, supplies of water were not where they needed to be, in the wake of two consecutive years of dry summers and winters. Carbon dioxide emissions per capita in Guildford declined by 2.6 tonnes of CO2 between 2008 and 2017. Wildfire likelihood and severity set to increase due to climate change, mitigation of present hazards and adaptation to future challenges is vital for any large development in high risk areas.

Summary of key issues, opportunities, implications from the Policy review and SA objectives Government policy requires new development to promote sustainable **Key issues** construction, energy conservation and renewable energy. Renewable energy generation could pose environmental challenges. The NPPF identifies flood risk management as an issue for planning policy. The Environment Agency predicts that flood events are likely to become more common therefore flood risk management should be considered. CO₂ emissions per capita are 5.3 tonnes and are still higher than per capita CO₂ emissions for Surrey, the South East region and England, with 5.2, 4.8 and 5.1 tonnes respectively. Predicted droughts will have implications for biodiversity as well as water supplies. Summer overheating will potentially contribute to heat-related health problems. Premature deaths due to hotter summers are projected to increase by between 580 and 5900 by the 2050s. This is likely to place different burdens on National Health Service, public health and social care services. Climate change may alter the impact that agriculture and forestry have on the natural environment and the value of the ecosystem services provided. Heightened impacts may in turn affect the way humans are able to use the environment – for example growing crops or obtaining high quality drinking water. The natural environment is crucial to our ability to adapt, reducing flood risk, cooling cities and storing water. **Opportunities** The hydro plant on the river Wey for electricity production can be replicated at other suitable locations along the river Wey, allowing Guildford to replicate this success and further develop its renewable energy sources. To provide clarity and direction on the location of potentially suitable sites for large-scale renewable energy development without compromising the value of sensitive landscape. Opportunity to include additional requirements to prevent overheating of buildings and reduce urban heat island effect through design. Introduce further measures to conserve water, address droughts and promote design that maximises the return of rainwater to the

environment and its retention.

Further reduce CO2 emission by incorporating the requirements for

embodied carbon dioxide emission in DM policies.

 To have regard to the risks of wildfire for new developments and to require measures to minimise wildfire spread and provide safe routes in areas of high risk.

Evolution without the Plan

Steps are being taken to reduce emissions of carbon dioxide in the built environment through Building Regulations, national policy and requirements contained in Local Plan policy D2: Climate change, sustainable design, construction and energy. However, it is considered likely that emissions from transport will continue to rise in Guildford, given the rural nature of the borough. Adapting to climate change will need to include managing an increased risk from overheating and considering the risk of wildfires in development design.

In the absence of the Plan, climate change effects will continue including increased temperatures, severe storms and flooding. The effects of climate change will not be experienced equally. The issue of overheating in buildings as a result of rising temperatures may not be sufficiently addressed as existing Building Regulations in the UK do not have a minimum standard for decrement delay so the decision to design with overheating in mind rests solely with us.

Closing the performance gap between design intent and regulatory requirement is likely to become an important issue over the next decade if we are to deliver the climate and environmental targets related to buildings and the new Plan can address through inclusion of relevant DM policies, that will provide specific details and thus add certainty to the developer of the Councils expectations of how the requirements stipulated in Policy D2 can be met.

Additional policies may be required to ensure that new development is to mitigate its impact on climate change by reducing embodied CO2 emissions and using resource efficiency and low impact construction techniques and thus reducing the impact on the environment, society, economy and climate change, by promoting high standards for thermal performance and energy efficiency, the up-take of low carbon energy, and water efficiency incorporating sustainable drainage measures and sustainable design.

Without a Plan, an opportunity to provide clarity and direction on the location of potentially suitable sites for large-scale renewable energy development without compromising the value of sensitive landscape may not be explored.

Introduction of further measures for water conservation may be missed.

Implications of the Policy Review

Plan should encourage reductions in CO2 emissions and promote sustainable growth. The Plan policies should promote energy efficient design for domestic and commercial developments and encourage the development of renewable energy capacity. The Plan needs to seek new renewable energy generation capacity to deliver an appropriate contribution towards the UK Government's binding renewable energy targets. There is a need for the Plan to include policies to assist in directing development to locations at least risk of flooding and help to reduce overall flood risk.



Suggested SA Objectives

- 18. To mitigate the causes of climate change through reducing emissions of greenhouse gases
- 19. To build resilience and adapt to the impacts of climate change and extreme weather events such as flood, drought and heat risks particularly on groups more vulnerable to the effects of climate change

3.9 Air quality

This chapter focuses on air quality and potential effects of air pollution on environment and cultural heritage. Air quality effects from the public health perspective are discussed *in the previous* **Section 3.4 Health and health inequalities**.

Air pollution can negatively affect natural habitats, ecosystems and processes, and plants and animals. Serious environmental impacts of air pollution occur as a result of nitrogen deposition, acid deposition and direct toxic effects of pollutants in the air. Ecosystems are impacted by air pollution, particularly sulphur and nitrogen emissions, and ground-level ozone as it affects their ability to function and grow. Emissions of both sulphur dioxide and nitrogen oxides deposit in water, on vegetation and on soils as "acid rain", thereby increasing their acidity with adverse effects on flora and fauna. Ultimately, acidification affects the ability of ecosystems to provide "ecosystem services", such as for example nutrient cycling and carbon cycling, but also water provision, on which the planet and human life is dependent.¹⁵³

Eutrophication, the process of accumulation of nutrients, including nitrogen, in water bodies, often results from air pollution. Nutrient overloads in aquatic ecosystems can cause algae blooms and ultimately a loss of oxygen, and of life. As ecosystems are impacted, so is the biological diversity. ¹⁵⁴

Air pollution is also a key factor in the degradation of surfaces of historical buildings and monuments. The impact of pollutants emitted into the atmosphere on materials is enormous and often irreversible. Corrosion caused by chemicals and soiling caused by particles can lead to economic losses but, more importantly, to the destruction of our cultural heritage, an important component of our individual and collective identity. 155

The Environment Act 1995 required Local Authorities to carry out annual reviews of air quality in their area. Air Quality was required to be assessed against objectives set out in the Air Quality (England) (Amendment) Regulations 2002. This assessment must be for both the present time and the likely future quality of air within its area. Is a local authority identifies noncompliance with national air quality objectives and there is relevant public exposure then action must be taken.

The first review and assessment for Guildford was published in November 2000 and further annual reports have been produced to date. Particulate matter, nitrogen dioxide and meteorological conditions are monitored by a mobile air quality monitoring station. In addition, nitrogen dioxide is also monitored at a number of sites throughout the borough using passive diffusion tubes.

The national air quality objectives set limits for the permitted concentrations of pollutants depending on the duration of exposure. For NO2, the exposure must not exceed $40\mu g/m3$ averaged over one year, or $200\mu g/m3$ averaged over one hour on more than 18 occasions in a year. For PM10, the

¹⁵³ UNECE Environmental Policy – Air pollution, ecosystems and biodiversity [online]. Available at: http://www.unece.org/environmental-policy/conventions/envlrtapwelcome/cross-sectoral-linkages/air-pollution-ecosystems-and-biodiversity.html

¹⁵⁴ Ibid

¹⁵⁵ UNECE Info – Air pollution puts cultural heritage at risk [online]. Available at:

https://www.unece.org/info/media/news/environment/2015/air-pollution-puts-cultural-heritage-at-risk/air-pollution-puts-cultural-heritage-at-risk.html

^{156 2018} Air Quality Annual Status Report (ASR)

¹⁵⁷ Part IV of the Environment Act 1995 and subsequent regulations, e.g., Air Quality (England) Regulations 2000 (as amended)

annual average exposure must not exceed 40µg/m3, and the average daily exposure must not exceed 50µg/m3 on more than 35 days in a year.

Air quality in Guildford borough is generally good and meets the National Air Quality Standard for NO2. However, road traffic is a significant cause of air pollution in the borough and there is a risk that NO2 levels may go above the acceptable national standards. However, the monitoring over recent years has found the annual air quality objective level for Nitrogen Dioxide (NO2) exceeding at two locations, which has led to the declaration of the two AQMAs (see **Table 3.10**).

Table 3.10: AQMAs declared by Guildford Borough Council

AQMA	Description	Date Declared	Date Amended	Date Revoked	Pollutants
The Street, Compton, Surrey	Incorporates a section of B3000, The Street, Compton.	01/02/2018			Nitrogen dioxide NO ₂
A281, The Street, Shalford, Guildford, Surrey	A281, The Street, Shalford, Guildford, Surrey The designated area incorporates a section of the A281, The Street, Shalford between grid references X499955, Y147737 and X499984,Y147691.	05/07/2019			Nitrogen dioxide NO ₂

Source: Guildford Borough Council

Initiatives to ease traffic congestion by linking car use with the promotion of public and alternative means of transport remains central to reducing pollution from vehicle exhaust emissions in Guildford. Park and Ride schemes, bus lanes, cycling and walking strategies and integrated transport plans all form part of the overall approach.

The borough council has launched projects in an attempt to improve air quality such as car clubs; a town centre Transport Package which aims to make it easier for people to get around the town centre on foot, by bicycle, and public transport; and electric charging points being added in public car parks.

In November 2017, Guildford Borough Council Executive approved the Air Quality Strategy 2017-2022. The document sets out the Council's approach and priorities on air quality, plus a number of actions associated with statutory regimes and initiatives to bring about improvements.

There are two AQMAs declared in the Borough due to exceedances of the annual mean Air Quality Strategy (AQS) objective for nitrogen dioxide (NO2). The legislation requires local authorities to declare an AQMA when levels of certain pollutants exceed, or are expected to exceed the relevant objective levels. In the case of GBC, an AQMA was first declared in 2017, based on an exceedance of the NO2 annual mean objective of 40µgm-3. The order came in to effect on 1 February 2018 following the Executive's approval on 28 November 2017. This AQMA covers the area along The Street, Compton, B3000. We have recorded exceedances of annual mean, Air Quality Objective (AQO) for NO2 within the AQMA since 2014. The road traffic emissions are the source of NO2 in the area.

The Shalford AQMA was the second AQMA declared on 5 July 2019, following approval by the Guildford Joint Committee. The monitoring in Shalford started in 2018 at two locations using diffusion tubes. The annual air quality objective for nitrogen dioxide (NO2) of 40 micorgrams per cubic meter (µg/m3) was found to be at a higher level at one receptor location. The monthly monitoring results can be obtained from the downloads section. A further detailed assessment was completed in February 2019, which predicted that the annual air quality objective level is likely to exceed at the relevant receptor location to the west of the A281 on the Street, Shalford. The source of NO2 in the area is attributed to road traffic emissions.

Where an AQMA has been declared, the local authority must produce an Air Quality Action Plan (AQAP), which sets out the options for working towards improving the air quality. We have published an AQAP which outlines the actions that Guildford Borough Council will deliver between 2019 - 2020 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors within the Compton AQMA.

Air quality trends

Two AQMAs were declared in the borough since the publication of the previous SA Scoping report in 2013.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	 Development in the borough has the potential to exacerbate congestion. This is likely to be the major source of emissions / air pollution within the borough. Since the last SA Scoping report two AQMA were declared in the borough. Adverse economic, social and environmental impacts of high traffic volumes and a culture of dependence on private car use including recurrent traffic congestion on certain parts of the network at certain times of day, road collisions, community severance, obesity, noise pollution, local air pollution, greenhouse gas emissions, high demand for parking, and amenity of local neighbourhoods.
Opportunities	Support delivery of objectives set out in the AQAPs for two AQMAs declared in the borough.
Evolution without the Plan	 Air quality within the borough is mainly associated with road traffic and therefore any increase in population, and associated travel, has the potential to adversely affect air quality in the future. Without additional measures to tackle the issue of air quality in the AQMAs, the level of NO2 concentrations may not improve in the future. The AQMAs in the borough will be dealt through measures and objectives set out in the adopted AQMP (2019). The recent national policies and the emergence of new technologies are likely to improve air pollution, for example, through cleaner fuels/energy sources, and the shift towards electric and low emissions vehicles is likely to gather pace over the plan period. However, the development of new housing across the borough will inevitably result in a higher number of cars on the roads. The Plan can provide an opportunity to contribute to improved air quality in the borough through the sustainable siting of development and the promotion of alternative travel modes to the motorised vehicle, in line with national policy aspirations and inclusion of a DM policy dealing with tackling NO2 emissions in the AQMAs.
Implications of the Policy Review	For the Plan to place emphasis on reducing emissions of nitrogen dioxide (NO2) from the transport sector. The Plan must acknowledge the importance of air quality to the lives of people who live, work and play in the district, as well as the environment. It must also demonstrate possible measures to be put in place to reduce the harmful effects of air pollution on

	human health and the environment.
Suggested SA Objectives	16. To reduce emissions and concentrations of harmful atmospheric pollutants, particularly in areas of poorest air quality and reduce exposure

3.10 Soil

Current land use characteristics

Land use within the borough is predominantly agricultural; outside of the urban areas most of the Borough is designated as Green Belt. The Metropolitan Green Belt was established under the London Home Counties (Green Belt) Act 1938 and the 1944 Greater London Plan to contain the outward sprawl of London. The boundaries of the Green Belt in Guildford borough were later defined in the 1987 Local Plan, forming part of a 19-24km concentric belt around London.

Currently the borough comprises approximately 84 per cent Green Belt. Guildford Urban Area and a number of smaller settlements are inset into the Green Belt (surrounded by it) and the urban area of Ash and Tongham is outside the Green Belt. There is an area of countryside in the west of the borough surrounding the Ash and Tongham urban area, including the village of Ash Green, which is not Green Belt; this is currently referred to as "Countryside" in the Local Plan: strategy and sites 2015-2034.

The general extent of the Green Belt has been retained, although land has been removed from the Green Belt in order to enable development around Guildford urban area, selected villages, and at the former Wisley airfield.

The majority of the agricultural land within the borough is classified as Grade 3 (a or b) and 4 (lower quality) with small pockets of Grade 2. A few areas of the Grade 3 land have been resurveyed to differentiate between Grades 3a and 3b. This has identified small areas of Grade 3a agricultural land. However, most of the Grade 3 soil areas have not yet been resurveyed. The top three grades, Grade 1, 2 and 3a, are referred to as 'Best and Most Versatile' land, and should enjoy significant protection from development in local policies in accordance with the NPPF.

Current industrial land uses

The industry within the borough is classified as light and is restricted to industrial estates such as Slyfield, Lysons Avenue and Middleton Road. There are 46 processes registered under Part B of the Environmental Protection Act 1990, including 26 petrol stations. Current landfill operations are restricted to sites at Albury and Seale, where sand extraction still takes place.

Industrial land use history

A number of categories of historical land use can be identified and these are outlined below, including illustrative cases (the list is not comprehensive)⁹⁷:

Iron

The Guildford Iron foundry was set up near the town mills around 1794 by E. Filmer and patent mangles, iron and stoves were made here, along with castings for the Portsmouth railway. Iron extraction was carried out in Shere at a much earlier date.

Brewing

Numerous smaller breweries existed within the borough which operated alongside the two major breweries based close to the river within Guildford town centre at the location of the current Friary Shopping Centre and Farnham Road car park.

Mineral Extraction

Clay was fired for bricks at a number of locations, including at Guildford Park Brickworks in the later Victorian times for the purposes of building the new cathedral. Sand extraction has also taken place in Albury, Shere, Ripley, Send and Seale/Sands.

Production

In 1625 the East India Company set up Chilworth Gunpowder Mills and became an important source of gunpowder.

A vulcanised fibre factory existed at Broadford, Shalford and operated until the 1980s.

Dennis Brothers originally started out making bicycles in Guildford before moving on to make motorbikes, cars and commercial vehicles. Guildford town was the site of the world's first car manufacturing factory. The various sites they have occupied in the borough are well documented.

Navigational Links

Railway sidings existed beside the 10 stations within the borough.

Ministry of Defence

The Ministry of Defence occupies facilities, notably in the Ash and Pirbright areas. There are also historical links with sites in Stoughton.

Landfill sites

Previous areas of landfill have had various forms of control dependent on the date of infill. These have taken place in quarries and pits originally utilised for mineral extraction.

Petrol and Oil Storage

Records maintained by Trading Standards at Surrey County Council demonstrate the existence of petrol stations in a number of locations, many of which have been redeveloped. Fuel storage facilities associated with goods yards and depots are still in use whilst some, including Shere Coal yard and Riverside Road, Guildford have been redeveloped.

Utilities

Gas works, power stations and sewage works have operated in various locations within the borough although only the sewage works remain.

Redevelopment

Planning conditions imposed by the Council and Environment Agency on the redevelopment of sites with previous industrial use have already 'remediated' a number of locations. The extent of the works carried out is dependent on the intended use, technology and guidance available at the time of development. Depending on their vulnerability, these already remediated sites will be reviewed as a matter of course as part of the Contaminated Land Inspection Strategy. For example, the large closed landfill site at Slyfield was provided with a physical gas curtain inserted in the sub-soil to a depth of 4 metres in order to protect the surrounding industrial properties from possible migration of landfill gas.

Soil quality trends

None identified.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	 Reusing previously developed land (PDL) will reduce pressure on the undeveloped areas of the countryside. Contamination issues may arise on previously developed sites.
Opportunities	To minimise the use of best and most versatile agricultural land (BVAL) and encourage the remediation of contaminated land
Evolution without the Plan	 Development is likely to take place on previously developed sites to the extent possible, given the prioritization of such through national policy and through the Local Plan: strategy and sites 2015-2034 site selection process. However, the supply of previously developed sites is likely to decline over time as more are developed and therefore greenfield sites are likely to be required. The proportion of high-quality agricultural land within the borough is relatively small and therefore it is unlikely that this will be at risk from development, given that there is a higher proportion of land that is classified as being of lower quality.
Implications of the Policy Review	The Local Plan must ensure the protection and sustainable use of soils.



	▼
Suggested SA Objectives	11. To minimise the use of best and most versatile agricultural land (BVAL) and encourage the remediation of contaminated land
	13.To make the best use of previously developed land and existing buildings

3.11 Water quality and flood risk

Flood Risk

Guildford borough is not subject to regular severe flooding. However, a significant proportion of the borough is located within either Flood Zone 2 or 3 and is thus considered to be at medium or high risk of flooding. River Wey and its tributaries (including the Tillingbourne and Cranleigh Water) are the primary sources of flooding in the area. The River Blackwater, which flows through the west of the borough, is a further source of fluvial flooding.

Widely associated with climate change, flood events are anticipated to become increasingly frequent and severe. In Guildford borough, heavier rainfall in winter will increase the hazards posed by fluvial flooding and the number of properties vulnerable to flooding. Such weather patterns will also create higher peak river flows (which will subsequently result in some areas becoming more prone to fluvial flooding), whilst more frequent storm events are likely to be associated with greater surface water flooding, particularly in identified hotspot areas.

Climate change will increase flash floods and mudflow hazards, primarily because of more intense rainfall events and warming in winter, resulting in rainfall occurring instead of snow, which will extend

the seasons of flash floods and mudflows and also high evaporation, leading to increased soil aridity in flat and foothill areas and the upper soil layer being washed away more easily.

A few developed areas in the borough, most notably Guildford town centre and parts of Ash, are currently considered to be at high risk of flooding. Approximately 1,000 properties within the borough have a 1 in 100 (1%) or greater annual probability of flooding. However, predictions indicate that the number of properties within the wider Thames Catchment Flood Management Plan Area with a 1% or greater probability of annual flooding is likely to rise by twenty percent as a result of climate change.

The borough has experienced fluvial and groundwater flood events in the recent past; large fluvial floods occurring in: 1900, 1928, 1968, 2000, 2006, 2007, 2012, 2013 and 2014. Groundwater flooding also occurred in 2000 around the Stoke Park area of Guildford.

River modelling has, and continues to be, undertaken on the River Wey. Where available, revised data and maps for the river have been used in the Council's SFRA to assess flood risk for sites that drain into the River Wey. At the time the plan was submitted to the Secretary of State, this data was available for the majority of sites allocated in the Submission Local Plan that are affected by flood risk. Modelling for other areas of the borough is not as advanced; for these areas, the SFRA uses the most up-to-date Environment Agency (EA) flood zones. The Council is generally reliant on work undertaken by the EA; we have engaged with them throughout preparation of the Local Plan and our plan follows their recommendations in relation to identifying and assessing flood risk.¹⁵⁹

Guildford is not subject to regular severe flooding but it does contain Zone 2 and 3 flood areas. The Environment Agency predicts that flood events are likely to become more common therefore flood risk management should be considered in Guildford. The primary source of flooding within Guildford is from fluvial (river) flooding from the River Wey and its tributaries. The main tributaries of the River Wey are the Tillingbourne and Cranleigh Water. The River Blackwater flows through the west of the borough and is also a source of fluvial flooding within the borough of Guildford. The Environment Agency is working with its partners to develop the River Wey flood alleviation schemes to reduce flood risk to local communities. They are currently looking at schemes in Godalming, Guildford and Byfleet.

Flood management schemes

The Environment Agency and Guildford Borough Council are working together to reduce flood risk to residents by providing a flood risk management scheme that will reduce the risk of fluvial flooding in Guildford. If development management policies relating to the scheme are included in the Plan, we suggest a separate objective is included in the SA. An indicator could be the number existing properties that would be protected.

The most severe flood events on the River Wey were in 1947, 1968, and recently in 2013/ to 2014. In winter 2013 to 2014 there was exceptionally heavy and prolonged rainfall over the River Wey catchment with very high river flows. Approximately 250 properties were flooded (see **Table 3.11**), not only from fluvial water but some from other sources such as surface water ground water and foul water. ¹⁶⁰

Table 3.11: Properties flooded, 2013-2014

Location	Properties flooded in 2013/2014	Properties (residential and non-residential) at risk of river flooding (1: 100 year)
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¹⁵⁸ Guildford Borough Council (2017) Topic Paper: Flood Risk December 2017 to accompany Guildford borough Submission Local Plan: strategy and sites https://www.guildford.gov.uk/newlocalplan/CHttpHandler.ashx?id=26504&p=0
¹⁵⁹ Ibid

¹⁶⁰ GOV.UK, Environment Agency, Reducing the flood risk on the River Wey: an overview, Published 30 August 2017, Policy paper [online] available at: <a href="https://www.gov.uk/government/publications/reducing-the-flood-risk-on-the-river-wey-an-overview/reducing-the-flood-risk-on-the-river-wey-an-over-wey-an-overview/reducing-the-river-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-an-over-wey-a

Godalming	84	135
Guildford	92	336
Byfleet and Weybridge	74	790
Totals	250	1,261

Source: Environment Agency Policy Paper,2017

Water Quality

In February 2018, the Environment Agency published the *State of the Environment Report: Water Quality*¹⁶¹ which found there has been a decline in the condition of English rivers. The Report found that 86% of English rivers had not reached good ecological status in 2016, up from 79% in 2014, with phosphorous, and to a lesser extent nitrates, the main factors. Unacceptable levels of phosphorus in over half of English rivers, usually due to sewage effluent and pollution from farm land, chokes wildlife as algal blooms use up their oxygen.

It also reported that water quality issues were the cause of 38% of all fish test failures and 61% of invertebrate test failures in 2015. Groundwater quality is currently deteriorating and nearly half of groundwater bodies will not reach good chemical status by 2021. For groundwaters protected for drinking water, nitrate levels were responsible for 65% of failures to achieve good chemical status.

The Borough of Guildford is expected to experience a significant increase in housing provision and economic growth over the period up to 2034. This growth represents a challenge in ensuring that both the water environment and water services infrastructure has the capacity to sustain this level of growth and development proposed. Development can potentially have a great impact on water resources from putting additional strain on existing supplies to affecting flood patterns by increasing the amount of impermeable land. Pollution from development to water can also have adverse impacts upon health and wellbeing both directly and indirectly through degradation of the natural environment and local amenity. It is therefore essential to conserve and enhance the quality and quantity of ground and surface water, ensure adequate service provision, conserve water supplies and manage flood risk.

Improving water quality provides a better-quality environment for and opportunities to enhance biodiversity; it will also help to maintain a good quality supply of drinking water and meet the requirements of the EU Water Framework Directive (2000/60/EC). This requires member states to prevent deterioration of all water bodies (groundwater and surface waters) and to improve them with the aim to meet 'good status' or 'good ecological potential' by 2027. The Water Framework Directive establishes a statutory framework for the protection of groundwater and inland surface water, estuaries, and coastal waters. The environmental objectives of the WFD, as published in the Environment Agency's RBMPs and relevant to this WQA are:

- to prevent deterioration of the status of surface waters and groundwater,
- to achieve objectives and standards for protected areas, and
- to aim to achieve good status for all water bodies or, for heavily modified water bodies and artificial

¹⁶¹Boyd Emma, H. The state of the environment: water quality February 2018 Environment Agency [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/709493/State_of_the_environment_water_quality_report.pdf

¹⁶² AECOM. Guildford Borough Council Water Quality Assessment Stage 2 – Final Report October 2017 [online]. Available at: https://www.guildford.gov.uk/newlocalplan/media/25940/Guildford-Water-Quality-Assessment-Stage-2/pdf/Guildford_Water_Quality_Assessment_Stage_2_FINAL_131017.pdf

water bodies, good ecological potential and good surface water chemical status.

These environmental objectives are legally binding, and all public bodies should have regard to these objectives when making decisions that could affect the quality of the water environment. The Environment Agency publish the status and objectives of each surface waterbody on the Catchment Data Explorer , and describe the status of each waterbody. The WFD requires all member states to achieve good ecological and good chemical status for all groundwater and surface water waterbodies by 2027 at the latest."

The South East River Basin Management Plan 2016, prepared by the Environment Agency, provides a framework for protecting and enhancing the benefits provided by the water environment. The Plan highlights the areas of land and bodies of water that have specific uses that need special protection. These include waters used for drinking water, bathing, commercial shellfish harvesting and those that sustain the most precious wildlife species and habitats. The Plan ensures that these areas have the legally binding objectives in place that protect those uses from potentially harmful activities and new developments. Thus, the Council will seek to conserve and enhance the water environment to improve water quality and achieve the objectives of the EU Water Framework Directive having regard to South East River Basin Management Plan.

Groundwater to varying degrees supports the baseflow of rivers – in some cases having a dominant influence on river flows and quality, particularly in dry periods. Groundwater may also support sensitive ecological sites such as wetlands where small changes in quality or level could be detrimental. The Environment Agency's approach to groundwater protection February 2018 Version 1.2¹⁶³ provides useful information and guidance on the risks to groundwater quality. This document will be of interest to developers, planners, environmental permit applicants and holders, abstractors, operators and anyone whose current or proposed activities have an impact on, or are affected by groundwater. This document updates the Groundwater protection: Principles and practice (GP3).

Many rivers in the borough are classified as being 'at risk' in relation to their water quality. Waterbodies which are affected by WwTW discharges in the Borough include the River Blackwater, River Wey and the Hoe Stream.

The River Wey is a tributary of the River Thames in the South East of England (Figure 1) on the periphery of London and is therefore subject to considerable development pressures, however much of the catchment has a rural nature. Its catchment is predominantly in Surrey, but the upper reaches of the North Wey tributary are in Hampshire and the upper reaches of the Addlestone and Chertsey Bourne are in Berkshire. The River Wey is 140 km (87 miles) long and its catchment area covers 904 km2 (349 square miles). Average discharge for the river at Weybridge (near its confluence with the Thames) is 6.76 m3/s, a maximum discharge was recorded of 74.8 m3/s on 29th December 1979 and a minimum of 1.30 m3/s on 12th August 1990. 164

The River Wey catchment comprises 31 river waterbodies (5 of which are designated as 'heavily modified' and thus are required to meet 'Good Ecological Potential' (GEP) subject to mitigation measures being implemented), 10 lakes and 7 groundwater bodies. Of these 31 river waterbodies 97% (all bare one) failed their WFD targets (Good or above) in 2015. 165 None are at 'High' overall status, only one is currently at 'Good' status (Hollywater & Deadwater at Bordon; a tributary of the South Wey), 14 are at 'Moderate', 12 are 'Poor' and 4 are classified as 'Bad'. The location and ecological status of rivers and lakes in the River Wey catchment are shown on a map in **Figure 3.30.**

The River Wey contains many rivers that are high in levels of Phosphate and/or are heavily modified, leading to loss of habitat diversity and the creation of barriers for fish migration. ¹⁶⁶ These issues and the presence of pollutants give rise to poor water quality for a number of rivers, as well as varied biological quality throughout the catchment.

The River Wey Catchment Plan (2018) states that phosphate (P) is the primary cause of failure; with

¹⁶³The Environment Agency's approach to groundwater protection February 2018 Version 1.2 [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692989/Envirnment-Agency-approach-to-groundwater-protection.pdf

Wey Landscape Partnership, Draft River Wey Catchment Plan [online]. Available at: https://surreynaturepartnership.files.wordpress.com/2018/05/wlp-catchment-plan_sert_-draft-v3.pdf

Wey Landscape Partnership, Draft River Wey Catchment Plan [online]. Available at: https://surreynaturepartnership.files.wordpress.com/2018/05/wlp-catchment-plan_sert_-draft-v3.pdf

¹⁶⁶ Defra and the Environment Agency (2009) Thames River Basin Management Plan.

18 waterbodies (58%) failing to meet the required standard for P and for macrophytes and phytobenthos combined (the key biological indicators for phosphate), 11 waterbodies (36%) are also failing for macrophytes alone and 9 waterbodies (29%) failing for phytobenthos (again both are key P biological indicators).

Fish are also a major cause of failure (13 waterbodies, 42% of waterbodies), as are invertebrates (9 waterbodies, 29%). Other than the general phosphate issue, water quality appears to be generally good with only 1 waterbody (3%) failing for ammonia and 4 waterbodies (13%) failing for dissolved oxygen. Of the 5 heavily modified waterbodies, none have had all their mitigation measures implemented and all are thus amongst the failing waterbodies.

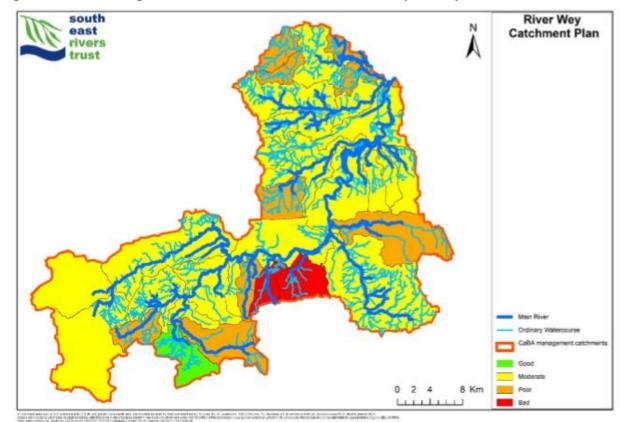


Figure 3.30. WFD Ecological Status for the 31 waterbodies that make up the Wey Catchment

The River Wey currently has an overall WFD status of 'Moderate', with the alternative objective to maintain 'Moderate' status by 2021.¹⁶⁷ Its current overall status is limited to 'Moderate' status due to the less than 'Good' status of the classification elements as listed in **Table 3.12**.

Table 3.12: Classification elements of less than Good status for River Wey

AECOM, Guildford Borough Council Water Quality Assessment, 2017. Available at: https://www.guildford.gov.uk/newlocalplan/media/25940/Guildford-Water-Quality-Assessment-Stage-2/pdf/Guildford Water Quality Assessment Stage 2 FINAL 131017.pdf

Classification Element	Current Status at downstream sampling point (2015)	Waterbody Objective	Justification for alternative objective
Phosphate	Poor	Moderate by 2021	No known technical solution is available – Technically infeasible
Macrophytes and Phytobenthos Combined	Moderate	Moderate by 2021	No known technical solution is available – Technically infeasible
Fish	Moderate	Good by 2027	Cause of adverse impact unknown – Technically infeasible

Source: AECOM, Guildford Borough Council Water Quality Assessment, 2017

The Reasons for Not Achieving 'Good' relevant to the River Wey are listed in Table 3.13.

Table 3.13: Reasons for not achieving good status on the River Wey (GB106039017630)

Classification Element	Category	Activity	Activity Certainty
Macrophytes and Phytobenthos Combined	Water Industry Sewage discharge (continuous)		Confirmed
Phosphate	- Water madeily	comage discharge (continuous)	Suspected
	Agriculture and rural land management	Impoundment - no water storage	Suspected
Fish	Other	Barriers to fish migration	Suspected
Fish	Navigation	Inland navigation	Suspected
	Urban and transport	Urbanisation - urban development	Suspected

Source: AECOM, Guildford Borough Council Water Quality Assessment, 2017

This Guildford Borough Council Water Quality Assessment (WQA)¹⁶⁸ assessed proposed future development with regards to wastewater infrastructure capacity and environmental capacity. Any water quality issues, associated water infrastructure upgrades that may be required and potential constraints have subsequently been identified and reported. The WQA identified that three Waste Water Treatment Works (WwTWs) at Ash Vale, Guildford and Ripley at the time of writing did not have sufficient flow capacity and/or have insufficient treatment processes to accept all future development proposed within the plan period. Therefore, solutions were required in order to accommodate the growth to ensure that the increased wastewater flow discharged did not impact on the current quality of the receiving watercourses, their associated ecological sites and also to ensure that the watercourses could still meet with legislative requirements.

The WQA study recommended for the Council to consider embedding a development control policy within the Local Plan to require that for all Major Development applications within the Guildford, Ripley and Ash Vale WwTW catchments, developers should provide evidence that they have consulted with TWUL regarding wastewater treatment capacity, and to provide outcome of this consultation prior to development approval. However, the Council already consults with TWUL on the majority of applications, including all Major Development.

The Surrey Wildlife Trust, South East Rivers Trust and Environment Agency have produced a Habitat Restoration Strategy for the Wey and are currently updating the Wey Catchment Plan. These reports identify actions needed to bring the River Wey into good ecological status, as required by the WFD. These documents should form part of the evidence base for SA appraisal.

There is a separate catchment partnership for the London catchment which is hosted by South East

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¹⁶⁸ Ibid.

Rivers Trust. Developments adjacent to a watercourse should work with the catchment partnerships to help deliver WFD objectives.

Environment Agency guidance document 'Approach to groundwater protection', Chapter N - Groundwater Resources refers to developments that require piling as being one of the activities that can result in physical disturbance of aquifers. Specific details on the scenarios that can result in creating pathways for contamination to migrate from one aquifer to another (due to the use of piling) is set out in National Groundwater & Contaminated Land Centre report NC/99/73 'Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention. For groundwater protection Scenarios 1 and 5 are key.

Strategic Flood Risk Assessment (SFRA) and flood risk sequential test are required to form part of the evidence base which informs this Sustainability Appraisal (SA).

Water quality trends

River quality is generally poor and groundwater quality is currently deteriorating.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	 A significant proportion of the borough is located within either Flood Zone 2 or 3 and is thus considered to be at medium or high risk of flooding. River quality is generally poor and showed no signs of improvement since the last SA Scoping report was published in 2013.
	Some WFD objectives can only be delivered via catchment wide/cross-boundary planning.
Opportunities	Support additional management to improve water quality through possible identification of specific projects to support the WFD.
	Development policies that include a requirement for new development to conserve and enhance the ecological, landscape and recreational value of watercourses and their associated corridors through good design and seeking out opportunities to deliver the WFD objectives.
Evolution without the Plan	 Flood events are likely to become more common in light of climate change and subsequent increases in winter precipitation and more extreme weather events, including storms. The issue of flooding is addressed through the existing Local Plan polices ID4 and P4. However, in the absence of the Plan, additional measures to adapt to potential impacts of climate change the resilience of new development will not be realized to accommodate the risks of flooding, i.e. reducing surface water runoff by prioritizing the use of permeable surfaces; green infrastructure and sustainable drainage systems as appropriate in accordance with Policy ID4. Following past trends, river quality is generally poor and therefore additional management is likely to be required to improve this. In the absence of the Plan, there will be reliance on developers entering discussion with the Environment Agency at planning application stage and the existing Local Plan Policies ID4 and P4. New development is likely to cause an increase in run-off and potential

	groundwater. Without additional policies the current water quality status of the River Wey may not improve and worsen due to pressure from new development.
Implications of the Policy Review	The Plan must include measures to protect, manage and conserve water resources and water (river and groundwater) quality.
	There is a need for the Plan to include policies to assist in directing development to locations at least risk of flooding and help to reduce overall flood risk.
	The Plan must include measures to protect, manage and conserve water resources and water (river and groundwater) quality.



Suggested SA Objectives	20. To reduce the risk of flooding from all sources and the resulting detriment to public well- being, the economy and the environment.
	22. To maintain and improve the water quality of the borough's rivers and groundwater
	23. To achieve sustainable water resources management and water conservation

3.12 Natural environment and biodiversity

The UK is "among the most nature-depleted countries in the world", according to a State of Nature Report 2016, 169 with continuing declines in species such as skylarks, hedgehogs, many insects including butterflies and corn marigolds. 170 The UK will miss almost all the 2020 nature targets it signed up to a decade ago, according to a report by the government's official advisers. 171 The report says "there have been widespread and significant ongoing declines across many species", such as farmland birds and pollinating insects. Only 8.5% of land was protected for wildlife, and only 40% of that was in good condition. 172

Surrey supports a diversity of wildlife habitats and species, ranging from the chalk grasslands and woodlands of the North Downs, through scarce flood meadows along the rivers Wey and Mole, to the extensive heaths, bogs and acid grasslands of the Thames terrace gravels and Wealden sandstone. Surrey is also home to around 85 specially protected species and at least 300 species recognised as being a priority for conservation. 173

Guildford borough supports a variety of wildlife rich priority habitats. These priority habitats include heathland, ancient semi-natural woodland and semi-improved grasslands, along with rivers and ponds which support a wide range of flora and fauna including many different mammals, birds, insects and

¹⁷² Ibid.

¹⁶⁹ The Royal Society for the Protection of Birds (RSPB), State of Nature report, Discover the State of Nature 2019 [online]. Available at https://www.rspb.org.uk/our-work/stateofnature2016/

¹⁷⁰ Joint Nature Conservation Committee (JNCC) United Kingdom's 6th National Report to the Convention on Biological Diversity, Thursday, May 2, 2019 [online]. Available at: <a href="https://jncc.gov.uk/our-work/united-kingdom-s-6th-national-report-to-but-national-report-but-national-repor the-convention-on-biological-diversity/ ¹⁷¹ Ibid.

¹⁷³ Surrey Natura Partnership (SyNP) (2018) Natural Capital Investment Plan for Surrey, 2018. Available at: https://surreynaturepartnership.files.wordpress.com/2018/11/biodiversity-planning-in-surrey-revised-november-20181.pdf

plants. Guildford's natural environment and landscapes forms part of the overall provision of Surrey's ecosystem services, creating a coherent network, for people, recreation and wildlife, through supporting the implementation of traditional management.

84 per cent of the borough is designated as green belt. The southern part lies within the Surrey Hills Area of Outstanding Natural Beauty and the borough also contains special protection areas, special areas of conservation, sites of special scientific interest and non-statutory designations of sites of nature conservation importance and local nature reserves. Guildford Borough Council is covered by four National Landscape Character Areas (NCA); Thames Basin Heaths, Thames Basin Lowlands, North Downs and Wealden Green Sand.

Guildford Borough Council owns and manages 52 sites as countryside sites covering an area of nearly 800ha, 2.5% of the Borough's land area. Guildford Borough Council also manages approximately 32km of rural road verges on behalf of Surrey County Council.¹⁷⁴

Guildford Borough Council's countryside sites provide opportunities for recreation, physical activity and access to nature. A significant proportion of site users visit the countryside to walk their dog. There is an increasing trend to visit open spaces in order to carry out physical activity and exercise. The education sector recognises the importance of outdoor education, for example in the growing trend of Forest Schools, and Guildford's countryside sites can provide opportunities for education events. Visitor counters are installed at Chantry Wood and Riverside Nature Reserve, which show that visitor numbers have almost doubled between 2012 and 2015.

The following issue were identified by the A Vision for Guildford Borough's Countryside Sites 2017 – 2027:

Heathland

Lowland Heathland is an internationally rare and declining habitat. Bullswater and Pirbright Commons are designated as SSSI and afforded protection within the Thames Basin Heath Special Protection Area (SPA), although the other Heathland sites also add to the SPA habitat network. Habitats are dominated by Calluna heathland, small areas of sphagnum mosses and acid grassland that supports protected heathland bird species including the woodlark, nightjar and Dartford warbler. A colony of protected Silver Studded Blue butterflies, a species of principle importance under the NERC Act, is present at Dawney Hill. Main issues are:

- Habitat decline from lack of management and developing woodland.
- Sites provide habitat for ground nesting birds and are sensitive to visitor pressure.
- Lack of public understanding and public opposition to heathland restoration.
- Fire risk.
- Flood risk

Wey Valley Meadows

Shalford Water Meadows is designated as SSSI. Reed beds and fen habitat are present as well as small areas of wet woodland. These habitats are important for wading birds such as lapwings (red list of conserving concern), reed bed bird species and owls as well as bats. All bats are European protected species. In combination with adjacent sites, the Wey Valley Meadows can potentially provide habitat for the priority species otter and water vole. Riverside Nature Reserve is an important stronghold for harvest mice. Main issues are:

Visitor pressure on habitat and ground nesting birds.

¹⁷⁴ Guildford Borough Council (2017) A VISION FOR GUILDFORD BOROUGH'S COUNTRYSIDE SITES 2017 – 2027. Available at: http://www2.guildford.gov.uk/councilmeetings/documents/s7517/ltem%2006%201%20-%20Countryside%20Vision%202017.pdf

¹⁷⁶ Guildford Borough Council (2017) A VISION FOR GUILDFORD BOROUGH'S COUNTRYSIDE SITES 2017 – 2027. Available at: http://www2.guildford.gov.uk/councilmeetings/documents/s7517/ltem%2006%201%20-%20Countryside%20Vision%202017.pdf

- The need for SANG provision in the Wey Valley.
- Management implications due to wetness of the sites.
- Scrub development and natural succession changes the habitat and site character.
- Invasive species.
- Fishing.
- Flooding preventing access.
- Low water levels lead to drying out of fen habitat.

Woodland

Approximatively 380ha of GBC's Countryside land is woodland. 177 Chantry Woods and Merrow Downs represent the largest woodland areas comprising a mix of hazel coppice, conifer plantations, and mixed deciduous woodland. Areas of Ancient Semi Natural Woodlands are present, the largest one in Thornycroft Wood. Shalford and Peasmarsh Commons and Chilworth Gunpowder Mills represent areas of wet woodland. Main issues are:

- Lack of management.
- Lack of habitat variety, monoculture.
- Development of wood fuel market in Surrey.
- Public opposition to woodland management works.
- Inappropriate uses.
- Scheduled Ancient Monument at Chilworth Gunpowder Mills.
- Tree diseases (Ash die back).
- Oak Processionary Moth.
- Invasive species within wet woodland.
- Flooding within wet woodland.
- Tree fall from heavy wind.

Downland

Downland is formed of the Chalk grassland areas of the North Downs with adjacent hedgerows and scrub areas. Chalk grassland habitat developed through sheep grazing on thin, free draining and nutrient poor soil. It is one the most diverse wildlife habitats in Western Europe with up to 60 species per square metre. Many of the species that occur on chalk grassland are specialists that struggle to live in other habitats, including a variety of nationally rare and protected orchids. The rare and protected Small Blue butterfly and the Grizzled Skipper, both priority species under the NERC Act, occur at Pewley Downs together with another 24 species of butterfly. It is estimated that up to 80% of chalk grassland habitat has been lost in the last century through development, change in land use and recreational pressure. Other main issues:

- Habitat decline from lack of management, nutrient enrichment and natural succession.
- Habitat is sensitive to visitor pressure.

Surrey Nature Partnership (SyNP) is a statutory body formally recognised by central government. It is a key part of delivering the objectives of the Natural Environment White Paper linking business,

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¹⁷⁷ Ibid.

nature and the economy in Surrey.

In November 2015 Surrey Nature Partnership published naturally richer; this document recognised the importance of Surrey's natural capital assets to its economic and social success in the past and the reliance that continued and future success has on these natural assets. The Natural Capital Investment Plan (NCIP) for Surrey sets out the broad actions required to achieve and maintain healthy natural assets in Surrey over the next 25 years. 178 The Plan advocates a Natural Capital Approach, linked to the delivery of the UN's Sustainable Development Goals and the Government's 25 Year Environmental Plan, to drive a new way of achieving systemic investment in Surrey's natural assets and to mobilise local delivery within a strategic framework.

Guildford borough contains several sites which have been designated for their nature conservation value. The international, national and local designated sites within Guildford are shown in Table 3.14 below.

Table 3.14: Designated nature conservation sites within Guildford

Designations	Sites within Guildford
Special Protection Area (SPA)	Thames Basin Heaths form part of a complex of heathlands in southern England that support important breeding bird populations (namely the Dartford warbler, woodlark and nightjar). It comprises of a number of component SSSI/ASSIs including: Ash to Brookwood Heaths; Whitmoor Common; and Ockham and Wisley Common) (covers wider area than Guildford). ¹⁷⁹
Special Areas of Conservation (SAC)	The Thursley, Ash, Pirbright and Chobham SAC is partially within the borough. ¹⁸⁰
Sites of Special Scientific Interest (SSSI)	A total of 16 SSSIs are designated within the borough.
Local Nature Reserves (LNR)	Riverside Park, Guildford; Lakeside Park, Ash Vale; Fox Corner, Pirbright and part of Hackhurst Down. 181
Sites of Nature Conservation Importance (SNCI)	A total of 83 sites are designated as SNCI.
Ancient Woodland	There is a network of 493 Ancient Woodland sites in the borough covering 1685 hectares.

The site supports important breeding populations of a number of birds of lowland heathland, especially Nightjar Caprimulgus europaeus and Woodlark Lullula arborea, both of which nest on the ground, often at the woodland/heathland edge, and Dartford Warbler Sylvia undata, which often nests in gorse Ulex sp. Scattered trees and scrub are used for roosting. 182

¹⁷⁸ Surrey Natura Partnership (SyNP) (2018) Natural Capital Investment Plan for Surrey, 2018. Available at: https://surreynaturepartnership.files.wordpress.com/2018/11/biodiversity-planning-in-surrey-revised-november-20181.pdf ¹⁷⁹ Joint Nature Conservation Committee (JNCC), Special Protection Area - SPA description (information as published 2001), Thames Basin Heaths [online]. Available at:

http://archive.jncc.gov.uk/default.aspx?page=2050 https://sac.jncc.gov.uk/site/UK0012793

Explore Surrey's countryside, Guildford Local Nature Reserves (2018) [online]. Available at: https://www.surreycc.gov.uk/culture-and-leisure/countryside/what-to-see/nature-and-wildlife/guildford

¹⁸² Joint Nature Conservation Committee (JNCC), Special Protection Area - SPA description

Together with the nearby Wealden Heaths SPA and Ashdown Forest SPA, the Thames Basin Heaths form part of a complex of heathlands in southern England that support important breeding bird populations. Thames Basin Heaths consists of a number of fragments of lowland heathland scattered across Surrey, Hampshire and Berkshire. It is predominantly dry and wet heath but also includes area of deciduous woodland, gorse scrub, acid grassland and mire, as well as associated conifer plantations. Around 75% of the SPA has open public access being either common land or designated as open country under the Countryside and Rights of Way Act 2000. The SPA consists of 13 Sites of Special Scientific Interest (SSSI). Three of the SSSIs are also designated as part of the Thursley, Ash, Pirbright and Chobham Special Area of Conservation (SAC). 183 Ash to Brookwood Heaths SSSI, Whitmoor Common SSSI, Colony Bog and Bagshot Heaths SSSI and Ockham and Wisley Commons SSSI lie within or partly within Guildford Borough.

The location of the Thames Basin Heaths has resulted in the area being subject to high development pressure. Guildford Borough Council has produced a Thames Basin Heaths Avoidance Strategy (2009-2016), which has identified that between 400m and 5km of the SPA boundary, development will only be possible if it can demonstrate adequate avoidance or mitigation of significant adverse effects through recreational pressure.

There are three Local Nature Reserves in Guildford:

Fox Corner Community Wildlife Area

The site was bought by Guildford Borough Council after years of misuse and dumping and has a variety of habitats that have been created and restored by the management association. Work has included pond creation, including a dipping platform and boardwalk; wheelchair and pushchair access; wildflower meadow creation and planting native trees and hedgerows. The management association promotes public access, enjoyment and education at the site, including school visits.

Lakeside Park

The site consists of a mosaic of lakes, reed beds, rough grassland, heath, scrub and woodland. It adjoins the Basingstoke Canal, which is one of the most ecologically rich waterways in Britain. Some of the lakes and ponds were created after the development of the Blackwater Valley Relief Road. Species found at Lakeside Park include the rare hairy dragonfly and water violet, plus the more common bee orchid.

Riverside Park

Straddles the A3 north-east of Guildford town centre. It contains a mosaic of different habitats including reed beds, wetland, riverside, a lake, ponds, scrub, meadows and woodland, and is popular with bird watchers and walkers. More than 300 plant species have been recorded and the reserve is used by breeding and wintering birds, including snipe, water rail and kingfisher.

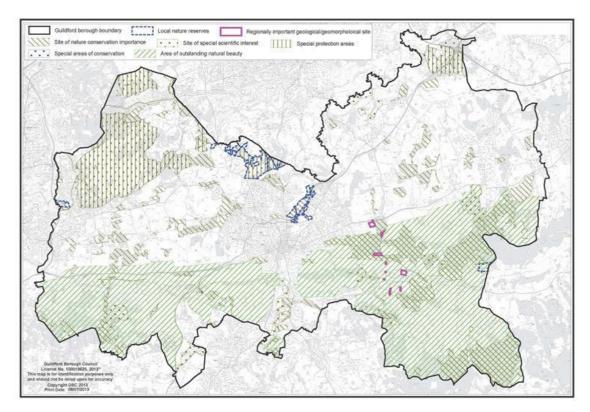
Figure 3.31: Biodiversity designations in Guildford

⁽information as published 2001), Thames Basin Heaths [online]. Available at:

http://archive.jncc.gov.uk/default.aspx?page=2050

¹⁸² https://sac.jncc.gov.uk/site/UK0012793

Hoffmann, I., Riley, J., Wade, M. Habitats Regulations Assessment for Guildford Borough Proposed Submission Local Plan: Strategy and Sites 2018 Update, May 2018 AECOM [online]. Available at: https://www.guildford.gov.uk/newlocalplan/media/27796/Guildford-Local-Plan-HRA-May-2018/pdf/Guildford Local Plan HRA May 2018 update.pdf



Natural England conducts condition assessments on all land designated as SSSI. Of the total hectares assessed, 97.4% of the land designated as SSSI is in favourable condition or is considered to be unfavourable but recovering, as set out in **Table 3.15**.

Table 3.15: Condition of Sites of Special Scientific Interest (SSSIs) in Guildford borough¹⁸⁴

Status	Area (Ha)	% Total Hectares Assessed
Favourable	519.22	20.17
Unfavourable (recovering)	1,988.85	77.27
Unfavourable (no change)	50.55	1.96
Unfavourable (declining)	15.28	0.59

There is a particular issue of the potential impact on European-designated sites: Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). There is specific guidance on avoiding or mitigating the potential impact on the Thames Basin Heaths SPA, linked to the proximity of housing development to the SPA. This is the Thames Basin Heaths SPA Avoidance Strategy 2017.¹⁸⁵ Much of Guildford is within the zone of influence of the Thames Basin Heaths SPA. 6% of land in the borough is within 400m of a SPA site, in which no new homes may be built.

47% of land is within 400m-5km of a SPA site. The guidance states that the cumulative effect of further residential development up to 5 kilometres from these protected heathlands will have a significant adverse effect on the heaths and in particular, on three rare species of birds which inhabit

¹⁸⁴ Natural England (2012) Condition of SSSI units - compiled 01 May 2012 [online]. Available at: http://www.sssi.naturalengland.org.uk/Special/sssi/report.cfm?category=C,CF

https://www.guildford.gov.uk/newlocalplan/media/24946/Thames-Basin-Heaths-SPA-Avoidance-Strategy-SPD-2017/pdf/Thames Basin Heaths SPA Avoidance Strategy SPD 2017.pdf

the heaths – nightjar, Dartford warbler and woodlark.

Table 3.16 shows the numbers of breeding pairs of each bird from the 1999 breeding season.

Table 3.16: Numbers of pairs of protected birds from the 1999 breeding season¹⁸⁶

Species	Number of Pairs	% of Breeding Population in Great Britain
Dartford Warbler	445	at least 27.8%
Nightjar	264	at least 7.8%
Woodlark	149	at least 9.9%

The Avoidance Strategy aims to overcome negative effects on the SPA through the provision of Suitable Alternative Natural Green space (SANG) to attract people away from the SPA and hence reduce pressure on it. The condition of the SSSIs that make up the Thames Basin Heaths SPA and Thursley, Ash, Pirbright and Chobham SAC is listed below in Table 3.17. The Thames Basin Heaths SPA is particularly sensitive to nitrogen deposition. An increase in traffic could lead to more nitrogen emissions and adversely impact the SPA.

Table 3.17: Condition of Sites of Special Scientific Interest (SSSIs) within Guildford borough's Special Protection Area (SPA) and Special Area of Conservation (SAC) sites

Name of SSSI	Constituent SPA/SAC	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed / part destroyed
Ash To Brookwood Heaths	Thames Basin Heaths SPA; Thursley, Ash, Pirbright and Chobham SAC	31.66%	67.37%	0.00%	0.97%	0.00%
Colony Bog And Bagshot Heath	Thames Basin Heaths SPA; Thursley, Ash, Pirbright and Chobham SAC	6.31%	92.56%	0.25%	0.87%	0.00%
Ockham And Wisley Commons	Thames Basin Heaths SPA	33.19%	66.81%	0.00%	0.00%	0.00%
Whitmoor Common	Thames Basin Heaths SPA	27.48%	69.28%	3.24%	0.00%	0.00%

¹⁸⁶ Joint Nature Conservation Committee (JNCC), Special Protection Area - SPA description (information as published 2001), Thames Basin Heaths [online]. Available at: http://archive.jncc.gov.uk/default.aspx?page=2050 https://sac.jncc.gov.uk/site/UK0012793

Priority habitats

Habitats of principal importance The UK Biodiversity Action Plan (BAP) describes the UK's biological resources and sets out a plan for their protection. This was our national response as signatories to the Convention on Biological Diversity in 1992, with a commitment to halt the decline of biodiversity by 2010. Following reorganisation of the UK response to CBD after 2011, the Post-2010 Biodiversity Framework was published to maintain national co-ordination within the period 2011-2020.¹⁸⁷

The Surrey Nature Partnership has since reviewed the former Surrey local BAP to align it with objectives of the current national strategy to continue this work, with a spatial prioritisation for conservation action within Biodiversity Opportunity Areas. Biodiversity Opportunity Areas (BOAs) identify the most important areas for wildlife conservation in Surrey, where targeted conservation action will have the greatest benefit. The main aim within BOAs is to recover declining biodiversity at a landscape scale through the maintenance, restoration and creation of Priority habitats.

Huge numbers of Surrey's trees fall outside woodlands and here remain vulnerable to indiscriminate removal for their perceived risk to human safety or transport disruption.

Priority species

Species of principal importance

In addition to listing Priority habitats the UK BAP also identifies priority species for conservation in the UK. There are 1,149 BAP species nationally and at least 406 of these have at some time belonged to the biodiversity of Surrey. Priority species are likely to be found both within and outside of designated sites; many will be associated with Priority habitats, but not exclusively so. Priority species are mostly now rare having undergone major declines in the UK over the last half-century. They include mammals, birds, reptiles, amphibians and fish, flowering plants and bryophytes, lichens and fungi, as well as a great many invertebrates. A full list of the Priority species still believed to occur in Surrey can be found in **Appendix II of the** BIODIVERSITY & PLANNING IN SURREY November 2018 Guidance document, which can be accessed at:

https://surreynaturepartnership.files.wordpress.com/2018/11/biodiversity-planning-in-surrey-revised-november-20181.pdf, and include Small Blue (butterfly) and birds of farmland and the wider countryside.

The State of Surrey's Nature was published by SyNP in 2017¹⁸⁸ and reports the following results: Out of a total 404 sppriority species of national conservation concern, 31.2% are already extinct locally, while 37.1% are threatened and/or remain in worrying decline. This only leaves the remaining 31.7% presently considered stable or recovering.

- Of the total 1,922 plant species, 9.8% are believed to be extinct in Surrey; 5.5% are threatened; 3.4% are near-threatened in Surrey; a further 11.6% are in decline; 7.4% are assumed to be stable, while only 1% is increasing.
- For invertebrates, the largest meta-group at 2,110 species, 12.7% to be locally extinct. 2.5% are threatened and 1.8% near-threatened; 16.4% are in decline; while 22.7% are stable and 4.5% are increasing.
- Vertebrates include breeding birds (both migratory and resident), mammals, reptiles, amphibians and freshwater fish (210 species). 14.7% are locally extinct; 13.8% are threatened and 6.2% near-threatened; 7.1% are in decline; 12.3% are stable; and 8.6% are increasing.

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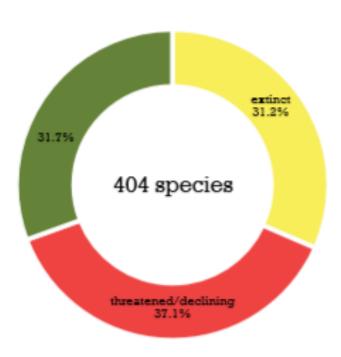
¹⁸⁷ Waite M. The State of Surrey's Nature, Surrey Nature Partnership 2017 [online]. Available at: https://surreynaturepartnership.files.wordpress.com/2018/11/biodiversity-planning-in-surrey-revised-november-20181.pdf

¹⁸⁸ Waite M. The State of Surrey's Nature, Surrey Nature Partnership 2017 [online]. Available at: https://surreynaturepartnership.files.wordpress.com/2014/11/state-of-surreys-nature_web.pdf

Surrey once supported at least 406 of the species nationally prioritised for urgent conservation action under the old UK Biodiversity Action Plan. 189 Three of these have become extinct within England, accounting for the small disparity with the 404 Species of Principal Importance recorded in the county (affecting a stonewort, a snail and the now Scottish-only Wildcat; contrarily Hen harrier is a SPI but was never BAP priority). These are all also lost from Surrey, along with 125 others. Although the national strategy for meeting our commitments to the international UN Convention on Biological Diversity has undergone a major re-organisation in its current phase (2010-2020), the recovery of these selected species remains accountable to the goals of that strategy. No doubt this will prove elusive, certainly across the full range and 'regional' (ie. national) extinction for some is now believed to be inevitable (see **Figure 3.32**).

Developments may have potential to result in the spread of non-native invasive species which might have devastating ecological and economic impacts.

Figure 3.32: Priority Species in Surrey



Source: The State of Surrey's Nature 2017, accessible from: https://surreynaturepartnership.files.wordpress.com/2014/11/state-of-surreys-nature_web.pdf

Establishing links between natural environment and public health

There is a growing body of evidence which tends to demonstrate a positive association between a) population level exposure to natural environments and b) individual use of natural environments, and a variety of positive mental health outcomes. Impacts appear to differ according to socio-economic status and other demographic factors such as age or gender. Interventions which make use of natural environments as settings for mental health promotion or therapy tend to show weak but positive outcomes and are found to be cost effective.¹⁹⁰

Most studies, which tend to have considered relationships at a population level, find greater amounts of natural environment around the home has a protective effect on self-reported mental health and is associated with reduced risk of stress, tendency to psychiatric morbidity, psychological distress,

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¹⁸⁹ ibid

¹⁹⁰ Natural England, Links between natural environments and mental health: evidence briefing, Natural England Access to Evidence Information Note EIN018, 2016.

depressive symptoms, clinical anxiety, depression and mood disorders in adults. 191 There is generally positive evidence relating to the impacts of activities in natural environments on children's mental health and their cognitive, emotional and behavioural functioning.

Natural environment trends

Although three of the four SSSIs in the borough are currently in unfavourable condition, only a small proportion, approximately 4%, some 70 hectares, is in an unfavourable condition with either a decline, or no change in condition.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	Protecting green spaces and erosion of valued natural places as a
ive issues	result of increased pressure for housing and associated transport. • Protecting and enhancing priority habitats and species in accordance
	with Surrey Nature Partnership targets.
	 Potential loss of biodiversity as a result of increased pressure for development to accommodate demand for housing.
	 Large areas of the borough are covered by biodiversity designations, including internationally important SPAs, nationally important SSSIs, SACs, SNCIs, and ancient woodland.
	Out of a total of 404 priority species of national conservation concern, 31.2% are already extinct locally, while 37.1% are threatened and/or remain in worrying decline. This only leaves the remaining 31.7% presently considered stable or recovering.
	Habitat decline from lack of management and developing woodland.
	Sites provide habitat for ground nesting birds and are sensitive to visitor pressure. Invasive species, fire risk, flooding.
Opportunities	A DM policy encouraging maintenance and enhancement of ancient woodlands, meadows and other characteristic habitats, taking into account the impacts of climate change.
	Achieve overall measurable net gains in biodiversity.
	Conserve, connect and enhance ecological networks, taking into account the impacts of climate change.
	Include requirements that support species, particularly Surrey priority species, to adapt to the anticipated effects of climate change (i.e. through connecting habitats and/or improving greenspace).
	Help to achieve targets and actions of the Surrey Nature Partnership.
	Include requirement with regard to the impact of development on the spread of invasive species.
Evolution without the Plan	New development and associated traffic growth and congestion may cause air pollution hence causing negative effects on air and water quality leading to deterioration of natural and built environment. In the absence of the Plan, the issue of potential biodiversity loss as a result of new development would be addressed through the adopted policy "ID4: Green and blue infrastructure". However, there may not be an

¹⁹¹ Ibid

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opportunity to meet the requirements of meeting 10% biodiversity net gain as asset out in the new Legislation. There may be increased pressure to develop areas of relative biodiversity outside of the settlement boundaries, with possible impacts to habitats and species of local and national importance. Opportunities to provide a mechanism to manage the effects of undirected development, such as disturbance to habitats and species, inappropriate use of land and impacts from pollution and water run-off may be missed. Increased development will put pressure to use areas of green space for development purpose, severing corridors and reducing quality and quantity of natural environment and connectivity between areas green space. Existing policies are not considered to provide an appropriate scale of guidance for the management of potential contamination, pollution, habitat fragmentation, management of priority habitats and priority species as a result of new development. Implications of the The Plan policies will need to be written in accordance with the objectives **Policy Review** and requirements set out in the 25 Year Plan. In particular, new policies should embed the principle of environmental net gain.



Suggested SA Objectives

14. To conserve and enhance biodiversity, geodiversity and the natural environment

3.13 Landscape

The Guildford Landscape Character Assessment¹⁹² notes the varied and dynamic landscape of the borough, evidenced by the presence of four different countryside character areas at the national level. The Surrey Hills Area of Outstanding Natural Beauty (AONB) lies within the borough and is a key landscape feature. AONBs are a national designation and the value of this designation is reflected in the NPPF. The Area of Great Landscape Value (AGLV) is a county-wide environmental designation.

Rural Landscape

The Guildford Landscape Character Assessment¹⁹³ identifies that physical and cultural influences have combined to create the unique and distinctive character of the rural landscape of Guildford borough. The area is characterised by a diversity of landscapes and these variations and differences are represented by twelve landscape types:

- River Floodplain;
- · Chalk Ridge;
- · Wooded Chalk Downs;
- Open Chalk Farmland;
- Wooded Rolling Claylands;

 ¹⁹² Guildford Borough Council and Land Use Consultants (2007) Guildford Landscape Character Assessment [online] available at: http://www.guildford.gov.uk/planningandbuildingcontroldocumentsandpublications
 193 ibid

- Unsettled Sandy Heath;
- · Wooded and Settled Heath;
- Gravel Terrace;
- Greensand Valley:
- Mudstone Plateau;
- · Wooded Greensand Hills; and
- Open Greensand Hills.

The rural areas are diverse in nature and many have strong character. Their condition is assessed to be mainly moderate or good whereby:

- The ridge of the North Downs provides a distinctive long-distance viewpoint with numerous dramatic views to and from the chalk ridge, and a distinctive backdrop to much of the area.
- Villages are generally well linked to the countryside, mainly through a strong network of mature tree belts and woodlands.
- A series of great historic country houses provides a wealth of designed landscapes and parklands from various ages. Local building materials are particularly influential on the characteristics of many local buildings.
- Historic buildings of varying ages and the spires and towers of local churches often feature in views and provide local distinctiveness and orientation.

There are many things that threaten the character of the borough's rural landscapes. They include the division of land ownership and changing land management practices, traffic growth and pressures for increased public and private recreational facilities.

Rural-urban fringe

The Guildford Landscape Character Assessmen also considers the character of areas that fall within the rural-urban fringe of Guildford, Ash and Tongham. Particular features include:

- The River Wey and its water meadows of great historical significance to the landscape setting of Guildford. The Basingstoke Canal provides this to a lesser extent in Ash.
- The floodplain gravel terraces of the River Wey to the north of Guildford, incorporate large areas of water. These play an important role in creating a clear 'gap' and sense of separation between the town and outlying residential areas. The floodplain of the Blackwater River and a chain of lakes to the west of Ash and Tongham have a similar role.
- Sandy soils and London clay to the north of Guildford and east of Ash and Tongham create a distinctive landscape of wooded and heathland commons. These provide a valued habitat to support biodiversity around Ash Green and at Ash Common.

The concerns for the rural-urban fringe are the possibility of development and recreational pressure in the future, and the impact of urban developments on views into and out of the surrounding 'rural' fringe.

Townscape

There are 57 separate townscape character areas in Guildford, Ash and Tongham, for which the townscape character has been assessed to have varying strengths of character and condition. They range from the historic towns and villages to the 20th century industrial/retail parks. The Landscape Character Assessment notes that:

• Guildford has numerous important views and scenery. These are particularly influenced by the strong topography of the North Downs, which creates many viewpoints and vistas both to and from the town. This provides a strong connection with the surrounding

landscape from within the town itself.

• Institutional buildings, set in elevated locations, often form local landmarks and focal points. They are easily seen from the surrounding area. The best example of this is Guildford Cathedral.

Issues within the townscape are also varied. They include new developments without regard for proportion and scale, blocked views and viewpoints, standardised street design and loss or break-up of boundaries.

Surrey Design¹⁹⁴ is an important guidance document aimed at ensuring that new development is of high quality and complimentary to the townscape, particularly Conservation Areas and Listed Buildings.

Landscape trends

No trends have been identified.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

Key issues	 Existing areas of high quality open space should be protected and enhanced to avoid changes to the character of built up areas and to reduce pressures on the countryside. Development pressures, fueled by high land and property prices, pose threats to landscape interests. There is a need to provide opportunities for countryside recreation and access whilst respecting its landscape quality and avoiding conflict with other users.
Opportunities	Provide opportunities for countryside recreation and access whilst respecting its landscape quality and avoiding conflict with other users.
Evolution without the Plan	There are various landscape designations within Guildford, including the nationally designated Surrey Hills Area of Outstanding Natural Beauty. The primary purpose of AONB designation is to conserve and enhance the natural beauty of the landscape, with a secondary aim being to meet the need for quiet enjoyment of the countryside. It is therefore considered that those areas that are afforded protection through national designations should retain their character.
Implications of the Policy Review	The Local Plan should aim to: protect and enhance the quality and distinctiveness of natural landscapes and townscapes; promote high quality design that respects and enhances local character; ensure tourism is compatible with protection of biodiversity, landscapes and townscapes.



¹⁹⁴ Surrey Local Government Association (SLGA), Surrey Design, A strategic guide for quality-built environment [online]. Available at: https://www.surreycc.gov.uk/ data/assets/pdf file/0008/66887/Surrey-Design.pdf

Suggested SA
Objectives

21. To conserve and enhance the quality and local distinctiveness of landscapes and townscapes

3.14 Waste

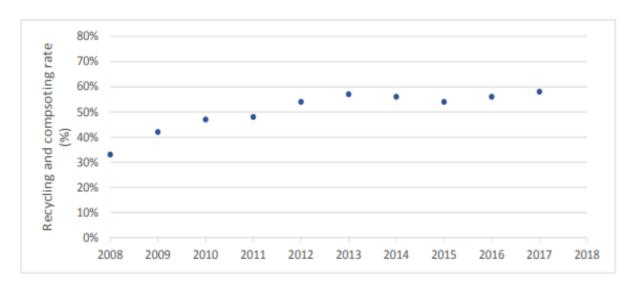
In a "circular economy" the value of products and materials is maintained for as long as possible; waste and resource use are minimised, and resources are kept within the economy when a product has reached the end of its life, to be used again and again to create further value.

In 2018 the European Union (EU) agreed a package of measures which forms part of the implementation of its Circular Economy Action Plan. These measures include increasing the existing recycling target for municipal waste to 65% by 2035 and a target to reduce landfill to a maximum of 10% of municipal waste by 2030. This compares to a target of 50% by 2020 that the UK Government and local authorities are currently working to. Even though the UK is to leave the European Union, the Government has signalled the Circular Economy measures will be adopted within UK legislation. 195

According to the draft Surrey Waste Local Plan 2019¹⁹⁶, Local Authority Collected Waste (LACW) arisings in Surrey in 2016/17 were 548,313 tonnes, slightly below the 570,773 tonnes in 2015/16. The total amount of LACW reused, recycled or composted was 314,065 tonnes. Of the remaining 234,248 tonnes of residual waste, 194,644 tonnes were sent for energy recovery and 39,604 tonnes were sent to landfill.¹⁹⁷

Rates of recycling (including composting) increased from just over 30% to nearly 60% between 2008 and 2017 (see **Figure 3.33**). For C&I waste there is less accurate data available but it is likely that recycling rates will broadly match trends in LACW.¹⁹⁸

Figure 3.33: Surrey recycling and composting rate, 2008-20018



Source: Surrey Waste Local Plan 2019

¹⁹⁵ Surrey County Council (2019) Minerals and Waste Planning Policy, Surrey Waste Local Plan Part 1 – Policies Submission plan January 2019 [online]. Available at: https://www.surreycc.gov.uk/ data/assets/pdf file/0008/188036/SWLP Part 1 Policies.pdf

¹⁹⁶ Surrey County Council (2019) Minerals and Waste Planning Policy, Surrey Waste Local Plan Part 1 – Policies Submission plan January 2019 [online]. Available at:

The recycling rates for LACW in Surrey districts and boroughs continues to be high, above the national average of 43%. Furthermore, there is evidence to support a decrease in residual waste arisings per person which decreased from 452 kg per person in 2015/16 to 441 kg per person in 2016/17 (**see Figure 3.34).** However, there is an ongoing need to continue to focus on reducing LACW in line with waste prevention which sits at the top of the waste hierarchy.¹⁹⁹

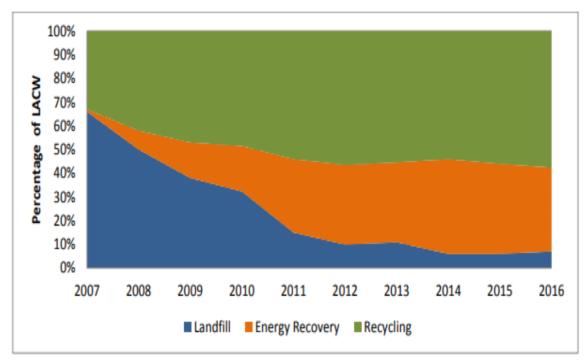


Figure 3.34: Local Authority Collected Waste (LACW) arisings and fate for the period 2007 to 2016

Source: Surrey County Council Annual Monitoring Report 2016/17

An estimated 643,510 tonnes of Commercial and Industrial waste was generated in Surrey in 2016 and has remained low between 2009 and 2013 but increased slightly in 2014 and again in 2015. An estimated 1,956,000 tonnes of Construction, Demolition and Excavation Waste was generated in Surrey in 2016.²⁰⁰

Since 2009 CD&E waste has generally increased. However, there has been a slight decrease in each of the last two years in CD&E waste.

Based on information in the EA's Hazardous Waste Interrogator, the amount of hazardous waste arisings in Surrey in 2016 was 32,526 tonnes. This is around half the amount in 2015 which saw unusually high arisings of Hazardous Waste.²⁰¹

Waste trends

The is a decrease in residual waste arisings per person from 452 kg per person in 2015/16 to 441 kg per person in 2016/17. Slight increase in commercial and industrial waste in 2014 and 2015.

Summary of key issues, opportunities, implications from the Policy review and SA objectives

¹⁹⁹ Ibid.

Surrey County Council Annual Monitoring Report 2016/17 [online]. Available at: https://www.surreycc.gov.uk/ data/assets/pdf_file/0005/163661/AMR-16-17-Final-Online.compressed.pdf
Point Ibid.

Key issues	There is an identified need to reduce the proportion of waste sent to landfill and increase the proportion of waste that is reclaimed, recycled and composted.
Opportunities	To increase the level of reclamation, recycling and composting.
Evolution without the Plan	 Based on past trends and the new recycling and refuse service, it appears the percentage of waste recycled and composted is, and will continue to, increase over time. The issue of the efficient use of materials, water and waste recycling will be addressed through existing policies adopted in the Plan, e.g. D2 (d) which requires development to meet the highest national standard, currently "optional requirement" described in Building Regulation 36 2(b). However, relying only upon the existing policy may not provide enough encouragement for all development proposals including conversions, extensions and changes of use to incorporate facilities to recycle, harvest and conserve water resources. Neither there would be sufficient encouragement on how to facilitate circular economy systems to support sustainable and low impact development.
Implications of the Policy Review	The Plan should apply principles of circular economy when aiming for waste reduction, reuse, re-manufacturing and recycling in all construction and operational practices. Guildford Borough Council should seek to promote sustainable waste management within the Plan.



Suggested SA Objectives	12. To reduce waste generation and achieve the sustainable management of waste
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CHAPTER 4: Significant issues identified (Task A3)

Compliance with the SEA Directive

"Compliance with the SEA Directive "Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC" (Annex 1 (d))

Based on the conclusions from the plans, programmes and policies and the baseline data detailed in the previous sections, **Table 4.1** below sets out the main characteristics of the Borough including a range of key facts covering issues such as population, protection of environment, equality, transport and health. From this information a number of significant issues and their likely evolution in the absence of the Plan have been identified for Guildford borough. In assessing their significance recent trends and existing sustainability issues which are relevant to the scope of the Plan and its objectives were taken into account. A number of new issues have been identified in this report which were not subject of focus in the previous Scoping Report 2013. The new issues pertinent to the nature, context and scope of the Plan are:

- 1. Fuel poverty and cold homes
- 2. Food poverty
- 3. Homelessness
- 4. Overheating and wildfires
- Traffic noise
- 6. Disproportional effects of deficiencies in open space provision on certain groups, i.e. lone parents, families with children under 5.

Table 4.1: Significant issues for Guildford

Topic	Significant issues identified	Evolution in the absence of the Plan	
Air quality	 Since the publication of the last SA Scoping report in 2013, two AQMAs were declared in the period 2017-2019. A reduction in NOx emissions is required to achieve the annual mean objective value of 40 µg/m3. New development will lead to increased car use and congestion leading to localized air quality issues. Adverse economic, social and environmental impacts of high traffic volumes and a culture of dependence on private car use including recurrent traffic congestion on certain parts of the network at certain times of day, road collisions, community severance, obesity, noise pollution, local air pollution, greenhouse gas emissions, high demand for parking, and amenity of local neighbourhoods. 	in the borough will be dealt through measures and objectives set out in the adopted AQMP (2019). The recent national policies and the emergence of new technologies are likely to improve air pollution, for example, through cleaner fuels/energy sources, and the shift towards electric and low emissions vehicles is likely t gather pace over the plan period. However, the development of new housin across the borough will inevitably result in a higher number of cars on the roads. The Plan can provide an opportunity to contribute to improved air quality in the borough through the sustainable siting of development and the promotion of alternative travel modes to the motorised vehicle, in line with national policy aspirations and inclusion of a DM policy dealing with tackling NO2 emissions in the AQMAs.	
Natural capital and natural environment	 Protecting green spaces and erosion of valued natural places as a result of increased pressure for housing and associated transport. Protecting and enhancing priority habitats and species in accordance with Surrey Nature Partnership targets. Potential loss of biodiversity as a result of increased pressure for development to accommodate demand for housing. Large areas of the borough are covered by biodiversity designations, including internationally important SPAs, nationally 	New development and associated traffic growth and congestion may cause air pollution hence causing negative effects on air and water quality leading to deterioration of natural and built environment. In the absence of the Plan, the issue of potential biodiversity loss as a result of new development would be addressed through adopted policy "ID4: Green and blue infrastructure". However, there may not be an opportunity to meet the requirements of meeting quantified set percentage target of biodiversity net gain as set out in the new legislation. Because of Green Belt, there may be increased pressure to develop areas of relative biodiversity outside of the settlement boundaries, with possible impacts to habitats and species of local and national importance. Opportunities to provide a mechanism to manage the effects of undirected development, such as disturbance to habitats and species,	

Topic	Significant issues identified	Evolution in the absence of the Plan	
	 important SSSIs, SACs, SNCIs, and ancient woodland. Out of a total 404 sppriority species of national conservation concern, 31.2% are already extinct locally, while 37.1% are threatened and/or remain in worrying decline. This only leaves the remaining 31.7% presently considered stable or recovering. Huge numbers of Surrey's trees fall outside woodlands and here remain vulnerable to indiscriminate removal Habitat decline from lack of management and developing woodland. Sites provide habitat for ground nesting birds and are sensitive to visitor pressure. Invasive species, fire risk, flooding 	inappropriate use of land and impacts from pollution and water run-off may be missed. However, by allocating sufficient land the LPSS 2015-2034 should guard against this development pressure. Increased development will put pressure to use areas of green space for development purpose, severing corridors and reducing quality and quantity of natural environment and connectivity between areas green space. Existing policies are not considered to provide an appropriate scale of guidance for the management of potential contamination, pollution, habitat fragmentation, management of priority habitats and priority species as a result of new development.	

Topic	Significant issues identified	Evolution in the absence of the Plan
Climate change	 The impacts of climate change will not be equal or fair, and are likely to increase existing inequalities. The flood events are likely to become more common therefore flood risk management should be considered in Guildford. CO₂ emissions per capita are 5.3 tonnes and are still higher than per capita CO₂ emissions for Surrey, the South East region and England, with 5.2, 4.8 and 5.1 tonnes respectively. Predicted droughts will have implications for biodiversity as well as water supplies. Summer overheating potentially contributing to heat-related health problems. Climate change may alter the impact that agriculture and forestry have on the natural environment and the value of the ecosystem services provided. 	In the absence of the Plan, climate change effects will continue including increased temperatures, severe storms and flooding. The effects of climate change will not be experienced equally. The issue of overheating in buildings as a result of rising temperatures may not be sufficiently addressed as existing Building Regulations in the UK do not have a minimum standard for decrement delay so the decision to design with overheating in mind rests solely with us. Closing the performance gap between design intent and regulatory requirement is likely to become an important issue over the next decade if we are to deliver the climate and environmental targets related to buildings and the new Plan can address through inclusion of relevant DM policies, that will provide specific details and thus add certainty to the developer of the Councils expectations of how the requirements stipulated in Policy D2 can be met. Additional policies may be required to ensure that new development is to mitigate its impact on climate change by reducing embodied CO2 emissions and using resource efficiency and low impact construction techniques and thus reducing the impact on the environment, society, economy and climate change, by promoting high standards for thermal performance and energy efficiency, the up-take of low carbon energy, and water efficiency incorporating sustainable drainage measures and sustainable design. Without a Plan, an opportunity to provide clarity and direction on the location of potentially suitable sites for large-scale renewable energy development without compromising the value of sensitive landscape may not be explored. Introduction of further measures for water conservation will be missed and no due consideration will be given to the risks of wildfire.
Sustainable transport and accessibility	 Car ownership is high and the percentage of people travelling to work by car or van appears to have increased substantially. Public transport has a poor reliability rate compared to national averages. 	In the absence of the Plan, the opportunity to maximise the use of the sustainable transport modes of walking, cycling, and the use of public and community transport, and opportunities for people with disabilities to access all modes of transport will be realised through <i>Policy ID3: Sustainable transport for new developments</i> . Although the site allocations and the

Topic	Significant issues identified	Evolution in the absence of the Plan	
	 Many key roads and junctions in the wider area suffer from severe congestion and long journey times. This also affects the quality of public transport provision. Local accessibility issues especially affect people who experience social exclusion, with linked issues related to personal security, cost, lack of easy-to-understand travel information and reliability of services. Adverse economic, social and environmental impacts of high traffic volumes and a culture of dependence on private car use including recurrent traffic congestion on certain parts of the network at certain times of day, road collisions, community severance, obesity, noise pollution, local air pollution, greenhouse gas emissions, high demand for parking, and amenity of local neighbourhoods. According to the Defra's noise map data, noise levels on the A3 running through Guildford are excessive on some sections of the road and its vicinity and can potentially have impacts on human health. 	proposals in the LPSS will provide opportunities to use active modes and may result in a modest modal shift over the period to 2034, there will be still an absolute increase in overall traffic volumes. Accordingly, schemes to increase highway capacity and improve road safety were included in the LSPP in order to mitigate the principal adverse material impacts of this forecast growth in traffic volumes. AECOM SA Report (2017) found that: 'Whilst transport/traffic constraints are widespread across Guildford Borough, it is apparent that the spatial strategy has been developed in order to reflect variations in constraint and opportunity, most notably through focusing growth at locations along a Sustainable Movement Corridor in the urban area of Guildford, and at locations in proximity to a rail station. Policy commitments regarding the phasing of infrastructure are also of critical importance.' Without the Plan, preventive measures of noise pollution in combating noise-induced health hazards may not be fully explored.	
Economic competitiveness and employment	 The availability of employment sites is an issue for the borough. The cost and availability of housing influences where people live, where they work and the availability of local labor. This is already adversely affecting some of the businesses in the borough and increasing congestion as more people are travelling longer distances to work in the borough. Broadband and the need for higher internet speeds is as a key priority for businesses across 	In the absence of the Plan, it is assumed that relevant policies in the currer Local Plan and National Planning Policy would apply. It is uncertain how th job market will change without the implementation of the Plan, particularly given the uncertainties posed by Brexit. Policy E3 of the Local Plan: Strategy and Sites (LPSS) 2015 – 2034 addresses the availability of employment sites by designating several Strategic and Locally Significant Employment Sites, which are priority locations for the development of further Use Class B1-B8 employment use in line with their designation (as per LPSS policy E2). Employment uses or	

Topic	Significant issues identified	Evolution in the absence of the Plan
the borough, from rural to town centre businesses where access to increased speeds is necessary to perform at the cutting edge of the business innovation. There are pockets of disadvantage and concentrations of people on low incomes, in receipt of benefits and with no or low qualifications, with some areas being amongst the most deprived in Surrey The borough experiences high levels of traffic congestion in the town centre and on major routes during peak hours. This is a concern for local businesses and residents. Unemployment levels are low but there is an increasing trend and pockets of higher unemployment in deprived areas. Uncertainty associated with the effect Brexit will have on Guildford economy.		these sites are also protected against change of use to other non- employment uses. The LPSS also allocates mixed-use sites that include a requirement for employment floorspace and one site specifically for employment uses; these sites will also increase the amount of land available for new businesses or business relocation and expansion. Policy E5 of the LPSS provides a positive framework to promote economic growth in rural areas and avoid stifling opportunities, however some additional detailed enabling policy wording may still be beneficial to stimulate and develop the rural economy, encourage innovative projects and capitalise on opportunities to diversify the economic activities of existing businesses in these areas.
Flood risk	 Some areas of the borough, including Guildford town centre, are at risk of fluvial and surface water flooding. Over recent years the borough has witnessed more frequent flooding. New developments typically introduce impermeable surfaces, which may increase the speed and amount of surface water run-off and can exacerbate flooding. 	The issue of flooding is addressed through the existing Local Plan polices ID4 and P4. However, in the absence of the Plan, additional measures to adapt to potential impacts of climate change the resilience of new development will not be realized to accommodate the risks of flooding, i.e. reducing surface water runoff by prioritizing the use of permeable surfaces; green infrastructure and sustainable drainage systems as appropriate in accordance with Policy ID4.
Geology and soils	 The majority of the agricultural land within the borough is classified as Grade 3 (a or b) and 4 (lower quality) with small pockets of Grade 2. Contamination issues may arise on previously developed sites. 	Development is likely to take place on previously developed sites to the extent possible, given the promotion of such through national policy. However, the supply of previously developed sites is likely to decline over time as more are developed and therefore greenfield sites are likely to be required. The proportion of high-quality agricultural land within the borough is relatively small and therefore it is unlikely that this will be at risk from

Topic	Significant issues identified	Evolution in the absence of the Plan	
		development, given that there is a higher proportion of land that is classified as being of lower quality.	
Historic environment	 Reducing the amount of designated assets that are at risk. Preventing loss or damage of designated assets. Some designated assets are still at risk from neglect, decay or inappropriate development. 	The number of Listed Buildings, Conservation Areas, Scheduled Ancient Monuments and Historic Parks and Gardens means that much of the borough's character and distinctive built heritage will continue to be conserved and protected from future development. However, if development of these sites (or in their setting) does occur, dependent on form and design, the cultural heritage interests could potentially be affected. In the absence of the Plan, some designated assets may still be at risk from neglect, decay or inappropriate development.	
Housing to meet the needs of the population	 There is an ongoing shortage of affordable housing, particularly for first time buyers. High average house prices create affordability problems for local people, first time buyers and essential key workers. The number of overcrowded households in Guildford has significantly increased. There is a deficit in affordable housing supply and the current completion rate is below the annual level required to address the deficit. The need for accommodation for people with care and support needs is likely to increase, given the projected increases in population and the proportion of older people in the borough. Achieving balance between sustainable higher density developments and the impact of density and development on the character of local areas. 	Without the Plan, it is likely that house prices will continue to rise across the County. The population of the borough is expected to increase in future years. This is likely to exacerbate current shortages of housing and increase housing need. Furthermore, the need for affordable housing for local people unable to compete in the open market is likely to continue to be unmet. The issue of overcrowding and affordability ratio will worsen. This is a problem shared by the rest of the South East region. However, the LPPS offers opportunity to facilitate and expedite the delivery of affordable housing across the borough. LPSS 2015-2034 intends to meet projected need and addresses affordable housing issues thus aiming to address the aforementioned issues.	
Population, poverty and social inclusion	 Population increases and are likely to place additional pressure on house prices and availability. The age structure of the borough will require continued monitoring as age shifts will have long 	In the absence of the Plan, there will be less opportunity to plan positively to reduce deprivation and improve social inclusion. Disparities in deprivation are going to increase. Food poverty has economic, social, and health impacts and there is a need to tackle the root cause of food poverty and insecurity in the borough.	

Topic	Significant issues identified	Evolution in the absence of the Plan
	 term implications for health care needs, housing mix and other social services. Some pockets of deprivation persist; there is a negative trend of increased disparities across the wards pointing to a widening inequality. Food and fuel poverty and insecurity are issues that need priority action. Crime rates are up in Guildford, with Guildford town centre having the highest proportion of reported crimes. There is a need to reduce the inequalities gap between those living in the most and least deprived parts of Guildford. Food poverty is a growing issue across the borough. The population of Guildford is highly qualified compared to the regional and national averages however the gap between national and regional averages is lessening. 	The population in Guildford is predicted to increase to just over 162,900 in 2041 and with more elderly people living in the area due to longer life expectancy and in-migration there will be an increased demand on health and social support services. Whilst the LPSS allocates some sites for care homes and supports specialist accommodation – it doesn't set targets to meet the full identified need. It also requires a percentage of accessible homes on sites of 25+ homes. Without initiatives to develop more vocational courses and job specific qualifications the disparity between those with qualifications and those without will remain. Without the Plan, it is likely that the gap between the most and least deprived areas in Guildford will continue to widen.
Materials, waste and water resources	 There is an identified need to reduce the proportion of waste sent to landfill and increase the proportion of waste that is recycled and composted. There is an ongoing need to continue to focus on reducing Local Authority Collected Waste (LACW) in line with waste prevention which sits at the top of the waste hierarchy. Given climate change forecasts and population increases, water shortage will be very an important issue in our borough in the plan period. 	The issue of the efficient use of materials, water and waste recycling will be addressed through existing policies adopted in the Plan, e.g. D2 (d) which requires development to meet the highest national standard, currently "optional requirement" described in Building Regulation 36 2(b). However, relying only upon the existing policy may not provide enough encouragement for all development proposals including conversions, extensions and changes of use to incorporate facilities to recycle, harvest and conserve water resources. Neither there would be sufficient encouragement on how to facilitate circular economy systems to support sustainable and low impact development.

Topic	Significant issues identified	Evolution in the absence of the Plan	
Water quality	 River quality is generally poor and showed no signs of improvement since the last SA report published in 2013. Some WFD objectives can only be delivered via catchment wide/cross-boundary planning. Much of the River Wey in the borough currently achieves 'moderate 'status, with some tributaries achieving only 'poor' or 'bad'. Certain types of development pose risks to ground and surface water quality. 	In the absence of the Plan, there will be reliance on developers entering discussion with the Environment Agency at planning application stage and the existing Local Plan Policies ID4 and P4. New development is likely to cause an increase in run-off and potential contamination and disruption of flows for surface water and groundwater. Without additional policies the current water quality status of the River Wey may not improve and further even worsen due to pressure from development.	
Health and health Inequalities	 Considerable differences between wards in life expectancy for both men and women, although with such small areas there is uncertainty about the precise estimate. Adult and child obesity is an issue; since 2014 obesity and excess weight rates are 13.5% higher in deprived wards than the average Surrey ward. One in four adults drinks alcohol above sensible levels; this places Guildford in the top ten council areas nationally for hazardous drinking. The number of adults with a learning disability in Guildford was 2,824 in 2017, and was the highest among the neighboring local authorities. This is projected to increase to 3,085 people with a learning disability and 1,307 people with a learning disability and 1,307 people with autism by 2030. Of these, an estimated 597 adults have a moderate or severe learning disability (143 of whom have a severe learning disability) and this is estimated to increase to 152 by 2030. There is an under supply of the majority of open space typologies across the majority of the wards, most notably youth provision. 	In the absence of the Plan, it is assumed that relevant policies in the current Local Plan and National Planning Policy would apply. Demands on healthcare in the borough will increase due to a growing population and an increasing elderly population. The issue of rising obesity, fuel and food poverty may not be adequately addressed through current policies in existing Plan. The existing lack of open space provision in most deprived areas will likely to further exacerbate deprivation and health inequalities. Lack of opportunities to address deficiencies in open space provision in wards with high level of deprivation, i.e. Westborough, Ash Vale and Worplesdon will not specifically addressed. An opportunity to specify that the provision of adequate open space to provide health related Interventions, particularly within the wards which are the public health focus may not be explored. In the absence of the Plan, an opportunity for the Council to adopt a health in the SA framework may be missed. The opportunity to provide a foundation for delivery of activities and services that maintain and improve the health and well- being of our communities may not be fully explored. This can be achieved through inclusion of a DM policy that seeks to improve health and address health inequalities.	

Topic	Significant issues identified	Evolution in the absence of the Plan
	 Deficiencies in open space provision have a disproportionate effect on certain groups, i.e. lone parents, families with children under 5. In Guildford Borough 5.7 per cent of deaths of those aged 25 years and over arise from long-term exposure to anthropogenic particulate air pollution. Low levels of physical activity. Rising fuel poverty from 8.0 per cent in 2012 to 9.1 per cent in 2016, the highest among the neighboring authorities. Rising food poverty in the borough. 	

CHAPTER 5: Developing the SA Framework (Task A4)

5.1 SA Objectives, questions and indicators

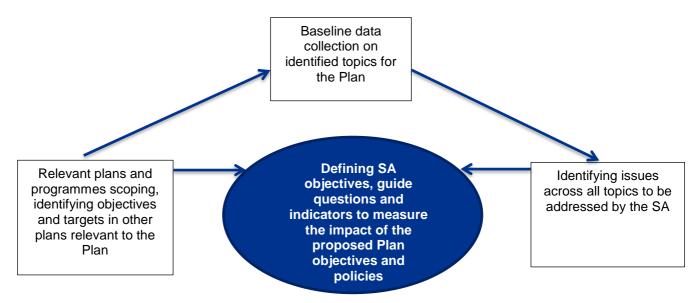
An important element of the SA process is the determination of the SA objectives. Baseline information is fundamentally linked to the SA framework and the SA objectives act as a basis against which policies can be assessed and indicators will be used to collect data as to how well progress towards the objectives is being achieved. An objective is a statement of what is intended, specifying a desired direction of change. The achievement of objectives is normally measured by using indicators and need to be specific and measurable. SA objectives are used to show whether the objectives of the Plan are beneficial for the achievement of sustainable development, to compare the sustainability effects of alternatives, or to suggest improvements.

An objectives-led approach is considered to be most appropriate to assessing the Plan as it enables assessment of the extent to which each aspect of the Plan contributes towards delivery of each objective as opposed to just meeting prescribed targets. Thus a more qualitative approach is adopted that allows for a better identification and description of effects rather than attempting to assign a quantitative value, which is more limited and restrictive at this strategic level.

SA objectives are also derived from external objectives to which Responsible Authorities need to have regard independently from the SEA process and include economic and social objectives. This SA process has adapted SA objectives to take account of local circumstances and concerns.

SA objectives align with wider international, national and local environmental, health, social and economic policy objectives and form the basis of what the Plan will be appraised against. A diagram showing the process of the determination of SA objectives is presented in **Figure 5.1.**

Figure 5.1: The process of the determination of SA objectives.



It is important that the SA Objectives which are to be used are up to date and relevant for the borough. Previously the Council used a series of 18 SA objectives to inform the consideration of strategic policies and sites. The preparation of the second part of the Local Plan provides an opportunity to review previously identified SA objectives in a collaborative approach to reflect the changes in the relevant plans and programmes, baseline data and key significant sustainability issues identified (see **Chapters 2,3 and 4**).

The overall aim of the review was to provide a more streamlined SA framework that is locally relevant, up-to-date and reflects the key sustainability issues our borough is facing. In addition to a review of the SA objectives, the accompanying indicators and guide questions were reviewed in order to provide a more concise, locally relevant SA framework for the assessment with clearer links to monitoring effects. As a result, a number of guide questions were added. Guide questions will be used to assess whether the Plan will help to achieve or conflict with the SA objective. These may be revised slightly as the strategy evolves.

It should be noted that some indicators will be relevant for multiple SA objectives and together will form a framework to monitor the sustainability of the Plan. The SA framework will be subject to review following consultation and further identification of baseline data and at this stage all of the objectives are of equal priority. This SA will be used to assess all future documents and policies forming part of the new Plan.

European Directive 2001/42/EC, Annex I, (f) sets out the topics against which the likely effects of a plan or programmes should be assessed. The relevant topics are listed against the objectives in the **Table 5.1** below showing the link between SEA Directive issues and SA objectives.

Table 5.1: Link between SEA Directive Issues and SA objectives

SEA Directive Issue	SA Objectives
Material Assets	10,12,13
Climatic Factors	18,19,20
Biodiversity	14
Fauna	14
Flora	14
Water	22, 23
Soil	11,12,13
Air	15,16
Cultural heritage, architectural and archaeological heritage	17
Landscape	21
Population	1, 3, 4, 5, 6, 7, 8, 9,10
Human health	2

The SA Framework consists of 23 objectives in total, of which progress towards will be measured using related indicators. The indicators also serve to clarify the intended interpretation of each objective. A comprehensive list of SA Objectives derived for the assessment of the Plan is presented in **Table 5.2.** More information on how SA objectives have been derived can be found **in Chapter 3**.

Table 5.2: The SA framework

Topic in the	SA/SEA	Guide questions	SA monitoring Indicators			
SEA Directive/SA Topic	Objectives	Does the Plan				
	Social					
Population Housing	1. To meet housing requirements of the whole community and provide housing of a suitable mix and type	Contribute to the supply of housing? Reduce homelessness? Contribute to meeting demand for a range and mix of housing including affordable housing and specialist housing? Contribute to the delivery of sustainable homes? Support those with disabilities?	Housing affordability as a function of lower quartile income to lower quartile house price (this should decrease, i.e. become more affordable) Completion rates of affordable housing in new developments (this should increase) Housing completions that provide for long- term care and disability (this should increase) Number of planning permissions for student accommodation Number of pitches or plots granted planning permission for Gypsy and Traveller Affordable housing register (this should decrease)			
Population Human health	2.To facilitate improved health and well-being of the population, enabling people to stay independent and reducing inequalities in health	Improve access to health facilities and social care services? Include policies that promote "health in all policies" approach, clearly referring to health and wellbeing as an outcome? Reduce human exposure to air pollution from traffic emissions? Contribute towards reduction of inequalities in health outcomes and strive to improve the overall physical and mental health and wellbeing of the borough?	Healthy Life expectancy (number of years living in a good state of health) (this should increase) Proportion of population in full-time care Proportion of population that is over retirement age Condition of residents' general health (Census - QS302EW)			

Topic in the SEA	SA/SEA	Guide questions	SA monitoring Indicators
Directive/SA Topic	Objectives	Does the Plan	
		Deliver sufficient community and cultural facilities and services to meet local needs, with particular focus on wards with poorest health outcomes including Stoke, Westborough and Ash Wharf or other priority wards? Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development? Encourage healthy lifestyles and takes into account priorities set out in Guildford and Surrey Health and Wellbeing Strategies? Avoid locating development in locations that could adversely affect people's health?	Number of noise complaints received by Environmental Health Number of large developments completed a Health Impact Assessment
Population Human health Crime and safety	3. To create and maintain safer and more secure communities and improve the quality of where people live and work	Promote access to safe, inclusive and accessible, open spaces, in particular for women and children, older persons and persons with disabilities? Reduce crime/ fear of crime and anti-social activity? Promote design that incorporate the principles of safe design to reduce the risk and fear of crime, e.g. natural surveillance, appropriate levels of lighting?	Level of recorded crime and anti-social behaviour Number of new developments achieving the 'Built for Life' quality mark (this should increase) Percentage of the district's population having access to a Open Space within 400 metres of their home Hectares of Open Space per 1,000 population Change in the amount of Open Space (Natural England)
Population Economy and employment	4. To reduce poverty and social exclusion for all sectors of the	Reduce poverty and social exclusion in those areas most affected?	Long term unemployment rate
	community	Reduce food and fuel poverty	Proportion of the population who live in wards that rank within the most deprived 10% and 25% of wards in

Topic in the SEA	SA/SEA	Guide questions	SA monitoring Indicators		
Directive/SA Topic	Objectives	Does the Plan			
		Promote development that benefit Guildford's most deprived areas?	the country (Index of Multiple Deprivation)		
		Support the changing population profile of the area?	Proportion of population in food and fuel poverty (this should decrease)		
		Encourage engagement/participation in community/cultural activities?			
		Contribute to regeneration activities?			
		Enhance the public realm?			
Population Equalities	5. To create and sustain vibrant communities	Facilitate the integration of new communities with existing communities by delivering a mix of	Borough demographics – proportion of the population likely to need long-term care		
		supporting/other ruses alongside housing development?	Changes to IMD (reductions in the most deprived and difference in the proportion of the highest to the lowest		
		Encourage and support diverse town centre uses?	levels of deprivation) (the gaps between deprived areas should decrease)		
Population Education	6. To improve levels of education and skills in the population overall	Support the provision of an adequate range of educational and child care facilities on where they are needed?	GCSE and equivalent results for young people (Department for Education) % of working age population with NVQ level		
		Provide for new and improved education and training facilities leading to a work ready population of	4+ or equivalent qualification (Census 2011 - QS501EW)		
		school and college leavers?	Qualifications at all ages (this should increase)		
Economic (una stream morease)					
Population Economy Employment	7. To maintain Guildford borough and Guildford town's	Improve business development and enhance competitiveness?	Estimated new job creation (ONS Business Register Employment Survey (BRES))		
	competitive economic role	Encourage economic investment and regeneration to create jobs in Guildford's more deprived communities?	Business formation rate (ONS)(business start ups)		
		Promote growth in key sectors?	Numbers employed by industry (ONS BRES)		
		Make land available for business development?	Percentage of A1 use class and vacant units in		

Topic in the SEA	SA/SEA Objectives	Guide questions	SA monitoring Indicators
Directive/SA Topic	Objectives	Does the Plan	
		Increase the range of employment opportunities, shops and services available in town, district, local centres? Will it decrease the number of vacant units in town, district, local centres?	town/district/local centres (Council records) Overall position / rank of the borough in the UK Competitiveness Index (this should increase) Overall position / rank of Guildford town in the UK Competitiveness Index (this should be maintained/improved)
Population Economy Employment	8. To facilitate appropriate development opportunities to meet the changing needs of the economy	Encourage the development of new businesses in new and growth sectors? Provide for the types of homes and cultural attractions that will attract and retain global talent? Allow for sufficient flexibility to respond to uncertainties and changing economic circumstances? Support the growth and creation of SMEs? Provide for the needs of the economy, especially local business?	Ratio of median salary in the borough compared to median national salary (NOMIS) Percentage of permitted and completed class B1a and B1b floorspace(Council records) Percentage of permitted and completed class B1c, B2 and B8 floorspace
Population Economy Employment	9. To enhance the borough's rural economy	Encourage rural diversification? Encourage indigenous business? Facilitate achievement of objectives set out in Rural Economic Strategy 2017 – 2022? Encourage inward investment?	Net change in floor space in rural areas (this should increase)
Population Material assets	10. To ensure that the digital infrastructure available meets the needs of current and future generations	Improve digital infrastructure provision? Will it increase opportunities to improve the digital economy?	Average broadband speed (OFCOM)

Topic in the	SA/SEA	Guide questions	SA monitoring Indicators
SEA Directive/SA	Objectives	Does the Plan	
Topic			
		Environmental	
	11. To minimise the use of best and most versatile agricultural land (BVAL) and encourage the remediation of	Minimise loss of best and most versatile agricultural land to development?	Number of potential and declared contaminated sites returned to beneficial use
		Maintain and enhance soil quality?	Change in recorded soil quality (EA)
	contaminated land	Prevent land contamination and facilitate remediation of contaminated sites?	
		Help to remediate contaminated sites and where possible carry this out on-site?	
		Prevent soil erosion?	
Material assets Waste Soil	12. To reduce waste generation and achieve the sustainable management of	Promotes sustainable use of materials and natural resources?	Estimated household waste produced (Council records) Estimated quantity of household waste recycled
	waste and materials	Reduce household waste generated/head of population?	(Council records) (this should increase)
		Reduce construction and demolition waste	
		Increase rate/head of population of waste reuse and recycling?	
Materia assets Soil	13.To make the best use of previously developed land	Prioritise the development of brownfield land over greenfield land?	Percentage of development recorded on greenfield/brownfield land (Council records)
	and existing buildings	Encourage the re-use of existing buildings?	
Biodiversity Flora Fauna	14. To conserve and enhance biodiversity, geodiversity and	Maintain and enhance International and national nature conservation sites?	Change in the number and area of designated ecological sites (NE)
	the natural environment	Maintain and enhance locally designated biodiversity assets, taking into account the impacts of climate	Change in the number and area of designated ecological sites (NE)
		change? Maintain and enhance	Recorded status/condition of designated and local ecological sites (NE)
		ancient woodlands, meadows and other characteristic habitats, taking into account the impacts of climate change?	Recorded visitor numbers on designated European sites (NE)

Topic in the	SA/SEA	Guide questions	SA monitoring Indicators
SEA Directive/SA Topic	Objectives	Does the Plan	
		Achieve overall measurable net gains in biodiversity?	Gains in biodiversity provided by development on sites of 25 homes or greater
		Conserve, connect and enhance ecological networks, taking into account the impacts of climate change?	Net gains in biodiversity measured using Defra Biodiversity Metric 2.0.
		Protect, enhance or extend designated geological sites? Assist species, particularly	The amount of Green and Blue Infrastructure that is protected and provided within the borough
		Surrey priority species, to adapt to the anticipated effects of climate change (i.e. through connecting habitats and/or improving greenspace)?	Number of hectares of Priority Habitat created or enhanced
		Help to achieve goals set out in 25 Year Environment Plan ²⁰² targets and actions of the Surrey Nature Partnership ²⁰³ ?	Number of Biodiversity Opportunity Areas (BOA) objectives achieved.
Air Transport and accessibility	15. To encourage the use of sustainable forms of transport (walking, cycling, bus and rail)	Support the maintenance and expansion of high-quality public transport networks? Help to address road	Percentage mode share for sustainable modes, defined as walking, cycling, bus, minibus, coach and train, as methods of travel to work, for all usual residents aged
	Due und runy	congestion, particularly involving HGVs on the routes into Guildford Town Centre?	16 to 74 in employment in Guildford borough (using Census data) (this should increase).
		Enhance connectivity of the sustainable transport network and provide new cycling and walking	Developments with Travel Plans.
		infrastructure? Facilitate the take up of	Travel to work distances (Census)
		low/zero emission vehicles?	Travel to work modes (Census)
Air	40 To market	Reduce air and noise pollution from traffic?	Concentrations of six
Air	16. To reduce emissions and concentrations of harmful	Help to achieve national and international standards for air quality?	Concentrations of air pollutants

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²⁰² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

plan.pdf 2003 https://surreynaturepartnership.files.wordpress.com/2019/10/biodiversity-planning-in-surrey-revised_post-revision-nppf_mar-2019.pdf

Topic in the SEA	SA/SEA	Guide questions	SA monitoring Indicators					
Directive/SA Topic	Objectives	Does the Plan						
	atmospheric pollutants, particularly in areas of poorest air quality and reduce exposure	Reduce the number of people exposed to levels of NO2 concentrations that exceed 40µg/m3? Avoid exacerbating existing air quality issues in designated AQMAs? Contributes to achievement of targets and actions specified in Guildford Borough Council Air Quality Action Plan (AQAP) 2019?	NOx, PM ₁₀ and PM _{2.5} emissions from road transport (they should decrease) Number of people exposed to levels of NO ₂ concentrations that exceed 40µg/m³ (this should decrease) Number of AQMAs revoked (Council records) Number of AQMAs declared					
Historic environment Climatic	17. To protect, enhance, and where appropriate make accessible, the archaeological land historic environments and cultural assets of Guildford, for the benefit of residents and visitors	Protect and enhance buildings, monuments, sites, places, areas and landscapes of heritage interest or cultural value (including their setting) meriting consideration in planning decisions? Protect and enhance sites, features and areas of archaeological value in both urban and rural areas? Enhance accessibility to and the enjoyment of cultural heritage assets? Provide opportunities to enhance the historic environment?	actions achieved in AQAP Change in the number of designated and non-designated heritage assets (Historic England, Council records) Number of heritage assets recorded as 'at risk' (Historic England, Council records) Area of historic parks and gardens Number of Scheduled Monuments (SMs) damaged as a result of development Number of listed buildings and buildings at risk Average energy					
Climatic factors	18. To mitigate the causes of climate change through reducing emissions of greenhouse gases and efficient use of natural resources	18. To mitigate the causes of climate change through reducing emissions of greenhouse gases and efficient use of natural Promote energy efficient design? Reduces CO2 emissions from buildings? Reduce energy consumption?						

Topic in the SA/SEA SEA Objectives		Guide questions	SA monitoring Indicators				
Directive/SA Topic	Objectives	Does the Plan					
		infrastructure where possible? Minimise greenhouse gas emissions from transport?	Low and zero carbon decentralised energy networks (this should increase)				
Climatic factors	19. To build resilience and adapt to the impacts of climate change and extreme weather events such as flood, drought and heat risks particularly on groups more vulnerable to the effects of climate change	Minimise the impact of overheating of urban areas and buildings, with particular references to buildings designed for vulnerable users such as hospitals, elderly care homes and schools? Help in protecting the community from the increased extremes of weather, which are projected to occur more often with climate change (heat waves, drought and flooding)?	Number of developments with measures to address overheating Number of planning application granting permission in flood risk areas against the EA advice				
Climatic factors	20. To reduce the risk of flooding and the resulting detriment to public well- being, the economy and the environment	Minimise the risk of flooding from rivers and watercourses? Promote the use of SuDS and flood resilient design?	Number of planning applications approved in Flood Zone 3 and 2 Number of major schemes incorporating SuDS mechanisms				
Landscape	21. To conserve and enhance the quality and local distinctiveness of landscapes and townscapes	Conserve and enhance the character of AONBs including its setting? Protect the special views into and out of Guildford town centre? Promote high quality design that responds to the distinctive local character? Safeguard the character and distinctiveness of Guildford's settlements? Support the achievement of	Amount of new major development in the AONB on sites not allocated in the Plan (Council records)				
Water	22. To maintain and improve the water quality of the borough's rivers and groundwater	Ecological and chemical water quality of rivers, canals and freshwater bodies (these should improve) (EA) Quality and quantity of groundwater					

Topic in the SEA Directive/SA Topic	SA/SEA Objectives	Guide questions Does the Plan	SA monitoring Indicators
		Maintain and improve the quality of inland waters? Reduce the amount of nitrates / phosphates entering the water environment?	Number of planning applications, of a potentially contaminating nature within a Source Protection Zone (SPZ) Number of planning applications which require contaminated land remediation
Water	23. To achieve sustainable water resources management and water conservation	Encourage water to be stored for re-use? Promotes water conservation measures? Promote sustainable use of water? Maintain water availability of water dependent habitats?	Water cycle studies Abstraction license data Water use, availability and proportions recycled

After the SA framework has been developed, an opportunity to explore how the proposed SA framework aligns with the global goals of the UN Agenda for Sustainable Development 2030²⁰⁴ was explored by conducting a mapping exercise of SA objectives against relevant UN SDGs and targets to demonstrate how the SA framework contributes to achievement of the SDGs at a local level (see Chapter 1 on the role of SDGs). The results of the mapping exercise of the proposed SA objectives against relevant SDGs and targets is presented in **Table 5.3**. This innovative approach to SA framework formulation is not a SEA Directive requirement but complements it principals of promoting sustainable development by providing an opportunity for a clearer visualization of contribution that a proposed Plan can potentially make at a local level towards achievement of sustainable development. Not only this approach will allow to test the Plan against the SA assessment framework but it will also test how the proposed policies meet the aspirations of the global agenda for sustainable development. The results presented in **Table 5.3** illustrate that the scope and context of the Plan has the potential to contribute to 13 SDGs and 20 SDG targets.

Table 5.3: Establishing linkages between SA Objective and relevant UN SDGs and targets

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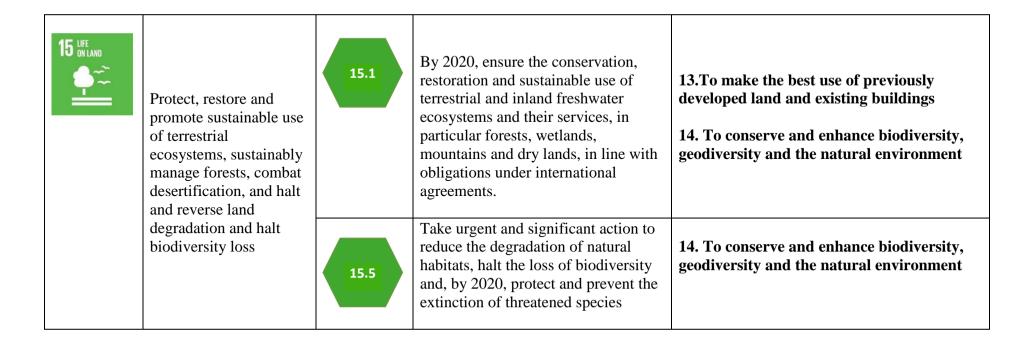
 $^{^{204}\} https://sustainable development.un.org/topics/sustainable development goals$

Goals	Goal description	Targets	Description	SA Objectives
1 NO POVERTY	End poverty in all its forms everywhere	1.5	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	19. To build resilience and adapt to the impacts of climate change and extreme weather events such as flood, drought and heat risks particularly on groups more vulnerable to the effects of climate change
3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote well-being for all at all ages	3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	2.To facilitate improved health and well- being of the population, enabling people to stay independent and reducing inequalities in health
4 QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	6. To improve levels of education and skills in the population overall
6 CLEAN WATER AND SANITATION	Ensure availability and sustainable management of water and sanitation for all	6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially	22. To maintain and improve the water quality of the borough's rivers and groundwater

		6.4	increasing recycling and safe reuse globally By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially	23. To achieve sustainable water resources management and water conservation
		6.6	reduce the number of people suffering from water scarcity By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	22. To maintain and improve the water quality of the borough's rivers and groundwater
7 AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all	7.3	By 2030, double the global rate of improvement in energy efficiency	18. To mitigate the causes of climate change through reducing emissions of greenhouse gases and efficient use of natural resources
8 DECENT WORK AND ECONOMIC GROWTH	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	9. To enhance the borough's rural economy 10. To ensure that the digital infrastructure available meets the needs of current and future generations

8 DECENT WORK AND ECONOMIC GROWTH		8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	7. To maintain Guildford borough and Guildford town's competitive economic role 8. To facilitate appropriate development opportunities to meet the changing needs of the economy
		8.9	8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products	7. To maintain Guildford borough and Guildford town's competitive economic role 17. To protect, enhance, and where appropriate make accessible, the archaeological land historic environments and cultural assets of Guildford, for the benefit of residents and visitors
9 MOUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	1. To meet housing requirements of the whole community and provide housing of a suitable mix and type 15. To encourage the use of sustainable forms of transport (walking, cycling, bus and rail)
10 REDUCED INEQUALITIES	Reduce inequality within and among countries	10.2	By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	4. To reduce poverty and social exclusion for all sectors of the community

11 SUSTAINABLE CITIES AND COMMUNITIES	Make cities and human settlements inclusive, safe, resilient and	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	12. To reduce waste generation and achieve the sustainable management of waste and materials 16. To maintain and where possible improve air quality
	sustainable	11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	3. To create and maintain safer and more secure communities and improve the quality of where people live and work
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly	12. To reduce waste generation and achieve the sustainable management of waste and materials
	production patterns	12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	12. To reduce waste generation and achieve the sustainable management of waste and materials
13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts	13.1	Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries	19. To build resilience and adapt to the impacts of climate change and extreme weather events such as flood, drought and heat risks particularly on groups more vulnerable to the effects of climate change



Compatibility testing of the SA Objectives

As well as setting the SA objectives, it is necessary to test their compatibility against one another in order to identify any areas of conflict and support which need further consideration. Considering the range of objectives there are instances where positive progress in one area causes deterioration in another – such as the conflict between economic growth and protection of the environment.

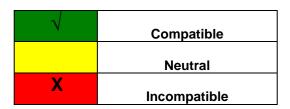
A compatibility test of the SA objectives has been carried out using a framework presented in **Appendix 2**. As there can be tensions between objectives that cannot be resolved, the compatibility assessment has clarified these so that subsequent decisions will be well based, and mitigation or alternatives can be considered.

Testing of the compatibility of the SA objectives highlighted some potential tensions between objectives. Some natural potential incompatibility emerged between SA objectives that require development (such as provision of housing) and environmental objectives. Although these conflicts have been identified they can be addressed through the appropriate mitigation methods such as innovative design, sustainable construction and making efficient use of urban land. Therefore, finding the right balance between these SA objectives is important for achieving sustainable development. For example, the protection of heritage assets could constrain opportunities for additional development but on the other hand an attractive environment including heritage assets could be a factor that helps to attract and retain businesses. Economic growth could result in greater waste generation however application of circular economy principles could assist in addressing this.

For some objectives there may well be a positive relationship between them – for example SA Objectives 21 and 14, where protecting and enhancing the landscape character will help with conserving and enhancing biodiversity.

A separate assessment of the Plan objectives against the SA objectives will be based on a symbol based system which indicates the degree of compatibility between SA objectives and objectives of the Plan.

Key



Assessment methodology of likely significant effects

The SA will identify, describe and evaluate the likely significant effects of implementing the Plan against the SA objectives using the assessment guide questions. It will do this for the area within the Guildford borough administrative boundary plus certain receptor sites beyond the Guildford administrative boundary which could still be affected by the Plan. This includes transport corridors, water bodies and some European designated sites which forms the spatial scope of the assessment.

Any likely effects identified as a result of implementing the Plan will be described according to criteria presented within the SEA Regulations including a description of the probability, duration, frequency and reversibility of impacts. As the emerging Plan covers a period up to 2034, the temporal scope of the SA is proposed as follows:

• Short term effects – those effects that occur within the first five years of implementation of the Plan:

- Medium term effects those effects that occur between six and fifteen years following the adopted of the Plan;
- Long term effects those effects that will occur beyond fifteen years.

Predicting the effects of the Plan against the SA Objectives

Testing the Plan policy options and measures against the SA objectives will use symbol based scoring system and provide a brief commentary explaining and expanding on the scoring. Impacts identified will be considered relative to their significance as per **Table 5.4**. Significance takes into account the magnitude, duration and permanency of the impact, along with consideration of potential secondary and cumulative impacts. For the purposes of this assessment major effects (positive or negative) will be considered significant).

Table 5.4: Significance ratings and definition

Scale	of effect	Definition	SA action/response
++	Major positive effect	Plan policies are proactive, specific, measurable and contribute greatly towards achieving the SA objective	SA will consider whether major positive effect can be further enhanced
+	Minor positive effect	Plan policies are reactive and contributes to achieving the SA objective	SA will consider whether positive effect can be further enhanced
0	Neutral or no effect	Plan polices do not impact upon the achievement of the SA objective	Plan policies are likely to be acceptable. SA will consider whether intervention could result in positive effects
-	Minor negative effect	Plan policies conflict with the SA objective	SA will consider mitigation, such as delete/reconsider/amend the policy
	Major negative effect	Plan policies greatly hinder or prevent the achievement of the SA objective	SA will consider significant mitigation measures to reduce severity of effect; reconsider the policies
?	Uncertain	Plan policies can have positive or negative effects but the level of information available at a time of assessment does not allow to make a clear judgement	SA will consider where information will come from – who has it? What will be done about collecting it? When will it be collected?

The assessment will identify cumulative and secondary effects of the strategy.

Secondary impacts are impacts that are not direct results of Plan but occur away from the original impact or as a result of a complex pathway e.g. development that changes water table and impacts the ecology of a nearby wetland. The assessment will consider two types of cumulative effects:

- Intra-strategy: those which arise from two or more impacts occurring simultaneously, whereby an impact that may not have a significant effect on its own may, combined with others, produce a cumulative effect.
- Inter-strategy significant effects of the Plan acting in combination with the impacts of other plans and strategies.

5.2 Monitoring proposals

The role of the SA monitoring involves measuring the SA indicators which may establish a causal link between implementation of the Plan and the likely significant effect being monitored. Thus, it enables us to carry out an evaluation of the effectiveness and the Plan as a whole to facilitate sustainable development. Monitoring is used, where appropriate, during implementation of the plan or programme to address deficiencies in baseline information in the SA. It enables unforeseen adverse effects to be identified at an early stage and is a way of demonstrating success in delivering the Plans' targets and reducing its environmental, social and economic effects.

A full SA monitoring framework will be developed at the next stage of the SA process where measures proposed for monitoring will be clear, practicable and linked to the indicators and objectives used in the SA.

CHAPTER 6: Consultation (Task A5)

Compliance with the SEA Directive

"The bodies identified by the UK Government as being likely to be concerned by the environmental effects of implementing the plan have been consulted in deciding" (Annex 1 (d))

It is a statutory requirement for the Scoping Report to be sent to the three Environmental Consultation Bodies²⁰⁵. To ensure the widest possible consultation takes place at this stage, relevant local stakeholders were invited to take part as well. The final SA document was then made available on the Council's website. Consultation at the scoping stage is fundamental to ensure that the Scope of the SA is fully identified and the subsequent report comprehensive enough. Furthermore, despite the fact that a health organisation is not included amongst the Consultation Bodies in the SEA Directive requirements, the council has sought interaction with health organisations to ensure that the population's health is assessed during the SA. During the consultation/engagement process the desktop analysis of community needs was sense-checked by professional experts and interested parties, and the potential health impact was established to demonstrate that all aspects of health impact were fully considered.

The purpose of consultation on the SA Scoping Report was to seek views, whether:

- The scope of the SA is appropriate as set out considering the role of the Plan to help meet and manage Guildford's growth needs and development ambition.
- There are any additional plans, policies or programmes that are relevant to the SA policy context that should be included.
- The existing and emerging baseline information provides a suitable baseline for the SA of the Plan.
- There are any additional SA issues relevant to the Plan that should be included.
- The SA Framework is appropriate and includes a suitable set of SA objectives and appraisal criteria for assessing the effects of the proposed Plan and reasonable alternatives.

The responses to the consultation were included in an appendix after the consultation had taken place.

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²⁰⁵ Environment Agency, Natural England and Historic England

CHAPTER 7: Post-Consultation Changes

The consultation on the SA Scoping report ran for six weeks for the period from 2 December 2019 to 13 January 2020.

Three statutory environmental consultees were consulted:

- Environment Agency
- Natural England
- Historic England

In addition, views were sought from health organisations to ensure that the population's health is assessed during the SA. To this end, the Surrey County Council Public Health team was also consulted to demonstrate that all aspects of health impact have been fully considered. Consultation responses were received from all four consultees. The summaries of consultation responses on the SA Scoping Report can be found below.

Environment Agency

The Environment Agency (EA) made comments in relation to their remit of flood risk, biodiversity, water quality and resources and groundwater and contaminated land. The EA was pleased to see that the SA Scoping report recognised fluvial flood risk and climate change as a significant issue in the borough but made recommendation to deal with them as separate issues. The EA also made some clarifications on the data on flood risk, flood management schemes and suggested relevant indicators for the SA objectives.

With regards to biodiversity, the EA were pleased to see that the potential loss of biodiversity as a result of increased pressure for development and the need to protect and enhance priority habitats and species have been identified as a significant issue. The EA also welcomed the opportunities identified for the natural environment and biodiversity, including a commitment to achieve overall measurable net gains in biodiversity. Suggestion has also been made by the EA that the amount of Green and Blue Infrastructure that is protected and provided within the borough could have been used as an indicator for Objective 14.

Concerning water quality and water quantity, the EA recommended splitting the SA objective 22 into at least two sections, one dealing with water quality and one dealing with water quantity, with water cycle studies and abstraction license data being used as indicators for water resourcing.

With regards to groundwater quality and contaminated land, the EA was pleased to see that reference was made to the risks that development could pose to groundwater quality. It also made suggestion to give consideration to protecting groundwater from development, particularly development which required penetrative piling methods, on land that had a potentially contaminative history. The EA recommended an inclusion of new indicators - the number of planning applications, of a potentially contaminating nature within a Source Protection Zone (SPZ) and the number of planning applications which require contaminated land remediation.

Historic England

The Historic England (HE) noted that the scoping report for Guildford Local Plan Part 2 adequately covered the issues that might arise in respect of the potential effects of proposed development sites on heritage assets and referred the Council to the HE SA guidance with regards to the HE involvement in the various stages of the local plan process.

Natural England

The Natural England (NE) has advised that on the types of plans relating to the natural environment that should be considered. Furthermore, The NE has invited the consideration of further opportunities to promote habitat connectivity and encouraged the inclusion of an objective to enhance, as well as protect, biodiversity in its own right, even outside of designated sites. The NE also noted its support of the use of biodiversity net gain for development sites and suggested the use of Defra's Biodiversity

Metric 2.0 for measuring and recording these net gains.

Surrey County Council

The Surrey County Council (SCC) Public Health team made comments on matters relating to public health, archaeology and flooding.

With regards to heritage, SCC has emphasized that a relevant International protection should include reference to the European Convention for the Protection of the Archaeological Heritage (1992) and the European Landscape Convention 2000 and the programmes review box should also be detailing "undesignated resources" and other comments of clarification nature.

Recommendation was also made for "Opportunities" and "Evolution without the plan" to reference undesignated heritage, with "Evolution" section to include a third bullet point outlining that without the Plan undesignated sites (archaeology, locally listed buildings, heritage landscapes etc.) would be at risk of loss as they largely lack protection or consideration through other means.

Concerning air quality, Air quality, SCC has recommended to include the Surrey Transport Plan: Low Emissions Transport Strategy (2018) and the Surrey Air Quality Alliance (SAA) (2016).

For health and health inequalities, SCC has suggested to add PHE publications 'Spatial Planning for Health: An evidence resource for planning and designing healthier places' (2017), 'Healthy High Streets: Good place-making in an urban setting' (2018), as well as the Surrey Healthy Weight Strategy (2017-2022), and the local health profile 'Guildford and Waverley CCG health profile (2015).

A suggestion was also made to include the following SA monitoring indicators:

- Healthy Life expectancy (i.e. number of years living in a good state of health)
- Number of noise complaints received by Environmental Health
- Number of large developments completed a Health Impact Assessment
- Number of AQMAs revoked and Number of new AQMAs declared.

In light of the comments above, a number of amendments and clarifications have been made to the SA Scoping report, in particular:

- 1. The SA framework has been amended with the number of SA objectives increasing from 22 to 23 to enable SA to deal with water quality and water conservation separately:
 - 23. To achieve sustainable water resources management and water conservation 22. To maintain and improve the water quality of the borough's rivers and groundwater
- 2. The following SA indicators have been added to the SA:
 - Healthy Life expectancy (number of years living in a good state of health) (this should increase):
 - Number of noise complaints received by Environmental Health;
 - Number of large developments completed a Health Impact Assessment;
 - Net gains in biodiversity measured using Defra Biodiversity Metric 2.0;
 - The amount of Green and Blue Infrastructure that is protected and provided within the borough;
 - Number of hectares of Priority Habitat created or enhanced;
 - Number of Biodiversity Opportunity Areas (BOA) objectives achieved;
 - Number of planning application granting permission in flood risk areas against the EA advice
 - Number of planning applications approved in Flood Zone 3 and 2;
 - Number of major schemes incorporating SuDS mechanisms;
 - Ecological and chemical water quality of rivers, canals and freshwater bodies (these should improve) (EA);
 - Quality and quantity of groundwater;
 - Number of planning applications, of a potentially contaminating nature within a Source Protection Zone (SPZ);

- Number of planning applications which require contaminated land remediation;
- Water cycle studies;
- Abstraction license data; and
- Water use, availability and proportions recycled.

CHAPTER 8: Next Steps

The Plan options will be informed by the issues that Guildford borough faces which have been identified in this SA Scoping report. The SA of the Plan will appraise policy options and the Plan objectives against SA objectives outlined in the SA Framework in order to assess their compatibility and effects across all sustainability topics.

The Council will prepare an Interim SA Report for publication alongside the Draft Plan, and then the SA Report for publication alongside the Proposed Submission Plan, with both reports structured as follows:

Part of the report	Information provided					
Introduction	Introduction to the plan and SA scope					
Plan-making / SA up to this stage	Outline reasons for selecting the alternatives dealt with Alternatives appraisal findings The Council's response to the appraisal / reasons for the PO					
SA findings at this stage	Present an appraisal of the draft plan, to include recommendations.					
Next steps	Explanation of subsequent plan-making stages Measures envisaged concerning monitoring					
Appendices	Regulatory checklist Detailed information on the SA scope					

Ongoing stakeholder engagement

While formal consultation with statutory consultees must be undertaken in conformity with SEA/SA practice, ongoing engagement will also be undertaken throughout the duration of the SA. This will take place both through scheduled meetings and events with stakeholders but also through ongoing liaison which has already commenced.

Appendix 1: Quality assurance checklist

To ensure that the requirements of Strategic Environmental Assessments (as required by European Directive EC/2001/42) are adhered to, the following quality assurance checklist has been completed. It identifies where in the IIA process the requirements of SEA will be undertaken. The checklist appears in the Practical Guide to the Strategic Environmental Assessment Directive (September 2005, ODPM) and has been adapted for the purposes of this SA. Those relevant to this stage have been highlighted below.

Information requirement of the SEA Directive (defined by Annex I)	Section of the IIA Scoping Report
Objectives and Context	
The plan's or programme's purpose and objectives are made clear.	Section 1.4
Environmental/Sustainability issues and constraints, including international and EC environmental protection objectives, are considered in developing objectives and targets.	Section 2.2
SEA objectives, where used, are clearly set out and linked to indicators and targets where appropriate.	Section 5.1
Links with other related plans, programmes and policies are identified and explained.	Chapter 2
Conflicts that exist between SEA objectives, between SEA and plan objectives and between SEA objectives and other plan objectives are identified and described.	Section 5.1, Appendix 3
An outline of the contents and main objectives of the plan or programme, and its relationship with other relevant plans and programmes.	Section 1.4
Scoping	
Consultation Bodies are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report.	Section 1.2, Chapter 6
The assessment focuses on significant issues.	Chapter 4
Technical, procedural and other difficulties encountered are discussed; assumptions and uncertainties are made explicit.	Part 1.5 and 1.6
Reasons are given for eliminating issues from further consideration.	Chapter 4
Baseline Information	
Relevant aspects of the current state of the environment and their likely evolution without the plan or programme are described.	Chapter 3
Environmental characteristics of areas likely to be significantly affected are described, including areas wider than the physical boundary of the plan area where it is likely to be affected by the plan.	Chapter 3
Difficulties such as deficiencies in information or methods are explained.	Section 1.6

Appendix 2: Testing compatibility of the SA objectives

SA objective	SA 1	SA 2	SA 3	SA 4	SA 5	SA 6	SA 7	SA 8	SA 9	SA 10	SA 11	SA 12	SA 13	SA 14	SA 15	SA 16	SA 17	SA 18	SA 19	SA 20	SA 21	SA 22
SA 1																						
SA 2	V																					
SA 3	V	$\sqrt{}$																				
SA 4	V	\ \	$\sqrt{}$																			
SA 5	V	V	V	√																		
SA 6	•	•	√ √	1	V																	
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SA 8	•		•	•	•	√ √	$\sqrt{}$															
SA 9						1	√ √	√														
SA 10							√ √	\ √														
SA 11	Х						•	,		√												
SA 12										,												
SA 13	V									√												
SA 14	X		Х							,		V	V									
SA 15																						
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SA 22														√ √					V			
SA 23														\(\)					√ √			V

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